

## Estudio para análisis de falla EAF 469/2023

“Desconexión forzada del transformador N°4 154/66 kV de S/E Los Ángeles”

Fecha de Emisión: 20-11-2023

### 1. Descripción pormenorizada de la perturbación

#### a. Fecha y Hora de la falla

|                                 |                                             |
|---------------------------------|---------------------------------------------|
| Fecha                           | 29/10/2023                                  |
| Hora                            | 11:19                                       |
| Consumos desconectados (MW)     | 36.10                                       |
| Demanda previa del sistema (MW) | 8905.62                                     |
| Porcentaje de desconexión       | 0.420 %                                     |
| Calificación Apagón             | No aplica (porcentaje de desconexión < 10%) |

#### b. Identificación instalación afectada

|                                  |                                                                    |
|----------------------------------|--------------------------------------------------------------------|
| Nombre de la instalación         | Transformador N°4 154/66 kV de S/E Los Ángeles / ET01T058SE076T058 |
| Tipo de instalación              | Transformador                                                      |
| Tensión nominal                  | 154 kV                                                             |
| Segmento                         | Transmisión zonal                                                  |
| Propietario instalación afectada | CGE Transmisión S.A.                                               |
| RUT                              | 77.465.741-k                                                       |
| Representante Legal              | Iván Arístides Quezada Escobar                                     |
| Dirección                        | Av. Presidente Riesco N°5561, piso 17, Las Condes                  |

#### c. Identificación del elemento fallado

|                              |                                                                              |
|------------------------------|------------------------------------------------------------------------------|
| Nombre del elemento fallado  | Sistema de protecciones del paño AT4 de S/E Los Ángeles / SP235T058SE076T058 |
| Propietario elemento fallado | CGE Transmisión S.A.                                                         |
| RUT                          | 77.465.741-k                                                                 |
| Representante Legal          | Iván Arístides Quezada Escobar                                               |
| Dirección                    | Av. Presidente Riesco N°5561, piso 17, Las Condes                            |

### d.1 Origen y causa de la falla

Se produjo la apertura automática del interruptor 52AT4 de S/E Los Ángeles, correspondiente al transformador N°4 154/66 kV de dicha subestación, por medio de la operación de la protección de sobrecorriente residual (51N), en forma coincidente con la reconexión automática exitosa de la línea 154 kV Los Ángeles – Santa Luisa.

La empresa CGE Transmisión S.A. señala que la operación anteriormente señalada fue debido a perturbaciones en la línea 154 kV Los Ángeles – Santa Luisa, en circunstancias que existía un frente de mal tiempo en la zona, lo que provocó la operación la función 51N del relé SEL-387, la cual no tiene opción de habilitar direccionalidad, mientras que la función 51N del relé SEL-311C del mismo paño en cuestión, la cual sí posee direccionalidad, no registró operación.

### d.2 Fenómeno Físico:

OPE26: Falla en sistema de protección o control.

Al respecto, la empresa CGE Transmisión S.A. no remite los siguientes antecedentes en respaldo a la proposición del fenómeno físico declarado:

- Mantenimientos de los últimos 24 meses del equipo que produce la falla.
- Secuencia de operación de las protecciones, incluyendo un informe técnico (como operaron las protecciones y como debieron haber operado), considerando las protecciones de la línea 154 kV Los Ángeles – Santa Luisa.

### d.3 Reiteración:

Reiteración Fenómeno Físico en la instalación afectada: Esta instalación sí ha sido afectada por un fenómeno físico similar, durante los últimos 24 meses móviles (EAF 464-2023).

Reiteración Fenómeno Físico en instalaciones del mismo propietario: Sí se han producido fallas en instalaciones del mismo propietario con un fenómeno físico similar, durante los últimos 24 meses.

| FALLA ID     | NOMBRE FALLA                                                       | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ACCIONES CORRECTIVAS LP                                                                                                                                                                                                              |
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| EAF 298-2021 | Desconexión de transformadores N°1 y N°2 110/13.2 kV de S/E Pirque | 07-10-21    | 09:46      | <p>La empresa CGE S.A. indica lo siguiente:</p> <p><i>"1. En relación con la incidencia N°2021002824, el día 7 de octubre se realizan pruebas eléctricas, adjuntas en Anexo 4 a los siguientes equipos:</i></p> <ul style="list-style-type: none"><li><i>a. Transformador N°2</i></li><li><i>b. Pararrayos MT transformador N°2</i></li><li><i>c. Interruptor General 52CT2</i></li></ul> <p><i>2. El día 15 de octubre mediante la SD N°2021088856 se realizan pruebas eléctricas al interruptor general de barra de MT 52CT1.</i></p> <p><i>3. El día 15 de octubre, durante la ejecución de trabajos programados para prueba de interruptores, se encuentra pararrayos de MT, fase central con descarga, por lo cual mediante la solicitud CF N°2021090410 se procede a desconectar el interruptor 52C1, NOVA27/Form-6 a fin de realizarle pruebas eléctricas.</i></p> <p><i>4. Mediante la SD N°2021092990, se tiene programado intervenir el paño C1 el próximo miércoles 3 de noviembre a fin de realizar una actualización de firmware, pruebas eléctricas y verificación de curvas tiempo/corriente sobre el interruptor 52C1."</i></p> | <p>La empresa CGE S.A. indica lo siguiente: Se propone una mejora en la lógica de control del relé diferencial de transformador, para que sólo haga Trip sobre el relé maestro 86 cuando se trate de fallas de tipo diferencial.</p> |

| FALLA ID     | NOMBRE FALLA                                                       | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ACCIONES CORRECTIVAS LP                                                                                                                                                                                                                                                                                                                                       |
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| EAF 303-2021 | Apertura intempestiva del interruptor 52CT2 de S/E Palafitos       | 12-10-21    | 15:59      | La empresa CGE S.A. indica:<br>"El día 13 de octubre, se realizaron pruebas de funcionamiento al relé del interruptor del 52C14 alimentador Norte SE Palafitos.<br>Durante las pruebas se detectó que el relé Micom del 52C14 cada cierto tiempo realiza un proceso de booteo o reset dejando durante este proceso la protección deshabilitada.<br>A consecuencia de lo planteado se toma la decisión de dejar indisponible el interruptor del 5214 Alimentador Norte. Las cargas del Alimentador Norte quedaron transferidas al alimentador Industrial.<br>Se gestionará el cambio de equipo." | No se indican.                                                                                                                                                                                                                                                                                                                                                |
| EAF 312-2021 | Desconexión de transformadores N°1 y N°2 110/13.2 kV de S/E Pirque | 17-10-21    | 02:31      | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No aplica.                                                                                                                                                                                                                                                                                                                                                    |
| EAF 350-2021 | Desconexión forzada de barra 13.8 kV de S/E Chocalán               | 21-11-21    | 08:00      | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No aplica.                                                                                                                                                                                                                                                                                                                                                    |
| EAF 372-2021 | Apertura intempestiva de interruptores 52BT y 52ET2 de S/E Piduco  | 14-12-21    | 09:48      | La empresa CGE S.A. indica lo siguiente:<br>"Se realizará una revisión del alambrado de las señales al relé maestro y de los dispositivos que envían orden al relé. Lo anterior, debido a que la operación del relé maestro del transformador T2 puede tener su origen en una transferencia de potencial y/o inducción electromagnética debido a la falla en red de MT. Se analizará la opción de generar registro de las señales de apertura a relé maestro mediante el relé SEL-387T2."                                                                                                       | La empresa CGE S.A. indica que no se tienen contempladas medidas de largo plazo hasta el momento, sin embargo, luego de la ejecución de las medidas de corto plazo señaladas, se podrá determinar si existirán otras acciones.                                                                                                                                |
| EAF 375-2021 | Desconexión forzada de la barra 13,2 kV de S/E Placilla            | 21-12-21    | 15:20      | Se procede a realizar el reemplazo de tarjeta actuadora de equipo reconector modelo NOVA el martes 22.12.2021. Se realizan pruebas locales y remotas de operación confirmando el buen estado del equipo.                                                                                                                                                                                                                                                                                                                                                                                        | No aplica.                                                                                                                                                                                                                                                                                                                                                    |
| EAF 002-2022 | Apertura intempestiva del interruptor 52ET3 de S/E Constitución    | 02-01-22    | 15:21      | CGE Transmisión S.A. señala que tomó contacto con la empresa Quanta Services, para que, a su vez, diera a conocer el problema a la fábrica Schneider Electric (proveedores del esquema SCADA y relés de protecciones), para que así se entregue un informe técnico a CGE Transmisión que clarifique y resuelva esta anomalía. Dicho nuevo esquema de control formó parte del proyecto: NUP 900 Ampliación en S/E Constitución, el que fue puesto en servicio en octubre de 2021.                                                                                                                | CGE Transmisión S.A. señala que no aplica acciones correctivas de largo plazo.                                                                                                                                                                                                                                                                                |
| EAF 028-2022 | Apertura intempestiva del interruptor 52CT1 de S/E Los Ángeles     | 25-01-22    | 17:01      | La empresa CGE Transmisión S.A. señala: Se realizará la revisión de los tiempos de operación y control del interruptor 52C8, a través del aviso N°2022010468. De igual manera, se realizará la revisión del interruptor 52CT1 de S/E Los Ángeles, en una fecha que está por confirmar.<br>La empresa CGE Distribución S.A. no señala acciones correctivas.                                                                                                                                                                                                                                      | La empresa CGE Transmisión S.A. señala: Está comprometido el reemplazo de la protección SEL-387, relé maestro y alambrado de control asociado al Transformador T-1, actividades asociadas al IF N°2021000141. Se tiene programado este reemplazo para la segunda semana de abril de 2022.<br>La empresa CGE Distribución S.A. no señala acciones correctivas. |
| EAF 043-2022 | Desconexión forzada de barra 13.2 kV de S/E San Rafael             | 09-02-22    | 10:44      | La empresa CGE Transmisión S.A. señala que se realizará una revisión y verificación del paño C3, para detectar posibles problemas en la unidad de control y protecciones de éste.                                                                                                                                                                                                                                                                                                                                                                                                               | La empresa CGE Transmisión S.A. indica que no aplican acciones correctivas de largo plazo.                                                                                                                                                                                                                                                                    |
| EAF 062-2022 | Apertura intempestiva del interruptor 52HT1 de S/E Pacífico        | 21-02-22    | 11:16      | Se replicarán las condiciones que generan el evento con los otros relés F35, C60, T60 y D60, asociados al paño HT1 fuera de servicio, para determinar cuáles son los relés que actúen de igual forma. Se consultará a representante de General Electric si tienen antecedente de esta falla y las medidas a seguir para aclararla.                                                                                                                                                                                                                                                              | No aplica.                                                                                                                                                                                                                                                                                                                                                    |
| EAF 065-2022 | Desconexión del transformador N°1 66/15 kV de S/E Pillanlelún      | 21-02-22    | 13:46      | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No aplica.                                                                                                                                                                                                                                                                                                                                                    |

| FALLA ID     | NOMBRE FALLA                                                         | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ACCIONES CORRECTIVAS LP                                                                                                                                                                                          |
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| EAJ 073-2022 | Desconexión forzada del transformador 110/23 kV N°4 de S/E Calama    | 25-02-22    | 09:05      | La empresa CGE Transmisión S.A. indica que se realizará prueba al relé GE-T60 del paño HT4 de S/E Calama. La empresa Calama Solar 2 SpA indica que ajustará el horario de la protección ekorRPS - EH3427/H - (EH3427H) correspondiente al paño E1 de S/E Puerto Seco Solar, puesto que al momento de la falla era erróneo.                                                                                                                                                                                                                                                                  | La empresa CGE Transmisión S.A. indica que las acciones correctivas de largo plazo se determinarán una vez realizadas las pruebas comprometidas de corto plazo.                                                  |
| EAJ 129-2022 | Apertura automática del interruptor 52ET1 de S/E Uribe               | 17-04-22    | 09:17      | Se constató el correcto encendido de las protecciones MICOM P142 asociadas a cada interruptor de cabecera de alimentadores y se constató también la correcta operatividad de maniobras de apertura y cierre de los interruptores de cada cabecera de los alimentadores en S/E Uribe. Se establece contacto con el fabricante del equipo de protección Micom P142, para efecto de evaluar la correcta configuración.                                                                                                                                                                         | No se indican.                                                                                                                                                                                                   |
| EAJ 215-2022 | Apertura automática del interruptor 52CT1 de S/E Chocalán            | 05-06-22    | 07:16      | La empresa CGE Transmisión S.A. indica las siguientes acciones correctivas de corto plazo:<br>"Con fecha 22 de mayo de 2022 se ingresó en la PGP del Coordinador Eléctrico Nacional la solicitud de proyecto de modificación no relevante, NUP 3468, mediante el cual se propone el reemplazo de los interruptores 52CT1 y 52C2 de S/E Chocalán, lo cual incluye los controles de ambos equipos.<br>La solicitud MNR se ha iniciado recientemente y propone un plazo de 4 meses para completar el reemplazo que se propone, es decir, debe ser finalizado antes del 31 de octubre de 2022." | La empresa CGE Transmisión S.A. no indica acciones correctivas de largo plazo.                                                                                                                                   |
| EAJ 238-2022 | Desconexión forzada del transformador 110/23 kV N°4 de S/E Calama    | 23-06-22    | 23:33      | CGE Transmisión S.A. indica que realizará pruebas al relé GE-T60, S1, del transformador N°4, para confirmar o descartar fallas en el equipo. Realizará pruebas en TTCC del paño HT4 de 110 kV y lazos de control asociados a la protección. Se realizará un estudio de análisis y simulación de corrientes secundarias del núcleo del TC, alambrado al relé, para determinar un nuevo ajuste de la función de sobrecorriente temporizada de neutro.                                                                                                                                         | La empresa CGE Transmisión S.A. indica que las acciones correctivas de largo plazo se determinarán una vez realizadas las pruebas mencionadas de corto plazo.                                                    |
| EAJ 245-2022 | Desconexión forzada del transformador N°1 66/13.8 kV de S/E La Manga | 01-07-22    | 15:59      | CGE Transmisión S.A. indica lo siguiente:<br>"a) Se identifica falla en controlador digital de Imagen Térmica MTeC, modelo EPT 202, en el cual se produjo un cortocircuito en el circuito integrado, sobre el punto Trip del controlador.<br>b) Se retira del transformador el instrumento MTeC, para ser reemplazado en forma posterior.<br>c) Se deja los grupos de ventilación forzada del transformador en operación Manual.<br>d) Se está realizando el proceso de cotización del controlador, para su reposición y reemplazo en el transformador."                                    | No se indican.                                                                                                                                                                                                   |
| EAJ 281-2022 | Desconexión forzada de barra 13.2 kV de S/E Chocalán                 | 14-07-22    | 13:49      | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No aplica.                                                                                                                                                                                                       |
| EAJ 311-2022 | Apertura intempestiva del interruptor 52ET1 de S/E Incahuasi         | 27-07-22    | 20:43      | La empresa CGE Transmisión S.A. señala:<br>"• Se realiza la inspección en terreno a la subestación para determinar causas de la desconexión y se determina la integridad de todas sus instalaciones.<br>• Se interrogan los equipos afectados y se observan eventos en el paño ET1 y E2, en donde se constata que ambos registran eventos de operación por sobrecorriente y el relé del circuito La Higuera con indicación de apertura manual local."                                                                                                                                       | La empresa CGE Transmisión S.A. señala:<br>• Se instalará sistema de candado inteligente en portón de acceso a la subestación.<br>• Se habilitará sistema de iluminación perimetral en patios de la subestación. |

| FALLA ID     | NOMBRE FALLA                                                      | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ACCIONES CORRECTIVAS LP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| EAF 369-2022 | Apertura del interruptor 52C2 de S/E Victoria                     | 07-10-22    | 14:51      | <p>CGE Transmisión S.A. indica:</p> <p><i>“Se realizará un estudio para revisar y verificar la coordinación de los actuales ajustes de las unidades de control de los paños C5 y CT2, la fecha de entrega será a fines de noviembre del 2022.</i></p> <p><i>Se coordinará con Frontel, una fecha antes de fin de año para poder revisar y probar la unidad de control del paño C5, cuando tengamos respuesta se informará ingresando una SD al CEN.</i></p> <p><i>Se revisarán las conexiones IIRIG-B para normalizar el registro horario a través de la SD N°2022092591”.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>CGE Transmisión S.A. indica:</p> <p><i>“Existe un proyecto licitado dentro del Decreto Exento de Transmisión Zonal, Obras de Ampliación N°198/2019, NUP 1579. El proyecto consiste en el reemplazo del actual transformador 66/13,2 kV de 6 MVA por un transformador de 66/13,2 kV de capacidad 16 MVA en la S/E Victoria, con sus respectivos paños de conexión a las barras de alta y media tensión. El proyecto contempla además la ampliación de la barra de 66 kV, del patio de media tensión y la construcción de dos paños para futuros alimentadores, una posición para el seccionador de barra, una posición para la acometida del transformador y una posición para banco de condensadores”.</i></p> |
| EAF 383-2022 | Desconexión del transformador N°1 66/23 kV de S/E Constitución    | 17-10-22    | 14:32      | <p>La empresa CGE Transmisión S.A. señala que:</p> <p><i>“Mediante la SD N°2022097476, para el día 08-11-2022, se ha programado la revisión y pruebas de esquemas de protección de paño T1 de SE Constitución”.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>La empresa CGE Transmisión S.A. señala: <i>“No se ha determinado acción de largo plazo al cierre del presente informe”.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| EAF 394-2022 | Desconexión forzada del transformador 110/23 kV N°4 de S/E Calama | 23-10-22    | 12:14      | <p>La empresa CGE Transmisión S.A. indica:</p> <p><i>“De acuerdo con los parámetros observados en esta falla, y anterior ocurrida IF 2022000687, se establece el continuar con el desarrollo de:</i></p> <ol style="list-style-type: none"> <li><i>1. Realizar pruebas de relé GE T60 S1 T4, para confirmar o descartar fallas de equipo.</i></li> <li><i>2. Realizar pruebas en TTCC del paño HT4 de 110 kV, y lazos de control asociados a relé GE T60 S1 T4, para descartar o confirmar falla en equipo o alambrados de control.</i></li> <li><i>3. En función de los resultados obtenidos en los puntos 1 y 2, se realizará un estudio de análisis y simulación de corrientes secundarias del núcleo del TC, alambrado al relé GE T60 S1 del paño HT4, para determinar un nuevo ajuste de la función de sobrecorriente temporizada de neutro 110 kV NEUTRAL TOC1, que contemple todos los casos de fallas reales en redes de distribución conectadas en lado 23 kV, que producen la aparición de corriente residual calculada en TC lado 110 kV (considerando que no debiera existir debido a la conexión del transformador Dyn1).</i></li> </ol> <p><i>Cabe destacar que la adjudicación de licitación por servicios mencionados anteriormente ya se encuentra realizada a Proveedor especialista y los trabajos inician su desarrollo durante el mes de noviembre de 2022.”</i></p> | <p>La empresa CGE Transmisión S.A. indica que las acciones correctivas de largo plazo se determinarán una vez realizadas las pruebas mencionadas de corto plazo.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| EAF 419-2022 | Desconexión forzada de barra 66 kV de S/E Escuadrón               | 12-11-22    | 23:26      | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EAF 424-2022 | Desconexión forzada de la barra 15 kV de S/E San Miguel           | 19-11-22    | 14:33      | <p>CGE Transmisión S.A. señala que revisará y realizará el mejoramiento en el cableado de control asociado al relé Form 6 del paño CT1 de S/E San Miguel. También revisará y corregirá la correspondencia de fases de las unidades de control, ya que la unidad de control Form 6 del paño C1 vio la falla en fase C, la unidad de control Form 6 del paño CT1 la vio en fase A y el relé de respaldo del paño CT1 SEL-387 la vio en fase C.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>No se indican acciones correctivas de largo plazo.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| FALLA ID     | NOMBRE FALLA                                                          | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ACCIONES CORRECTIVAS LP                                                                                                                                                                                                                                                                                                                                                                                                          |
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| EAF 427-2022 | Falla en el interruptor 52C6 de S/E Fátima                            | 21-11-22    | 12:04      | La empresa CGE Transmisión S.A. señala que: “no aplica”.<br>La empresa CGE S.A. no señala acciones correctivas a corto plazo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | La empresa CGE Transmisión S.A. indica que durante el mes de diciembre de 2022 entrará en servicio la comunicación al sistema SCADA, a través de un enlace de fibra óptica en la S/E Fátima, el que pasará a ser la vía principal de comunicación, quedando como primer respaldo el de radioenlace y como segundo respaldo la conexión vía red móvil 3G/4G.<br>La empresa CGE S.A. no señala acciones correctivas a largo plazo. |
| EAF 485-2022 | Desconexión forzada de la barra 13.8 kV de S/E Alto Hospicio          | 22-12-22    | 10:14      | La empresa CGE Transmisión S.A. señala que se realiza un análisis de la falla, determinando la necesidad de realizar la verificación del equipo de protección F60 del alimentador 52C30. Se programa a la brevedad el servicio de verificación de la protección F60 del alimentador 52C30. Se programa a la brevedad un servicio de modificación de la configuración del control y las comunicaciones del trip remoto entre el relé F60 del paño CT1 hacia el relé F60 del paño C30, donde se eliminará la lógica responsable del trip remoto.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | La empresa CGE Transmisión S.A. señala que se contempla el reemplazo del equipo reconector actual del paño C30 por un equipo reconector NOJA RC15, a ejecutarse el primer semestre de 2023.                                                                                                                                                                                                                                      |
| EAF 002-2023 | Desconexión forzada del transformador N°1 154/66 kV de S/E Talcahuano | 04-01-23    | 13:16      | CGE Transmisión S.A. señala que se realizó la instalación de un relé (SEL-351) en forma provisoria, para efectos de determinar el origen de la señal de apertura, produciéndose una nueva falla el 05.01.23 en la cual fue posible determinar la causa de la operación. Una vez determinado el elemento de protección que genera la operación en forma espuria del relé maestro, se realizan mediciones determinando que el switch asociado a dicha válvula falló, por lo cual se realiza su reemplazo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CGE Transmisión S.A. señala que no se consideran mayores acciones correctivas a las ya realizadas, las cuales solucionan el problema detectado.                                                                                                                                                                                                                                                                                  |
| EAF 012-2023 | Falla en desconectador 89B1 de S/E Tap Off Santa Clara                | 09-01-23    | 07:06      | No se indican.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No se indican.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EAF 051-2023 | Desconexión de transformador N°1 66/13.2 kV de S/E Victoria           | 06-02-23    | 02:16      | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No aplica.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EAF 054-2023 | Desconexión forzada de transformadores 66/13.2 kV de S/E Curicó       | 06-02-23    | 17:01      | La empresa CGE Transmisión S.A. indica las siguientes acciones correctivas de corto plazo:<br>“La primera acción ya fue realizada y correspondió a una inspección de diagnóstico al interruptor 52CT1, efectuada el domingo 12/02/2023 en horas de madrugada (SD N°2023011474). En esta inspección se pudo determinar el daño en las bobinas de apertura del interruptor 52CT1, por lo que no fue posible recuperar el equipo al servicio. Se retiraron estos elementos dañados con el fin de solicitar la fabricación de las bobinas de reemplazo, para realizar la reparación a la brevedad. Como medida de mitigación provisoria, se direccionaron por programación las señales de apertura del relé SEL-387 asociado al paño CT1 hacia el 52BT1”.<br>“También el mismo domingo 12/02/2023, se desconectó el reconector 52C10 para realizar pruebas efectivas de apertura con inyección de corriente primaria, las que resultaron exitosas y se programó el control con la fecha correcta incluyendo el año a fin de evitar la pérdida de datos. Cabe indicar que el 52C10 y sus protecciones fueron auditadas por personal técnico a solicitud del Coordinador Eléctrico Nacional el año 2022, encontrándose en buen estado. En vista de que durante las pruebas de la Auditoria Técnica y las pruebas del Domingo 12/02/2023 el 52C10 se encontró normal pero no abrió durante la falla del 06/02/2023, se programó su reemplazo para el Domingo 26/02/2023”.<br>“Respecto del relé de respaldo SEL751A dañado, se estima su reemplazo dentro del mes de abril del 2023”. | La empresa CGE Transmisión S.A. indica la siguiente acción correctiva de largo plazo:<br>“Finalmente, se reemplazará el tablero de distribución de corriente continua, con el fin de actualizar los interruptores termomagnéticos en un plazo estimado de tres meses”.                                                                                                                                                           |

| FALLA ID     | NOMBRE FALLA                                                           | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ACCIONES CORRECTIVAS LP                                                                      |
|--------------|------------------------------------------------------------------------|-------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| EAF 071-2023 | Apertura intempestiva del interruptor 52ET1 de S/E Marquesa            | 13-02-23    | 12:07      | La empresa CGE Transmisión S.A. señala que se realizó el reemplazo de los equipos de los paños E2 y E3 (NUP 3702 de plataforma PGP), de acuerdo con el Curso Forzoso N°2023014094 del 17-02-2023.                                                                                                                                                                                                                                                                                                                                                             | No se indican.                                                                               |
| EAF 074-2023 | Falla en interruptor 52C3 de S/E San Francisco de Mostazal             | 14-02-23    | 14:07      | La empresa CGE Transmisión S.A. indica que realizó revisión de unidad de control y pruebas locales con el equipo.                                                                                                                                                                                                                                                                                                                                                                                                                                             | No se indican.                                                                               |
| EAF 103-2023 | Desconexión forzada del transformador N°4 66/15 kV de S/E San Fernando | 05-03-23    | 18:05      | La empresa CGE Transmisión S.A. indica lo siguiente:<br>"Se programa de acuerdo con SD 2023024484, la revisión y habilitación de alarmas de equipos asociados al transformador N°4. Considera labores SCADA en sistema de la subestación y NODO San Fernando.".                                                                                                                                                                                                                                                                                               | No se indican.                                                                               |
| EAF 107-2023 | Desconexión forzada de la barra 15 kV N°2 de S/E Los Ángeles           | 06-03-23    | 21:02      | La empresa CGE Transmisión S.A. indica que corrigió el mal contacto en la bornera de la celda del alimentador Paillihue (52C11) de S/E Los Ángeles, durante trabajos programados según las solicitudes SD N°2023020928 y SD N°2023020932 del 12-03-2023.                                                                                                                                                                                                                                                                                                      | No se indican.                                                                               |
| EAF 170-2023 | Falla en interruptor 52C3 de S/E San Francisco de Mostazal             | 15-04-23    | 01:43      | No se indican.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No se indican.                                                                               |
| EAF 182-2023 | Apertura intempestiva del interruptor 52B1 de S/E Angol                | 28-04-23    | 05:23      | La empresa CGE Transmisión S.A. indica: "Se realiza reemplazo de RTU N°1 y dispositivos electrónicos afectados por un cortocircuito en los servicios auxiliares de corriente continua del gabinete de RTU N°1, se presume falla en fuentes de poder o en componentes de la RTU. Posteriormente se realizan pruebas efectivas exitosas sobre control y operación del interruptor 52B1 de S/E Angol.".                                                                                                                                                          | Las empresas CGE Transmisión S.A., Frontel y STS S.A. no indican acciones correctivas.       |
| EAF 187-2023 | Falla en interruptor 52C3 de S/E Chacahuín                             | 28-04-23    | 13:20      | La empresa CGE Transmisión S.A. indica: "Se realizarán pruebas operativas del reconectador 52C3, que comprenda órdenes de cierre y de apertura, tanto remotas desde SCADA como locales en caseta, y en el panel propio del control del 52C3."                                                                                                                                                                                                                                                                                                                 | La empresa CGE Transmisión S.A. indica: "No se consideran acciones correctivas adicionales." |
| EAF 274-2023 | Falla en el interruptor 52C1 de S/E Las Arañas                         | 23-06-23    | 15:49      | CGE Transmisión S.A. señala que no aplica.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CGE Transmisión S.A. señala que no aplica.                                                   |
| EAF 304-2023 | Falla en interruptor 52E23 de S/E Calama                               | 19-07-23    | 17:58      | La empresa CGE Transmisión S.A. indica: "Se realiza reemplazo de batería de control F5 asociado a 52E23 Latorre, no observándose alarmas activas por falla de baterías luego del reemplazo. Se realiza monitoreo del estado de la nueva batería, constatándose que esta se encuentra con parámetros normales de funcionamiento. Cabe destacar que la última inspección operacional realizada a SE Calama fue realizada el 07/07/2023. En esa oportunidad no se detectó indicación de falla batería".                                                          | CGE Transmisión S.A. señala que "no aplica".                                                 |
| EAF 305-2023 | Falla en el interruptor 52C2 de S/E El Monte                           | 19-07-23    | 21:45      | La empresa CGE Transmisión S.A. indica lo siguiente: "Se reemplaza el interruptor NOVA27, cabecera del paño C2, alimentador Naltagua de S/E El Monte."                                                                                                                                                                                                                                                                                                                                                                                                        | La empresa CGE Transmisión S.A. indica: "No hay".                                            |
| EAF 366-2023 | Apertura intempestiva del interruptor 52CT1 de S/E Punitaqui           | 21-08-23    | 08:19      | La empresa CGE Transmisión S.A. indica: "Se programan pruebas del conjunto Relé - Reconectador del paño C3. (fecha 07-09-2023)."                                                                                                                                                                                                                                                                                                                                                                                                                              | La empresa CGE Transmisión S.A. no indica acciones correctivas de largo plazo.               |
| EAF 408-2023 | Falla en sistema de control del paño C6 de S/E Chivilcán               | 14-09-23    | 11:54      | La empresa CGE Transmisión S.A. indica: "Se realiza intervención en nodo SCADA Temuco para normalizar intermitencia de datos según SDCF 2023083822".                                                                                                                                                                                                                                                                                                                                                                                                          | La empresa CGE Transmisión S.A. indica: "No aplica".                                         |
| EAF 414-2023 | Desconexión forzada del transformador N°5 66/23 kV de S/E Pullinque    | 21-09-23    | 01:06      | La empresa CGE Transmisión S.A. indica:<br>"Se realiza la desconexión de rama de control que genera el trip desde la válvula de alivio, para efecto de asegurar que dicho equipo no genere operaciones indeseadas sobre el transformador. Lo anterior mientras se realiza el cambio de válvula. Mediante la SD N°2023083073, se realiza la desconexión del transformador T5 el sábado 30 de septiembre de 2023. Esto con la finalidad de verificar las dimensiones del equipo y características técnicas, para efecto de permitir el cambio de dicho equipo." | La empresa CGE Transmisión S.A. no indica acciones correctivas a largo plazo.                |

| FALLA ID     | NOMBRE FALLA                                                           | FECHA FALLA | HORA FALLA | ACCIONES CORRECTIVAS CP                                                                                                                                                                                                                                                                                                                                                                               | ACCIONES CORRECTIVAS LP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|------------------------------------------------------------------------|-------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EAF 426-2023 | Falla en control del paño C3 de S/E San Francisco de Mostazal          | 03-10-23    | 14:24      | La empresa CGE Transmisión S.A. señala que reemplazó la tarjeta actuadora del reconectador 52C3 de S/E San Francisco de Mostazal.<br>La empresa CGE S.A. no señala acciones correctivas a corto plazo.                                                                                                                                                                                                | La empresa CGE Transmisión S.A. señala que "no aplica" ejecutar acciones correctivas a largo plazo.<br>La empresa CGE S.A. no señala acciones correctivas a largo plazo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| EAF 432-2023 | Falla en el sistema de control del paño C2 de S/E Las Cabras           | 07-10-23    | 00:05      | La empresa CGE Transmisión S.A. indica: "Se reemplaza tarjeta actuadora del interruptor 52C2 Cto. Cocalán en SE Las Cabras."                                                                                                                                                                                                                                                                          | La empresa CGE Transmisión S.A. indica: "No aplica".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EAF 464-2023 | Desconexión forzada del transformador N°4 154/66 kV de S/E Los Ángeles | 28-10-23    | 23:28      | La empresa CGE Transmisión S.A. indica lo siguiente:<br>"Se realizará la revisión del ajuste de sobrecorriente residual de la protección SEL-387 del Transformador T4.<br>Bajo la SD N°2023103207 se desactivará la función de sobrecorriente residual, hasta que se verifique su coordinación, manteniendo operativa la función de sobrecorriente residual en la protección SEL-311C del sistema 2." | La empresa CGE Transmisión S.A. indica lo siguiente:<br>"El 30 de noviembre del 2023, se enviará al CEN una solicitud de modificación no relevante SMNR, junto al estudio de homologación de ajustes por el proyecto de reemplazo de las protecciones del transformador T4 en S/E Los Ángeles. El reemplazo será por protecciones de la misma marca y modelo, pero de última generación esto con el fin de habilitar su comunicación remota y conexión a un nuevo reloj satelital, que también se colocará en la caseta del transformador T4 para regularizar la estampa de tiempo.<br>La puesta en servicio del reemplazo de protecciones del Transformador T4 en S/E Los Ángeles se realizará la segunda semana del mes de marzo del 2024." |

Cantidad de fallas (sin importar Fenómeno Físico) en la misma instalación: Se ha producido una falla en la misma instalación afectada, durante los últimos 24 meses móviles (EAF 464-2023).

#### d.4 Fenómeno eléctrico

PR51N: Protección de sobrecorriente temporizada residual.

#### e. Detalles de la instalación, equipo o elemento donde se produjo la falla

El elemento que provoca la desconexión forzada del transformador N°4 154/66 kV de S/E Los Ángeles, corresponde al sistema de protecciones N°1, el cual, según lo informado por el propietario en la plataforma Infotécnica del Coordinador, es de la marca SEL-387 y posee funciones 87T, 51/51N, 50/50N.

La empresa CGE Transmisión S.A. no presenta información de los mantenimientos realizados al transformador N°4 155/66 kV de S/E Los Ángeles, junto a sus sistemas de control y protecciones, ni a la línea 154 kV Los Ángeles – Santa Luisa, durante los últimos 24 meses.

#### f. Ubicación urbana o rural según DS 327/1997

- La empresa CGE S.A. señala: "Urbano/Rural".
- La empresa Coopelan señala: "Densidad Muy Baja".
- La empresa Frontel señala: "Densidad Baja" y "Densidad Muy Baja".

#### g. Proposición del propietario respecto del origen de la falla

Interna.

#### h. Comuna donde se presenta la falla

8301: Los Ángeles.

## i. Fecha de entrega de la información al Coordinador

| Coordinado                                         | Informe de 48 horas<br>(31-10-2023) | Informe de 5 días<br>(06-11-2023) |
|----------------------------------------------------|-------------------------------------|-----------------------------------|
| CGE Transmisión S.A.                               | 29-10-2023                          | 13-11-2023                        |
| Sistema de Transmisión del Sur S.A. (STS)          | 29-10-2023                          | 04-11-2023                        |
| AR Alena SpA                                       | 29-10-2023                          | 10-11-2023                        |
| Enel Green Power Chile S.A.                        | 29-10-2023                          | 13-11-2023                        |
| Eólica La Esperanza S.A.                           | 29-10-2023                          | 16-11-2023                        |
| WPD Negrete SpA                                    | 29-10-2023                          | 02-11-2023                        |
| Compañía General de Electricidad S.A. (CGE S.A.)   | 31-10-2023                          | 03-11-2023                        |
| Cooperativa Eléctrica Los Ángeles Ltda. (Coopelan) | 29-10-2023                          | 16-11-2023                        |
| Empresa Eléctrica de la Frontera S.A. (Frontel)    | 29-10-2023                          | 02-11-2023                        |

## 2. Descripción del equipamiento afectado

### a. Sistema de Generación

| Central             | Unidad | Pérdida de Generación (MW) | Hora Desc. | Hora Norm.     |
|---------------------|--------|----------------------------|------------|----------------|
| PE Los Buenos Aires | -      | 20.0                       | 11:19+     | 11:26          |
| PE La Esperanza     | -      | 4.9(*)                     | 11:19+     | 12:00          |
| PE Negrete          | -      | 3.0                        | 11:19+     | 11:34          |
| PE Alena            | -      | 39.0                       | 11:19+     | 01:10 (*) (**) |

**Total: 66.9 MW**

- Los montos y las horas indicadas corresponden a lo informado por las empresas Enel Green Power Chile S.A., Eólica La Esperanza S.A., WPD Negrete SpA y AR Alena SpA.
- (\*) Según el registro histórico del sistema SCADA del Coordinador.
- (\*\*) Horario correspondiente al día 30-10-2023.

### b. Sistema de Transmisión

| Elemento Afectado                                      | Segmento    | Tramo                       | Hora Desc. | Hora Norm. |
|--------------------------------------------------------|-------------|-----------------------------|------------|------------|
| Los Ángeles – Santa Luisa 154 kV                       | ST Dedicado | -                           | 11:19      | 11:19      |
| Los Ángeles - Central Parque Eólico Buenos Aires 66 kV | ST Zonal    | -                           | 11:19      | 11:26      |
| S/E Los Ángeles                                        | ST Zonal    | Transformador N°4 154/66 kV | 11:19      | 11:23      |
| S/E Central Parque Eólico Los Buenos Aires             | ST Zonal    | Transformador N°1 66/33 kV  | 11:19      | 11:26      |
| S/E Central Parque Eólico Los Buenos Aires             | ST Zonal    | Barra 33 kV                 | 11:19      | 11:26      |
| S/E Central Eólica Alena                               | ST Dedicado | Transformador N°1 154/33 kV | 11:19      | 01:10*     |

- Las horas indicadas corresponden a lo informado por las empresas CGE Transmisión S.A., Enel Green Power Chile S.A. y AR Alena SpA.
- (\*) Horario correspondiente al día 30-10-2023, según el registro histórico del sistema SCADA del Coordinador.

### c. Consumos

| Sub-Estación     | Alimentador/<br>Paño      | Comuna                            | Pérdida de<br>Consumo<br>(MW) | %<br>consumo<br>pre-falla | Clientes<br>Afectados | H.<br>Desc. | H.<br>Dispon. | H.<br>Norm. |
|------------------|---------------------------|-----------------------------------|-------------------------------|---------------------------|-----------------------|-------------|---------------|-------------|
| Manso de Velasco | Colo Colo / C1            | Los Ángeles                       | 2.70                          | 0.030                     | 2903                  | 11:19       | 11:23         | 11:23       |
| Manso de Velasco | Bulnes / C2               | Los Ángeles                       | 3.20                          | 0.040                     | 4583                  | 11:19       | 11:23         | 11:23       |
| Manso de Velasco | Alemania / C3             | Los Ángeles                       | 4.90                          | 0.060                     | 6703                  | 11:19       | 11:23         | 11:23       |
| Manso de Velasco | Villagrán / C4            | Los Ángeles                       | 5.20                          | 0.060                     | 12449                 | 11:19       | 11:23         | 11:23       |
| Manso de Velasco | Quilque / C5              | Los Ángeles                       | 1.10                          | 0.010                     | 1                     | 11:19       | 11:23         | 11:23       |
| El Avellano      | La Mona / E1              | Los Ángeles                       | 5.00                          | 0.060                     | 553                   | 11:19       | 11:23         | 11:23       |
| El Avellano      | Sor Vicenta / E2          | Los Ángeles                       | 1.50                          | 0.020                     | 1334                  | 11:19       | 11:23         | 11:23       |
| El Avellano      | Laja / E3                 | Los Ángeles                       | 0.80                          | 0.010                     | 523                   | 11:19       | 11:23         | 11:23       |
| El Avellano      | Rarincó / E4              | Los Ángeles y Laja                | 1.59                          | 0.020                     | 7021                  | 11:19       | 11:23         | 11:23       |
| Negrete          | Negrete - Renaico / E1    | Negrete y Renaico                 | 2.39                          | 0.030                     | 4111                  | 11:19       | 11:26         | 11:28       |
| Negrete          | Negrete - Nacimiento / E2 | Los Ángeles, Nacimiento y Negrete | 6.42                          | 0.070                     | 10517                 | 11:19       | 11:26         | 11:26       |
| Negrete          | Negrete - Mulchén / E3    | Mulchén, Negrete y Renaico        | 1.30                          | 0.010                     | 2178                  | 11:19       | 11:26         | 11:26       |

**Total: 36.10 MW 0.420 % 52876**

- Los montos y horarios señalados corresponden a lo informado por las empresas Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda y Empresa Eléctrica de la Frontera S.A.

### 3. Estimación de la energía no suministrada

| Sub-Estación     | Alimentador /<br>Paño | Empresa  | Tipo de<br>Cliente | Pérdida de<br>Consumo (MW) | Tiempo<br>Indispon. (h) | Tiempo<br>Desc. (h) | ENS<br>(MWh) |
|------------------|-----------------------|----------|--------------------|----------------------------|-------------------------|---------------------|--------------|
| Manso de Velasco | Colo Colo / C1        | CGE      | Regulado           | 2.70                       | 0.07                    | 0.07                | 0.2          |
| Manso de Velasco | Bulnes / C2           | CGE      | Regulado           | 3.20                       | 0.07                    | 0.07                | 0.2          |
| Manso de Velasco | Alemania / C3         | CGE      | Regulado           | 4.90                       | 0.07                    | 0.07                | 0.3          |
| Manso de Velasco | Villagrán / C4        | CGE      | Regulado           | 5.20                       | 0.07                    | 0.07                | 0.3          |
| Manso de Velasco | Quilque / C5          | CGE      | Regulado           | 1.10                       | 0.07                    | 0.07                | 0.1          |
| El Avellano      | La Mona / E1          | CGE      | Regulado           | 5.00                       | 0.07                    | 0.07                | 0.3          |
| El Avellano      | Sor Vicenta / E2      | CGE      | Regulado           | 1.50                       | 0.07                    | 0.07                | 0.1          |
| El Avellano      | Laja / E3             | CGE      | Regulado           | 0.80                       | 0.07                    | 0.07                | 0.1          |
| El Avellano      | Rarincó / E4          | Coopelan | Regulado           | 1.59                       | 0.07                    | 0.07                | 0.1          |

|         |                           |         |           |      |      |      |     |
|---------|---------------------------|---------|-----------|------|------|------|-----|
| Negrete | Negrete - Renaico / E1    | Frontel | Regulado  | 2.39 | 0.12 | 0.15 | 0.4 |
| Negrete | Negrete - Nacimiento / E2 | Frontel | Regulado* | 6.42 | 0.12 | 0.12 | 0.7 |
| Negrete | Negrete - Mulchén / E3    | Frontel | Regulado  | 1.30 | 0.12 | 0.12 | 0.2 |

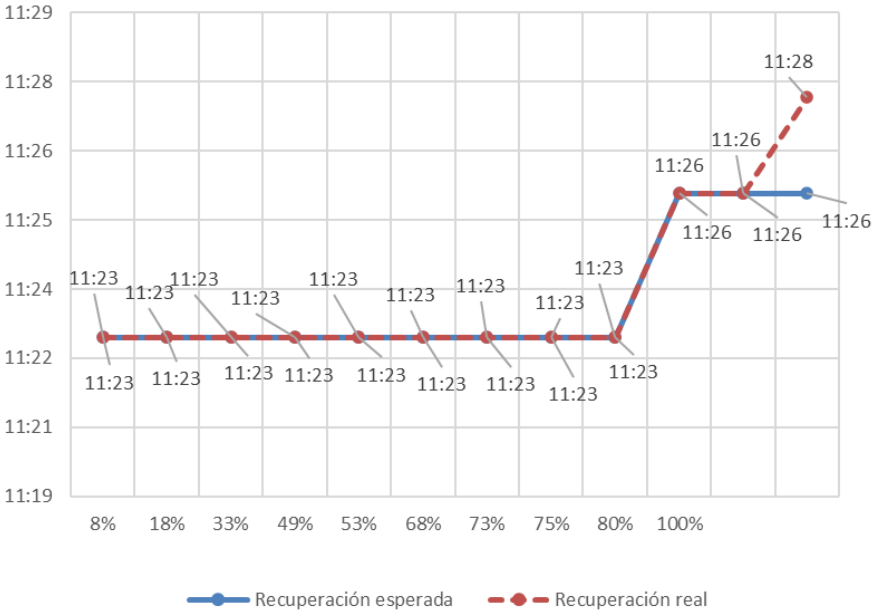
**Cientes Regulados : 3.0 MWh**

**Cientes Libres : MWh**

**Total : 3.0 MWh**

- Los montos y horarios señalados corresponden a lo informado por las empresas Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda y Empresa Eléctrica de la Frontera S.A.
- (\*) Incluye a clientes libres abastecidos desde redes de distribución.

- Curva de recuperación esperada v/s recuperación real.



No hay diferencias significativas entre la recuperación real y esperada de los consumos.

- Velocidad promedio de recuperación.

| Rango       | Potencia (MW) | Tiempo recuperación (h) | Velocidad de recuperación (MW/h) |
|-------------|---------------|-------------------------|----------------------------------|
| Primer 80 % | 25.93         | 0.12                    | 222.27                           |
| Último 20 % | 6.48          | 0.15                    | 43.22                            |
| 100 % Total | 36.10         | 0.15                    | 240.70                           |

**4. Descripción de las configuraciones en los momentos previo y posterior a la falla**

**Demanda del sistema previo a la falla: 8905.62 MW**

## **Regulación de Frecuencia**

Control distribuido de frecuencia en el SEN previo a la falla, mediante las centrales Angostura (U2 y U3), Mejillones (IEM), Norgener (NTO2), Pehuenche (U1 y U2), Ralco (U1 y U2) y Rapel (U1).

## **Operación Programada**

En Anexo N°1 se adjunta el detalle de la generación programada para el día 29 de octubre de 2023.

## **Operación Real**

En Anexo N°2 se adjunta el detalle de la generación real del día 29 de octubre de 2023.

## **Movimiento de centrales e informe diario del CDC**

En Anexo N°3 se presenta el detalle del Movimiento de Centrales e Informe Diario del CDC para el día 29 de octubre de 2023.

## **Mantenimientos**

En Anexo N°4 se presenta el detalle de los mantenimientos programados y forzados para el día 29 de octubre de 2023.

## **Estado y configuración previo a la falla**

Las instalaciones de transmisión se encontraban en servicio normal en los momentos previos a la desconexión forzada, con las siguientes particularidades:

- El transformador N°4 154/66 kV de S/E Los Ángeles, abastecía los consumos de las SS/EE Manso de Velasco, El Avellano y Negrete a través de la barra 66 kV N°2 de S/E Los Ángeles.
- El interruptor 52B2 de S/E Negrete, correspondiente a la línea 66 kV Negrete - Nahuelbuta, se encontraba abierto.
- Los interruptores 52B1 y 52B2 de S/E Duqueco, correspondientes a la línea 2x66 kV Los Ángeles – Duqueco, se encontraban abiertos.
- Los Parques Eólicos Cuel y Mesamávida se encontraban fuera de servicio.

## **Otros antecedentes relevantes**

Según lo informado por la empresa CGE Transmisión S.A.:

*"A las 11:19 horas del día 29 de octubre de 2023, se registró la operación por protecciones del interruptor 52AT4 de S/E Los Ángeles asociado al Transformador T-4. A raíz de temporal de viento y lluvia en la zona, esto afectó a subestaciones Manso de Velasco, El Avellano, Buenos Aires y Negrete (consumos de CGED, Frontel y Copelan). Ante este escenario y en coordinación con el CEN se inician maniobras de recuperación. A las 11:23 horas se cierra de manera exitosa el interruptor 52AT4, normalizando la topología."*

*"De acuerdo con los antecedentes aportados en el presente informe, se concluye que dada la perturbación en la LT154kV Los Ángeles – Santa Luisa, se produjo la apertura del interruptor 52AT4, por medio de la función de sobrecorriente residual de tiempo inverso, la cual operó de acuerdo a ajustes, más se evaluará este elemento ya que el relé SE-387 no tiene opción de poder ajustar direccionalidad, según lo expuesto en acciones correctivas."*

*"A las 11:19 horas del día 29 de octubre de 2023, se registró la operación con reconexión automática exitosa del interruptor del interruptor 52A2 en S/E Los Ángeles, asociado a la LT154kV Los Ángeles – Santa Luisa. Como antecedente, se desarrollaba fuerte temporal de viento y lluvia en la zona."*

*Durante la jornada brigada contratista de CGE transmisión efectuó recorrido pedestre a la totalidad de la LT154kV Los Ángeles – Santa Luisa no encontrándose novedades ni causa aparente de falla en dicha instalación.”*

Según lo informado por la empresa Enel Green Power Chile S.A.:

*"A las 11:20 horas del 29 de octubre del 2023, se produjo una interrupción forzada por protecciones del transformador N°4 154/66 [kV] 56 [MVA] de la S/E Los Ángeles. Esta falla causó la desconexión de diversos parques y consumos en el sistema de 66 [kV] aguas debajo de la S/E Los Ángeles. En particular, en el Parque Eólico Los Buenos Aires y S/E Los Buenos Aires se verificó la desconexión del PE Los Buenos Aires producto de la operación de las protecciones del paño 52B1 de la S/E Los Buenos Aires producto de la actuación de su función de protección de distancia en su Zona 1 de operación y la actuación de la función de sobrefrecuencia del sistema de protecciones asociadas al transformador elevador de 66/33 [kV], lo que se verifica en los registros oscilográficos en donde se observa que la orden de desconexión enviada a los paños 52BT1 y 52FT1.*

*En cuanto a la actuación del sistema 2 de protecciones del paño B1 de la S/E los Buenos Aires, su causa se encuentra en investigación en conjunto con la empresa representante del fabricante en Chile del relé de protección, de manera de determinar la razón de la detección de la falla en análisis en su Zona 1 de protección, considerando que el sistema 1 de protección, que dispone del mismo ajuste, no actuó frente a esta falla.*

*De lo anterior, se puede concluir que las protecciones asociadas al Transformador de 66/33 [kV] de la S/E Los Buenos Aires, operaron de manera correcta y de acuerdo con sus ajustes.”*

*"Al momento de la falla, el Parque Eólico Los Buenos Aires estaba generando un monto aproximado de 20 [MW] y no se realizaban trabajos en las instalaciones del parque.”*

Según lo informado por la empresa WPD Negrete SpA:

*"A las 11:19 PE Negrete pierde generación por falla en instalaciones de terceros*

*A las 11:34 horas, PE Negrete recupera automáticamente la generación.”*

*"El PE Negrete se encontraba generando 3 MW.”*

Según lo informado por la empresa AR Alena SpA:

*"El sábado 29-10-2023, a las 14:20:27.857 (UTC 0), se registra operación automática de los relés de protecciones SPAT1-S1 y SPTAT1-S2 ambos relés SIEMENS 7SA86 asociados a la Línea de Transmisión Alena – Tap Off Coyanco de 154 kV, por la activación de la función de baja tensión (27) ocasionando la apertura del interruptor 52AT1 en la Subestación Elevadora Alena 33/154 kV.”*

*"El interruptor 52AT1 perteneciente a la LT Alena – Tap Off Coyanco de 154 kV y al Transformador de Potencia TR1 se encontraba en condiciones normales de operación. Al momento de la falla la Subestación Elevadora Alena 33/154 kV propiedad de MRP se encontraba con un aporte de generación de 39 MW al SEN.”*

*"Debido a la característica de esta falla, se sobrescriben los eventos y los registros oscilográficos en ambos esquemas de protecciones, solo quedando disponibles los eventos en el registrados de falla de la Subestación Alena, por tal motivo, se realiza el análisis de falla con estos archivos y no con los archivos descargados de los relés de protecciones.”*

## Sistema de Transmisión del Sur S.A.:

*"Durante el evento en análisis no operaron ni debieron operar elementos de protección propiedad de Sistema de Transmisión del Sur S.A."*

### **Acciones preventivas y/o correctivas**

a) La instalación afectada no cuenta con una auditoría, plan de acción u otro tipo de mantenimiento en curso.

b) Acciones correctivas a corto plazo:

- o La empresa CGE Transmisión S.A. indica lo siguiente:

*"Se realizará la revisión del ajuste de sobrecorriente residual de la protección SEL-387 del Transformador T4.*

*Bajo la SD N°2023103207 se desactivará la función de sobrecorriente residual, hasta que se verifique su coordinación, manteniendo operativa la función de sobrecorriente residual en la protección SEL-311C del sistema 2."*

- o La empresa Enel Green Power Chile S.A. indica lo siguiente:

*"Como acciones correctivas para la falla en análisis, y en particular para la determinación de la causa de actuación del Sistema N°2 de protección, relé SEL311L del paño B1 de la S/E Los Buenos Aires, se ha iniciado un proceso de revisión del ajuste y algoritmos de la función de distancia (21/21N) de este relé con el representante en Chile del fabricante del equipo, con el objetivo de aclarar la operación de este relé de protección, teniendo en cuenta la no operación del sistema N°1 de protección, el cual corresponde a otro modelo de protección (SEL-311C). Cabe mencionar que el modelo SEL 311L es un relé cuya función principal de protección corresponde al esquema diferencial de línea, por lo que los métodos de detección de falla de la función de protección de distancia no son idénticos a los del sistema N°1 de protección del paño B1, modelo SEL 311C. Las posibles causas de operación indeseada de este relé de protección se indican en el Anexo N°3 del presente informe de falla, por lo que las recomendaciones y pruebas recomendadas por la empresa representante del fabricante se realizarán en el menor plazo posible, y los resultados se informarán al CEN.*

*En caso de que las pruebas recomendadas no sean satisfactorias o en caso de determinarse que el relé SEL311L requiere de funciones adicionales o complementarias, como detección de oscilación de potencia u otros que no estén disponibles en el relé, se propondrá el cambio de este equipo de protección por uno de similares características a la del relé SEL311C, de manera de evitar operaciones indeseadas."*

- o La empresa WPD Negrete SpA indica lo siguiente: "No hay"
- o La empresa Sistema de Transmisión del Sur S.A. indica lo siguiente: "No hay"
- o La empresa Eólica La Esperanza S.A. indica lo siguiente:

*"No se registraron comportamiento inadecuado de los sistemas de protección, ya que la protección actuó de acuerdo con los valores de tensión y tiempos definidos."*

- o La empresa AR Alena SpA indica lo siguiente:

*"Descargar los eventos y registros oscilográficos el mismo día de ocurrencia de la falla."*

- o La empresa Compañía General de Electricidad S.A. no indica acciones correctivas a corto plazo.
- o La empresa Cooperativa Eléctrica Los Ángeles Ltda. indica que no aplica.

- La Empresa Eléctrica de la Frontera S.A. no indica acciones correctivas a corto plazo.

c) Acciones correctivas a largo plazo:

- La empresa CGE Transmisión S.A. indica lo siguiente:

*"El 30 de noviembre del 2023, se enviará al CEN una solicitud de modificación no relevante SMNR, junto al estudio de homologación de ajustes por el proyecto de reemplazo de las protecciones del transformador T4 en S/E Los Ángeles. El reemplazo será por protecciones de la misma marca y modelo, pero de última generación esto con el fin de habilitar su comunicación remota y conexión a un nuevo reloj satelital, que también se colocará en la caseta del transformador T4 para regularizar la estampa de tiempo."*

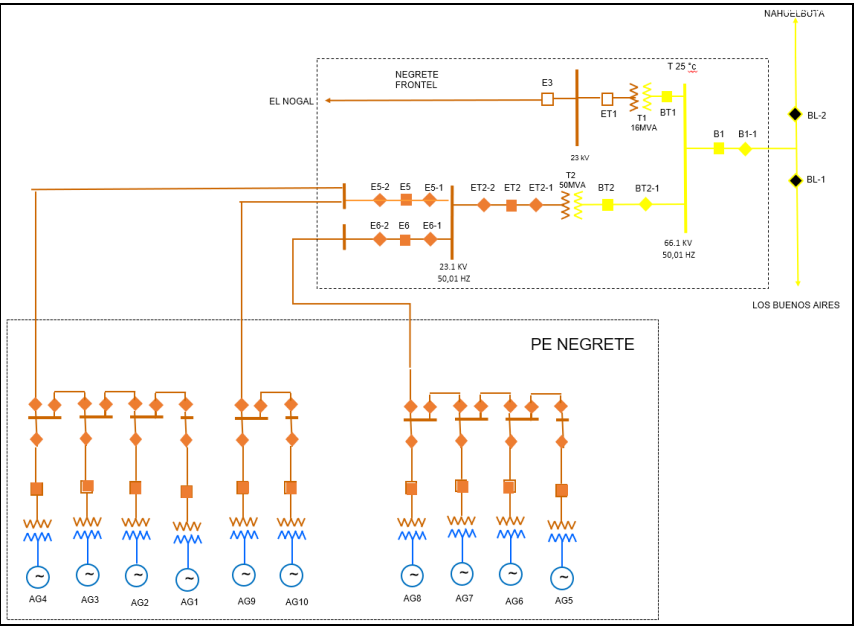
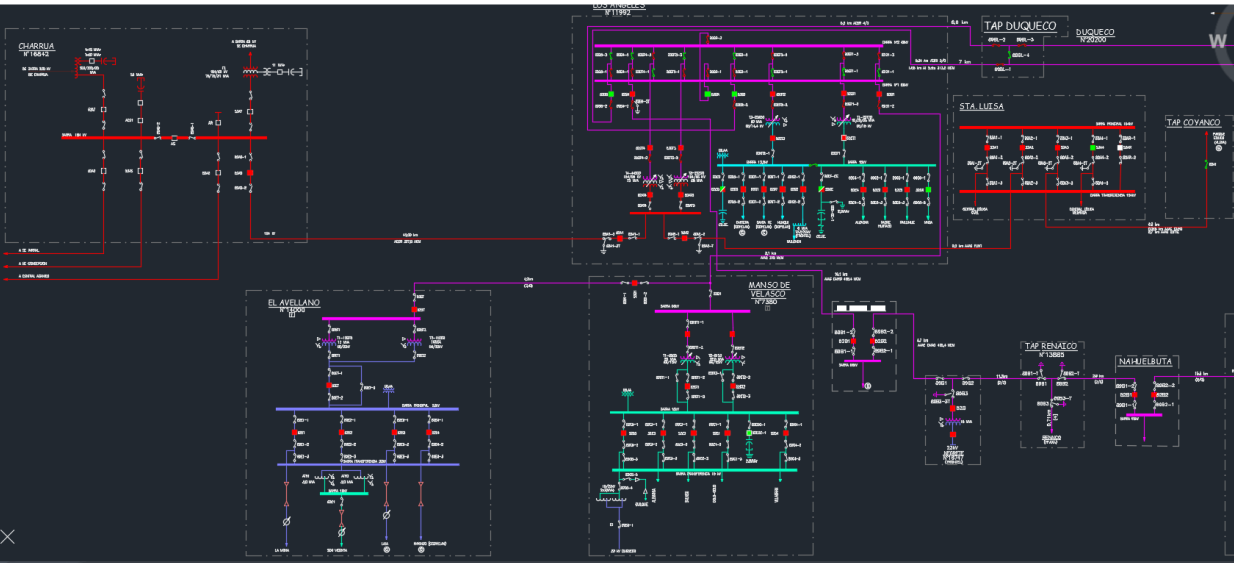
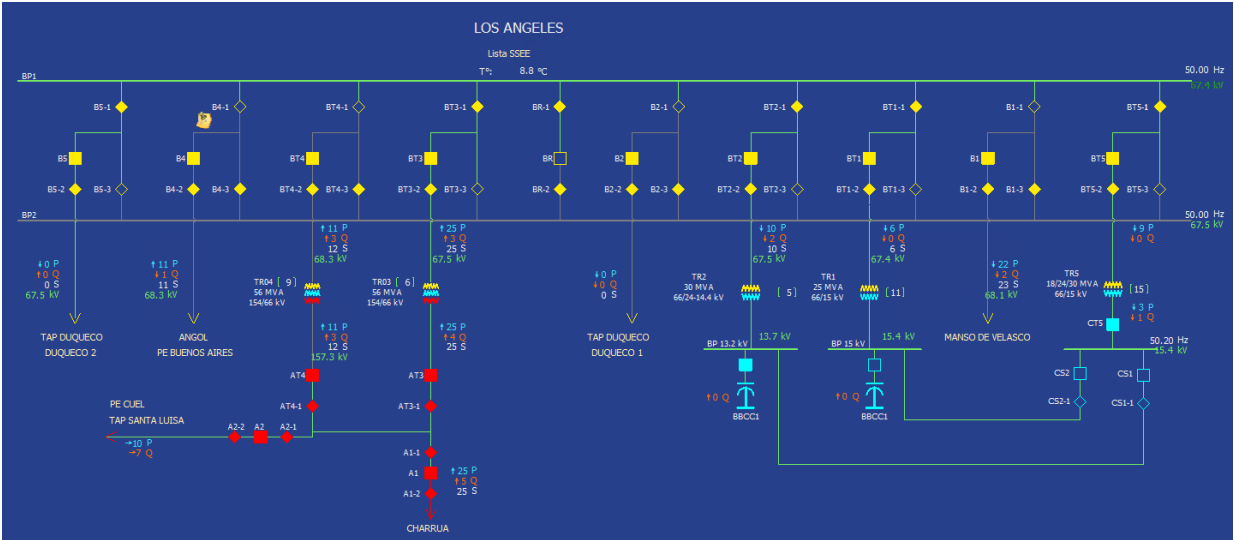
*"La puesta en servicio del reemplazo de protecciones del Transformador T4 en S/E Los Angeles se realizará la segunda semana del mes de marzo del 2024."*

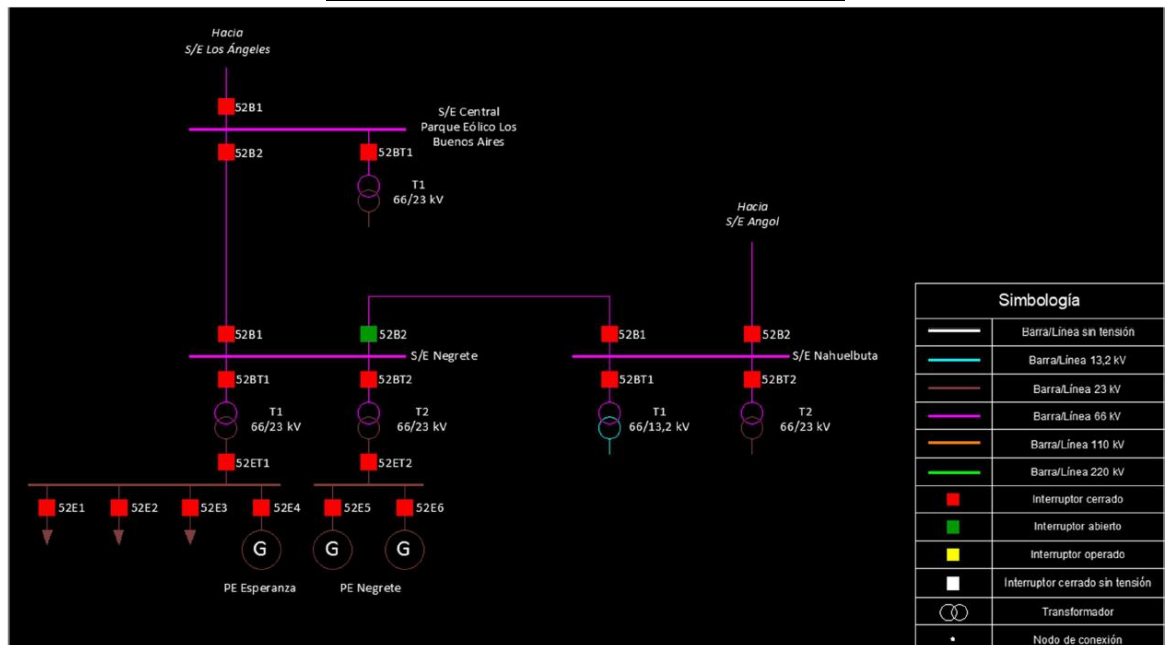
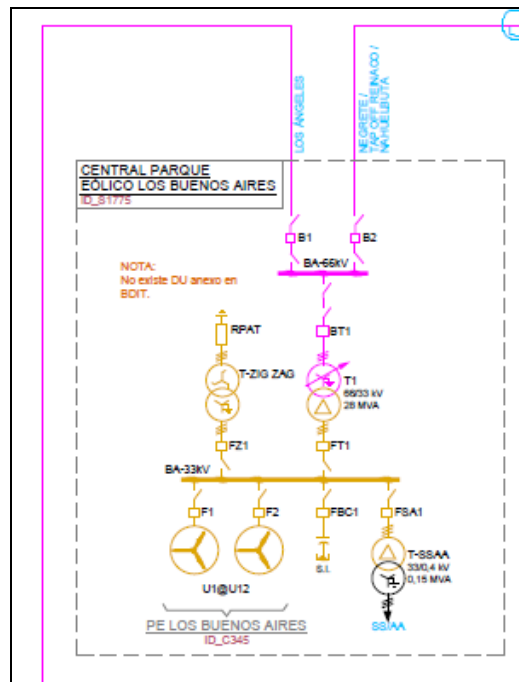
*"Lo anterior además trae incluido como mejora la instalación de un nuevo reloj satelital en esta caseta de control, lo cual solucionará el inconveniente de la estampa de tiempo de las protecciones instaladas en esa caseta, en particular a las protecciones del paño A2 de S/E Los Ángeles analizadas."*

*"La instalación del reloj satelital se espera realizar antes de las Puesta en servicio de las protecciones comprometidas para el mes de marzo del 2024 ya que no requiere autorización vía plataforma PGP, por lo que solo se espera de la llegada del equipo, la cual se estima en enero del 2024, periodo en el cual se instalará el nuevo reloj satelital."*

- La empresa Enel Green Power Chile S.A. no indica acciones correctivas a largo plazo.
- La empresa WPD Negrete SpA indica lo siguiente: *"No hay"*
- La empresa Sistema de Transmisión del Sur S.A. indica lo siguiente: *"No hay"*
- La empresa Eólica La Esperanza S.A. indica lo siguiente:  
*"No se registraron comportamiento inadecuado de los sistemas de protección, ya que la protección actuó de acuerdo con los valores de tensión y tiempos definidos."*
- La empresa AR Alena SpA no indica acciones correctivas a largo plazo.
- La empresa Compañía General de Electricidad S.A. no indica acciones correctivas a largo plazo.
- La empresa Cooperativa Eléctrica Los Ángeles Ltda. no indica acciones correctivas a largo plazo.
- La Empresa Eléctrica de la Frontera S.A. no indica acciones correctivas a largo plazo.

Diagrama simplificado de las instalaciones previo a la falla





## 5. Cronología de eventos y la descripción de las causas de los eventos

| Hora   | Involucrado                    | Evento                                                                                                                                                                                                                                                                                 |
|--------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:19  | CGE Transmisión                | Apertura con reconexión automática exitosa del interruptor 52A2 de S/E Los Ángeles, correspondiente a la línea 154 kV Los Ángeles – Santa Luisa, por medio de la operación de la protección de sobrecorriente residual.                                                                |
| 11:19  | AR Alena                       | Apertura automática del interruptor 52AT1 de S/E Central Eólica Alena, por medio de la función de baja tensión. El PE Alena queda indisponible.                                                                                                                                        |
| 11:19  | CGE Transmisión                | Apertura automática del interruptor 52AT4 de S/E Los Ángeles, correspondiente al transformador N°4 154/66 kV de dicha subestación, por medio de la operación de la protección de sobrecorriente residual.                                                                              |
| 11:19+ | Enel Green Power / WPD Negrete | Apertura automática del interruptor 52B1 de S/E Central Parque Eólico Los Buenos Aires, correspondiente a la línea 66 kV Los Ángeles - Parque Eólico Buenos Aires, por medio de la operación de la protección de distancia de fases en primera zona. El PE Negrete queda indisponible. |
| 11:19+ | Enel Green Power               | Apertura automática de los interruptores 52BT1 y 52FT1 de S/E Central Parque Eólico Los Buenos Aires, por medio la operación de la protección de sobrefrecuencia. El PE Los Buenos Aires queda indisponible.                                                                           |
| 11:19+ | Eólica La Esperanza            | Apertura automática del interruptor 52E1 del Parque Eólico La Esperanza, por medio de la operación de su protección de baja tensión. El PE La Esperanza queda indisponible.                                                                                                            |

- Las horas señaladas corresponden a lo informado por las empresas CGE Transmisión S.A., Enel Green Power Chile S.A., WPD Negrete SpA, AR Alena SpA y Eólica La Esperanza S.A.

## 6. Normalización del servicio

| Fecha      | Involucrado         | Hora   | Acción                                                                                                                                                           |
|------------|---------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29-10-2023 | CGE Transmisión     | 11:23  | Cierre del interruptor 52AT4 de S/E Los Ángeles. Se normaliza la topología del transformador N°4 154/66 kV de dicha subestación.                                 |
| 29-10-2023 | CGE                 | 11:23  | Se recupera los consumos de la S/E Manso de Velasco.                                                                                                             |
| 29-10-2023 | CGE                 | 11:23  | Se recupera los consumos de los alimentadores 52E1 La Mona, 52E2 Sor Vicenta y 52E3 Laja de S/E El Avellano.                                                     |
| 29-10-2023 | Coopelan            | 11:23  | Se recuperan los consumos del alimentador 52E4 Rarínco de S/E El Avellano.                                                                                       |
| 29-10-2023 | Enel Green Power    | 11:26  | Cierre del interruptor 52B1 de S/E Central Parque Eólico Los Buenos Aires. Se normaliza la topología de la línea 66 kV Los Ángeles - Parque Eólico Buenos Aires. |
| 29-10-2023 | Frontel             | 11:26  | Se recuperan los consumos de los alimentadores 52E2 Negrete – Nacimiento y 52E3 Negrete – Mulchén de S/E Negrete.                                                |
| 29-10-2023 | Enel Green Power    | 11:26  | Cierre de los interruptores 52BT1 y 52FT1 de S/E Central Parque Eólico Los Buenos Aires. El PE Los Buenos Aires queda disponible.                                |
| 29-10-2023 | Frontel             | 11:28  | Se recuperan los consumos del alimentador 52E1 Negrete – Renaico de S/E Negrete.                                                                                 |
| 29-10-2023 | WPD Negrete         | 11:34  | PE Negrete recupera automáticamente la generación.                                                                                                               |
| 29-10-2023 | Eólica La Esperanza | 12:00  | Cierre del interruptor 52E1 del Parque Eólico La Esperanza. El PE La Esperanza queda disponible.                                                                 |
| 29-10-2023 | AR Alena            | 19:44* | Apertura del interruptor 52FT1 de S/E Central Eólica Alena.                                                                                                      |
| 30-10-2023 | AR Alena            | 01:10* | Cierre del interruptor 52AT1 de S/E Central Eólica Alena, energizando en vacío el transformador N°1 154/33 kV de dicha subestación.                              |

| Fecha      | Involucrado | Hora   | Acción                                                                                  |
|------------|-------------|--------|-----------------------------------------------------------------------------------------|
| 30-10-2023 | AR Alena    | 01:10* | Cierre del interruptor 52FT1 de S/E Central Eólica Alena. El PE Alena queda disponible. |

- Las fechas y las horas señaladas corresponden a lo informado por las empresas CGE Transmisión S.A., Sistema de Transmisión del Sur S.A., AR Alena SpA, Enel Green Power Chile S.A., Eólica La Esperanza S.A., WPD Negrete SpA, Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda y Empresa Eléctrica de la Frontera S.A.

- (\*) Según el registro histórico del sistema SCADA del Coordinador.

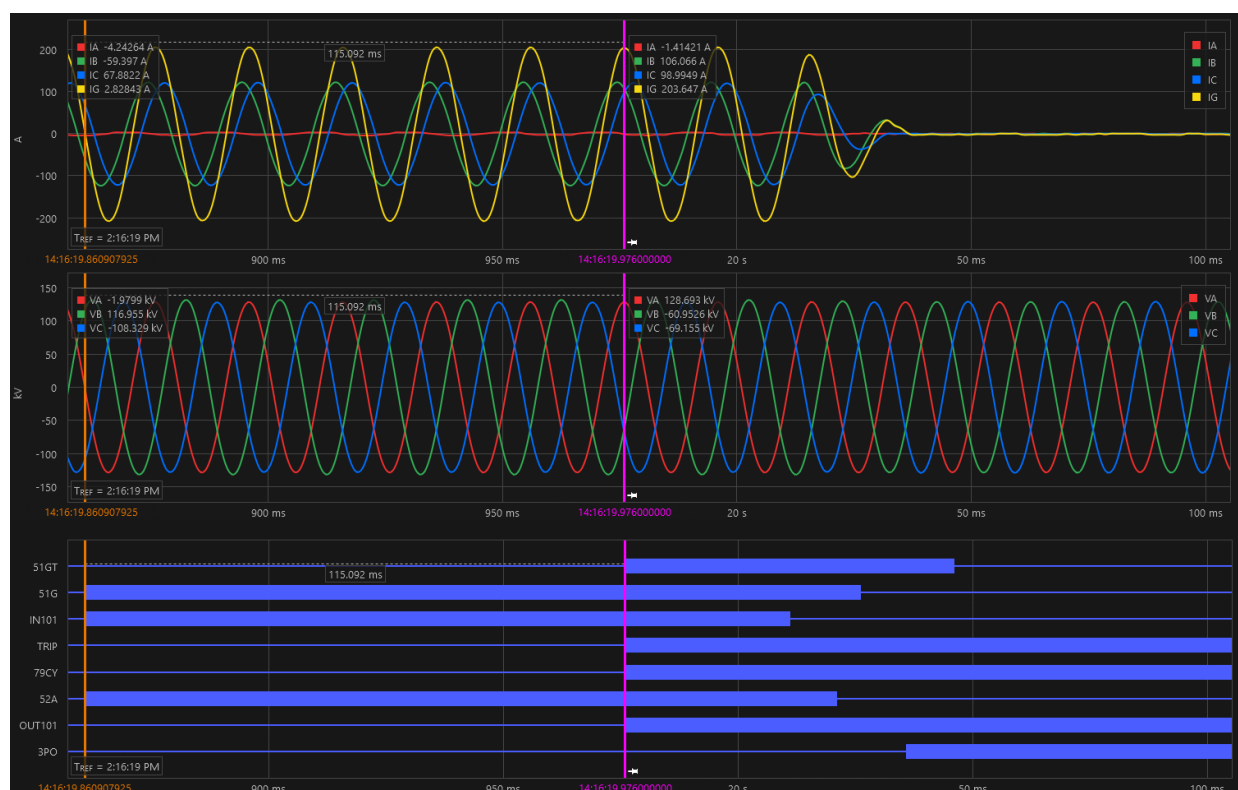
## 7. Análisis de las causas de la falla y de la actuación de los dispositivos de protección y control

Se produjo la apertura automática del interruptor 52AT4 de S/E Los Ángeles, correspondiente al transformador N°4 154/66 kV de dicha subestación, por medio de la operación de la protección de sobrecorriente residual (51N), en forma coincidente con la reconexión automática exitosa de la línea 154 kV Los Ángeles – Santa Luisa.

La empresa CGE Transmisión S.A. señala que la operación anteriormente señalada fue debido a perturbaciones en la línea 154 kV Los Ángeles – Santa Luisa, en circunstancias que existía un frente de mal tiempo en la zona, lo que provocó la operación la función 51N del relé SEL-387, la cual no tiene opción de habilitar direccionalidad, mientras que la función 51N del relé SEL-311C del mismo paño en cuestión, la cual sí posee direccionalidad, no registró operación.

A raíz del evento en cuestión, resultaron afectados 36.10 MW de consumos asociados a las SS/EE Manso de Velasco, El Avellano y Negrete. Además, resultaron afectados 66.9 MW de generación de las centrales PE Los Buenos Aires, PE La Esperanza, PE Negrete y PE Alena.

### Apertura con reconexión automática exitosa del interruptor 52A2 de S/E Los Ángeles, correspondiente a la línea 154 kV Los Ángeles – Santa Luisa. Relé SEL-311C (Sistema 1).



En el registro oscilográfico se aprecia que las corrientes de la fase “B” y C” presentan formas de onda y desfases normales, mientras que en la fase “A” la magnitud es prácticamente cero, cuya corriente residual mostrada ( $IG$ ) es equivalente a la suma fasorial de las fases “B” y “C”. Por otra parte, se observa que las tensiones presentan sus desfases normales, situación que podría explicarse para una condición de fase abierta que para una falla propiamente tal. En relación con las señales digitales, se registra la activación de la función de sobrecorriente residual ( $51G = 1$ ) y su consecuente operación ( $51GT = 1$ ). Además, se da inicio al ciclo de reconexión automática ajustada en 10 segundos ( $79CY = 1$ ).

Se presenta a continuación el registro secuencial de eventos de la protección:

LT 154KV LOS ANGELES-STA LUISA Date: 11/05/2023 Time: 15:21:46.528  
S/E LOS ANGELES 52A2

FID=SEL-311C-R113-V0-Z006004-D20110829 CID=7388

| #   | DATE       | TIME         | ELEMENT | STATE      |
|-----|------------|--------------|---------|------------|
| 512 | 10/29/2023 | 14:15:37.993 | 50G3    | Asserted   |
| 511 | 10/29/2023 | 14:15:38.004 | 51G     | Deasserted |
| 510 | 10/29/2023 | 14:15:38.004 | 67G3    | Deasserted |
| 509 | 10/29/2023 | 14:15:38.004 | 50G3    | Deasserted |
| 508 | 10/29/2023 | 14:15:38.014 | 51G     | Asserted   |
| 507 | 10/29/2023 | 14:15:38.014 | 67G3    | Asserted   |
| 506 | 10/29/2023 | 14:15:38.014 | 50G3    | Asserted   |
| 505 | 10/29/2023 | 14:15:38.024 | 51G     | Deasserted |
| 504 | 10/29/2023 | 14:15:38.024 | 67G3    | Deasserted |
| 503 | 10/29/2023 | 14:15:38.024 | 50G3    | Deasserted |
| 502 | 10/29/2023 | 14:15:38.033 | 51G     | Asserted   |
| 501 | 10/29/2023 | 14:15:38.033 | 67G3    | Asserted   |
| 500 | 10/29/2023 | 14:15:38.033 | 50G3    | Asserted   |
| 499 | 10/29/2023 | 14:15:38.043 | 51G     | Deasserted |
| 498 | 10/29/2023 | 14:15:38.043 | 67G3    | Deasserted |
| 497 | 10/29/2023 | 14:15:38.043 | 50G3    | Deasserted |
| 496 | 10/29/2023 | 14:15:38.054 | 51G     | Asserted   |
| 495 | 10/29/2023 | 14:15:38.054 | 67G3    | Asserted   |
| 494 | 10/29/2023 | 14:15:38.054 | 50G3    | Asserted   |
| 493 | 10/29/2023 | 14:15:38.058 | 51G     | Deasserted |
| 492 | 10/29/2023 | 14:15:38.058 | 67G3    | Deasserted |
| 491 | 10/29/2023 | 14:15:38.058 | 50G3    | Deasserted |
| 490 | 10/29/2023 | 14:15:38.073 | 51G     | Asserted   |
| 489 | 10/29/2023 | 14:15:38.073 | 67G3    | Asserted   |
| 488 | 10/29/2023 | 14:15:38.073 | 50G3    | Asserted   |
| 487 | 10/29/2023 | 14:15:38.079 | 51G     | Deasserted |
| 486 | 10/29/2023 | 14:15:38.079 | 67G3    | Deasserted |
| 485 | 10/29/2023 | 14:15:38.079 | 50G3    | Deasserted |
| 484 | 10/29/2023 | 14:15:38.093 | 51G     | Asserted   |
| 483 | 10/29/2023 | 14:15:38.093 | 67G3    | Asserted   |
| 482 | 10/29/2023 | 14:15:38.093 | 50G3    | Asserted   |
| 481 | 10/29/2023 | 14:15:38.098 | 51G     | Deasserted |
| 480 | 10/29/2023 | 14:15:38.098 | 67G3    | Deasserted |
| 479 | 10/29/2023 | 14:15:38.098 | 50G3    | Deasserted |
| 478 | 10/29/2023 | 14:15:38.113 | 51G     | Asserted   |
| 477 | 10/29/2023 | 14:15:38.113 | 67G3    | Asserted   |
| 476 | 10/29/2023 | 14:15:38.113 | 50G3    | Asserted   |
| 475 | 10/29/2023 | 14:15:38.118 | 51G     | Deasserted |
| 474 | 10/29/2023 | 14:15:38.118 | 67G3    | Deasserted |
| 473 | 10/29/2023 | 14:15:38.118 | 50G3    | Deasserted |
| 472 | 10/29/2023 | 14:15:38.133 | 51G     | Asserted   |
| 471 | 10/29/2023 | 14:15:38.133 | 67G3    | Asserted   |
| 470 | 10/29/2023 | 14:15:38.133 | 50G3    | Asserted   |
| 469 | 10/29/2023 | 14:15:38.138 | 51G     | Deasserted |
| 468 | 10/29/2023 | 14:15:38.138 | 67G3    | Deasserted |
| 467 | 10/29/2023 | 14:15:38.138 | 50G3    | Deasserted |
| 466 | 10/29/2023 | 14:15:38.153 | 51G     | Asserted   |
| 465 | 10/29/2023 | 14:15:38.153 | 67G3    | Asserted   |
| 464 | 10/29/2023 | 14:15:38.153 | 50G3    | Asserted   |
| 463 | 10/29/2023 | 14:15:38.163 | 51G     | Deasserted |
| 462 | 10/29/2023 | 14:15:38.163 | 67G3    | Deasserted |
| 461 | 10/29/2023 | 14:15:38.163 | 50G3    | Deasserted |
| 460 | 10/29/2023 | 14:15:38.173 | 51G     | Asserted   |
| 459 | 10/29/2023 | 14:15:38.173 | 67G3    | Asserted   |
| 458 | 10/29/2023 | 14:15:38.173 | 50G3    | Asserted   |
| 457 | 10/29/2023 | 14:15:38.183 | 51G     | Deasserted |
| 456 | 10/29/2023 | 14:15:38.183 | 67G3    | Deasserted |
| 455 | 10/29/2023 | 14:15:38.183 | 50G3    | Deasserted |
| 454 | 10/29/2023 | 14:15:38.193 | 51G     | Asserted   |
| 453 | 10/29/2023 | 14:15:38.193 | 67G3    | Asserted   |
| 452 | 10/29/2023 | 14:15:38.193 | 50G3    | Asserted   |
| 451 | 10/29/2023 | 14:15:38.203 | 51G     | Deasserted |
| 450 | 10/29/2023 | 14:15:38.203 | 67G3    | Deasserted |
| 449 | 10/29/2023 | 14:15:38.203 | 50G3    | Deasserted |
| 448 | 10/29/2023 | 14:15:38.293 | 51G     | Asserted   |
| 447 | 10/29/2023 | 14:15:38.293 | 67G3    | Asserted   |
| 446 | 10/29/2023 | 14:15:38.293 | 50G3    | Asserted   |
| 445 | 10/29/2023 | 14:15:38.298 | 51G     | Deasserted |
| 444 | 10/29/2023 | 14:15:38.298 | 67G3    | Deasserted |
| 443 | 10/29/2023 | 14:15:38.298 | 50G3    | Deasserted |
| 442 | 10/29/2023 | 14:15:38.313 | 51G     | Asserted   |
| 441 | 10/29/2023 | 14:15:38.313 | 67G3    | Asserted   |
| 440 | 10/29/2023 | 14:15:38.313 | 50G3    | Asserted   |
| 439 | 10/29/2023 | 14:15:38.318 | 51G     | Deasserted |

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| 438 | 10/29/2023 | 14:15:38.318 | 67G3 | Deasserted |
| 437 | 10/29/2023 | 14:15:38.318 | 50G3 | Deasserted |
| 436 | 10/29/2023 | 14:15:38.353 | 51G  | Asserted   |
| 435 | 10/29/2023 | 14:15:38.353 | 67G3 | Asserted   |
| 434 | 10/29/2023 | 14:15:38.353 | 50G3 | Asserted   |
| 433 | 10/29/2023 | 14:15:38.358 | 51G  | Deasserted |
| 432 | 10/29/2023 | 14:15:38.358 | 67G3 | Deasserted |
| 431 | 10/29/2023 | 14:15:38.358 | 50G3 | Deasserted |
| 430 | 10/29/2023 | 14:15:38.413 | 51G  | Asserted   |
| 429 | 10/29/2023 | 14:15:38.413 | 67G3 | Asserted   |
| 428 | 10/29/2023 | 14:15:38.413 | 50G3 | Asserted   |
| 427 | 10/29/2023 | 14:15:38.418 | 51G  | Deasserted |
| 426 | 10/29/2023 | 14:15:38.418 | 67G3 | Deasserted |
| 425 | 10/29/2023 | 14:15:38.418 | 50G3 | Deasserted |
| 424 | 10/29/2023 | 14:15:38.553 | 51G  | Asserted   |
| 423 | 10/29/2023 | 14:15:38.553 | 67G3 | Asserted   |
| 422 | 10/29/2023 | 14:15:38.553 | 50G3 | Asserted   |
| 421 | 10/29/2023 | 14:15:38.563 | 51G  | Deasserted |
| 420 | 10/29/2023 | 14:15:38.563 | 67G3 | Deasserted |
| 419 | 10/29/2023 | 14:15:38.563 | 50G3 | Deasserted |
| 418 | 10/29/2023 | 14:15:38.573 | 51G  | Asserted   |
| 417 | 10/29/2023 | 14:15:38.573 | 67G3 | Asserted   |
| 416 | 10/29/2023 | 14:15:38.573 | 50G3 | Asserted   |
| 415 | 10/29/2023 | 14:15:38.583 | 51G  | Deasserted |
| 414 | 10/29/2023 | 14:15:38.583 | 67G3 | Deasserted |
| 413 | 10/29/2023 | 14:15:38.583 | 50G3 | Deasserted |
| 412 | 10/29/2023 | 14:15:38.593 | 51G  | Asserted   |
| 411 | 10/29/2023 | 14:15:38.593 | 67G3 | Asserted   |
| 410 | 10/29/2023 | 14:15:38.593 | 50G3 | Asserted   |
| 409 | 10/29/2023 | 14:15:38.603 | 51G  | Deasserted |
| 408 | 10/29/2023 | 14:15:38.603 | 67G3 | Deasserted |
| 407 | 10/29/2023 | 14:15:38.603 | 50G3 | Deasserted |
| 406 | 10/29/2023 | 14:15:38.613 | 51G  | Asserted   |
| 405 | 10/29/2023 | 14:15:38.613 | 67G3 | Asserted   |
| 404 | 10/29/2023 | 14:15:38.613 | 50G3 | Asserted   |
| 403 | 10/29/2023 | 14:15:38.623 | 51G  | Deasserted |
| 402 | 10/29/2023 | 14:15:38.623 | 67G3 | Deasserted |
| 401 | 10/29/2023 | 14:15:38.623 | 50G3 | Deasserted |
| 400 | 10/29/2023 | 14:15:38.633 | 51G  | Asserted   |
| 399 | 10/29/2023 | 14:15:38.633 | 67G3 | Asserted   |
| 398 | 10/29/2023 | 14:15:38.633 | 50G3 | Asserted   |
| 397 | 10/29/2023 | 14:15:38.643 | 51G  | Deasserted |
| 396 | 10/29/2023 | 14:15:38.643 | 67G3 | Deasserted |
| 395 | 10/29/2023 | 14:15:38.643 | 50G3 | Deasserted |
| 394 | 10/29/2023 | 14:15:38.653 | 51G  | Asserted   |
| 393 | 10/29/2023 | 14:15:38.653 | 67G3 | Asserted   |
| 392 | 10/29/2023 | 14:15:38.653 | 50G3 | Asserted   |
| 391 | 10/29/2023 | 14:15:38.663 | 51G  | Deasserted |
| 390 | 10/29/2023 | 14:15:38.663 | 67G3 | Deasserted |
| 389 | 10/29/2023 | 14:15:38.663 | 50G3 | Deasserted |
| 388 | 10/29/2023 | 14:15:38.673 | 51G  | Asserted   |
| 387 | 10/29/2023 | 14:15:38.673 | 67G3 | Asserted   |
| 386 | 10/29/2023 | 14:15:38.673 | 50G3 | Asserted   |
| 385 | 10/29/2023 | 14:15:38.683 | 51G  | Deasserted |
| 384 | 10/29/2023 | 14:15:38.683 | 67G3 | Deasserted |
| 383 | 10/29/2023 | 14:15:38.683 | 50G3 | Deasserted |
| 382 | 10/29/2023 | 14:15:38.693 | 51G  | Asserted   |
| 381 | 10/29/2023 | 14:15:38.693 | 67G3 | Asserted   |
| 380 | 10/29/2023 | 14:15:38.693 | 50G3 | Asserted   |
| 379 | 10/29/2023 | 14:15:38.703 | 51G  | Deasserted |
| 378 | 10/29/2023 | 14:15:38.703 | 67G3 | Deasserted |
| 377 | 10/29/2023 | 14:15:38.703 | 50G3 | Deasserted |
| 376 | 10/29/2023 | 14:15:38.713 | 51G  | Asserted   |
| 375 | 10/29/2023 | 14:15:38.713 | 67G3 | Asserted   |
| 374 | 10/29/2023 | 14:15:38.713 | 50G3 | Asserted   |
| 373 | 10/29/2023 | 14:15:38.723 | 51G  | Deasserted |
| 372 | 10/29/2023 | 14:15:38.723 | 67G3 | Deasserted |
| 371 | 10/29/2023 | 14:15:38.723 | 50G3 | Deasserted |
| 370 | 10/29/2023 | 14:15:38.733 | 51G  | Asserted   |
| 369 | 10/29/2023 | 14:15:38.733 | 67G3 | Asserted   |
| 368 | 10/29/2023 | 14:15:38.733 | 50G3 | Asserted   |
| 367 | 10/29/2023 | 14:15:38.743 | 51G  | Deasserted |
| 366 | 10/29/2023 | 14:15:38.743 | 67G3 | Deasserted |
| 365 | 10/29/2023 | 14:15:38.743 | 50G3 | Deasserted |
| 364 | 10/29/2023 | 14:15:38.753 | 51G  | Asserted   |
| 363 | 10/29/2023 | 14:15:38.753 | 67G3 | Asserted   |
| 362 | 10/29/2023 | 14:15:38.753 | 50G3 | Asserted   |
| 361 | 10/29/2023 | 14:15:38.763 | 51G  | Deasserted |
| 360 | 10/29/2023 | 14:15:38.763 | 67G3 | Deasserted |
| 359 | 10/29/2023 | 14:15:38.763 | 50G3 | Deasserted |
| 358 | 10/29/2023 | 14:15:38.773 | 51G  | Asserted   |
| 357 | 10/29/2023 | 14:15:38.773 | 67G3 | Asserted   |
| 356 | 10/29/2023 | 14:15:38.773 | 50G3 | Asserted   |
| 355 | 10/29/2023 | 14:15:38.783 | 51G  | Deasserted |
| 354 | 10/29/2023 | 14:15:38.783 | 67G3 | Deasserted |
| 353 | 10/29/2023 | 14:15:38.783 | 50G3 | Deasserted |
| 352 | 10/29/2023 | 14:15:38.793 | 51G  | Asserted   |
| 351 | 10/29/2023 | 14:15:38.793 | 67G3 | Asserted   |
| 350 | 10/29/2023 | 14:15:38.793 | 50G3 | Asserted   |
| 349 | 10/29/2023 | 14:15:38.803 | 51G  | Deasserted |
| 348 | 10/29/2023 | 14:15:38.803 | 67G3 | Deasserted |
| 347 | 10/29/2023 | 14:15:38.803 | 50G3 | Deasserted |
| 346 | 10/29/2023 | 14:15:38.813 | 51G  | Asserted   |
| 345 | 10/29/2023 | 14:15:38.813 | 67G3 | Asserted   |
| 344 | 10/29/2023 | 14:15:38.813 | 50G3 | Asserted   |
| 343 | 10/29/2023 | 14:15:38.823 | 51G  | Deasserted |
| 342 | 10/29/2023 | 14:15:38.823 | 67G3 | Deasserted |
| 341 | 10/29/2023 | 14:15:38.823 | 50G3 | Deasserted |
| 340 | 10/29/2023 | 14:15:38.833 | 51G  | Asserted   |
| 339 | 10/29/2023 | 14:15:38.833 | 67G3 | Asserted   |
| 338 | 10/29/2023 | 14:15:38.833 | 50G3 | Asserted   |

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| 337 | 10/29/2023 | 14:15:38.843 | 51G  | Deasserted |
| 336 | 10/29/2023 | 14:15:38.843 | 67G3 | Deasserted |
| 335 | 10/29/2023 | 14:15:38.843 | 50G3 | Deasserted |
| 334 | 10/29/2023 | 14:15:38.853 | 51G  | Asserted   |
| 333 | 10/29/2023 | 14:15:38.853 | 67G3 | Asserted   |
| 332 | 10/29/2023 | 14:15:38.853 | 50G3 | Asserted   |
| 331 | 10/29/2023 | 14:15:38.863 | 51G  | Deasserted |
| 330 | 10/29/2023 | 14:15:38.863 | 67G3 | Deasserted |
| 329 | 10/29/2023 | 14:15:38.863 | 50G3 | Deasserted |
| 328 | 10/29/2023 | 14:15:38.873 | 51G  | Asserted   |
| 327 | 10/29/2023 | 14:15:38.873 | 67G3 | Asserted   |
| 326 | 10/29/2023 | 14:15:38.873 | 50G3 | Asserted   |
| 325 | 10/29/2023 | 14:15:38.883 | 51G  | Deasserted |
| 324 | 10/29/2023 | 14:15:38.883 | 67G3 | Deasserted |
| 323 | 10/29/2023 | 14:15:38.883 | 50G3 | Deasserted |
| 322 | 10/29/2023 | 14:15:38.893 | 51G  | Asserted   |
| 321 | 10/29/2023 | 14:15:38.893 | 67G3 | Asserted   |
| 320 | 10/29/2023 | 14:15:38.893 | 50G3 | Asserted   |
| 319 | 10/29/2023 | 14:15:38.903 | 51G  | Deasserted |
| 318 | 10/29/2023 | 14:15:38.903 | 67G3 | Deasserted |
| 317 | 10/29/2023 | 14:15:38.903 | 50G3 | Deasserted |
| 316 | 10/29/2023 | 14:15:38.913 | 51G  | Asserted   |
| 315 | 10/29/2023 | 14:15:38.913 | 67G3 | Asserted   |
| 314 | 10/29/2023 | 14:15:38.913 | 50G3 | Asserted   |
| 313 | 10/29/2023 | 14:15:38.923 | 51G  | Deasserted |
| 312 | 10/29/2023 | 14:15:38.923 | 67G3 | Deasserted |
| 311 | 10/29/2023 | 14:15:38.923 | 50G3 | Deasserted |
| 310 | 10/29/2023 | 14:15:38.933 | 51G  | Asserted   |
| 309 | 10/29/2023 | 14:15:38.933 | 67G3 | Asserted   |
| 308 | 10/29/2023 | 14:15:38.933 | 50G3 | Asserted   |
| 307 | 10/29/2023 | 14:15:38.943 | 51G  | Deasserted |
| 306 | 10/29/2023 | 14:15:38.943 | 67G3 | Deasserted |
| 305 | 10/29/2023 | 14:15:38.943 | 50G3 | Deasserted |
| 304 | 10/29/2023 | 14:15:38.953 | 51G  | Asserted   |
| 303 | 10/29/2023 | 14:15:38.953 | 67G3 | Asserted   |
| 302 | 10/29/2023 | 14:15:38.953 | 50G3 | Asserted   |
| 301 | 10/29/2023 | 14:15:38.963 | 51G  | Deasserted |
| 300 | 10/29/2023 | 14:15:38.963 | 67G3 | Deasserted |
| 299 | 10/29/2023 | 14:15:38.963 | 50G3 | Deasserted |
| 298 | 10/29/2023 | 14:15:38.973 | 51G  | Asserted   |
| 297 | 10/29/2023 | 14:15:38.973 | 67G3 | Asserted   |
| 296 | 10/29/2023 | 14:15:38.973 | 50G3 | Asserted   |
| 295 | 10/29/2023 | 14:15:38.983 | 51G  | Deasserted |
| 294 | 10/29/2023 | 14:15:38.983 | 67G3 | Deasserted |
| 293 | 10/29/2023 | 14:15:38.983 | 50G3 | Deasserted |
| 292 | 10/29/2023 | 14:15:38.993 | 51G  | Asserted   |
| 291 | 10/29/2023 | 14:15:38.993 | 67G3 | Asserted   |
| 290 | 10/29/2023 | 14:15:38.993 | 50G3 | Asserted   |
| 289 | 10/29/2023 | 14:15:39.003 | 51G  | Deasserted |
| 288 | 10/29/2023 | 14:15:39.003 | 67G3 | Deasserted |
| 287 | 10/29/2023 | 14:15:39.003 | 50G3 | Deasserted |
| 286 | 10/29/2023 | 14:15:39.013 | 51G  | Asserted   |
| 285 | 10/29/2023 | 14:15:39.013 | 67G3 | Asserted   |
| 284 | 10/29/2023 | 14:15:39.013 | 50G3 | Asserted   |
| 283 | 10/29/2023 | 14:15:39.023 | 51G  | Deasserted |
| 282 | 10/29/2023 | 14:15:39.023 | 67G3 | Deasserted |
| 281 | 10/29/2023 | 14:15:39.023 | 50G3 | Deasserted |
| 280 | 10/29/2023 | 14:15:39.033 | 51G  | Asserted   |
| 279 | 10/29/2023 | 14:15:39.033 | 67G3 | Asserted   |
| 278 | 10/29/2023 | 14:15:39.033 | 50G3 | Asserted   |
| 277 | 10/29/2023 | 14:15:39.043 | 51G  | Deasserted |
| 276 | 10/29/2023 | 14:15:39.043 | 67G3 | Deasserted |
| 275 | 10/29/2023 | 14:15:39.043 | 50G3 | Deasserted |
| 274 | 10/29/2023 | 14:15:39.053 | 51G  | Asserted   |
| 273 | 10/29/2023 | 14:15:39.053 | 67G3 | Asserted   |
| 272 | 10/29/2023 | 14:15:39.053 | 50G3 | Asserted   |
| 271 | 10/29/2023 | 14:15:39.063 | 51G  | Deasserted |
| 270 | 10/29/2023 | 14:15:39.063 | 67G3 | Deasserted |
| 269 | 10/29/2023 | 14:15:39.063 | 50G3 | Deasserted |
| 268 | 10/29/2023 | 14:15:39.073 | 51G  | Asserted   |
| 267 | 10/29/2023 | 14:15:39.073 | 67G3 | Asserted   |
| 266 | 10/29/2023 | 14:15:39.073 | 50G3 | Asserted   |
| 265 | 10/29/2023 | 14:15:39.083 | 51G  | Deasserted |
| 264 | 10/29/2023 | 14:15:39.083 | 67G3 | Deasserted |
| 263 | 10/29/2023 | 14:15:39.083 | 50G3 | Deasserted |
| 262 | 10/29/2023 | 14:15:39.093 | 51G  | Asserted   |
| 261 | 10/29/2023 | 14:15:39.093 | 67G3 | Asserted   |
| 260 | 10/29/2023 | 14:15:39.093 | 50G3 | Asserted   |
| 259 | 10/29/2023 | 14:15:39.103 | 51G  | Deasserted |
| 258 | 10/29/2023 | 14:15:39.103 | 67G3 | Deasserted |
| 257 | 10/29/2023 | 14:15:39.103 | 50G3 | Deasserted |
| 256 | 10/29/2023 | 14:15:39.108 | 51G  | Asserted   |
| 255 | 10/29/2023 | 14:15:39.108 | 67G3 | Asserted   |
| 254 | 10/29/2023 | 14:15:39.108 | 50G3 | Asserted   |
| 253 | 10/29/2023 | 14:15:39.123 | 51G  | Deasserted |
| 252 | 10/29/2023 | 14:15:39.123 | 67G3 | Deasserted |
| 251 | 10/29/2023 | 14:15:39.123 | 50G3 | Deasserted |
| 250 | 10/29/2023 | 14:15:39.128 | 51G  | Asserted   |
| 249 | 10/29/2023 | 14:15:39.128 | 67G3 | Asserted   |
| 248 | 10/29/2023 | 14:15:39.128 | 50G3 | Asserted   |
| 247 | 10/29/2023 | 14:15:39.143 | 51G  | Deasserted |
| 246 | 10/29/2023 | 14:15:39.143 | 67G3 | Deasserted |
| 245 | 10/29/2023 | 14:15:39.143 | 50G3 | Deasserted |
| 244 | 10/29/2023 | 14:15:39.153 | 51G  | Asserted   |
| 243 | 10/29/2023 | 14:15:39.153 | 67G3 | Asserted   |
| 242 | 10/29/2023 | 14:15:39.153 | 50G3 | Asserted   |
| 241 | 10/29/2023 | 14:15:39.163 | 51G  | Deasserted |
| 240 | 10/29/2023 | 14:15:39.163 | 67G3 | Deasserted |
| 239 | 10/29/2023 | 14:15:39.163 | 50G3 | Deasserted |
| 238 | 10/29/2023 | 14:15:39.168 | 51G  | Asserted   |
| 237 | 10/29/2023 | 14:15:39.168 | 67G3 | Asserted   |

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| 236 | 10/29/2023 | 14:15:39.168 | 50G3 | Asserted   |
| 235 | 10/29/2023 | 14:15:39.183 | 51G  | Deasserted |
| 234 | 10/29/2023 | 14:15:39.183 | 67G3 | Deasserted |
| 233 | 10/29/2023 | 14:15:39.183 | 50G3 | Deasserted |
| 232 | 10/29/2023 | 14:15:39.188 | 51G  | Asserted   |
| 231 | 10/29/2023 | 14:15:39.188 | 67G3 | Asserted   |
| 230 | 10/29/2023 | 14:15:39.188 | 50G3 | Asserted   |
| 229 | 10/29/2023 | 14:15:39.203 | 51G  | Deasserted |
| 228 | 10/29/2023 | 14:15:39.203 | 67G3 | Deasserted |
| 227 | 10/29/2023 | 14:15:39.203 | 50G3 | Deasserted |
| 226 | 10/29/2023 | 14:15:39.213 | 51G  | Asserted   |
| 225 | 10/29/2023 | 14:15:39.213 | 67G3 | Asserted   |
| 224 | 10/29/2023 | 14:15:39.213 | 50G3 | Asserted   |
| 223 | 10/29/2023 | 14:15:39.223 | 51G  | Deasserted |
| 222 | 10/29/2023 | 14:15:39.223 | 67G3 | Deasserted |
| 221 | 10/29/2023 | 14:15:39.223 | 50G3 | Deasserted |
| 220 | 10/29/2023 | 14:15:39.233 | 51G  | Asserted   |
| 219 | 10/29/2023 | 14:15:39.233 | 67G3 | Asserted   |
| 218 | 10/29/2023 | 14:15:39.233 | 50G3 | Asserted   |
| 217 | 10/29/2023 | 14:15:39.243 | 51G  | Deasserted |
| 216 | 10/29/2023 | 14:15:39.243 | 67G3 | Deasserted |
| 215 | 10/29/2023 | 14:15:39.243 | 50G3 | Deasserted |
| 214 | 10/29/2023 | 14:15:39.253 | 51G  | Asserted   |
| 213 | 10/29/2023 | 14:15:39.253 | 67G3 | Asserted   |
| 212 | 10/29/2023 | 14:15:39.253 | 50G3 | Asserted   |
| 211 | 10/29/2023 | 14:15:39.263 | 51G  | Deasserted |
| 210 | 10/29/2023 | 14:15:39.263 | 67G3 | Deasserted |
| 209 | 10/29/2023 | 14:15:39.263 | 50G3 | Deasserted |
| 208 | 10/29/2023 | 14:15:39.273 | 51G  | Asserted   |
| 207 | 10/29/2023 | 14:15:39.273 | 67G3 | Asserted   |
| 206 | 10/29/2023 | 14:15:39.273 | 50G3 | Asserted   |
| 205 | 10/29/2023 | 14:15:39.283 | 51G  | Deasserted |
| 204 | 10/29/2023 | 14:15:39.283 | 67G3 | Deasserted |
| 203 | 10/29/2023 | 14:15:39.283 | 50G3 | Deasserted |
| 202 | 10/29/2023 | 14:15:39.293 | 51G  | Asserted   |
| 201 | 10/29/2023 | 14:15:39.293 | 67G3 | Asserted   |
| 200 | 10/29/2023 | 14:15:39.293 | 50G3 | Asserted   |
| 199 | 10/29/2023 | 14:15:39.303 | 51G  | Deasserted |
| 198 | 10/29/2023 | 14:15:39.303 | 67G3 | Deasserted |
| 197 | 10/29/2023 | 14:15:39.303 | 50G3 | Deasserted |
| 196 | 10/29/2023 | 14:15:39.313 | 51G  | Asserted   |
| 195 | 10/29/2023 | 14:15:39.313 | 67G3 | Asserted   |
| 194 | 10/29/2023 | 14:15:39.313 | 50G3 | Asserted   |
| 193 | 10/29/2023 | 14:15:39.323 | 51G  | Deasserted |
| 192 | 10/29/2023 | 14:15:39.323 | 67G3 | Deasserted |
| 191 | 10/29/2023 | 14:15:39.323 | 50G3 | Deasserted |
| 190 | 10/29/2023 | 14:15:39.333 | 51G  | Asserted   |
| 189 | 10/29/2023 | 14:15:39.333 | 67G3 | Asserted   |
| 188 | 10/29/2023 | 14:15:39.333 | 50G3 | Asserted   |
| 187 | 10/29/2023 | 14:15:39.343 | 51G  | Deasserted |
| 186 | 10/29/2023 | 14:15:39.343 | 67G3 | Deasserted |
| 185 | 10/29/2023 | 14:15:39.343 | 50G3 | Deasserted |
| 184 | 10/29/2023 | 14:15:39.353 | 51G  | Asserted   |
| 183 | 10/29/2023 | 14:15:39.353 | 67G3 | Asserted   |
| 182 | 10/29/2023 | 14:15:39.353 | 50G3 | Asserted   |
| 181 | 10/29/2023 | 14:15:39.363 | 51G  | Deasserted |
| 180 | 10/29/2023 | 14:15:39.363 | 67G3 | Deasserted |
| 179 | 10/29/2023 | 14:15:39.363 | 50G3 | Deasserted |
| 178 | 10/29/2023 | 14:15:39.373 | 51G  | Asserted   |
| 177 | 10/29/2023 | 14:15:39.373 | 67G3 | Asserted   |
| 176 | 10/29/2023 | 14:15:39.373 | 50G3 | Asserted   |
| 175 | 10/29/2023 | 14:15:39.383 | 51G  | Deasserted |
| 174 | 10/29/2023 | 14:15:39.383 | 67G3 | Deasserted |
| 173 | 10/29/2023 | 14:15:39.383 | 50G3 | Deasserted |
| 172 | 10/29/2023 | 14:15:39.393 | 51G  | Asserted   |
| 171 | 10/29/2023 | 14:15:39.393 | 67G3 | Asserted   |
| 170 | 10/29/2023 | 14:15:39.393 | 50G3 | Asserted   |
| 169 | 10/29/2023 | 14:15:39.403 | 51G  | Deasserted |
|     |            |              |      |            |

|     |            |              |        |            |
|-----|------------|--------------|--------|------------|
| 135 | 10/29/2023 | 14:15:39.513 | 67G3   | Asserted   |
| 134 | 10/29/2023 | 14:15:39.513 | 50G3   | Asserted   |
| 133 | 10/29/2023 | 14:15:39.523 | 51G    | Deasserted |
| 132 | 10/29/2023 | 14:15:39.523 | 67G3   | Deasserted |
| 131 | 10/29/2023 | 14:15:39.523 | 50G3   | Deasserted |
| 130 | 10/29/2023 | 14:15:39.533 | 51G    | Asserted   |
| 129 | 10/29/2023 | 14:15:39.533 | 67G3   | Asserted   |
| 128 | 10/29/2023 | 14:15:39.533 | 50G3   | Asserted   |
| 127 | 10/29/2023 | 14:15:39.543 | 51G    | Deasserted |
| 126 | 10/29/2023 | 14:15:39.543 | 67G3   | Deasserted |
| 125 | 10/29/2023 | 14:15:39.543 | 50G3   | Deasserted |
| 124 | 10/29/2023 | 14:15:39.553 | 51G    | Asserted   |
| 123 | 10/29/2023 | 14:15:39.553 | 67G3   | Asserted   |
| 122 | 10/29/2023 | 14:15:39.553 | 50G3   | Asserted   |
| 121 | 10/29/2023 | 14:15:39.563 | 51G    | Deasserted |
| 120 | 10/29/2023 | 14:15:39.563 | 67G3   | Deasserted |
| 119 | 10/29/2023 | 14:15:39.563 | 50G3   | Deasserted |
| 118 | 10/29/2023 | 14:15:39.573 | 51G    | Asserted   |
| 117 | 10/29/2023 | 14:15:39.573 | 67G3   | Asserted   |
| 116 | 10/29/2023 | 14:15:39.573 | 50G3   | Asserted   |
| 115 | 10/29/2023 | 14:15:39.583 | 51G    | Deasserted |
| 114 | 10/29/2023 | 14:15:39.583 | 67G3   | Deasserted |
| 113 | 10/29/2023 | 14:15:39.583 | 50G3   | Deasserted |
| 112 | 10/29/2023 | 14:15:39.593 | 51G    | Asserted   |
| 111 | 10/29/2023 | 14:15:39.593 | 67G3   | Asserted   |
| 110 | 10/29/2023 | 14:15:39.593 | 50G3   | Asserted   |
| 109 | 10/29/2023 | 14:15:39.603 | 51G    | Deasserted |
| 108 | 10/29/2023 | 14:15:39.603 | 67G3   | Deasserted |
| 107 | 10/29/2023 | 14:15:39.603 | 50G3   | Deasserted |
| 106 | 10/29/2023 | 14:15:39.613 | 51G    | Asserted   |
| 105 | 10/29/2023 | 14:15:39.613 | 67G3   | Asserted   |
| 104 | 10/29/2023 | 14:15:39.613 | 50G3   | Asserted   |
| 103 | 10/29/2023 | 14:15:39.623 | 51G    | Deasserted |
| 102 | 10/29/2023 | 14:15:39.623 | 67G3   | Deasserted |
| 101 | 10/29/2023 | 14:15:39.623 | 50G3   | Deasserted |
| 100 | 10/29/2023 | 14:15:39.633 | 51G    | Asserted   |
| 99  | 10/29/2023 | 14:15:39.633 | 67G3   | Asserted   |
| 98  | 10/29/2023 | 14:15:39.633 | 50G3   | Asserted   |
| 97  | 10/29/2023 | 14:15:39.643 | 51G    | Deasserted |
| 96  | 10/29/2023 | 14:15:39.643 | 67G3   | Deasserted |
| 95  | 10/29/2023 | 14:15:39.643 | 50G3   | Deasserted |
| 94  | 10/29/2023 | 14:15:39.653 | 51G    | Asserted   |
| 93  | 10/29/2023 | 14:15:39.653 | 67G3   | Asserted   |
| 92  | 10/29/2023 | 14:15:39.653 | 50G3   | Asserted   |
| 91  | 10/29/2023 | 14:15:39.683 | 51G    | Deasserted |
| 90  | 10/29/2023 | 14:15:39.683 | 67G3   | Deasserted |
| 89  | 10/29/2023 | 14:15:39.683 | 50G3   | Deasserted |
| 88  | 10/29/2023 | 14:15:39.693 | 51G    | Asserted   |
| 87  | 10/29/2023 | 14:15:39.693 | 67G3   | Asserted   |
| 86  | 10/29/2023 | 14:15:39.693 | 50G3   | Asserted   |
| 85  | 10/29/2023 | 14:15:39.723 | 51G    | Deasserted |
| 84  | 10/29/2023 | 14:15:39.723 | 67G3   | Deasserted |
| 83  | 10/29/2023 | 14:15:39.723 | 50G3   | Deasserted |
| 82  | 10/29/2023 | 14:15:39.733 | 51G    | Asserted   |
| 81  | 10/29/2023 | 14:15:39.733 | 67G3   | Asserted   |
| 80  | 10/29/2023 | 14:15:39.733 | 50G3   | Asserted   |
| 79  | 10/29/2023 | 14:15:39.743 | 51G    | Deasserted |
| 78  | 10/29/2023 | 14:15:39.743 | 67G3   | Deasserted |
| 77  | 10/29/2023 | 14:15:39.743 | 50G3   | Deasserted |
| 76  | 10/29/2023 | 14:15:39.753 | 51G    | Asserted   |
| 75  | 10/29/2023 | 14:15:39.753 | 67G3   | Asserted   |
| 74  | 10/29/2023 | 14:15:39.753 | 50G3   | Asserted   |
| 73  | 10/29/2023 | 14:15:39.763 | 51G    | Deasserted |
| 72  | 10/29/2023 | 14:15:39.763 | 67G3   | Deasserted |
| 71  | 10/29/2023 | 14:15:39.763 | 50G3   | Deasserted |
| 70  | 10/29/2023 | 14:15:39.773 | 51G    | Asserted   |
| 69  | 10/29/2023 | 14:15:39.773 | 67G3   | Asserted   |
| 68  | 10/29/2023 | 14:15:39.773 | 50G3   | Asserted   |
| 67  | 10/29/2023 | 14:15:40.773 | 67G3T  | Asserted   |
| 66  | 10/29/2023 | 14:16:19.976 | 51GT   | Asserted   |
| 65  | 10/29/2023 | 14:16:19.976 | TRIP   | Asserted   |
| 64  | 10/29/2023 | 14:16:19.976 | OUT101 | Asserted   |
| 63  | 10/29/2023 | 14:16:19.981 | OUT106 | Asserted   |
| 62  | 10/29/2023 | 14:16:20.011 | IN101  | Deasserted |
| 61  | 10/29/2023 | 14:16:20.021 | 52A    | Deasserted |
| 60  | 10/29/2023 | 14:16:20.026 | 51G    | Deasserted |
| 59  | 10/29/2023 | 14:16:20.026 | 67G3T  | Deasserted |
| 58  | 10/29/2023 | 14:16:20.026 | 67G3   | Deasserted |
| 57  | 10/29/2023 | 14:16:20.026 | 50G3   | Deasserted |
| 56  | 10/29/2023 | 14:16:20.031 | SV9    | Deasserted |
| 55  | 10/29/2023 | 14:16:20.036 | 3PO    | Asserted   |
| 54  | 10/29/2023 | 14:16:20.046 | 51GT   | Deasserted |
| 53  | 10/29/2023 | 14:16:20.156 | SV9    | Asserted   |
| 52  | 10/29/2023 | 14:16:20.156 | TRIP   | Deasserted |
| 51  | 10/29/2023 | 14:16:20.156 | OUT101 | Deasserted |
| 50  | 10/29/2023 | 14:16:30.026 | CLOSE  | Asserted   |
| 49  | 10/29/2023 | 14:16:30.026 | OUT102 | Asserted   |
| 48  | 10/29/2023 | 14:16:30.101 | 52A    | Asserted   |
| 47  | 10/29/2023 | 14:16:30.101 | CLOSE  | Deasserted |
| 46  | 10/29/2023 | 14:16:30.101 | IN101  | Asserted   |
| 45  | 10/29/2023 | 14:16:30.101 | OUT102 | Deasserted |
| 44  | 10/29/2023 | 14:16:30.111 | SV9    | Deasserted |
| 43  | 10/29/2023 | 14:16:30.111 | 3PO    | Deasserted |
| 42  | 10/29/2023 | 14:16:30.216 | SV9    | Asserted   |
| 41  | 10/29/2023 | 14:18:44.156 | SV9    | Deasserted |
| 40  | 10/29/2023 | 14:18:44.236 | SV9    | Asserted   |
| 39  | 10/29/2023 | 15:14:24.612 | LOP    | Asserted   |
| 38  | 10/29/2023 | 15:14:24.612 | SV9    | Deasserted |
| 37  | 10/29/2023 | 15:14:24.687 | SV9    | Asserted   |
| 36  | 10/29/2023 | 15:14:24.692 | SV9    | Deasserted |
| 35  | 10/29/2023 | 15:14:24.697 | SV9    | Asserted   |

|    |            |              |        |            |
|----|------------|--------------|--------|------------|
| 34 | 10/29/2023 | 15:14:25.611 | OUT107 | Asserted   |
| 33 | 10/29/2023 | 15:14:34.769 | SV9    | Deasserted |
| 32 | 10/29/2023 | 15:14:34.974 | LOP    | Deasserted |
| 31 | 10/29/2023 | 15:14:34.974 | OUT107 | Deasserted |
| 30 | 10/29/2023 | 15:14:35.104 | SV9    | Asserted   |
| 29 | 10/29/2023 | 17:32:17.037 | RB4    | Asserted   |
| 28 | 10/29/2023 | 17:32:17.037 | LT2    | Deasserted |
| 27 | 10/29/2023 | 17:32:17.042 | RB4    | Deasserted |
| 26 | 10/29/2023 | 21:29:45.096 | OUT106 | Deasserted |
| 25 | 10/29/2023 | 22:36:29.926 | SV9    | Deasserted |
| 24 | 10/29/2023 | 22:36:29.966 | SV9    | Asserted   |
| 23 | 10/30/2023 | 00:11:00.287 | OC     | Asserted   |
| 22 | 10/30/2023 | 00:11:00.287 | OUT101 | Asserted   |
| 21 | 10/30/2023 | 00:11:00.292 | OC     | Deasserted |
| 20 | 10/30/2023 | 00:11:00.322 | IN101  | Deasserted |
| 19 | 10/30/2023 | 00:11:00.332 | SV9    | Deasserted |
| 18 | 10/30/2023 | 00:11:00.332 | 3PO    | Asserted   |
| 17 | 10/30/2023 | 00:11:00.332 | 52A    | Deasserted |
| 16 | 10/30/2023 | 00:11:00.337 | SV9    | Asserted   |
| 15 | 10/30/2023 | 00:11:00.690 | OUT101 | Deasserted |
| 14 | 10/30/2023 | 03:17:58.147 | CC     | Asserted   |
| 13 | 10/30/2023 | 03:17:58.152 | CLOSE  | Asserted   |
| 12 | 10/30/2023 | 03:17:58.152 | CC     | Deasserted |
| 11 | 10/30/2023 | 03:17:58.152 | OUT102 | Asserted   |
| 10 | 10/30/2023 | 03:17:58.227 | 52A    | Asserted   |
| 9  | 10/30/2023 | 03:17:58.227 | CLOSE  | Deasserted |
| 8  | 10/30/2023 | 03:17:58.227 | IN101  | Asserted   |
| 7  | 10/30/2023 | 03:17:58.227 | OUT102 | Deasserted |
| 6  | 10/30/2023 | 03:17:58.232 | SV9    | Deasserted |
| 5  | 10/30/2023 | 03:17:58.237 | 3PO    | Deasserted |
| 4  | 10/30/2023 | 03:17:58.367 | SV9    | Asserted   |
| 3  | 10/30/2023 | 03:21:06.784 | RB3    | Asserted   |
| 2  | 10/30/2023 | 03:21:06.784 | LT2    | Asserted   |
| 1  | 10/30/2023 | 03:21:06.789 | RB3    | Deasserted |

Entre los registros N°508 y N°73 se observan reiteradas activaciones y desactivaciones de la función de sobrecorriente residual (*51G = Asserted* y *51G = Deasserted*), para luego en el registro N°70 la activación de dicha función termina con su operación en un tiempo de 40.203 segundos (*51GT = Asserted*, registro N°66). El tiempo de apertura del interruptor fue de 45 ms (*52A = Deasserted*, registro N°61).

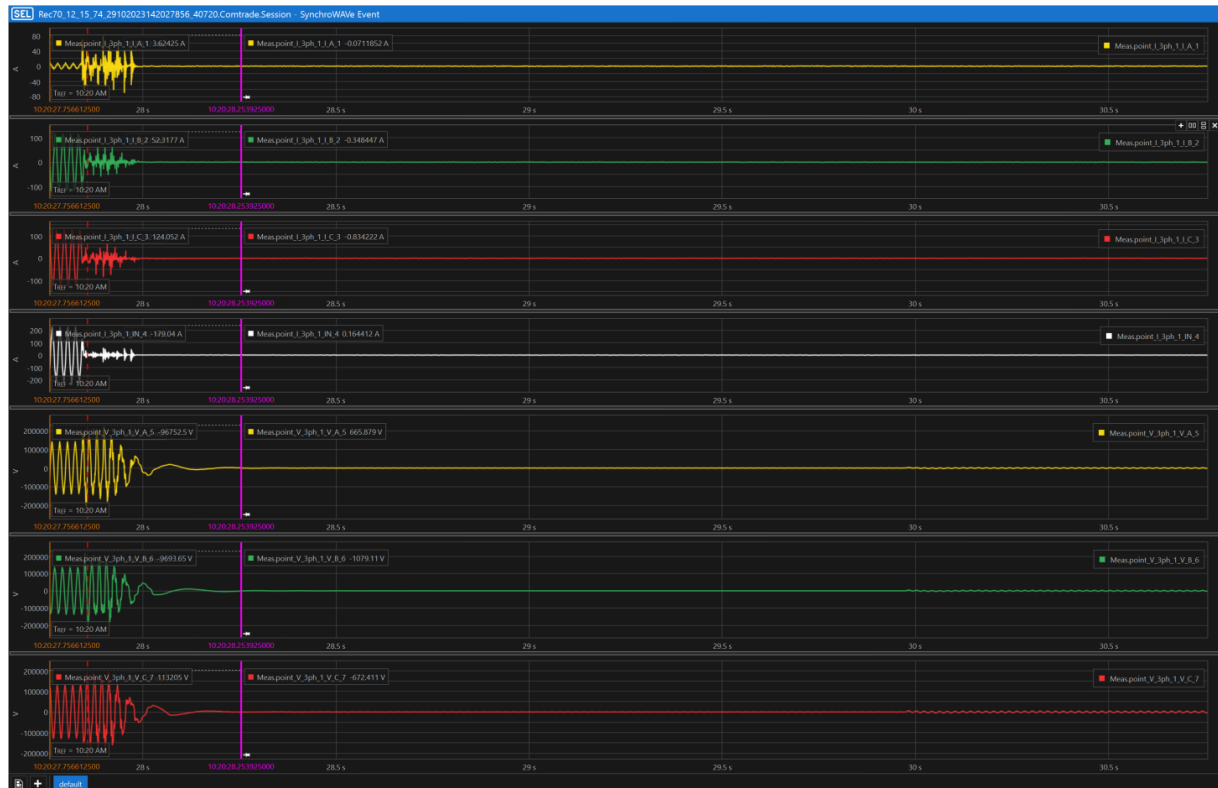
Luego de aproximadamente 10 segundos desde la apertura del interruptor 52A2 de S/E Los Ángeles, se confirma su cierre automático (*52A = Asserted*, registro N°48), permaneciendo en dicha condición.

Se detecta un desfase de aproximadamente 3 minutos en la estampa de tiempo de la protección con respecto al horario UTC -0 del evento.

Con respecto al sistema de protecciones N°2 (relé SEL-311L) se verifica un comportamiento similar.

## Apertura automática del interruptor 52AT1 de S/E Central Eólica Alena. Relés Siemens 7SA86 (Ambos sistemas).

La empresa AR Alena SpA señala que se produjo la operación de ambos sistemas de protecciones por medio de la función de baja tensión, sin embargo, sus registros fueron sobrescritos. Sin perjuicio de lo anterior, se presenta a continuación registros del relé Siemens 7KE85 de la S/E Central Eólica Alena:



En el registro oscilográfico se aprecia en primera instancia un valor de corriente bajo en la fase "A" en comparación con el resto de las fases, para luego producirse la extinción tanto de las corrientes como de las tensiones, lo que se explica por la apertura automática del interruptor 52A2 de S/E Los Ángeles. Por otra parte, no se dispone de señales digitales que permitan verificar la función de protección operada. Sin perjuicio de lo anterior, se presenta a continuación la lista de alarmas SCADA de la subestación:

| SIEMENS                                                                             |                |              |                                                      |                                   |           |              |                   |                |          |
|-------------------------------------------------------------------------------------|----------------|--------------|------------------------------------------------------|-----------------------------------|-----------|--------------|-------------------|----------------|----------|
| AUTORIDAD DE CONTROL                                                                |                |              |                                                      |                                   |           |              |                   |                |          |
| 172 16/02/2023                                                                      |                |              |                                                      |                                   |           |              |                   |                |          |
| 09/11/2023 14:29:13                                                                 |                |              |                                                      |                                   |           |              |                   |                |          |
| ACCESO                                                                              | USUARIO ACTUAL | REMITO       | UNIFILAR                                             | LISTA DE                          | LISTA DE  | TENDENCIAS   | COMUNICACIONES    | COMUNICACIONES | PQ       |
| USUARIO                                                                             |                |              | 154/33 kV                                            | EVENTOS                           | ALARMAS   |              | ALTA TENSIÓN      | MEDIA TENSIÓN  | ANALYZER |
| LISTA DE ALARMAS                                                                    |                |              |                                                      |                                   |           |              |                   |                |          |
| Estado                                                                              | Fecha          | Hora         | Grupo                                                | Mensaje                           | Valor     | Localización | Causa             | Estado         |          |
| 24                                                                                  | 30/10/2023     | 01.10.22.277 | ALENA154V33VWITCHGEAR CELDA 2 - ALIMENT. 1152F1      | Muelles no Tensados               | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 25                                                                                  | 30/10/2023     | 01.10.22.203 | ALENA154V33VWITCHGEAR CELDA 2 - ALIMENT. 1152F1      | Fallo Supervisión Bobina Cierre   | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 26                                                                                  | 30/10/2023     | 01.09.57.954 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Muelles no Tensados               | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 27                                                                                  | 30/10/2023     | 01.09.57.881 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Fallo Supervisión Bobina Cierre   | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 28                                                                                  | 30/10/2023     | 01.09.38.645 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Alarma Rele 27_59 A1              | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 29                                                                                  | 30/10/2023     | 01.09.38.204 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Bloqueo Cierre Accionamiento      | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 30                                                                                  | 30/10/2023     | 01.04.35.965 | ALENA154V33VWITCHGEAR CELDA 7 - TRAPO SSAA152F6      | Alarma Rele 27_59 A3              | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 31                                                                                  | 29/10/2023     | 19.45.08.976 | ALENA154V33VWITCHGEAR CELDA 7 - TRAPO SSAA152F6      | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 32                                                                                  | 29/10/2023     | 19.44.50.884 | ALENA154V33VWITCHGEAR CELDA 5 - ALIMENT. 4152F4      | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 33                                                                                  | 29/10/2023     | 19.44.40.673 | ALENA154V33VWITCHGEAR CELDA 4 - ALIMENT. 3152F3      | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 34                                                                                  | 29/10/2023     | 19.44.33.103 | ALENA154V33VWITCHGEAR CELDA 3 - ALIMENT. 2152F2      | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 35                                                                                  | 29/10/2023     | 19.44.24.878 | ALENA154V33VWITCHGEAR CELDA 2 - ALIMENT. 1152F1      | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 36                                                                                  | 29/10/2023     | 19.44.09.777 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 37                                                                                  | 29/10/2023     | 11.20.29.988 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L1         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 38                                                                                  | 29/10/2023     | 11.20.29.988 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L2         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 39                                                                                  | 29/10/2023     | 11.20.29.988 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L3         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 40                                                                                  | 29/10/2023     | 11.20.29.988 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo Subtensión - 27-1         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 41                                                                                  | 29/10/2023     | 11.20.29.988 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo SPAT1-51                  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 42                                                                                  | 29/10/2023     | 11.20.29.988 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo Subtensión 27             | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 43                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L1         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 44                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L2         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 45                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L3         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 46                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo Subtensión - 27-1         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 47                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo SPAT1-51                  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 48                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo Subtensión 27             | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 49                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General                   | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 50                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L1         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 51                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L2         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 52                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo General - Fase L3         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 53                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo Subtensión - 27-1         | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 54                                                                                  | 29/10/2023     | 11.20.29.948 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo SPAT1-51                  | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 55                                                                                  | 29/10/2023     | 11.20.27.896 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Alarma 2 Rele 27_59 A1            | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 56                                                                                  | 29/10/2023     | 11.20.27.870 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Alarma 1 Rele 27_59 A2            | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 57                                                                                  | 29/10/2023     | 11.20.27.870 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Alarma 2 Rele 27_59 A2            | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 58                                                                                  | 29/10/2023     | 11.20.27.870 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Falla ITM QM2                     | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| 59                                                                                  | 28/10/2023     | 20.54.08.346 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Disparo Sobre frecuencia - 8 IM-1 | DESPEJADA | irrelevante  | espontaneos       | valid          |          |
| Pendientes: 362 Pendiente de acción: 322 Ocultos: 0 Listas: 322 09/11/2023 14:29:13 |                |              |                                                      |                                   |           |              |                   |                |          |
| Estado                                                                              | Fecha          | Hora         | Grupo                                                | Mensaje                           | Valor     | Localización | Causa             | Estado         |          |
| 1                                                                                   | 09/11/2023     | 12.13.50.755 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Falla Canal Comunicación 1        | DESPEJADA | irrelevante  | interrog. general | valid          |          |
| 2                                                                                   | 09/11/2023     | 12.13.50.755 | ALENA154V33VWITCHGEAR CELDA 1 - ACOM. TRAPO 1152F1-1 | Falla Canal Comunicación 2        | DESPEJADA | irrelevante  | interrog. general | valid          |          |

En los registros N°43 y N°49 (11:20 horas) se aprecia la operación de la función de baja tensión (*Disparo Subtensión* 27) de ambos sistemas de protecciones, sin disponer de señales que muestren el cambio de estado del interruptor.

## Apertura automática del interruptor 52AT4 de S/E Los Ángeles, correspondiente al transformador N°4 154/66 kV de dicha subestación. Relé SEL-387 (Sistema 1).

La empresa CGE Transmisión S.A. no presenta los registros oscilográficos de la protección operada. Sin perjuicio de lo anterior, si presenta los registros históricos y secuenciales de eventos, los que se muestran a continuación:

### Registro histórico de eventos:

PROT DIFERENCIAL TRANSFORMADOR 4 Date: 10/31/23 Time: 19:45:17.423  
SUBESTACION LOS ANGELES

| #  | DATE     | TIME         | EVENT | GRP | TARGETS        |
|----|----------|--------------|-------|-----|----------------|
| 1  | 10/29/23 | 14:14:55.838 | CLS1  | 1   |                |
| 2  | 10/29/23 | 14:12:09.696 | TRIP4 | 1   | TRIP 51 B N W1 |
| 3  | 10/29/23 | 02:22:15.509 | CLS1  | 1   |                |
| 4  | 10/29/23 | 02:19:27.683 | TRIP4 | 1   | TRIP 51 B N W1 |
| 5  | 10/28/23 | 23:53:48.819 | CLS1  | 1   |                |
| 6  | 10/28/23 | 23:45:59.351 | TRIP4 | 1   | TRIP 51 B N W1 |
| 7  | 10/28/23 | 20:49:22.817 | CLS1  | 1   |                |
| 8  | 10/28/23 | 20:32:16.260 | TRIP4 | 1   | TRIP 51 B N W1 |
| 9  | 10/28/23 | 20:02:21.054 | CLS1  | 1   |                |
| 10 | 10/28/23 | 19:39:18.380 | TRIP3 | 1   | TRIP           |
| 11 | 07/17/22 | 12:42:49.391 | TRIP3 | 1   | TRIP           |

En el evento N°2 se aprecia la operación de la protección por medio del elemento **TRIP4**, el cual, está conformado por las funciones de sobrecorriente de fase y residual del lado 154 kV ( $TR4 = 51P1T + 51N1T$ ). En particular, el target indica la operación del elemento de sobrecorriente residual (TRIP 51 B N W1).

Se detecta un desfase de aproximadamente 7 minutos en la estampa de tiempo de la protección con respecto al horario UTC -0 del evento.

Configuración de nombres en los ajustes de la protección:

ALIAS1 =87R DIFERENCIALR  
ALIAS2 =87U DIFERENCIALU  
ALIAS3 =IN101 CERRADO52AT4  
ALIAS4 =IN102 CERRADO52BT4  
ALIAS5 =IN103 TELECONTROLON  
ALIAS6 =TRIP1 TRIP86T4  
ALIAS7 =TRIP2 TRIP2121NAT  
ALIAS8 =TRIP3 APERTURAREMOTA  
**ALIAS9 =TRIP4 TRIP6252BT4**  
ALIAS10 =NA  
ALIAS11 =CLS1 CIERRETELECONTR  
ALIAS12 =OUT107 TRIPAL52BT4  
ALIAS13 =S1V2T FALLAAPER52AT4

Según la configuración del **ALIAS9** el **TRIP4** corresponde al **TRIP6252BT4** en el registro secuencial de eventos que se presenta a continuación:

Registro secuencial de eventos:

PROT DIFERENCIAL TRANSFORMADOR 4      Date: 10/31/23      Time: 19:45:35.773  
SUBESTACION LOS ANGELES

FID=SEL-387-R104-V-D981222

| #  | DATE     | TIME         | ELEMENT         | STATE      |
|----|----------|--------------|-----------------|------------|
| 15 | 10/28/23 | 23:53:48.929 | CIERRETELECONTR | Deasserted |
| 14 | 10/29/23 | 02:19:27.683 | TRIP6252BT4     | Asserted   |
| 13 | 10/29/23 | 02:19:27.726 | CERRADO52AT4    | Deasserted |
| 12 | 10/29/23 | 02:19:28.083 | TRIP6252BT4     | Deasserted |
| 11 | 10/29/23 | 02:22:15.509 | CIERRETELECONTR | Asserted   |
| 10 | 10/29/23 | 02:22:15.621 | CERRADO52AT4    | Asserted   |
| 9  | 10/29/23 | 02:22:15.621 | CIERRETELECONTR | Deasserted |
| 8  | 10/29/23 | 04:08:32.602 | 51P3            | Asserted   |
| 7  | 10/29/23 | 04:08:32.622 | 51P3            | Deasserted |
| 6  | 10/29/23 | 14:12:09.696 | TRIP6252BT4     | Asserted   |
| 5  | 10/29/23 | 14:12:09.739 | CERRADO52AT4    | Deasserted |
| 4  | 10/29/23 | 14:12:10.096 | TRIP6252BT4     | Deasserted |
| 3  | 10/29/23 | 14:14:55.838 | CIERRETELECONTR | Asserted   |
| 2  | 10/29/23 | 14:14:55.947 | CERRADO52AT4    | Asserted   |
| 1  | 10/29/23 | 14:14:55.947 | CIERRETELECONTR | Deasserted |

En el registro N°6 se aprecia la operación de la protección por medio del elemento TRIP4 (TRIP4 = **TRIP6252BT4** = Asserted), sin haber registro de la activación de la función de sobrecorriente que permita determinar su tiempo de operación. El tiempo de apertura del interruptor 52AT4 de S/E Los Ángeles fue de 43 ms (*CERRADO52AT4* = Deasserted, registro N°5).

**Apertura automática del interruptor 52B1 de S/E Central Parque Eólico Los Buenos Aires, correspondiente a la línea 66 kV Los Ángeles - Parque Eólico Buenos Aires. Relé SEL-311L (Sistema 2).**

Summary Data

### Event Report Summary

Event Report File: C:\Users\CL158437368\OneDrive - Enel Spa\Actividades 2023\Fallas LBA\_28\_29\_OCT\OSCILOGRAFIA\_B1\eventos3\CEV\_R\_L30\_4.CEV

Relay FID: FID=SEL-311L-1-R502-V0-Z106006-D20141106

Frequency: 50 # Cycles: 31 Samples/Cycle: 16

Event Date/Time: domingo, 29 de octubre de 2023 14:20:06,284

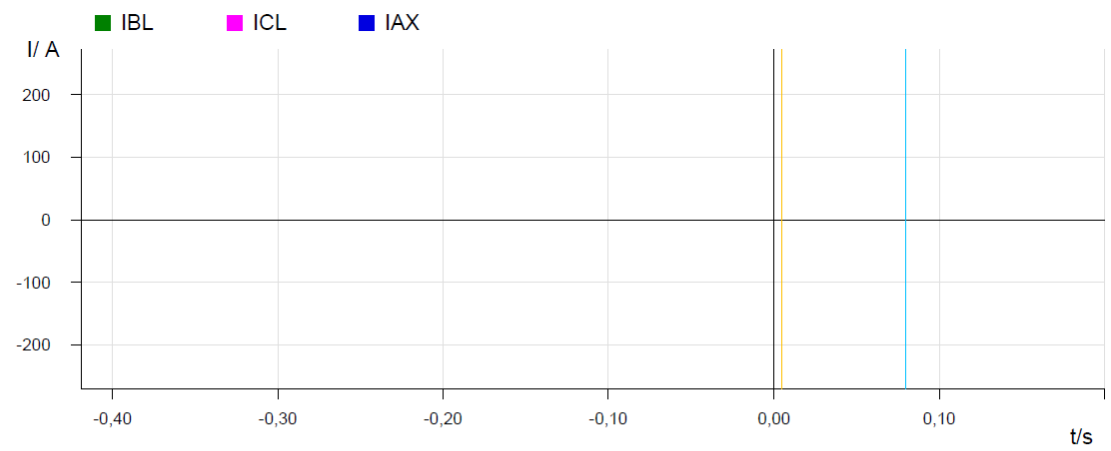
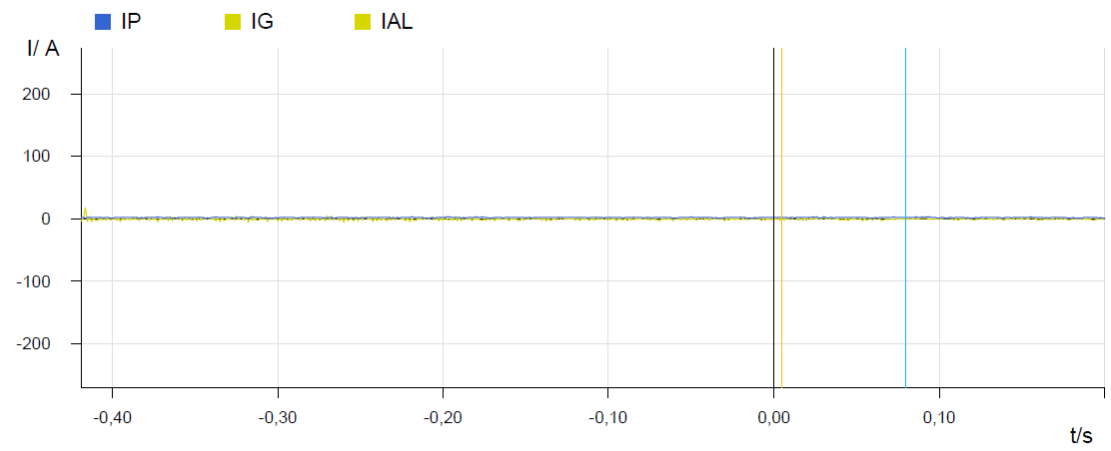
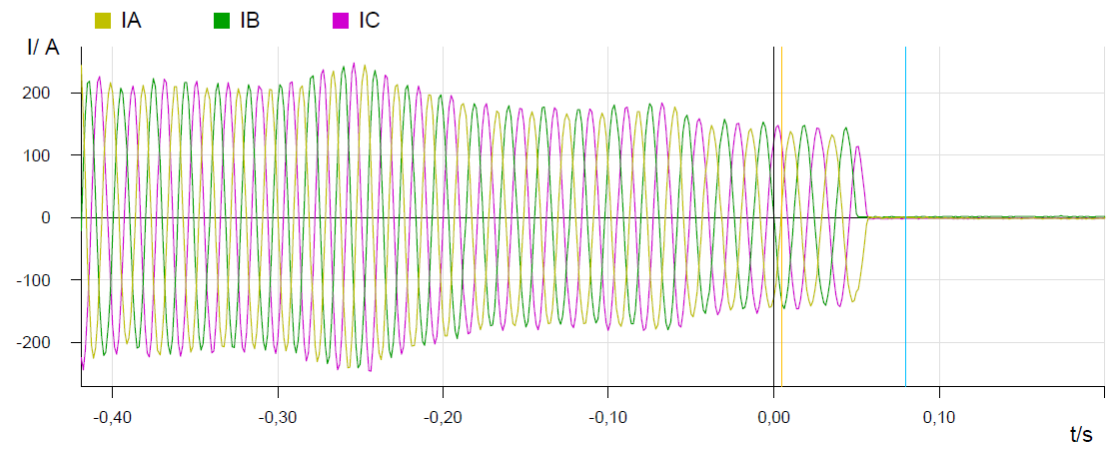
Miscellaneous:

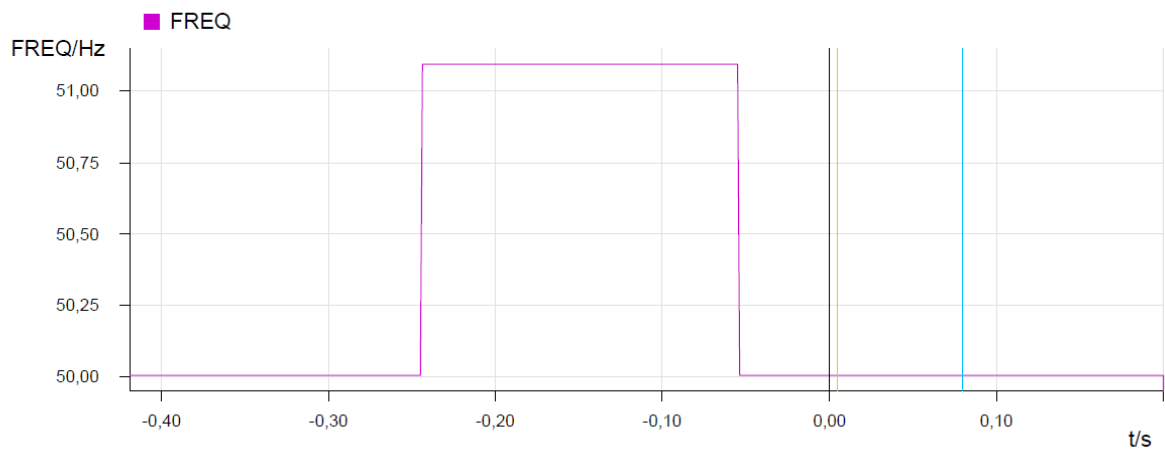
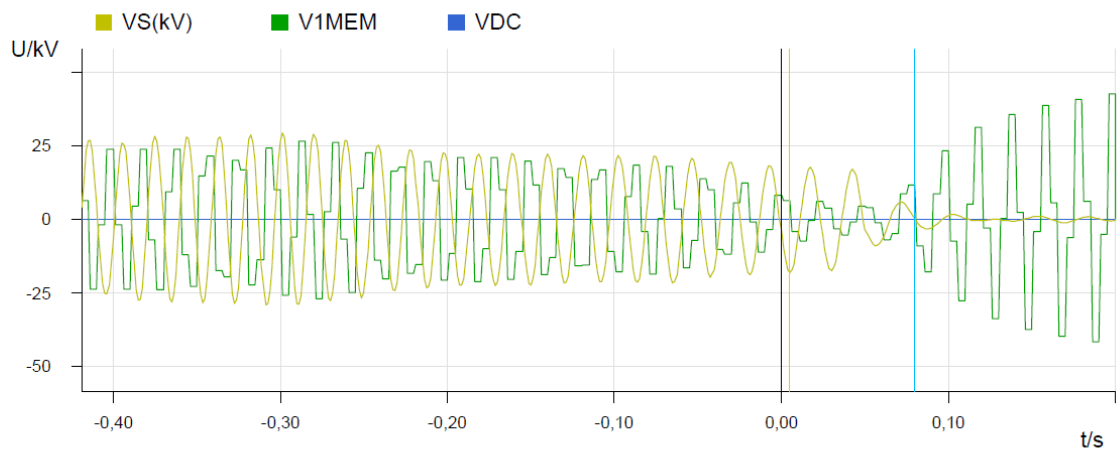
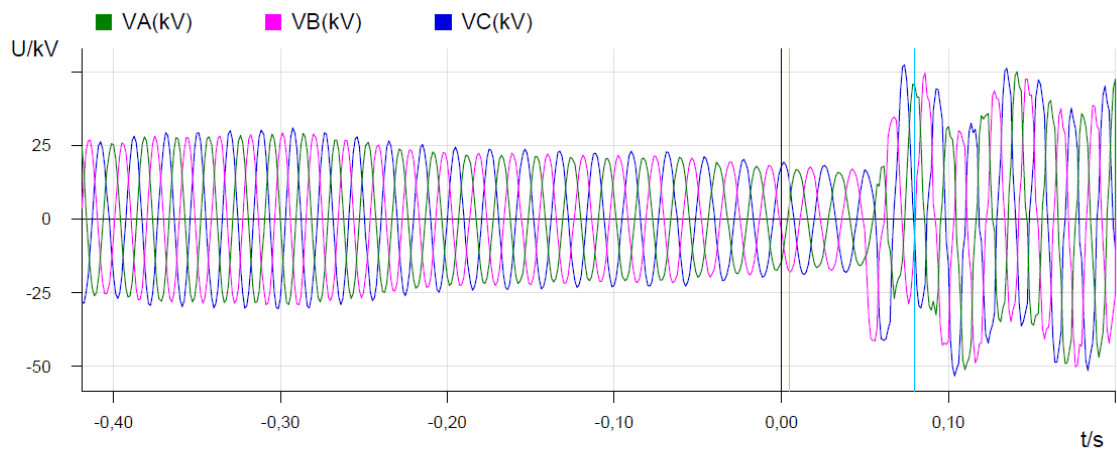
|                  |                         |
|------------------|-------------------------|
| EVENT            | ABC T                   |
| LOCATION         | 52.37                   |
| SHOT             | 0                       |
| TARGETS          | ZONE1                   |
| IA               | 146                     |
| IB               | 125                     |
| IC               | 134                     |
| IP               | 1                       |
| IG               | 1                       |
| 3I2              | 32                      |
| IAL              | 0                       |
| IBL              | 0                       |
| ICL              | 0                       |
| IAx              | 19661                   |
| IBx              | 19661                   |
| ICx              | 19661                   |
| IAy              | 19661                   |
| IBy              | 19661                   |
| ICy              | 19661                   |
| NFREQ            | 50                      |
| PRE_FAULT_CYCLES | 21.000                  |
| START_TIME       | 10-29-2023 14:20:05,865 |
| TRIG_TIME        | 10-29-2023 14:20:06,284 |

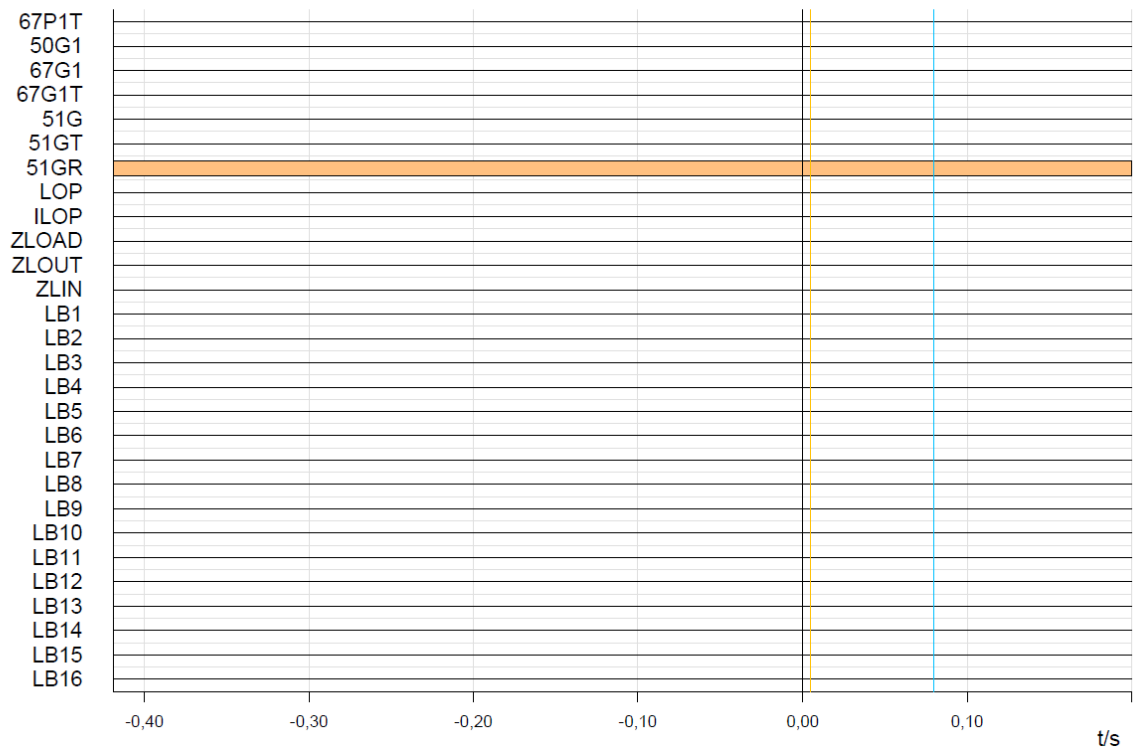
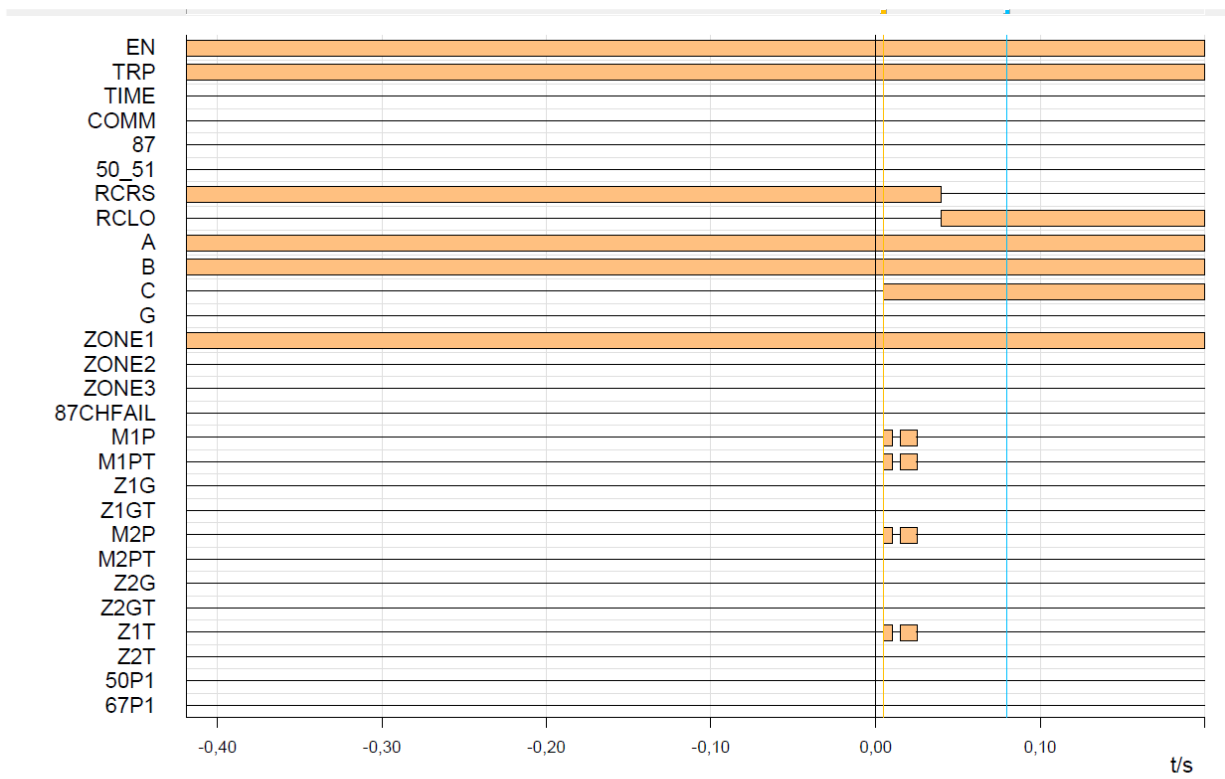
Print Close

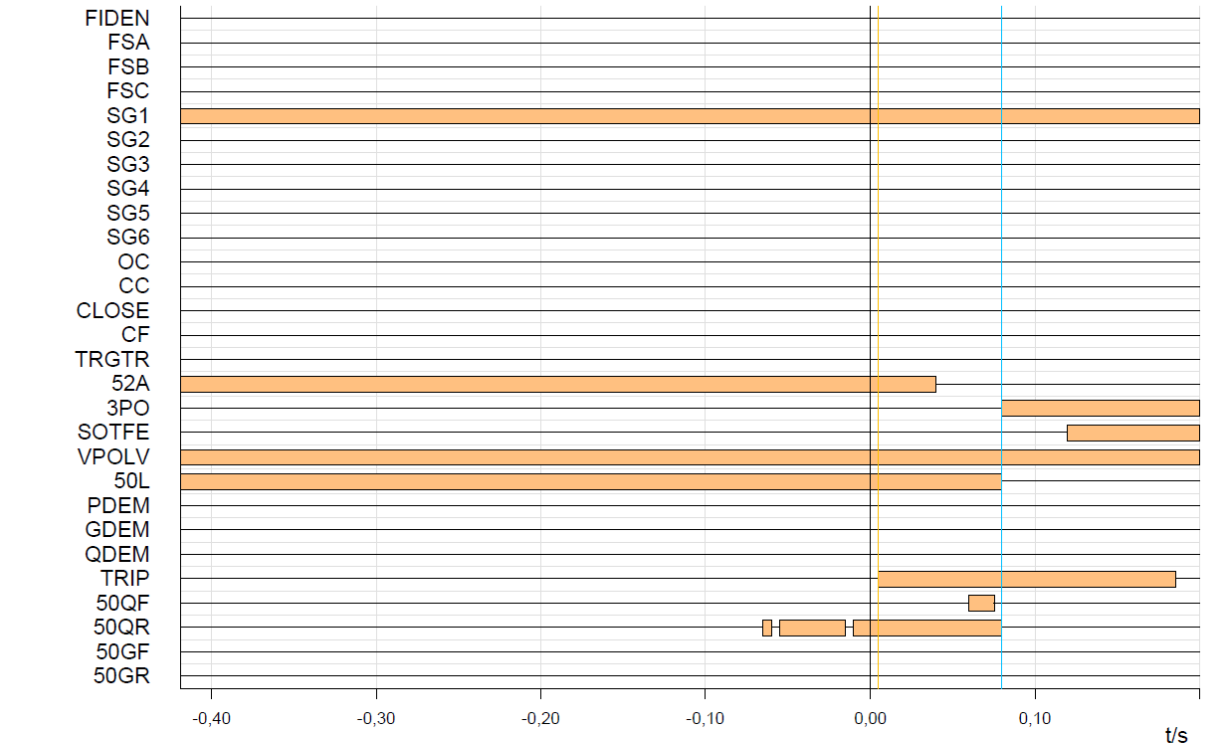
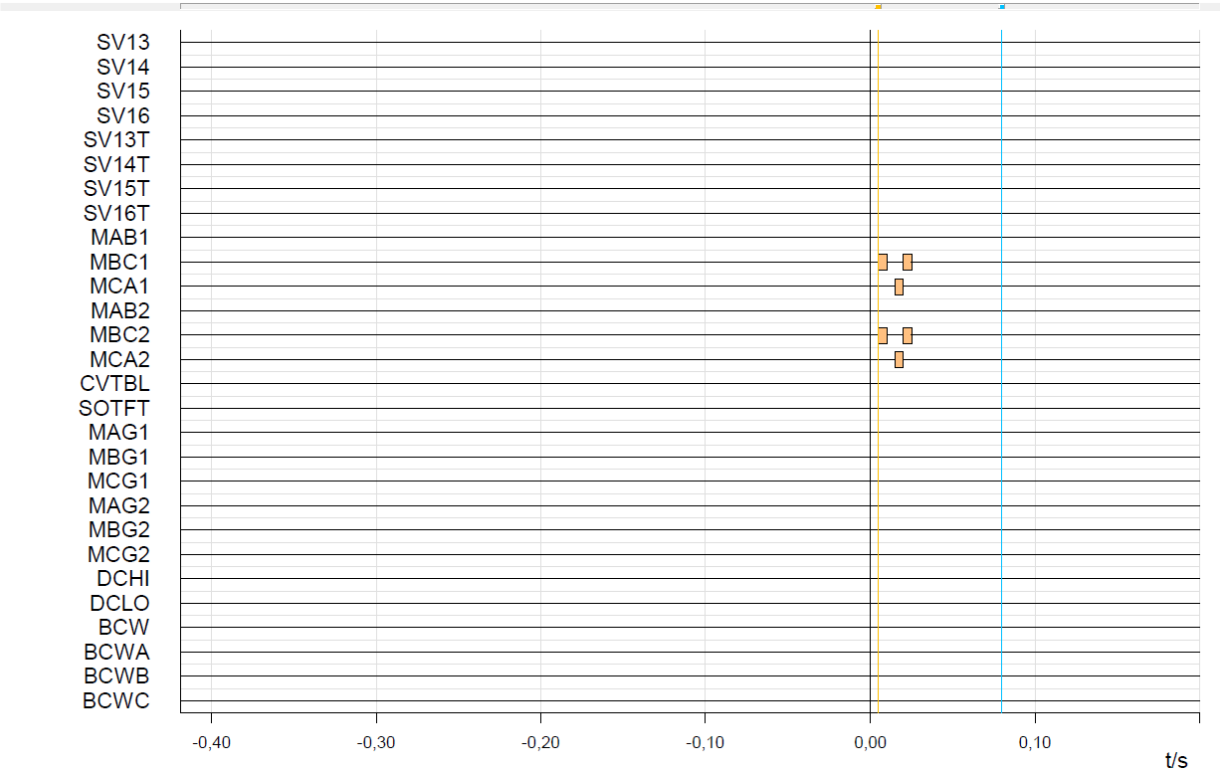
En el reporte del evento se registran magnitudes de corriente similares para las tres fases, sin evidenciar la existencia de una falla.

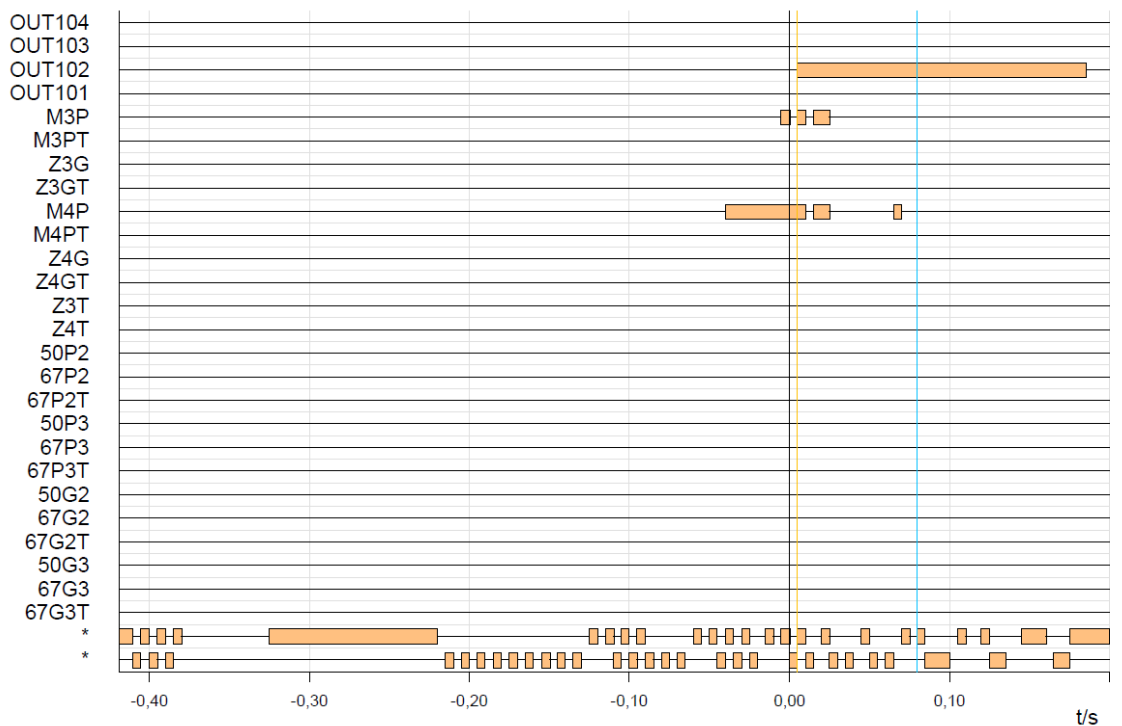
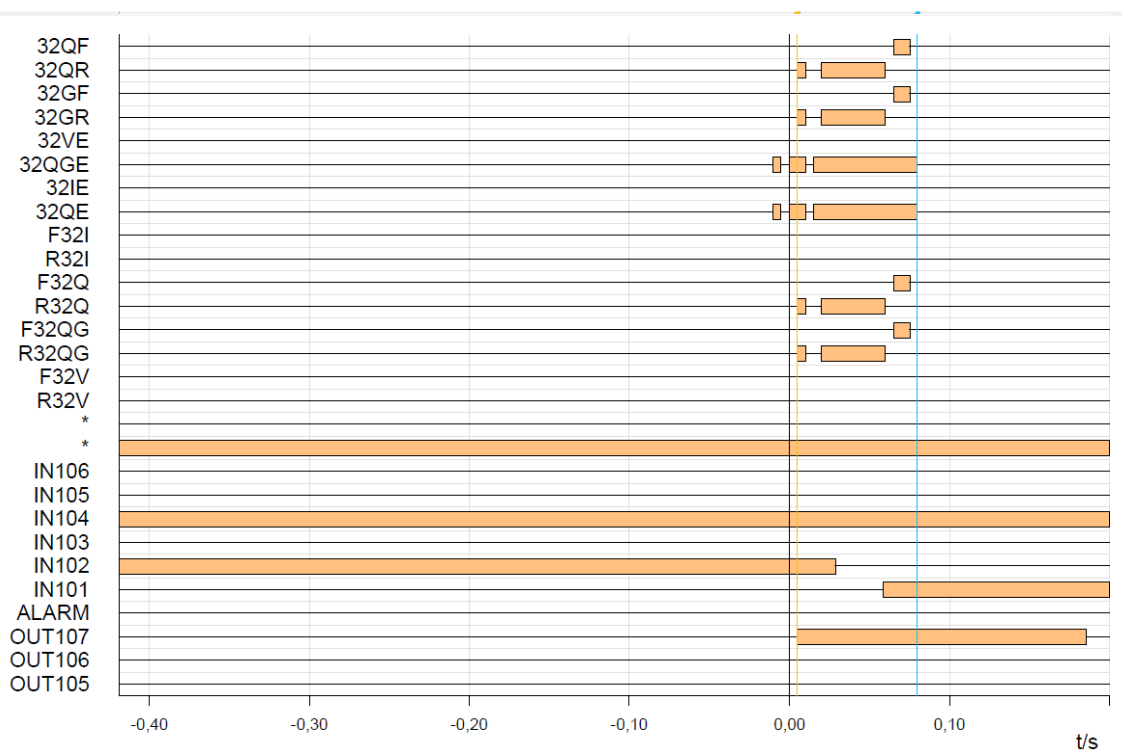
Trigger  
29-10-1923  
14:20:06.284









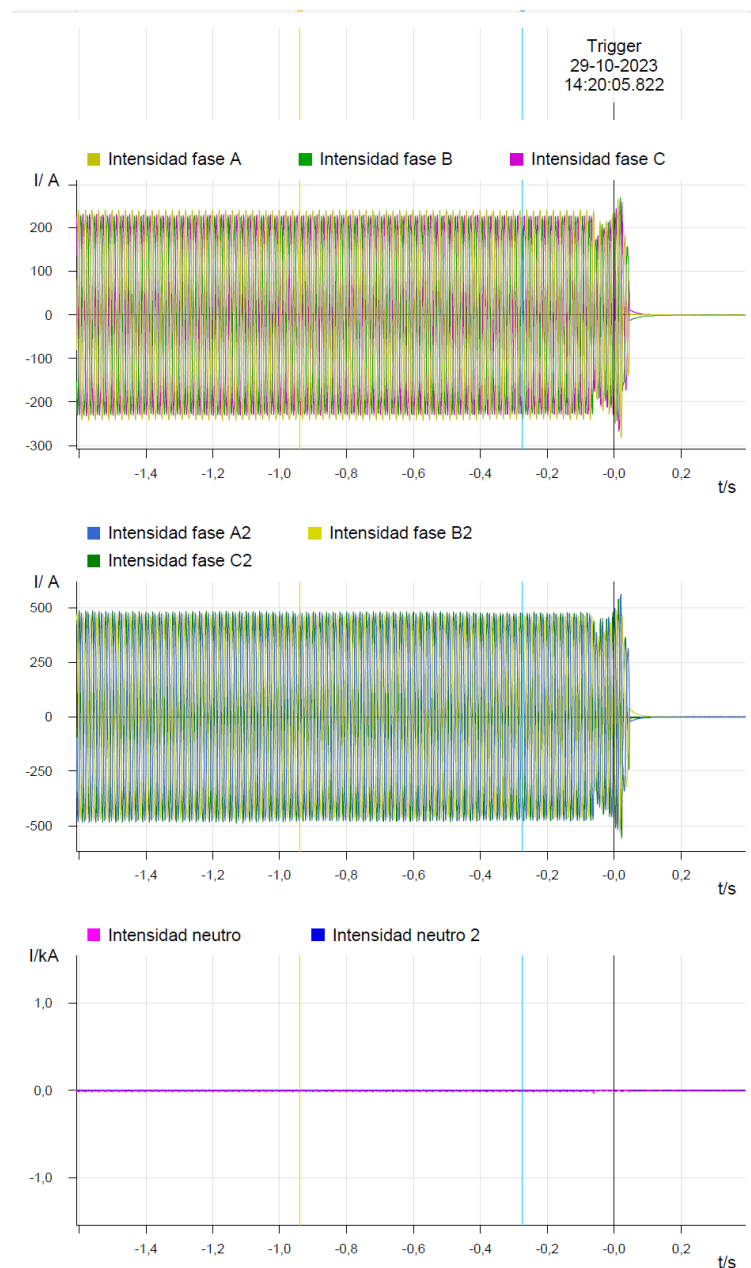


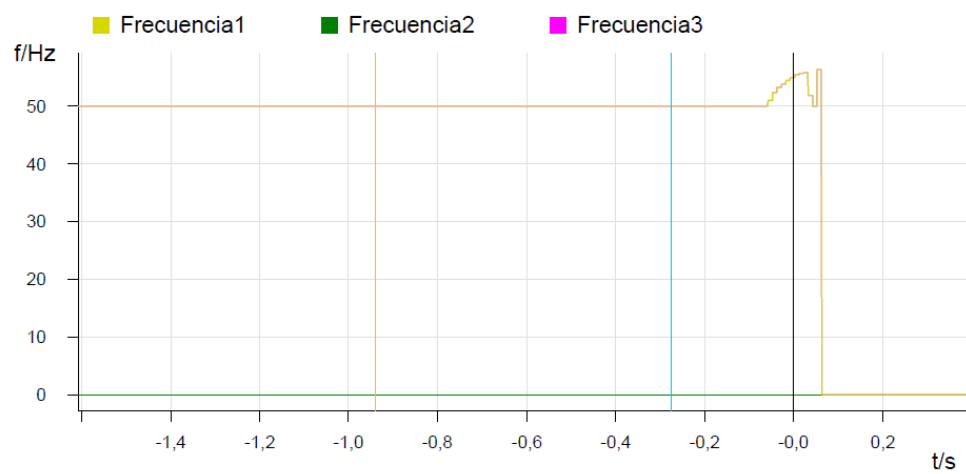
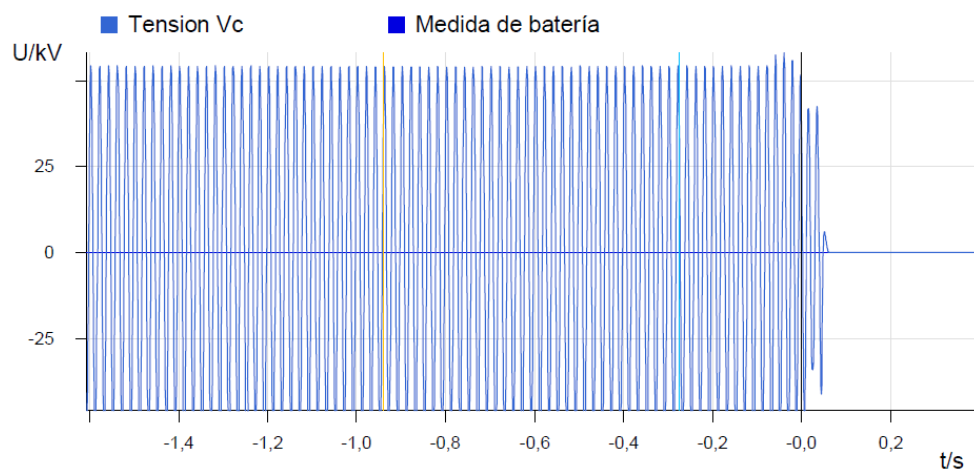
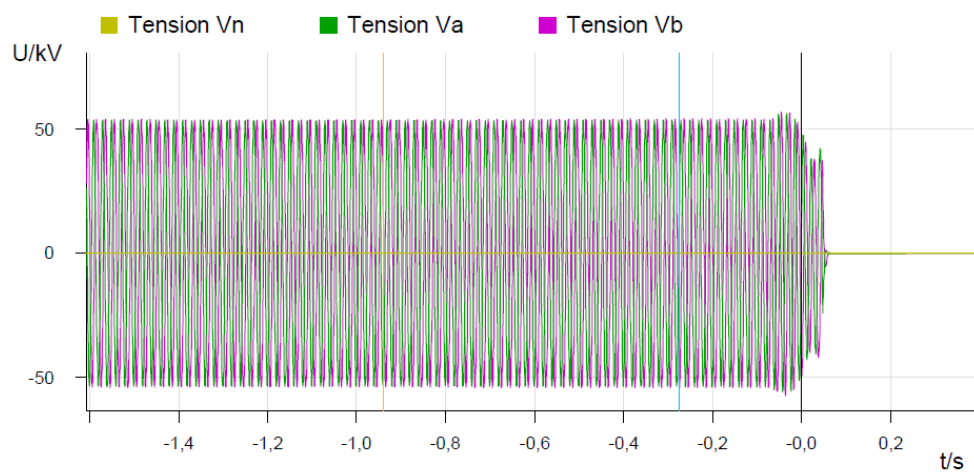
En el registro oscilográfico se aprecia la oscilación de las corrientes y tensiones, lo que se explica por la apertura automática del interruptor 52AT4 de S/E Los Ángeles y la conformación de un subsistema con generación de los Parque Eólicos Los Buenos Aires, La Esperanza y Negrete, sin capacidad de regular frecuencia. En relación con las señales digitales, se registra la activación de la función de distancia de fases en primera zona ( $M1P = 1$ ) y su consecuente operación en forma instantánea ( $M1PT = 1$ ). En forma gráfica, se determina un tiempo de apertura aproximado del interruptor de 40 ms ( $52A = 0$ ).

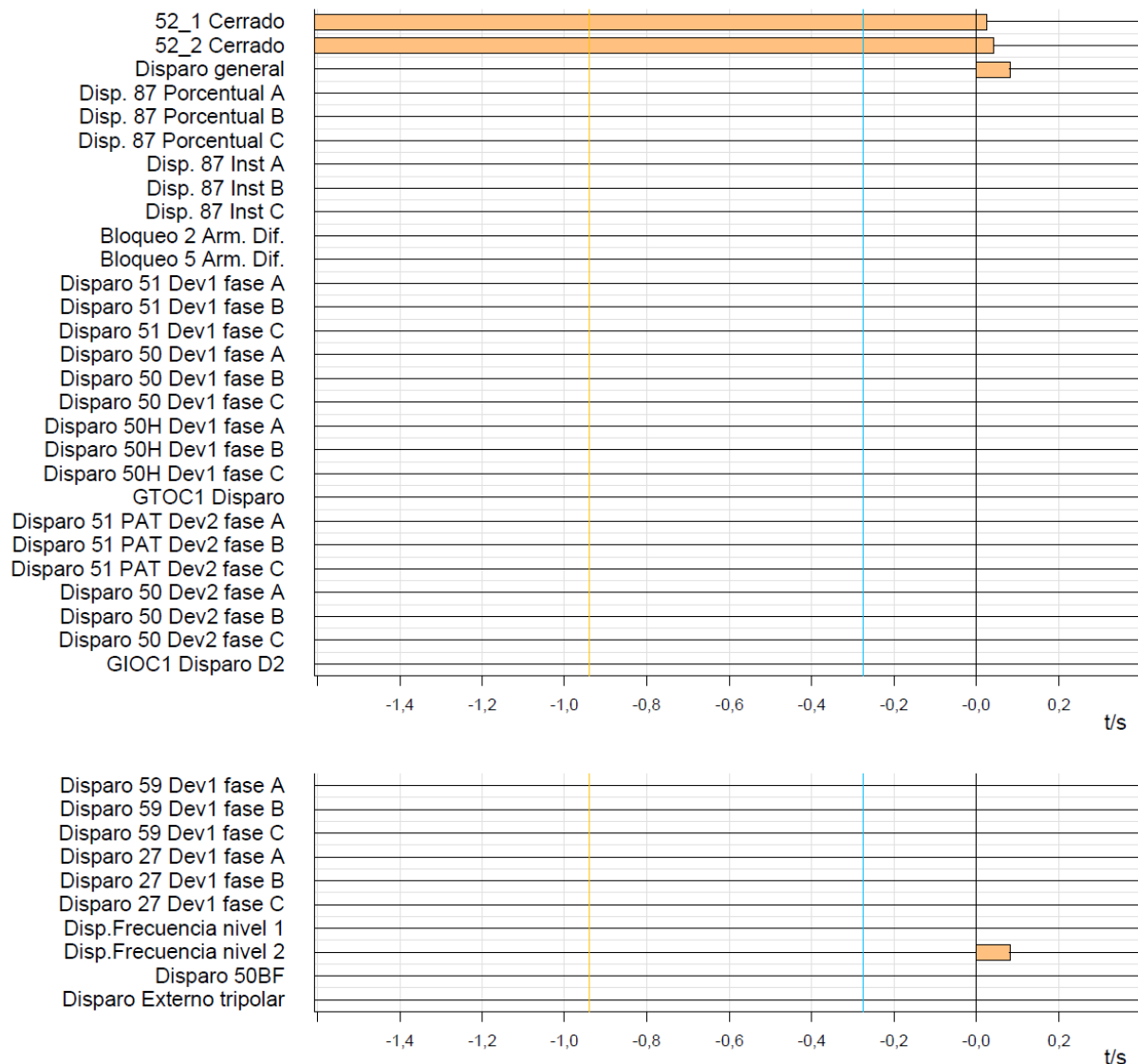
Al respecto, se evidencia que la impedancia calculada por el relé ingresa a la primera zona instantánea de la función de distancia de fases, ante la perturbación en las formas de onda de las corrientes y tensiones, y no por la presencia de una falla, considerando además que el interruptor 52AT4 de S/E Los Ángeles ya se encontraba abierto. Esta situación permite inferir que los elementos supervisores de corriente que se encargan de discriminar entre una falla o corriente de carga no se encuentran correctamente ajustados para la primera zona, en contraste con el sistema de protecciones N°1 (relé SEL-311C), el cual no operó para este evento.

Se observa un desfase de 3 horas en la stampa de tiempo de la protección con respecto al horario real de la falla, cumpliendo con la Hora Oficial (UTC - 0) establecida en la NTSyCS.

### Apertura automática de los interruptores 52BT1 y 52FT1 de S/E Central Parque Eólico Los Buenos Aires.







En el registro oscilográfico se aprecia el momento de la apertura del interruptor 52B1 de S/E Central Parque Eólico Los Buenos Aires, observándose en un instante un detrimento de las corrientes y un leve aumento de las tensiones, ante la condición excentearia en generación del subsistema conformado por las Centales PE Los Buenos Aires, PE Negrete y PE La Esperanza y los consumos de la S/E Negrete. En relación con las señales digitales, se registra la operación del segundo escalón de la función de sobrefrecuencia (*Disp.Frecuencia nivel 2 = 1* y *Disparo general = 1*), que según lo declarado por la empresa Enel Green Power Chile S.A. posee un ajuste de 51.5 Hz sin temporización. En forma gráfica, se determina un tiempo de apertura de los interruptores 52BT2 (*52\_1 CERRADO = 0*) y 52FT1 (*52\_2 CERRADO = 0*) de S/E Central Parque Eólico Los Buenos Aires de aproximadamente 40 ms.

Se observa un desfase de 3 horas en la estampa de tiempo de la protección, cumpliendo con la Hora Oficial (UTC – 0) establecida en la NTSyCS.

## Apertura automática del interruptor 52E1 del Parque Eólico La Esperanza. Relé SEL-651R.

|    |            |              |        |            |
|----|------------|--------------|--------|------------|
| 64 | 10/29/2023 | 19:51:22.765 | SV02   | Deasserted |
| 63 | 10/29/2023 | 19:51:22.010 | 52A3P  | Asserted   |
| 62 | 10/29/2023 | 19:51:23.166 | SV02T  | Deasserted |
| 61 | 10/28/2023 | 19:51:23.166 | RCCL1X | Deasserted |
| 60 | 10/29/2023 | 11:20:09.712 | SV07T  | Asserted   |
| 59 | 10/29/2023 | 11:20:09.717 | TRIP3P | Asserted   |
| 58 | 10/29/2023 | 11:20:09.717 | SV01T  | Asserted   |
| 57 | 10/29/2023 | 11:20:09.717 | SV01   | Asserted   |
| 56 | 10/29/2023 | 11:20:09.717 | RCCL1X | Asserted   |
| 55 | 10/29/2023 | 11:20:09.747 | 52A3P  | Deasserted |
| 54 | 10/29/2023 | 11:20:10.517 | TRIP3P | Deasserted |
| 53 | 10/29/2023 | 11:20:10.517 | SV01   | Deasserted |
| 52 | 10/29/2023 | 11:20:10.917 | SV01T  | Deasserted |
| 51 | 10/29/2023 | 11:20:10.917 | RCCL1X | Deasserted |
| 50 | 10/29/2023 | 11:20:16.707 | SV06P  | Asserted   |
| 49 | 10/29/2023 | 11:20:16.712 | TRIP3P | Asserted   |
| 48 | 10/29/2023 | 11:20:16.712 | SV01T  | Asserted   |
| 47 | 10/29/2023 | 11:20:16.712 | SV01   | Asserted   |
| 46 | 10/29/2023 | 11:20:16.712 | RCCL1X | Asserted   |
| 45 | 10/29/2023 | 11:20:17.512 | TRIP3P | Deasserted |

En el registro N°60 se aprecia la operación de la variable temporizada SV07 (*SV07T = Asserted*), la cual posee un ajuste de tiempo de 150 ciclos (3 segundos) y contiene a la función de baja tensión ajustada con un pickup de 75.26 V secundarios. El tiempo de apertura del interruptor fue de 30 ms (*52A3P = Deasserted*, registro N°55).

Cabe señalar que no se registra la activación del elemento SV07 o de las funciones de baja tensión asociadas que permitan verificar el tiempo de operación de la protección.

Se observa un desfase aproximado de 1 hora en la estampa de tiempo de la protección con respecto al horario real de la falla, sin cumplir con la Hora Oficial (UTC – 0) establecida en la NTSyCS.

### 8. Detalle de toda la información utilizada en la evaluación de la falla

- Detalle de la generación programada para el día 29 de octubre de 2023 (Anexo N°1).
- Detalle de la generación real del día 29 de octubre de 2023 (Anexo N°2).
- Detalle del Movimiento de Centrales e Informe Diario del CDC correspondientes al día 29 de octubre de 2023 (Anexo N°3).
- Detalle de los mantenimientos programados y forzados para el día 29 de octubre de 2023 (Anexo N°4).
- Informes de fallas de instalaciones ingresados en el sistema del Coordinador Eléctrico Nacional por las empresas CGE Transmisión S.A., Sistema de Transmisión del Sur S.A., AR Alena SpA, Enel Green Power Chile S.A., Eólica La Esperanza S.A., WPD Negrete SpA, Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda. y Empresa Eléctrica de la Frontera S.A. (Anexo N°5).
- Otros antecedentes aportados por las empresas CGE Transmisión S.A., Sistema de Transmisión del Sur S.A., AR Alena SpA, Enel Green Power Chile S.A., Eólica La Esperanza S.A., WPD Negrete SpA, Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda. y Empresa Eléctrica de la Frontera S.A. (Anexo N°6).

## 9. Análisis de las actuaciones de protecciones

### 9.1 Incumplimiento Normativo

#### CGE Transmisión S.A.

- Plazo de envío del Informe de Falla de 5 días, de acuerdo con lo indicado en el Título 6-7 de la NTSyCS vigente.
- Relé SEL-387 asociado al transformador N°4 154/66 kV de S/E Los Ángeles, opera por parte de la función 51N ante una falla en la línea 154 kV Los Ángeles – Santa Luisa, línea que posee sus propias protecciones.
- Estampa de tiempo del relé SEL-387 asociado al transformador N°4 154/66 kV de S/E Los Ángeles, no cumple con la sincronización horaria establecida en la NTSyCS vigente.
- Estampa de tiempo de ambos sistemas de protecciones (SEL-311C y SEL-311L) del paño A2 de S/E Los Ángeles, no cumplen con la sincronización horaria establecida en la NTSyCS vigente.

#### AR Alena SpA.

- Plazo de envío del Informe de Falla de 5 días, de acuerdo con lo indicado en el Título 6-7 de la NTSyCS vigente.

#### Enel Green Power Chile S.A.

- Plazo de envío del Informe de Falla de 5 días, de acuerdo con lo indicado en el Título 6-7 de la NTSyCS vigente.

#### Eólica La Esperanza S.A.

- Plazo de envío del Informe de Falla de 5 días, de acuerdo con lo indicado en el Título 6-7 de la NTSyCS vigente.

#### Cooperativa Eléctrica Los Ángeles Ltda.

- Plazo de envío del Informe de Falla de 5 días, de acuerdo con lo indicado en el Título 6-7 de la NTSyCS vigente.

### 9.2 Estándares Normativos Art. 1-14 NTSyCS

Los incumplimientos del propietario del elemento afectado, reportados en la versión vigente del "Informe Anual de Cumplimientos, Artículo 1-14 Norma Técnica de Seguridad y Calidad de Servicio", no incidieron en el origen y causa de la falla, ni en el desarrollo de las maniobras que permitieron la normalización de servicio.

### 9.3 Desempeño de Protecciones Eléctricas y Modo de operación de interruptores

Según los antecedentes proporcionados por las empresas involucradas y el respectivo análisis realizado por el Coordinador:

- o Se presume una correcta operación de los sistemas de protecciones del paño A2 de S/E Los Ángeles, correspondiente a la línea 154 kV Los Ángeles – Santa Luisa, por medio de la función de sobrecorriente residual y reconexión automática exitosa.

Se presume un correcto modo de operación del interruptor 52A2 de S/E Los Ángeles.

- Se presume una correcta operación de los sistemas de protecciones del paño AT1 de S/E Central Eólica Alena, por medio de la función de baja tensión.

No se dispone de antecedentes suficientes que permitan determinar el modo de operación del interruptor 52AT1 de S/E Central Eólica Alena.

- Se concluye una incorrecta operación del sistema de protecciones N°1 (SEL-387) del transformador N°4 154/66 kV de S/E Los Ángeles, ante una falla en la línea 154 kV Los Ángeles – Santa Luisa, por medio de la función de sobrecorriente residual.

Se concluye un correcto modo de operación del interruptor 52AT4 de S/E Los Ángeles.

- Se concluye una incorrecta operación del sistema de protecciones N°2 (relé SEL-311L) del paño B1 de S/E Central Parque Eólico Los Buenos Aires, correspondiente a la línea 66 kV Los Ángeles - Parque Eólico Buenos Aires, por medio de la función de distancia de fases en primera zona, sin la existencia de una falla.

Se presume un correcto modo de operación del interruptor 52B1 de S/E Central Parque Eólico Los Buenos Aires.

- Se concluye una correcta operación del sistema de protecciones asociado a los paños BT1 y FT1 de S/E Central Parque Eólico Los Buenos Aires, por medio de la función de sobrefrecuencia.

Se concluye un correcto modo de operación de los interruptores 52BT1 y 52FT1 de S/E Central Parque Eólico Los Buenos Aires.

- Se presume una correcta operación del sistema de protecciones asociado al paño E1 del Parque Eólico La Esperanza, por medio de su función de baja tensión.

Se concluye un correcto modo de operación del interruptor 52E1 del Parque Eólico La Esperanza.

#### **9.4 Desempeño EDAC**

No aplica pronunciarse sobre el desempeño de EDAC ante este evento.

#### **9.5 Desempeño EDAG**

No aplica pronunciarse sobre el desempeño de EDAG ante este evento.

### **10. Pronunciamiento Técnico del Coordinador Eléctrico Nacional**

De acuerdo con el análisis realizado por el Coordinador:

- a) Se produjo la apertura automática del interruptor 52AT4 de S/E Los Ángeles, correspondiente al transformador N°4 154/66 kV de dicha subestación, por medio de la operación de la protección de sobrecorriente residual (51N), debido a perturbaciones declaradas en la línea 154 kV Los Ángeles – Santa Luisa, mientras que la función 51N del relé SEL-311C del mismo paño en cuestión, la cual sí posee direccionalidad, no registró operación.

Con lo anterior, y en base al análisis realizado en el punto 7 de este informe, es posible indicar que se concluye un incorrecto desempeño del sistema de protección N°1 (relé SEL-387) del transformador N°4 154/66 kV de S/E Los Ángeles, en forma simultánea con la reconexión automática exitosa de la línea 154 kV Los Ángeles – Santa Luisa.

- b) Se evidenciaron incumplimientos normativos en el desarrollo de este evento, en particular, la protección SEL-387 asociada al transformador N°4 154/66 kV de S/E Los Ángeles, no cumple con la sincronización horaria establecida en la NTSyCS vigente y su operación por parte de la función 51N se produjo en forma descoordinada con las protecciones de la línea 154 kV Los Ángeles – Santa Luisa.
- c) No se evidenciaron incumplimientos asociados al elemento afectado por la falla, reportados en la versión vigente del "Informe Anual de Cumplimientos, Artículo 1-14 Norma Técnica de Seguridad y Calidad de Servicio".
- d) Para el desarrollo de la falla no hay observaciones respecto de la aplicación de los Planes de Recuperación de servicio asociados a las instalaciones involucradas, ni de las actuaciones del CDC y los respectivos CC durante la falla del día 29 de octubre de 2023.

#### **11. Recomendación respecto de las instalaciones a las cuales el Coordinador Eléctrico Nacional debería solicitar una auditoría**

- a) Auditorías, planes de acción, instrucciones de acciones correctivas de largo y/o corto plazo.  
No se solicitan por el momento.

- b) Solicitudes de ampliación de información.

Se solicitará a la empresa CGE Transmisión S.A. lo siguiente:

- o Antecedentes requeridos para el Fenómeno Físico declarado (OPE26: Falla en sistema de protección o control), según Resolución Exenta SEC N°30989-2019, en particular, los mantenimientos de los últimos 24 meses del equipo que produce la falla y secuencia de operación de las protecciones, incluyendo un informe técnico (como operaron las protecciones y como debieron haber operado), considerando las protecciones de la línea 154 kV Los Ángeles – Santa Luisa.
- o Mantenimientos realizados al transformador N°4 155/66 kV de S/E Los Ángeles, junto a sus sistemas de control y protecciones, y a la línea 154 kV Los Ángeles – Santa Luisa, durante los últimos 24 meses, junto con los antecedentes que acrediten su realización, indicando los principales hallazgos.
- o Registros oscilográficos de la protección SEL-387 asociada al transformador N°4 155/66 kV de S/E Los Ángeles, operada con ocasión del evento en cuestión.
- o Resultados de la revisión del ajuste de la función de sobrecorriente residual en la protección SEL-387 del transformador N°4 154/66 kV de S/E Los Ángeles, junto con la verificación de coordinación, lo que fue comprometido como acción correctiva de corto plazo.
- o Cronograma de trabajo, con fechas definidas, que incluya las tareas necesarias que permitan determinar el origen de las reiteradas activaciones y desactivaciones de la función de sobrecorriente residual en ambos sistemas de protecciones del paño A2 de S/E Los Ángeles, correspondiente a la línea 154 kV Los Ángeles – Santa Luisa, junto con la explicación acerca del valor de corriente nulo en la fase "A".
- o Informar por medio del sistema de correspondencia del Coordinador cuando las acciones

correctivas de largo plazo declaradas se hayan concretado, las cuales consisten en el reemplazo de las protecciones del transformador N°4 154/66 kV de S/E Los Ángeles por unas de última generación, con el fin de habilitar su comunicación remota, lo que fue comprometido para estar concluido en la segunda semana del mes de marzo 2024. Además, la instalación de un nuevo reloj satelital para regularizar la estampa de tiempo de las protecciones de dicha subestación, lo que fue comprometido para ser instalado en el mes de enero de 2024.

Se solicitará a la empresa Enel Green Power Chile S.A. lo siguiente:

- Cronograma de trabajo, con fechas definidas, que incluya las tareas necesarias para el desarrollo de las acciones correctivas comprometidas, las que consisten en la determinación de la causa de la actuación del sistema de protecciones N°2 (relé SEL-311L) del paño B1 de S/E Central Parque Eólico Los Buenos Aires y su eventual reemplazo, en el caso que corresponda.

Se solicitará a la empresa Eólica La Esperanza S.A. lo siguiente:

- Monto de la generación afectada en el Parque Eólico La Esperanza a raíz del evento en cuestión.
- Registros oscilográficos y de eventos en formato COMTRADE del relé operado en el paño E1 del Parque Eólico La Esperanza (relé SEL-651R), donde sea posible visualizar la activación de la función de baja tensión con el fin de verificar su tiempo de operación con respecto al ajuste declarado.
- Cronograma de trabajo, con fechas definidas, que incluya las tareas necesarias para la sincronización en forma automática de la estampa de tiempo de la protección SEL-651R operada en el Parque Eólico La Esperanza, con el fin de cumplir con la Hora Oficial (UTC - 0) establecida en el NTSyCS.

## ANEXO N°1

Detalle de la generación programada para el día 29 de octubre de 2023

Periodo Desde: 29-10-2023 02-11-2023

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| Costos Totales [KUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

| Hidroeléctricas de Pasada | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24   | Total  |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|
| Total                     | 933 | 896 | 890 | 890 | 892 | 885 | 890 | 895 | 688 | 568 | 532 | 528 | 519 | 527 | 524 | 521 | 548 | 601 | 805 | 914 | 986 | 991 | 994 | 1000 | 18,419 |
| CHAPIQUINA                | 7   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 5   | 4   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 4   | 5   | 7   | 7   | 7   | 7    | 111    |
| COSAPILLA                 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 2      |
| ELTORON2                  | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 22     |
| CAVANCHA                  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0      |
| ALTOHOSPICIO              | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 22     |
| SANTAROSA                 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 12     |
| CORRALES                  | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 2   | 1   | 0   | 1   | 1   | 1   | 1   | 2   | 3   | 3   | 3   | 3   | 3   | 3    | 54     |
| PUNTADELVIENTO            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 3    | 65     |
| RIOHUASCO                 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1    | 14     |
| PUCLARO                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 5      |
| LOSMOLLES                 | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 2   | 2   | 2   | 2   | 2    | 23     |
| LAPALOMA                  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0      |
| ELTARTARO                 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0      |
| CH-HORNITOS               | 18  | 18  | 18  | 18  | 17  | 17  | 17  | 16  | 10  | 6   | 5   | 5   | 4   | 5   | 6   | 5   | 6   | 8   | 15  | 18  | 18  | 18  | 18  | 18   | 305    |
| JUNCAL                    | 15  | 15  | 15  | 15  | 14  | 14  | 14  | 13  | 9   | 7   | 7   | 7   | 6   | 7   | 8   | 7   | 8   | 8   | 12  | 14  | 14  | 14  | 15  | 15   | 273    |
| JUNCALITO                 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1    | 10     |
| COMPANIA-2                | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2    | 46     |
| BLANCO                    | 25  | 25  | 24  | 24  | 24  | 23  | 23  | 23  | 16  | 12  | 11  | 11  | 10  | 11  | 11  | 11  | 12  | 13  | 21  | 25  | 25  | 25  | 25  | 25   | 452    |
| LOSQUILLOS                | 31  | 31  | 31  | 30  | 30  | 30  | 30  | 30  | 25  | 23  | 22  | 22  | 22  | 22  | 22  | 21  | 22  | 23  | 29  | 31  | 32  | 32  | 32  | 32   | 655    |
| CHACABUQUITO              | 19  | 19  | 19  | 19  | 19  | 18  | 18  | 18  | 15  | 14  | 13  | 13  | 13  | 13  | 13  | 12  | 13  | 14  | 16  | 18  | 19  | 19  | 19  | 19   | 390    |
| SAUCEANDES                | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 12     |
| CARENA                    | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 2   | 3   | 3   | 3   | 3   | 3    | 42     |

Periodo Desde: 29-10-2023 02-11-2023

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| Costos Totales [KUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

[illegible]

| COORDINADOR ELÉCTRICO NACIONAL                     |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|----------------------------------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| Programación Diaria del Sistema Eléctrico Nacional |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
| domingo, 29 de octubre de 2023                     | 1     | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación                                   | 181   | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención                         | 5     | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]                              | 187   | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV                     | 113.0 | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                                     | 338   | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]                             | 230   | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]                                | 8189  | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]                             | 8757  | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |

|                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| PURISIMA        | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 10  |
| ELGALPON        | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 31  |
| CUMPEO          | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| DONWALTERIO     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| DIGUA           | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 240 |
| MELO            | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 46  |
| LICAN           | 14 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4  | 4  | 4  | 3  | 4  | 4  | 3  | 4  | 4  | 6  | 7  | 16 | 16 | 16 | 16 | 124 |
| DONAHILDA       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| MARIAELENA      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CHANLEUFU       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| TRANQUIL        | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 38  |
| PEHUI           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| PICHILONCO      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 10  |
| PILMAIQUEN      | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 19 | 25 | 24 | 24 | 24 | 25 | 24 | 24 | 24 | 25 | 30 | 32 | 32 | 32 | 32 | 32 | 611 |
| RUCATAYO        | 35 | 26 | 26 | 31 | 35 | 35 | 35 | 35 | 29 | 18 | 14 | 14 | 13 | 14 | 14 | 13 | 19 | 19 | 33 | 36 | 40 | 40 | 40 | 40 | 655 |
| CUMBRES         | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 13 | 12 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12 | 14 | 15 | 15 | 15 | 15 | 18 | 326 |
| PULELFU         | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 8  | 8  | 7  | 7  | 7  | 8  | 7  | 7  | 7  | 7  | 9  | 9  | 9  | 9  | 9  | 9  | 203 |
| CAPULLO         | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 10 | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 11 | 12 | 12 | 12 | 12 | 12 | 253 |
| MUCHI           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 2   |
| LASFLORES       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| PALMAR          | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 3  | 3  | 3  | 3  | 3  | 48  |
| CORRENTOSO      | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 4  | 4  | 4  | 4  | 4  | 70  |
| NALCAS          | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 62  |
| CALLAO          | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 17  |
| HIDROBONITO-MC1 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 3  | 3  | 3  | 3  | 3  | 52  |
| HIDROBONITO-MC2 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 13  |
| HIDROBONITO-MC3 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 53  |
| ENSENADA        | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 24  |
| LAARENA         | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 14  |
| ELCOLORADO      | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 14  |
| COLLIL          | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 58  |
| PIEDRASNEGRAS   | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 59  |
| DONGO           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |

| Eólicas             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19   | 20   | 21   | 22   | 23   | 24   | Total  |
|---------------------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|--------|
| Total               | 1050 | 1001 | 1005 | 1032 | 1075 | 1097 | 1081 | 1072 | 718 | 550 | 555 | 618 | 561 | 675 | 682 | 633 | 734 | 864 | 1329 | 1860 | 1687 | 1480 | 1328 | 1218 | 23,904 |
| PE-TCHAMMA          | 0    | 0    | 3    | 9    | 31   | 58   | 97   | 100  | 71  | 24  | 0   | 0   | 4   | 24  | 25  | 31  | 38  | 47  | 62   | 80   | 61   | 15   | 1    | 0    | 780    |
| PE-SIERRAGORDA      | 6    | 8    | 12   | 17   | 23   | 32   | 43   | 49   | 29  | 4   | 0   | 9   | 24  | 37  | 42  | 44  | 51  | 58  | 72   | 85   | 58   | 23   | 6    | 4    | 731    |
| PE-VALLEDELOSVENTOS | 4    | 3    | 2    | 3    | 5    | 8    | 10   | 10   | 0   | 0   | 0   | 0   | 0   | 10  | 16  | 17  | 22  | 27  | 44   | 64   | 54   | 37   | 16   | 7    | 359    |
| PE-CERROTTIGRE      | 19   | 9    | 5    | 3    | 4    | 7    | 7    | 8    | 0   | 0   | 0   | 0   | 0   | 20  | 39  | 41  | 55  | 60  | 89   | 116  | 76   | 41   | 20   | 9    | 626    |
| PE-LLANOSDELVIENTO  | 12   | 8    | 7    | 0    | 0    | 0    | 0    | 0    | 0   | 0   | 0   | 0   | 9   | 66  | 88  | 92  | 99  | 101 | 111  | 116  | 43   | 12   | 3    | 0    | 767    |
| PE-CALAMA           | 3    | 2    | 4    | 6    | 10   | 18   | 17   | 19   | 0   | 0   | 0   | 0   | 0   | 14  | 28  | 34  | 45  | 54  | 76   | 101  | 87   | 55   | 21   | 7    | 602    |
| PE-TALTAL           | 92   | 94   | 96   | 98   | 98   | 98   | 98   | 98   | 87  | 81  | 78  | 78  | 70  | 68  | 62  | 52  | 38  | 22  | 19   | 23   | 27   | 48   | 77   | 93   | 1694   |
| PE-ATACAMA          | 21   | 12   | 7    | 6    | 3    | 3    | 2    | 1    | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 6   | 44  | 72  | 93   | 120  | 118  | 119  | 114  | 110  | 851    |
| PE-SARCO            | 33   | 24   | 16   | 14   | 15   | 14   | 8    | 6    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 18  | 57   | 106  | 119  | 124  | 128  | 123  | 806    |
| PE-CABOLEONES-1     | 26   | 16   | 10   | 14   | 16   | 17   | 9    | 7    | 0   | 0   | 0   | 0   | 0   | 0   | 2   | 6   | 20  | 36  | 58   | 84   | 92   | 89   | 83   | 75   | 661    |
| PE-CABOLEONES-2     | 40   | 28   | 24   | 30   | 35   | 34   | 20   | 14   | 0   | 0   | 0   | 0   | 0   | 1   | 9   | 16  | 34  | 57  | 95   | 142  | 152  | 147  | 144  | 135  | 1154   |
| PE-CABOLEONES-3     | 33   | 20   | 15   | 20   | 21   | 20   | 8    | 6    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 5   | 26  | 63   | 99   | 111  | 109  | 101  | 93   | 749    |
| PE-SANJUAN          | 175  | 168  | 159  | 140  | 131  | 122  | 113  | 85   | 38  | 10  | 12  | 19  | 23  | 60  | 90  | 105 | 118 | 126 | 148  | 187  | 186  | 182  | 172  | 149  | 2718   |
| PE-PUNTACOLORADA    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 1    | 1    | 1    | 0    | 0    | 5      |
| PE-ELARRAYAN        | 3    | 1    | 2    | 1    | 1    | 2    | 2    | 2    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 5   | 26   | 47   | 57   | 59   | 59   | 60   | 329    |
| PE-TALINAYPONIENTE  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 4   | 15   | 28   | 31   | 30   | 29   | 27   | 170    |
| PE-TALINAYORIENTE   | 1    | 2    | 1    | 1    | 1    | 1    | 2    | 2    | 0   | 0   | 0   | 0   | 0   | 0   | 3   | 6   | 12  | 21  | 38   | 56   | 51   | 40   | 28   | 17   | 283    |
| PE-PUNTASIERRA      | 0    | 0    | 5    | 0    | 1    | 1    | 1    | 1    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 2   | 20   | 41   | 46   | 49   | 51   | 54   | 272    |

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |

|                   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| PE-LOSCURUROS     | 1  | 1  | 2  | 2  | 1  | 1  | 2  | 2  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 13 | 35 | 38 | 34 | 26 | 18 |
| PE-MONTEREDONDO   | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4  | 10 | 11 | 11 | 11 | 13 |
| PE-PUNTAPALMERAS  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 4  | 6  | 7  | 8  |
| PE-CANELA         | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 2  | 2  | 3  | 3  | 3  |
| PE-CANELA-2       | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4  | 11 | 12 | 13 | 14 | 14 |
| PE-TOTAL          | 3  | 3  | 3  | 2  | 2  | 2  | 2  | 2  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 2  | 7  | 12 | 14 | 15 | 7  | 8  |
| PE-UCUQUER-2      | 7  | 7  | 6  | 6  | 5  | 4  | 4  | 3  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 2  | 3  | 3  |
| PE-UCUQUER        | 5  | 4  | 4  | 2  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1  |
| PE-LAESTRELLA     | 38 | 36 | 36 | 32 | 28 | 23 | 19 | 16 | 8  | 1  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 4  | 5  | 8  | 9  | 10 |
| PE-LASPENAS       | 3  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 0  | 0  | 4  | 4  | 3  | 3  | 3  | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 0  | 0  |
| PE-CAMPO-LINDO    | 16 | 17 | 19 | 21 | 22 | 23 | 23 | 23 | 17 | 16 | 17 | 19 | 17 | 16 | 13 | 8  | 5  | 2  | 5  | 7  | 5  | 4  | 2  | 2  |
| PE-ELMAITEN       | 3  | 3  | 3  | 4  | 4  | 4  | 5  | 4  | 4  | 3  | 3  | 3  | 3  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| PE-NEGRETE        | 11 | 11 | 13 | 14 | 14 | 14 | 14 | 14 | 11 | 11 | 12 | 13 | 11 | 9  | 6  | 3  | 1  | 0  | 2  | 3  | 2  | 1  | 1  | 1  |
| PE-MESAMAVIDA     | 20 | 21 | 23 | 25 | 25 | 26 | 26 | 26 | 24 | 22 | 24 | 27 | 19 | 13 | 9  | 5  | 1  | 0  | 4  | 6  | 4  | 3  | 2  | 2  |
| PE-ALENA          | 25 | 29 | 32 | 33 | 35 | 36 | 36 | 38 | 32 | 31 | 30 | 30 | 24 | 19 | 12 | 8  | 6  | 3  | 7  | 8  | 4  | 4  | 4  | 4  |
| PE-CUEL           | 11 | 11 | 12 | 14 | 15 | 15 | 16 | 18 | 16 | 16 | 15 | 17 | 14 | 10 | 8  | 6  | 3  | 2  | 3  | 4  | 3  | 2  | 2  | 2  |
| PE-LOMASDEDUQUECO | 33 | 35 | 38 | 39 | 40 | 40 | 40 | 39 | 34 | 32 | 31 | 31 | 27 | 24 | 19 | 15 | 11 | 6  | 7  | 9  | 6  | 5  | 4  | 3  |
| PE-LOSOLMOS       | 27 | 30 | 32 | 35 | 37 | 37 | 37 | 37 | 27 | 27 | 31 | 35 | 31 | 24 | 12 | 2  | 0  | 0  | 0  | 4  | 3  | 3  | 2  | 1  |
| PE-RENAICO        | 13 | 15 | 17 | 19 | 20 | 20 | 21 | 24 | 20 | 24 | 30 | 33 | 26 | 16 | 7  | 3  | 1  | 0  | 3  | 6  | 3  | 2  | 2  | 1  |
| PE-RENAICO-2      | 15 | 17 | 19 | 19 | 19 | 20 | 21 | 23 | 11 | 5  | 5  | 9  | 2  | 0  | 0  | 0  | 0  | 0  | 0  | 6  | 5  | 4  | 2  | 0  |
| PE-MALLECONORTE   | 36 | 42 | 49 | 57 | 59 | 58 | 56 | 56 | 46 | 44 | 49 | 56 | 50 | 45 | 33 | 21 | 18 | 14 | 21 | 20 | 9  | 5  | 3  | 2  |
| PE-MALLECOSUR     | 31 | 36 | 42 | 49 | 51 | 50 | 50 | 50 | 37 | 34 | 40 | 48 | 43 | 39 | 31 | 20 | 16 | 12 | 18 | 16 | 6  | 3  | 2  | 1  |
| PE-SANGABRIEL     | 51 | 56 | 60 | 64 | 69 | 64 | 62 | 72 | 56 | 53 | 57 | 52 | 45 | 35 | 18 | 5  | 0  | 0  | 13 | 19 | 17 | 12 | 9  | 2  |
| PE-LAFLOR         | 13 | 13 | 13 | 14 | 14 | 13 | 13 | 14 | 13 | 11 | 11 | 12 | 9  | 7  | 5  | 5  | 3  | 2  | 4  | 4  | 5  | 5  | 3  | 2  |
| PE-LACABANA       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| PE-TOLPANSUR      | 17 | 19 | 22 | 26 | 27 | 27 | 28 | 29 | 21 | 19 | 23 | 24 | 16 | 10 | 3  | 0  | 0  | 0  | 1  | 4  | 3  | 2  | 1  | 1  |
| PE-ELNOGAL        | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1  | 2  | 2  | 2  | 4  | 0  | 0  | 0  | 3  | 3  | 0  | 0  | 0  | 0  |
| PE-LOSBUENOSAIRE  | 10 | 11 | 11 | 12 | 13 | 13 | 13 | 14 | 13 | 14 | 15 | 16 | 14 | 13 | 11 | 9  | 7  | 4  | 3  | 3  | 2  | 1  | 1  | 1  |
| PE-LAESPERANZA    | 3  | 3  | 3  | 4  | 4  | 4  | 4  | 5  | 4  | 4  | 3  | 4  | 4  | 2  | 2  | 1  | 1  | 0  | 1  | 1  | 1  | 0  | 0  | 0  |
| PE-LEBU-3         | 2  | 2  | 3  | 3  | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  |
| PE-LEBU           | 4  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4  | 4  | 4  | 3  | 3  | 2  | 1  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  |
| PE-HUAJACHE       | 3  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 4  | 4  | 3  | 3  | 3  | 3  | 2  | 2  | 2  | 1  | 1  | 1  | 0  | 0  | 0  |
| PE-RAKI           | 4  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4  | 4  | 3  | 3  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 1  |
| PE-ELARREBOL      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| PE-AURORA         | 62 | 56 | 51 | 55 | 48 | 44 | 40 | 41 | 28 | 19 | 19 | 26 | 30 | 36 | 35 | 32 | 33 | 36 | 44 | 56 | 51 | 51 | 48 | 50 |
| PE-PUELCHESUR     | 58 | 57 | 54 | 49 | 55 | 53 | 47 | 46 | 26 | 7  | 4  | 14 | 10 | 13 | 12 | 8  | 11 | 14 | 30 | 45 | 43 | 49 | 53 | 51 |
| PE-SANPEDRO       | 21 | 21 | 20 | 19 | 18 | 18 | 17 | 16 | 12 | 9  | 9  | 9  | 8  | 9  | 9  | 8  | 10 | 9  | 15 | 21 | 19 | 20 | 20 | 19 |
| PE-SANPEDRO-2     | 35 | 34 | 33 | 33 | 32 | 30 | 29 | 28 | 19 | 15 | 15 | 15 | 13 | 15 | 15 | 15 | 19 | 19 | 27 | 37 | 36 | 34 | 34 | 34 |

|                    |   |   |   |   |   |   |   |     |      |      |      |      |      |      |      |      |      |      |      |     |    |    |    |    |        |
|--------------------|---|---|---|---|---|---|---|-----|------|------|------|------|------|------|------|------|------|------|------|-----|----|----|----|----|--------|
| Solares            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8   | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20  | 21 | 22 | 23 | 24 | Total  |
| Total              | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 870 | 2986 | 3689 | 4004 | 4086 | 4186 | 4372 | 4254 | 3994 | 3788 | 3675 | 3014 | 689 | 58 | 0  | 0  | 0  | 43,673 |
| PFV-ELAGUILA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 0    | 0   | 0  | 0  | 0  | 0  | 10     |
| PFV-PAMPACAMARONES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   | 2    | 3    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 3    | 1   | 0  | 0  | 0  | 0  | 43     |
| PFV-POZOALMONTE-1  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 5    | 7    | 7    | 7    | 6    | 6    | 6    | 6    | 6    | 6    | 4    | 1   | 0  | 0  | 0  | 0  | 67     |
| PFV-POZOALMONTE-2  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 3    | 4    | 4    | 3    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 1   | 0  | 0  | 0  | 0  | 41     |
| PFV-WILLKA         | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 15  | 69   | 79   | 78   | 78   | 77   | 79   | 79   | 76   | 67   | 28   | 0    | 0   | 0  | 0  | 0  | 0  | 727    |
| PFV-POZOALMONTE-3  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 7    | 9    | 9    | 9    | 10   | 10   | 9    | 9    | 9    | 9    | 7    | 1   | 0  | 0  | 0  | 0  | 100    |
| PFV-TAMARUGO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   | 0    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 2    | 0    | 0   | 0  | 0  | 0  | 0  | 24     |
| PFV-LOSPUQUIOS     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0  | 0  | 0  | 0  | 0      |
| PFV-PICA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0  | 0  | 0  | 0  | 2      |
| PFV-LAHUAYCA-2     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 4    | 8    | 12   | 16   | 15   | 15   | 14   | 12   | 10   | 6    | 5    | 2   | 0  | 0  | 0  | 0  | 120    |
| PFV-SANTAISABEL    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34  | 99   | 119  | 119  | 120  | 118  | 120  | 117  | 111  | 108  | 100  | 75   | 6   | 0  | 0  | 0  | 0  | 1244   |
| PFV-VALLEDELSOL    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25  | 91   | 104  | 108  | 108  | 99   | 97   | 92   | 79   | 94   | 97   | 70   | 12  | 0  | 0  | 0  | 0  | 1076   |
| PFV-HUATACONDO     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7   | 33   | 58   | 57   | 56   | 51   | 50   | 44   | 39   | 39   | 38   | 26   | 4   | 0  | 0  | 0  | 0  | 501    |

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |
|                                |                                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |

|                       |   |   |   |   |   |   |   |   |    |     |     |     |     |     |     |     |     |     |     |     |    |    |   |   |
|-----------------------|---|---|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|---|
| PFV-BELLAVISTA-1      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 2   | 5   | 6   | 6   | 6   | 6   | 6   | 5   | 3   | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-ATACAMASOLAR-2    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 85  | 108 | 109 | 108 | 84  | 90  | 82  | 78  | 76  | 77  | 65  | 9  | 0  | 0 | 0 |
| PFV-NUEVOQUILLAGUA    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 51  | 60  | 57  | 55  | 53  | 53  | 50  | 39  | 39  | 44  | 39  | 7  | 0  | 0 | 0 |
| PFV-GRANJA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 50  | 54  | 53  | 50  | 45  | 43  | 39  | 34  | 35  | 41  | 45  | 9  | 0  | 0 | 0 |
| PFV-USYA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 8   | 19  | 32  | 38  | 40  | 41  | 41  | 38  | 32  | 21  | 10  | 2  | 0  | 0 | 0 |
| PFV-CALAMA-1          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 8   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 7   | 1  | 0  | 0 | 0 |
| PFV-SANPEDRO-GPG      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 58  | 68  | 64  | 65  | 70  | 79  | 79  | 60  | 45  | 48  | 41  | 5  | 0  | 0 | 0 |
| PFV-VICTORIA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 7   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 4   | 0   | 0  | 0  | 0 | 0 |
| PFV-JAMA-1            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 13  | 17  | 18  | 18  | 18  | 18  | 17  | 18  | 18  | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-JAMA-2            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 9   | 13  | 13  | 13  | 13  | 13  | 13  | 12  | 13  | 13  | 0   | 0  | 0  | 0 | 0 |
| PFV-QUETENA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 5   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 8   | 4   | 1   | 0  | 0  | 0 | 0 |
| PFV-SOLDELDESERTO     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 150 | 179 | 179 | 179 | 169 | 163 | 149 | 128 | 142 | 165 | 127 | 20 | 0  | 0 | 0 |
| PFV-MARIAELENA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8  | 29  | 40  | 40  | 40  | 39  | 40  | 40  | 38  | 40  | 39  | 29  | 5  | 0  | 0 | 0 |
| PFV-LACRUZSOLAR       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9  | 35  | 40  | 39  | 38  | 36  | 37  | 35  | 33  | 32  | 36  | 27  | 4  | 0  | 0 | 0 |
| PFV-COYA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 73  | 122 | 126 | 119 | 116 | 108 | 93  | 84  | 78  | 108 | 69  | 12 | 0  | 0 | 0 |
| PFV-FINISTERRAE       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 128 | 136 | 128 | 128 | 130 | 144 | 149 | 134 | 113 | 99  | 98  | 17 | 0  | 0 | 0 |
| PFV-LASSALINAS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-AZABACHE          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 38  | 41  | 43  | 43  | 42  | 42  | 38  | 27  | 29  | 30  | 32  | 5  | 0  | 0 | 0 |
| PFV-PAINE             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 7   | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-PUERTOSECO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 6   | 7   | 7   | 7   | 7   | 6   | 6   | 6   | 7   | 7   | 6   | 1  | 0  | 0 | 0 |
| PFV-TAMAYA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 63 | 70  | 70  | 70  | 70  | 72  | 75  | 74  | 71  | 72  | 73  | 82  | 69 | 32 | 0 | 0 |
| PFV-ELENA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9  | 6   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1  | 0  | 0 | 0 |
| PFV-CERRODOMINADOR    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 39  | 41  | 37  | 34  | 28  | 27  | 23  | 17  | 20  | 23  | 30  | 6  | 0  | 0 | 0 |
| PFV-TALLADO           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 7   | 8   | 8   | 9   | 8   | 8   | 6   | 5   | 3   | 1  | 0  | 0 | 0 |
| PFV-BOLERO-1          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 59  | 63  | 59  | 60  | 53  | 50  | 46  | 38  | 40  | 39  | 45  | 8  | 0  | 0 | 0 |
| PFV-CAPRICORNIO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7  | 29  | 53  | 56  | 53  | 54  | 56  | 51  | 50  | 55  | 54  | 41  | 8  | 0  | 0 | 0 |
| PFV-URIBESOLAR        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 21  | 31  | 31  | 30  | 30  | 31  | 31  | 30  | 31  | 31  | 22  | 5  | 0  | 0 | 0 |
| PFV-LOCKMA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 8   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 5   | 1  | 0  | 0 | 0 |
| PFV-CKILIR            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 3   | 8   | 8   | 9   | 9   | 9   | 9   | 9   | 9   | 7   | 1  | 0  | 0 | 0 |
| PFV-PAMPATIGRE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 74  | 83  | 80  | 80  | 79  | 81  | 80  | 78  | 80  | 76  | 47  | 3  | 0  | 0 | 0 |
| PFV-DOMEYKO           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 114 | 164 | 162 | 162 | 160 | 164 | 163 | 159 | 163 | 162 | 109 | 17 | 0  | 0 | 0 |
| PFV-ANDES             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 11  | 12  | 11  | 11  | 10  | 10  | 11  | 9   | 9   | 9   | 9   | 2  | 0  | 0 | 0 |
| PFV-ANDES2A           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9  | 37  | 47  | 50  | 51  | 51  | 50  | 46  | 45  | 42  | 37  | 40  | 7  | 0  | 0 | 0 |
| PFV-ANDES2B           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 39 | 112 | 112 | 112 | 42  | 42  | 112 | 96  | 41  | 112 | 111 | 32  | 0  | 0  | 0 | 0 |
| PFV-SOLDELILA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 97  | 121 | 117 | 117 | 115 | 116 | 116 | 112 | 111 | 112 | 94  | 16 | 0  | 0 | 0 |
| PFV-SOLDELNORTEANDES  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 5   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 5   | 3   | 0  | 0  | 0 | 0 |
| PFV-LOSANDES          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 6   | 7   | 7   | 7   | 7   | 7   | 7   | 7   | 7   | 6   | 4   | 0  | 0  | 0 | 0 |
| PFV-DELDESERTO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 0  | 0  | 0 | 0 |
| PFV-PARANAL           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-ARMAZONES         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-LALACKAMA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 26  | 36  | 33  | 27  | 26  | 27  | 26  | 26  | 27  | 26  | 27  | 5  | 0  | 0 | 0 |
| PFV-LALACKAMA-2       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4   | 5   | 5   | 4   | 3   | 4   | 3   | 4   | 3   | 3   | 4   | 1  | 0  | 0 | 0 |
| PFV-PAMPASOLARNORTE   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 19  | 23  | 23  | 22  | 21  | 22  | 21  | 18  | 20  | 21  | 25  | 8  | 0  | 0 | 0 |
| PFV-CONEJO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 43  | 52  | 50  | 57  | 56  | 59  | 58  | 53  | 55  | 54  | 43  | 9  | 0  | 0 | 0 |
| PFV-ALMEYDA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 17  | 25  | 29  | 29  | 29  | 30  | 29  | 29  | 29  | 31  | 30  | 6  | 0  | 0 | 0 |
| PFV-MALGARIDA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 113 | 124 | 134 | 124 | 118 | 123 | 125 | 124 | 129 | 131 | 117 | 23 | 0  | 0 | 0 |
| PFV-JAVIERA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7  | 26  | 37  | 36  | 36  | 36  | 37  | 37  | 35  | 37  | 36  | 28  | 6  | 0  | 0 | 0 |
| PFV-SOLDELOSANDES     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 47  | 61  | 61  | 61  | 61  | 62  | 61  | 59  | 60  | 59  | 43  | 8  | 0  | 0 | 0 |
| PFV-COVADONGA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 1   | 3   | 5   | 6   | 5   | 9   | 9   | 9   | 9   | 5   | 1  | 0  | 0 | 0 |
| PFV-CHANARES          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4   | 8   | 8   | 9   | 8   | 8   | 6   | 6   | 8   | 9   | 10  | 2  | 0  | 0 | 0 |
| PFV-SALVADOR          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 2   | 11  | 27  | 37  | 38  | 39  | 39  | 37  | 37  | 38  | 45  | 44 | 20 | 0 | 0 |
| PFV-PILARLOSAMARILLOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 1   | 1   | 2   | 2   | 2   | 1   | 1   | 0   | 0   | 0   | 0  | 0  | 0 | 0 |
| PFV-DIEGODEALMAGRO    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 2   | 4   | 6   | 7   | 8   | 7   | 6   | 7   | 8   | 7   | 5   | 0  | 0  | 0 | 0 |
| PFV-DAS               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 3   | 6   | 7   | 5   | 5   | 7   | 7   | 6   | 3   | 0   | 0  | 0  | 0 | 0 |

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |

|                     |   |   |   |   |   |   |   |    |     |     |     |     |     |     |     |     |     |     |     |    |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|---|---|---|---|
| PFV-DIEGOALMAGROSUR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 95  | 135 | 155 | 156 | 151 | 149 | 142 | 127 | 145 | 142 | 147 | 20 | 4 | 0 | 0 | 0 |
| PFV-CAMPODELSOL     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 239 | 254 | 256 | 254 | 244 | 235 | 210 | 169 | 167 | 176 | 231 | 62 | 0 | 0 | 0 | 0 |
| PFV-GUANCHOI        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 34  | 21  | 19  | 16  | 11  | 13  | 4   | 0   | 0   | 0   | 41  | 14 | 0 | 0 | 0 | 0 |
| PFV-CARRERAPINTO    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 71  | 74  | 72  | 72  | 72  | 73  | 70  | 73  | 70  | 73  | 70  | 16 | 0 | 0 | 0 | 0 |
| PFV-LUZDELNORTE     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 72  | 0   | 0   | 0   | 110 | 110 | 106 | 108 | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-LLANODELLAMOS   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8  | 28  | 32  | 33  | 34  | 30  | 29  | 26  | 22  | 22  | 21  | 29  | 7  | 0 | 0 | 0 | 0 |
| PFV-JOTABECHE       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 2   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 0  | 0 | 0 | 0 | 0 |
| PFV-TRAVESIA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-SANANDRES       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 2   | 3   | 4   | 5   | 4   | 5   | 5   | 4   | 5   | 6   | 6   | 2  | 0 | 0 | 0 | 0 |
| PFV-RIOSCONDIDO     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 67  | 86  | 91  | 95  | 97  | 106 | 108 | 106 | 108 | 105 | 82  | 24 | 0 | 0 | 0 | 0 |
| PFV-VALLEESCONDIDO  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 47  | 52  | 47  | 50  | 46  | 46  | 41  | 35  | 35  | 35  | 44  | 12 | 0 | 0 | 0 | 0 |
| PFV-ANTAY           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 1   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 0  | 0 | 0 | 0 | 0 |
| PFV-TIERRA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 0  | 0 | 0 | 0 | 0 |
| PFV-PILOTOCARDONES  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-PEPASOLAR-1     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 2   | 2   | 2   | 2   | 3   | 3   | 3   | 2   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-PSFHORIZONTE    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 0   | 0   | 1   | 1   | 1   | 1   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-LACOLONIA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 1   | 1   | 1   | 3   | 4   | 5   | 4   | 8   | 5   | 3   | 0  | 0 | 0 | 0 | 0 |
| PFV-ESPERANZA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-SANTAMARGARITA  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-GUADALAO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-LAESTANCIA      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 1   | 1   | 1   | 0   | 1   | 1   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-LASCHACRAS      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 1   | 1   | 2   | 2   | 1   | 1   | 1   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-LASTERRAZAS     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 2   | 2   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-MITCHI          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-CASTILLA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 1   | 2   | 2   | 1   | 1   | 2   | 2   | 2   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-LOSLOROS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 3   | 10  | 22  | 26  | 28  | 32  | 29  | 22  | 18  | 11  | 4   | 1  | 0 | 0 | 0 | 0 |
| PFV-HORNITOS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-VALLESOLARESTE  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 2   | 6   | 8   | 9   | 8   | 8   | 8   | 7   | 5   | 1  | 0 | 0 | 0 | 0 |
| PFV-VALLESOLAROESTE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 2   | 6   | 8   | 8   | 8   | 8   | 7   | 3   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-MALAQUITA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 5   | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 5   | 1  | 0 | 0 | 0 | 0 |
| PFV-CACHIYUYO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 6   | 9   | 9   | 9   | 9   | 9   | 9   | 4   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-MARANON         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-SANTACECILIA    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 1   | 2   | 2   | 2   | 2   | 2   | 2   | 1   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-ELROMERO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 10  | 31  | 58  | 63  | 69  | 79  | 79  | 78  | 87  | 61  | 31  | 4  | 0 | 0 | 0 | 0 |
| PFV-ELPELICANO      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 12  | 12  | 14  | 18  | 19  | 23  | 24  | 24  | 21  | 31  | 29  | 6  | 0 | 0 | 0 | 0 |
| PFV-LAHUELLA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 14  | 18  | 25  | 34  | 38  | 42  | 45  | 48  | 41  | 39  | 39  | 10 | 0 | 0 | 0 | 0 |
| PFV-LASILLA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-ASTILLAS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 1   | 3   | 3   | 3   | 4   | 6   | 7   | 6   | 7   | 6   | 1  | 0 | 0 | 0 | 0 |
| PFV-PUNTABAJASOLAR  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-SOLDELNORTE     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 2   | 2   | 3   | 3   | 3   | 2   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-SANTAFRANCISCA  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 2   | 5   | 6   | 6   | 6   | 5   | 4   | 3   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-LUNADELNORTE    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 2   | 2   | 3   | 3   | 3   | 2   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-GAVIOTIN        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 3   | 4   | 4   | 7   | 8   | 8   | 9   | 9   | 7   | 2  | 0 | 0 | 0 | 0 |
| PFV-TAMBOREAL       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 2   | 2   | 2   | 3   | 3   | 2   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-ELRAYADOR       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 1   | 2   | 2   | 3   | 3   | 4   | 3   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-LASTAGUAS       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0 | 0 | 0 | 0 |
| PFV-CHERCAN         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 1   | 1   | 0   | 1   | 2   | 3   | 5   | 4   | 3   | 1  | 0 | 0 | 0 | 0 |
| PFV-OLIVIER         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 1   | 2   | 2   | 2   | 2   | 2   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-OLIVIA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 2   | 2   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-GABRIELA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 6   | 8   | 9   | 9   | 9   | 9   | 9   | 9   | 8   | 2  | 0 | 0 | 0 | 0 |
| PFV-LAGUNILLA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 1   | 1   | 2   | 2   | 2   | 2   | 2   | 2   | 1   | 1   | 0  | 0 | 0 | 0 | 0 |
| PFV-SUNHUNTER       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 5   | 3   | 2   | 5   | 7   | 6   | 7   | 7   | 7   | 2  | 0 | 0 | 0 | 0 |
| PFV-GRANATE         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 4   | 3   | 3   | 4   | 7   | 7   | 7   | 7   | 7   | 2  | 0 | 0 | 0 | 0 |
| PFV-DONENRIQUE      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1   | 2   | 3   | 4   | 5   | 4   | 2   | 9   | 9   | 9   | 8   | 0  | 0 | 0 | 0 | 0 |

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|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |
|                                |                                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|
| PFV-AMPARODELSOL       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 3  | 3 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-SDGx01             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LACHAPEANA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-ALTURASDEOVALLE    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 4  | 4 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-OVALLENORTE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 2 | 2 | 4  | 5 | 7 | 6 | 5 | 0 | 0 | 0 | 0 | 0 |
| PFV-LACHIMBABIS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2  | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PAMA               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-TALHUEN            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2  | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 |
| PFV-SANTA CLARA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1  | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 |
| PFV-PRETTYFIELD        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASMOLLACAS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-LASMAJADAS         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3  | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELDIVISADERO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2  | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-ELSALITRAL         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 3 | 3 | 3 | 3  | 3 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 |
| PFV-HUAQUELON          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 2  | 4 | 7 | 7 | 7 | 5 | 0 | 0 | 0 | 0 |
| PFV-LOMASCOLORADAS     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-SANTALUCIA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 5 | 5 | 5 | 5  | 5 | 5 | 5 | 5 | 4 | 1 | 0 | 0 | 0 |
| PFV-SIETECOLORES       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 3  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 |
| PFV-LOSNOGALES         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2  | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 |
| PFV-BELLAVISTA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2  | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-CANESA-1           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-SANTALAURA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-MONTT              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2  | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-CHUCHINI           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-COCINILLAS         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 3 | 3  | 3 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 |
| PFV-CANELILLO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2  | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ILLAPEL-5          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2  | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 |
| PFV-CHALINGA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1  | 2 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALICAHUE           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-CUZCUZ             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-NORTECHICO-1       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-JAURURO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-FLORENCIA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 4 | 6  | 6 | 7 | 8 | 9 | 6 | 1 | 0 | 0 | 0 |
| PFV-CARACAS-2          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LALIGUA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2  | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-PULLALLI           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-ARIZTIA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1  | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-SANTAJULIA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-JARDINSOLARPETORCA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-INGENIO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 1 | 1  | 1 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |
| PFV-CABIL SOL          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CABILDOSUNLIGHT    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4  | 4 | 4 | 3 | 8 | 5 | 1 | 0 | 0 | 0 |
| PFV-LOSJOTES           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1  | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSPALTOS          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ESFENA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELQUEMADO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-DONACARMEN         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 8 | 10 | 7 | 4 | 3 | 0 | 3 | 0 | 0 | 0 | 0 |
| PFV-SANTUARIO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-CALLELARGA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-CASUTO             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-SANFRANCISCO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2  | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-FILOMENA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 3  | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-NILHUE             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SLKCB9             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 2 | 3  | 2 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |

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|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kv | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PFV-LASTORTOLASDELVERANO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-HORMIGA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-JAHUEL               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 6 | 5 | 6 | 6 | 5 | 6 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-MARIN                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ENCONSOLAR           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 4 | 5 | 5 | 4 | 3 | 2 | 1 | 0 | 0 | 0 |
| PFV-SANTAINES            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSPERALES           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-MAIKONO              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-VILLAMOSCOSO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-VILLAALMANA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-KAUFMANN             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ICB                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-VALLEDELALUNA-2      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-CRUZSOLAR-1          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LIPANGUE             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-PITRA                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-TARANTO              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 5 | 4 | 3 | 4 | 4 | 2 | 4 | 1 | 0 | 0 | 0 |
| PFV-SOLDESEPTIEMBRE      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOBOZA               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-TREBALSOLAR          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PLOMODELVERANO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-ELQUELTEHUE          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-TRINIDAD             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| PFV-ELBOCO               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-ABASTIBLECONCON      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-RDCLSAN              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 | 2 | 3 | 5 | 7 | 4 | 1 | 0 | 0 | 0 |
| PFV-PASTRAN              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 1 | 0 | 0 | 0 | 0 |
| PFV-FOSTER               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-GRANADA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 1 | 0 | 0 | 0 |
| PFV-OLIVILLO             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 | 2 | 5 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LINGUE               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSMAGNOLIOS         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-PANQUEHUE-2          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-OVEJERIA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 2 | 0 | 0 | 0 | 0 |
| PFV-ELLITREII            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 8 | 8 | 5 | 4 | 6 | 8 | 8 | 6 | 6 | 0 | 0 | 0 | 0 | 0 |
| PFV-PICURIO              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-TILITIL              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-PELUMPEN             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSCANONESSUNLIGHT   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PARQUEVALPARAISO     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 6 | 4 | 5 | 3 | 1 | 0 | 0 | 0 |
| PFV-PALTOSUNLIGHT        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 4 | 4 | 3 | 3 | 4 | 7 | 3 | 1 | 0 | 0 | 0 |
| PFV-AYLA                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 3 | 5 | 7 | 5 | 3 | 0 | 0 | 0 | 0 |
| PFV-LOMALOSCOLORADOS     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-INDEPENDENCIA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ANAKENA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 5 | 5 | 5 | 5 | 5 | 3 | 1 | 0 | 0 | 0 | 0 |
| PFV-SAMOBAJO             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 |
| PFV-RECOLETA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 0 | 0 | 0 | 0 | 0 |
| PFV-LUNA                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ROSARIO              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-ELQUEULE             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-LOMIRANDA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-AROMOVERANO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LIMA                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-OCOA                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |

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| Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197  | 187   | 171   |      | 2,572   |
| 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198  | 188   | 174   |      | 2,650   |
| 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

[illegible]

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| Costo Marginal Quillota 220 kv | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

|                          |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |     |
|--------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|-----|
| PFV-CATANSOLAR           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 2  | 2  | 1  | 1  | 0 | 0 | 0 | 0 | 0 | 15  |
| PFV-RAULI                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 2  | 2  | 2  | 3  | 4  | 3  | 2  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 20  |
| PFV-SANCAMILO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 1  | 2  | 1  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 7   |
| PFV-VILLAPRAT            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 4   |
| PFV-VILLA                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 1  | 1  | 2  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 7   |
| PFV-LLANOSDEPOTROSO      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 4  | 4  | 3  | 4  | 4  | 4  | 2  | 0  | 0 | 0 | 0 | 0 | 0 | 29  |
| PFV-LASROJAS             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 2  | 2  | 3  | 3  | 3  | 2  | 2  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 23  |
| PFV-LOSPATOS             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 12  |
| PFV-REXNER               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 2  | 3  | 3  | 3  | 3  | 3  | 2  | 2  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 24  |
| PFV-ITAHUE               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 2  | 2  | 2  | 2  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 11  |
| PFV-LAFRONTERA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 19  |
| PFV-PARAGUAY             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 2  | 2  | 2  | 2  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 15  |
| PFV-ELFLAMENCO           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5  | 7  | 8  | 8  | 8  | 8  | 8  | 8  | 8  | 7  | 5  | 1  | 0 | 0 | 0 | 0 | 0 | 81  |
| PFV-ERINOME              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 10  |
| PFV-ELZORZAL             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 10  |
| PFV-PIDUCO               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 12  |
| PFV-TALCA                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 1  | 2  | 6  | 4  | 4  | 3  | 3  | 2  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 27  |
| PFV-DONRODRIGO           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 3  | 3  | 3  | 1  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 13  |
| PFV-PANGUILEMOAEROPUERTO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 2  | 3  | 3  | 3  | 2  | 2  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 18  |
| PFV-SANJAVIER            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 3  | 2  | 4  | 4  | 3  | 2  | 2  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 22  |
| PFV-QUINANTU             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 2  | 1  | 0 | 0 | 0 | 0 | 0 | 24  |
| PFV-RANGUIL              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 8   |
| PFV-PACHIRA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 2  | 4  | 6  | 6  | 6  | 4  | 2  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 34  |
| PFV-LOSCISNES            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4  | 6  | 6  | 5  | 5  | 6  | 6  | 6  | 5  | 4  | 1  | 0 | 0 | 0 | 0 | 0 | 55  |
| PFV-LAACACIA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 11  |
| PFV-COLTAUACOALMENDRO    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 5   |
| PFV-LASTENCAS            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 2  | 3  | 2  | 1  | 2  | 1  | 2  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 15  |
| PFV-SANTAAMELIA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 1  | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 6   |
| PFV-IDAHUELDELVERANO     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 3   |
| PFV-ANTONIA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 4   |
| PFV-LORETO               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 4   |
| PFV-ROVIAN               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 10  |
| PFV-JSOLERM              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 1   |
| PFV-DONJORGE             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 7   |
| PFV-GRPITAO              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 1  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 15  |
| PFV-ROMERIA              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 11  |
| PFV-TORINO               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 6   |
| PFV-BERGAMO              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 4   |
| PFV-PEQUEN               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 3   |
| PFV-RAUQUEN              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 2  | 2  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 12  |
| PFV-CURICURA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 2  | 2  | 2  | 2  | 2  | 1  | 1  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 13  |
| PFV-LALAJUELA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 11  |
| PFV-ALTOSTILITIL         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 6   |
| PFV-LIQUIDAMBAR          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4  | 7  | 8  | 8  | 7  | 7  | 8  | 8  | 6  | 6  | 5  | 1  | 0 | 0 | 0 | 0 | 0 | 74  |
| PFV-QUILAPILUN           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5  | 12 | 16 | 25 | 16 | 11 | 24 | 26 | 10 | 26 | 23 | 8  | 2 | 0 | 0 | 0 | 0 | 205 |
| PFV-CLEMENTINA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4  | 5  | 4  | 3  | 2  | 3  | 3  | 4  | 3  | 5  | 2  | 0  | 0 | 0 | 0 | 0 | 0 | 39  |
| PFV-KONDA                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 1  | 1  | 1  | 2  | 2  | 1  | 1  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 12  |
| PFV-SLK808               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 3  | 2  | 1  | 3  | 3  | 3  | 3  | 2  | 2  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 26  |
| PFV-ESCORIALVERANO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 2  | 2  | 3  | 3  | 3  | 2  | 2  | 1  | 0  | 0 | 0 | 0 | 0 | 0 | 19  |
| PFV-CHACABUCO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 3  | 3  | 3  | 4  | 4  | 4  | 5  | 6  | 5  | 3  | 1  | 0 | 0 | 0 | 0 | 0 | 42  |
| PFV-MESEADELOSANDES      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 12 | 28 | 41 | 49 | 52 | 55 | 56 | 56 | 61 | 53 | 40 | 14 | 0 | 0 | 0 | 0 | 0 | 525 |
| PFV-UTFSMVITACURA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0   |
| PFV-TECHOSDEALTAMIRA     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 0   |
| PFV-PUENTE               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0 | 0 | 0 | 0 | 0 | 8   |

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|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kv | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |
|                                |                                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PFV-NAZARINOVERANO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CONDORPELVIN   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-DONANDRONICO   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-JAVIERACARRERA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 4 | 3 | 3 | 7 | 5 | 3 | 1 | 0 | 0 | 0 | 0 |
| PFV-VICENTE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PIRQUE         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CHAMPA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 1 | 0 | 0 | 0 | 0 |
| PFV-DARLIN         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELPERAL        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PATRICIAVERANO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 | 7 | 7 | 6 | 7 | 5 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CANTILLANA     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-GABARDOVERANO  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-FRANCISCO      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-TRICAHUE-2     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANISIDRO      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LABLANQUINA-1  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 5 | 7 | 4 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-MELI           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CANDELARIA     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-MARIAPINTO     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-HOMERO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELPILPEN       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASMERCEDES-1  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTAELIZABETH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 2 | 1 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ENCINO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CASABERMEJA    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CITRINO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-GUANACO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 5 | 6 | 4 | 4 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-VIOLETA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-MALLOCO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PENAFLO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 6 | 5 | 4 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PICUNCHE       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 7 | 6 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-LIRIODECAMPO   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-QUILLAY        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LUMBRERAS      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-PUANGUE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-MALINKE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALTOSDELPAICO  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LAUREL         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 | 3 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-RAMIRO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALHUE          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSIERRA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTAADRIANA   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CRUCERO        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANPEDRO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-RLA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELROBLE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 3 | 0 | 0 | 0 | 0 | 0 |
| PFV-CANTERA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELSHARON       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-GUARANA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-FARAMALLA      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELSAUCE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTAROSA      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-ECLIPSE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASTORCAZAS    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kv | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PFV-NEWENTUN           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-NAHUEN             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASPALMASDELVERANO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-MANDINGA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 2 | 2 | 3 | 4 | 3 | 2 | 1 | 0 | 0 | 0 |
| PFV-LASTURCAS          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-DONAIGNA           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-RIMINI             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-NIHUE              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-MARCHIGUE-2        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 0 | 0 | 0 | 0 |
| PFV-MARCHIGUE-7        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-PILPILEN           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-POBLACION          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PORTEZUELO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-VITUCO2B           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LAMANGA-1          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CONDORCHEPICA      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOCHACON           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-RINCONADAALCONES   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-COLCHAGUA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALCON              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 2 | 2 | 4 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| PFV-AVILES             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LAFORESTA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CORDILLERILLA      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANEMILIO-1        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALTOSOLAR          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-DONIHUE            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-MUTUPIN            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 5 | 4 | 4 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANCARLOS          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-RATULEMUS          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 3 | 3 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASCODORNICES      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALCALDESA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTALUISA         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELCERNICALO-1      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELCERNICALO-2      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CHUCAO             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-NIQUEN             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-BICENTENARIO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CHINCOL            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSGORRIONES       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CAUQUENES          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ITIHUE             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 4 | 5 | 5 | 5 | 2 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-PLAYERO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PLAYERITO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PLAYERON           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTAESTER         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASLECHUZAS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-DADINCO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PEGASUS            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SOLSANTAINES       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LUCESOLAR          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-RINCONADA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-PITOTOY            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSMOLINOS         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELMONTE            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |
|                                |                                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PFV-TREBO            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-MARAMBIO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-SALERNO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-QUELTEHUE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASTORTOLAS      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANJOSE-2        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-BERRUECO         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 5 | 4 | 3 | 2 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTARITA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELPIUQUEN        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LAVICTORIA       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 5 | 4 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ORION            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LAPALMA          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 7 | 5 | 5 | 3 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-HUAPE            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELRECONQUISTADOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASPALOMAS       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-GUADALUPE        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 0 | 0 | 0 | 0 | 0 |
| PFV-MOYA             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 1 | 0 | 0 | 0 | 0 |
| PFV-AVEL             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 3 | 2 | 4 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELOLIVAR         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 3 | 2 | 2 | 4 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-BULNESLOSBARONES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-FULGOR           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-PUELICHE         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-DONMARTIN        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ALBOR            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELTIUQUE         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-DUQUECO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-MECOCHILLAN      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-VENTURADA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 5 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-COCHARCAS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-VILLACRUZ        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANTAFE          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 4 | 2 | 1 | 0 | 0 | 0 | 0 |
| PFV-VILLAALEGRE      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELCONDOR         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-MILAN-A          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-TENO             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOICA            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-LEMU             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASPERDICES      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LOSTORDOS        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-PENCAHUEESTE     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-TRICADOS         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-MERCURIOSUR      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-MACHICURA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LINARESSOLAR     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-SANANTONIO       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-SATURNONORTE     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-VILLASECA        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CIPRES           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-CARACOLES        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELPITIO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-LASCATITAS       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PFV-CORTIJO          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 5 | 4 | 2 | 4 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-COYUNCHE         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PFV-ELRESPLANDOR     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Periodo Desde: 29-10-2023 02-11-2023

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|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| PFV-TRIGAL  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 78 |
| PFV-CABRERO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 23 |

[illegible][illegible]

29-10-2023 02-11-2023

| Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |         |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|---------|
| 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24    |         |
| 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197  | 187   | 171   | 2,572 |         |
| 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1    | 1     | 4     | 78    |         |
| 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198  | 188   | 174   | 2,650 |         |
| 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4  | 43.40   |
| 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356   | 5,755   |
| 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224   | 5,206   |
| 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605  | 194,886 |
| 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185  | 205,845 |

[illegible]

29-10-2023 02-11-2023

| Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

[illegible]

29-10-2023 02-11-2023

| Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

[illegible]

Periodo Desde: 29-10-2023 02-11-2023

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

[illegible]

29-10-2023 02-11-2023

| Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |         |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|---------|
| 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24    |         |
| 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197  | 187   | 171   | 2,572 |         |
| 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1    | 1     | 4     | 78    |         |
| 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198  | 188   | 174   | 2,650 |         |
| 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4  | 43.40   |
| 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356   | 5,755   |
| 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224   | 5,206   |
| 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605  | 194,886 |
| 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185  | 205,845 |

[illegible]

29-10-2023 02-11-2023

| Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |       |         |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|-------|---------|
| 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |       |         |
| 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197  | 187   | 171   |      | 2,572 |         |
| 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1    | 1     | 4     |      | 78    |         |
| 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198  | 188   | 174   |      | 2,650 |         |
| 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |       | 43.40   |
| 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |       | 5,755   |
| 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |       | 5,206   |
| 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |       | 194,886 |
| 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |       | 205,845 |

[illegible]

Periodo Desde: 29-10-2023 02-11-2023

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |         |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  | 2,572   |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    | 78      |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  | 2,650   |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 | 43.40   |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 | 205,845 |

[illegible]

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |
|                                |                                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |

|                                   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| NUEVARENCA_TG1+TV1+FA1_GNL_B      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| NUEVARENCA_TG1+TV1+FA1_GNL_INFLEX | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| NUEVARENCA_TG1+TV1+FA1_GNL_P      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| RENCA-1_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| RENCA-2_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CMPCCORDILLERA_GN_A               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CMPCCORDILLERA_GNL_A              | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CMPCCORDILLERA_GNL_B              | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| SANTAMARTA_COGEN                  | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 15 | 15 | 15 | 15 | 15 |
| CANDELARIA-1_DIESEL               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GN_A                 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 60 | 63 | 63 | 0  | 0  |
| CANDELARIA-1_GNL_A                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_B                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_C                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_D                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_E                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_F                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_G                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-1_GNL_INFLEX           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_DIESEL               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GN_A                 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 60 | 60 | 60 | 61 | 0  |
| CANDELARIA-2_GNL_A                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_B                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_C                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_D                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_E                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_F                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_G                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CANDELARIA-2_GNL_INFLEX           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| EPACIFICO_COGEN                   | 16 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 16 | 16 | 16 | 16 |
| COLIHUES-1_DIESEL                 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| COLIHUES-1_HFO                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| COLIHUES-2_DIESEL                 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| COLIHUES-2_HFO                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| ESPERANZA-DS1_DIESEL              | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| ESPERANZA-DS2_DIESEL              | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| ESPERANZA-TG1_DIESEL              | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| TENO_DIESEL                       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| TENOGAS_GLP                       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CEMENTOSBIOBIO_DIESEL             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CEMENTOSBIOBIO_F06                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| LICANTEN_BL1_COGEN                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| LICANTEN_BL1+BL2_COGEN            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| CONSTITUCION_DIESEL               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| MAULE_DIESEL                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| VINALES_BL1_COGEN                 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| VINALES_BL1+BL2_COGEN             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 12 | 12 | 0  | 0  |
| CELCO_BL1_COGEN                   | 5  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 5  | 5  | 5  | 5  | 5  |
| CELCO_BL1+BL2_COGEN               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| SANJAVIER-1_DIESEL                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| SANJAVIER-2_DIESEL                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| LINARES_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| SANGREGORIO_DIESEL                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| NUEVAALDEA_BL1_COGEN              | 7  | 7  | 7  | 7  | 7  | 7  | 7  | 7  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 7  | 7  | 7  | 7  | 7  | 7  |

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kv | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |

|                                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
|------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| NUEVAALDEA_BL1+BL2_COGEN           | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 37 | 37 | 37 | 37 | 37 | 37 | 518 |
| NUEVAALDEA_BL1+BL2+BL3_COGEN       | 7  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 7  | 7  | 7  | 7  | 7  | 42  |
| NUEVAALDEA-2_DIESEL                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| LAJAEVE-1_COGEN                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 7  | 7  | 7  | 7  | 7  | 35  |
| LAJAEVE-2_COGEN                    | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 72  |
| MASISA_COGEN                       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 8  | 8  | 8  | 8  | 8  | 39  |
| SANTALIDIA_DIESEL                  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| LOSPINOS_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| LOSGUINDOS_DIESEL                  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| LOSGUINDOS-2_DIESEL                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| SANTAFE_BL1_COGEN                  | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 519 |
| SANTAFE_BL1+BL2_COGEN              | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4  | 19 | 19 | 19 | 19 | 80  |
| SANTAFE_BL1+BL2+BL3_COGEN          | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 16 | 16 | 16 | 16 | 64  |
| SANTAFE_BL1+BL2+BL3+BL4_COGEN      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 11 | 11 | 11 | 11 | 44  |
| CMPCSAntafe_COGEN                  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 120 |
| CMPCLAJA_BL1_COGEN                 | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 120 |
| CMPCLAJA_BL1+BL2_COGEN             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 10 | 10 | 10 | 10 | 40  |
| CMPCLAJA_BL1+BL2+BL3_COGEN         | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 10 | 10 | 10 | 10 | 32  |
| CMPCLAJA_BL1+BL2+BL3+BL4_COGEN     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CMPCLAJA_BL1+BL2+BL3+BL4+BL5_COGEN | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CMPCPACIFICO_BL1_COGEN             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CMPCPACIFICO_BL1+BL2_COGEN         | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CMPCPACIFICO_BL1+BL2+BL3_COGEN     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-1_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-1_GN_A                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-1_GNL_A                     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-2_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-2_GN_A                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-2_GNL_A                     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-3_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-3_GN_A                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-3_GNL_A                     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| YUNGAY-4_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CHOLGUAN_BL1_COGEN                 | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 9  | 9  | 9  | 116 |
| CHOLGUAN_BL1+BL2_COGEN             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| NEWEN_DIESEL                       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| NEWEN_GN_A                         | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| NEWEN_GNL_A                        | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| NEWEN_GNL_B                        | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| NEWEN_PROpano                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| ENAPBIOBIO_COGEN                   | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 492 |
| ESCUADRON_COGEN                    | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 43  |
| CORONEL_DIESEL                     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CORONEL_GN_A                       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CORONEL_GNL_A                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| CORONEL_GNL_B                      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| SANTAMARIA_CAR                     | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| HORCONES_DIESEL                    | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| ARAUCO_COGEN                       | 5  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 24 | 24 | 24 | 24 | 179 |
| MAPA_COGEN                         | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 30 | 30 | 30 | 30 | 570 |
| LAUTARO-1_BL1_COGEN                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 22 | 22 | 22 | 22 | 22 | 110 |
| LAUTARO-1_BL1+BL2_COGEN            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4  | 4  | 4  | 4  | 16  |
| LAUTARO-2_BL1_COGEN                | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 16 | 16 | 16 | 16 | 16 | 80  |
| LAUTARO-2_BL1+BL2_COGEN            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 6  | 6  | 6  | 6  | 24  |

Periodo Desde: 29-10-2023 02-11-2023

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |       |         |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|---------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21    | 22    | 23   | 24   |       |         |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |      | 2,572 |         |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |      | 78    |         |
| Costos Totales [KUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |      | 2,650 |         |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |      | 43.40 |         |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305   | 325   | 339  | 356  |       | 5,755   |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226   | 226   | 226  | 224  |       | 5,206   |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124  | 9260  | 8995 | 8605 |       | 194,886 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654  | 9811  | 9560 | 9185 |       | 205,845 |

[illegible][illegible]

Periodo Desde: 29-10-2023 02-11-2023

| COORDINADOR ELÉCTRICO NACIONAL | Programación Diaria del Sistema Eléctrico Nacional |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |
|--------------------------------|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| domingo, 29 de octubre de 2023 | 1                                                  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   |
| Costos Operación               | 181                                                | 175  | 172  | 169  | 166  | 160  | 163  | 98   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 107  | 175  | 197   | 187   | 171  |
| Costos Encendido/Detención     | 5                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 52   | 1     | 1     | 4    |
| Costos Totales [kUSD]          | 187                                                | 175  | 172  | 170  | 166  | 160  | 163  | 107  | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 41   | 112  | 227  | 198   | 188   | 174  |
| Costo Marginal Quillota 220 kV | 113.0                                              | 72.6 | 72.5 | 64.1 | 62.3 | 61.7 | 61.6 | 52.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 58.0 | 75.5 | 128.6 | 126.0 | 93.4 |
| Pérdidas [MWh]                 | 338                                                | 325  | 306  | 302  | 296  | 290  | 287  | 254  | 141  | 147  | 158  | 154  | 162  | 163  | 175  | 158  | 154  | 162  | 180  | 277  | 305  | 325   | 339   | 356  |
| Consumos Propios [MWh]         | 230                                                | 230  | 230  | 231  | 230  | 230  | 230  | 206  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 207  | 212  | 226  | 226   | 226   | 224  |
| Demanda Total [MWh]            | 8189                                               | 7878 | 7671 | 7464 | 7413 | 7376 | 7395 | 7322 | 7394 | 7724 | 8024 | 8144 | 8282 | 8446 | 8439 | 8278 | 8225 | 8240 | 8380 | 8615 | 9124 | 9260  | 8995  | 8605 |
| Generación Total [MWh]         | 8757                                               | 8434 | 8207 | 7997 | 7940 | 7897 | 7913 | 7782 | 7742 | 8077 | 8389 | 8506 | 8651 | 8815 | 8820 | 8642 | 8585 | 8609 | 8767 | 9104 | 9654 | 9811  | 9560  | 9185 |
| QUILLECO                       | 70                                                 | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70   | 70    | 70    | 70   |
| LAJA1                          | 31                                                 | 25   | 25   | 25   | 22   | 24   | 25   | 31   | 24   | 22   | 25   | 25   | 25   | 25   | 31   | 24   | 22   | 25   | 25   | 25   | 25   | 27    | 26    | 28   |
| RALCO-1                        | 239                                                | 300  | 299  | 291  | 297  | 300  | 252  | 223  | 147  | 199  | 190  | 184  | 184  | 160  | 153  | 160  | 152  | 114  | 106  | 272  | 345  | 345   | 345   | 343  |
| RALCO-2                        | 328                                                | 252  | 300  | 300  | 300  | 300  | 300  | 223  | 199  | 128  | 190  | 184  | 184  | 160  | 153  | 160  | 152  | 108  | 106  | 272  | 345  | 345   | 345   | 300  |
| PALMUCHO                       | 32                                                 | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 28   | 26   | 26   | 26   | 25   | 26   | 26   | 25   | 26   | 26   | 30   | 32   | 32   | 32    | 32    | 32   |
| PANGUE-1                       | 225                                                | 225  | 59   | 50   | 65   | 115  | 115  | 115  | 50   | 50   | 50   | 50   | 50   | 80   | 130  | 180  | 180  | 180  | 225  | 225  | 225  | 225   | 225   | 225  |
| PANGUE-2                       | 225                                                | 225  | 225  | 50   | 50   | 50   | 100  | 150  | 50   | 20   | 20   | 0    | 20   | 20   | 20   | 20   | 70   | 120  | 125  | 175  | 225  | 225   | 225   | 225  |
| ANGOSTURA-1                    | 140                                                | 140  | 140  | 140  | 140  | 140  | 140  | 109  | 74   | 74   | 74   | 74   | 110  | 74   | 74   | 140  | 140  | 140  | 140  | 140  | 137  | 128   | 132   | 140  |
| ANGOSTURA-2                    | 140                                                | 136  | 140  | 140  | 130  | 140  | 140  | 74   | 79   | 88   | 85   | 85   | 74   | 92   | 109  | 93   | 109  | 95   | 118  | 140  | 140  | 140   | 140   | 140  |
| ANGOSTURA-3                    | 47                                                 | 40   | 40   | 47   | 40   | 47   | 42   | 47   | 40   | 40   | 40   | 40   | 47   | 40   | 40   | 47   | 47   | 40   | 47   | 47   | 47   | 47    | 47    | 47   |
| CANUTILLAR-1                   | 0                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 80   | 80   | 80    | 80    | 64   |
| CANUTILLAR-2                   | 0                                                  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 80   | 80   | 80    | 80    | 80   |

## ANEXO N°2

Detalle de la generación real del día 29 de octubre de 2023

29-10-2023

29-10-2023

|                | 1    | 2    | 3    | 4    | 5    | 6     | 7     | 8     | 9     | 10    | 11    | 12   | 13   | 14    | 15    | 16   | 17   | 18   | 19   | 20    | 21    | 22    | 23    | 24    | TOT.DIA | DMAX  | DMED. |      |
|----------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|------|------|------|------|-------|-------|-------|-------|-------|---------|-------|-------|------|
|                |      |      |      |      |      |       |       |       |       |       |       |      |      |       |       |      |      |      |      |       |       |       |       |       | MWh     | MWh/h | MWh/h |      |
| CHAPIQUINA     | 6.4  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0   | 4.0   | 4.8   | 7.0   | 7.0   | 5.0   | 4.5  | 4.5  | 4.5   | 4.5   | 4.5  | 1.2  | 2.8  | 4.5  | 4.9   | 9.0   | 9.0   | 8.1   | 8.0   | 124.2   | 9.0   | 5.2   |      |
| COSAPILLA      | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4  | 0.4  | 0.4   | 0.4   | 0.4  | 0.4  | 0.4  | 0.4  | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 10.5    | 0.5   | 0.4   |      |
| ELTORON2       | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0  | 1.0  | 1.0   | 1.0   | 1.0  | 1.0  | 1.0  | 1.0  | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 23.3    | 1.0   | 1.0   |      |
| CAVANCHA       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| ALTOHOSPICIO   | 0.9  | 0.9  | 0.9  | 0.9  | 0.9  | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9  | 0.9  | 0.9   | 0.9   | 0.9  | 0.9  | 0.9  | 0.9  | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 22.6    | 0.9   | 0.9   |      |
| SANTAROSA      | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5  | 0.5  | 0.5   | 0.5   | 0.5  | 0.5  | 0.5  | 0.5  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 11.7    | 0.5   | 0.5   |      |
| RIOHUASCO      | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0   | 1.0   | 1.0   | 1.1   | 1.1   | 1.1   | 1.1  | 1.1  | 1.1   | 1.1   | 1.1  | 1.1  | 1.1  | 1.1  | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 25.4    | 1.1   | 1.1   |      |
| PUCJARO        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LOSMOLLES      | 0.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.8  | 1.9  | 2.1   | 2.0   | 3.0  | 3.7  | 3.5  | 3.6  | 3.8   | 3.7   | 3.5   | 3.6   | 5.3   | 40.8    | 5.3   | 1.7   |      |
| LAPALOMA       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| CH-HORNITOS    | 20.8 | 20.8 | 20.8 | 20.6 | 20.3 | 20.0  | 19.9  | 19.7  | 19.7  | 19.6  | 19.7  | 19.8 | 19.7 | 19.6  | 19.4  | 19.4 | 19.4 | 19.4 | 19.4 | 19.4  | 19.3  | 19.2  | 19.0  | 18.7  | 18.4    | 472.6 | 20.8  | 19.7 |
| JUNCALITO      | 0.6  | 0.6  | 0.6  | 0.6  | 0.6  | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6  | 0.6  | 0.6   | 0.6   | 0.6  | 0.6  | 0.6  | 0.6  | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 14.4    | 0.6   | 0.6   |      |
| ELTARTARO      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| JUNCAL         | 16.4 | 16.4 | 16.4 | 16.4 | 16.3 | 16.2  | 16.1  | 16.1  | 16.1  | 16.1  | 16.0  | 16.1 | 16.1 | 16.1  | 16.1  | 16.1 | 16.1 | 16.0 | 16.0 | 15.9  | 15.9  | 15.8  | 15.7  | 15.7  | 386.1   | 16.4  | 16.1  |      |
| BLANCO         | 27.2 | 27.2 | 27.5 | 27.5 | 27.3 | 27.1  | 26.9  | 26.7  | 26.5  | 26.5  | 26.8  | 26.9 | 26.9 | 27.3  | 27.5  | 27.6 | 27.5 | 27.3 | 24.1 | 26.3  | 26.1  | 26.0  | 25.9  | 25.5  | 642.1   | 27.6  | 26.8  |      |
| LOSQUILLOS     | 27.7 | 30.6 | 31.2 | 29.7 | 30.4 | 31.7  | 30.2  | 30.7  | 30.9  | 31.6  | 31.1  | 31.2 | 27.4 | 32.4  | 33.1  | 33.1 | 33.1 | 33.2 | 33.5 | 32.2  | 32.3  | 31.6  | 32.8  | 31.0  | 752.7   | 33.5  | 31.4  |      |
| CHACABUQUITO   | 18.3 | 16.7 | 16.9 | 17.9 | 18.2 | 17.7  | 18.4  | 18.3  | 18.2  | 18.2  | 18.4  | 18.5 | 18.6 | 17.4  | 17.8  | 18.8 | 19.5 | 19.7 | 19.7 | 19.7  | 19.9  | 19.1  | 18.7  | 19.1  | 443.7   | 19.9  | 18.5  |      |
| SAUCEANDES     | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5  | 0.5  | 0.5   | 0.5   | 0.5  | 0.5  | 0.5  | 0.5  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 12.0    | 0.5   | 0.5   |      |
| CARENA         | 6.9  | 6.9  | 7.0  | 6.7  | 6.6  | 6.9   | 7.0   | 6.9   | 7.0   | 6.9   | 6.9   | 7.0  | 7.0  | 7.0   | 7.0   | 7.0  | 7.0  | 7.0  | 7.1  | 7.0   | 7.1   | 7.0   | 7.1   | 7.1   | 167.1   | 7.1   | 7.0   |      |
| MINI_ARRAYAN   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| ALFALFAL       | 59.1 | 60.5 | 62.4 | 63.0 | 63.0 | 63.0  | 63.0  | 63.0  | 63.0  | 63.2  | 65.1  | 65.1 | 65.1 | 61.8  | 61.4  | 61.4 | 61.4 | 61.4 | 61.4 | 61.5  | 61.4  | 60.3  | 59.3  | 57.6  | 1487.4  | 65.1  | 62.0  |      |
| ALFALFAL-2     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LAS-LAJAS      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| MAITENES       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LABIFURCADA    | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 2.4     | 0.2   | 0.1   |      |
| CALIBORO       | 0.8  | 0.8  | 0.8  | 0.8  | 0.8  | 0.8   | 0.8   | 0.8   | 0.6   | 0.6   | 0.6   | 0.5  | 0.5  | 0.6   | 0.6   | 0.6  | 0.6  | 0.6  | 0.6  | 0.5   | 0.4   | 0.4   | 0.5   | 0.5   | 14.9    | 0.8   | 0.6   |      |
| MALLARAUCO     | 3.3  | 3.3  | 3.3  | 3.3  | 3.3  | 3.3   | 3.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 1.1  | 3.4   | 3.4   | 3.4  | 3.4  | 3.4  | 3.4  | 3.4   | 3.4   | 3.4   | 3.3   | 3.2   | 61.4    | 3.4   | 2.6   |      |
| COYA           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| CHACAYES       | 97.3 | 94.3 | 95.3 | 93.2 | 95.6 | 106.5 | 107.1 | 106.2 | 107.0 | 107.1 | 103.2 | 90.2 | 85.3 | 102.7 | 105.1 | 92.8 | 72.6 | 70.6 | 99.1 | 107.0 | 107.2 | 106.7 | 107.3 | 107.7 | 2367.1  | 107.7 | 98.6  |      |
| SAUZAL         | 74.6 | 73.6 | 74.9 | 72.3 | 68.1 | 69.5  | 63.1  | 65.3  | 67.6  | 67.6  | 67.3  | 66.0 | 63.5 | 64.6  | 63.9  | 65.0 | 72.0 | 69.1 | 70.2 | 71.6  | 70.7  | 17.3  | 17.3  | 70.6  | 1545.7  | 74.9  | 64.4  |      |
| CIPRESILLOS    | 3.7  | 3.7  | 3.7  | 3.7  | 3.7  | 3.7   | 3.7   | 3.7   | 3.7   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 29.6    | 3.7   | 1.2   |      |
| SAUZAL 60 HZ   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| SAUZALITO      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LA-COMPANIA-II | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.6   | 0.8   | 0.8   | 0.8   | 3.0     | 0.8   | 0.1   |      |
| LAHIGUERA      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LACONFLUENCIA  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| ELPASO         | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 16.3  | 20.2  | 13.2  | 10.3  | 0.0   | 0.0   | 0.0  | 1.6  | 10.9  | 10.9  | 8.6  | 8.0  | 8.2  | 8.2  | 8.2   | 14.7  | 20.5  | 20.4  | 20.4  | 253.1   | 20.5  | 10.5  |      |
| SANANDRES      | 5.4  | 1.4  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 3.0   | 5.2   | 5.2  | 5.2  | 5.2  | 6.6  | 7.0   | 7.7   | 8.0   | 8.0   | 8.1   | 76.0    | 8.1   | 3.2   |      |
| CONVENTOVIEJO  | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1  | 15.1  | 15.1  | 15.1  | 15.1  | 15.1  | 15.1 | 15.1 | 15.1  | 15.1  | 15.1 | 15.1 | 15.1 | 15.1 | 15.1  | 15.1  | 15.1  | 15.1  | 15.1  | 363.0   | 15.1  | 15.1  |      |
| LAMONTANA-1    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LAMONTANA-2    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| CUMPEO         | 1.8  | 1.8  | 1.7  | 2.0  | 2.0  | 2.0   | 2.0   | 2.1   | 2.2   | 1.9   | 2.3   | 2.3  | 2.3  | 2.3   | 2.3   | 2.3  | 1.9  | 2.6  | 1.9  | 2.5   | 2.5   | 2.5   | 2.5   | 2.5   | 52.1    | 2.6   | 2.2   |      |
| CORRALES       | 2.9  | 1.5  | 0.9  | 0.9  | 0.9  | 0.9   | 0.9   | 0.9   | 0.9   | 0.4   | 0.0   | 0.6  | 1.3  | 1.3   | 2.0   | 3.0  | 2.2  | 3.0  | 2.2  | 3.0   | 3.0   | 2.9   | 2.9   | 2.9   | 43.1    | 3.0   | 1.8   |      |
| ROBLERIA       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| LIRCAY         | 20.1 | 20.1 | 20.2 | 20.2 | 20.2 | 20.2  | 20.2  | 20.1  | 20.1  | 20.2  | 20.1  | 20.1 | 20.1 | 20.2  | 19.8  | 20.0 | 20.3 | 20.2 | 20.2 | 20.2  | 20.2  | 20.2  | 20.2  | 20.3  | 483.7   | 20.3  | 20.2  |      |
| MARIPOSAS      | 1.6  | 1.8  | 2.1  | 2.1  | 2.3  | 2.5   | 2.9   | 3.2   | 3.5   | 3.6   | 3.7   | 3.8  | 3.8  | 3.8   | 3.7   | 3.6  | 3.5  | 3.5  | 3.6  | 3.6   | 3.6   | 3.7   | 3.7   | 3.8   | 77.0    | 3.8   | 3.2   |      |
| PROVIDENCIA    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| MCHDOSAL       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PURISIMA       | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2  | 0.2  | 0.2   | 0.2   | 0.2  | 0.2  | 0.2  | 0.2  | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 3.8     | 0.2   | 0.2   |      |
| ELGALPON       | 0.6  | 0.6  | 0.6  | 0.6  | 0.5  | 0.6   | 0.7   | 0.7   | 0.7   | 0.7   | 0.8   | 0.8  | 0.7  | 0.7   | 0.7   | 0.7  | 0.6  | 0.7  | 0.7  | 0.7   | 0.7   | 0.7   | 0.8   | 0.8   | 16.3    | 0.8   | 0.7   |      |
| RIOCOLORADO    | 15.3 | 15.3 | 15.3 | 15.3 | 15.3 | 15.2  | 15.2  | 15.0  | 15.4  | 15.5  | 15.5  | 15.3 | 15.3 | 15.   |       |      |      |      |      |       |       |       |       |       |         |       |       |      |

|                 | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | TOT.DIA | DMAX  | DMED. |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-------|-------|
|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | MWh     | MWh/h | MWh/h |
| PALMAR          | 4.1  | 4.0  | 3.9  | 3.8  | 3.8  | 3.7  | 3.6  | 3.5  | 3.5  | 3.4  | 3.3  | 3.3  | 3.2  | 3.2  | 3.1  | 3.1  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 2.9  | 80.2    | 4.1   | 3.3   |
| PUELFU          | 9.3  | 9.3  | 9.3  | 9.3  | 9.3  | 9.2  | 9.3  | 9.3  | 9.3  | 9.3  | 9.3  | 8.9  | 8.9  | 9.4  | 9.4  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 9.0  | 8.8  | 8.7  | 8.7  | 219.0   | 9.4   | 9.1   |
| MARIAELENA      | 0.1  | 0.1  | 0.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 1.6     | 0.1   | 0.1   |
| LOSOLONOS       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CHANLEFU        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CAPULLO         | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.5 | 11.5 | 11.4 | 11.5 | 11.5 | 11.4 | 11.5 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.3 | 11.3 | 10.8 | 273.3   | 11.5  | 11.4  |
| NALCAS          | 6.0  | 6.0  | 5.9  | 5.9  | 5.8  | 6.0  | 5.8  | 5.6  | 5.5  | 5.3  | 5.2  | 5.2  | 5.1  | 5.0  | 5.0  | 4.8  | 4.8  | 4.8  | 4.7  | 4.6  | 4.5  | 4.6  | 4.5  | 4.4  | 124.8   | 6.0   | 5.2   |
| CALLAO          | 2.7  | 2.8  | 2.6  | 2.7  | 2.7  | 2.7  | 2.7  | 2.7  | 2.6  | 2.6  | 2.6  | 2.6  | 2.5  | 2.5  | 2.5  | 2.4  | 2.4  | 2.4  | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  | 2.2  | 60.2    | 2.8   | 2.5   |
| HIDROBONITO-MC1 | 9.0  | 9.0  | 8.8  | 8.8  | 8.7  | 8.6  | 8.4  | 7.9  | 7.7  | 7.5  | 7.4  | 7.2  | 7.1  | 7.0  | 6.8  | 6.7  | 6.6  | 6.5  | 6.4  | 6.3  | 6.3  | 6.2  | 6.1  | 6.0  | 176.9   | 9.0   | 7.4   |
| HIDROBONITO-MC2 | 2.0  | 2.0  | 2.0  | 2.1  | 2.1  | 2.0  | 1.9  | 1.8  | 1.8  | 1.7  | 1.7  | 1.6  | 1.6  | 1.6  | 1.6  | 1.5  | 1.5  | 1.5  | 1.5  | 1.4  | 1.4  | 1.4  | 1.4  | 1.4  | 40.7    | 2.1   | 1.7   |
| HIDROBONITO-MC3 | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.1  | 2.0  | 2.0  | 2.0  | 2.0  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 51.2    | 2.3   | 2.1   |
| RUCATAYO        | 40.8 | 32.7 | 28.8 | 27.7 | 26.7 | 25.5 | 25.4 | 25.2 | 25.4 | 25.4 | 25.3 | 25.4 | 25.4 | 25.5 | 25.4 | 25.1 | 25.4 | 24.9 | 25.5 | 29.2 | 35.4 | 39.9 | 40.2 | 36.6 | 692.9   | 40.8  | 28.9  |
| LOS-LAGOS       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CHILCO          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| ENSENADA        | 1.0  | 0.9  | 0.5  | 0.5  | 0.6  | 0.6  | 0.6  | 0.6  | 0.6  | 0.7  | 0.7  | 0.7  | 0.7  | 0.1  | 0.0  | 0.3  | 0.6  | 0.6  | 0.7  | 0.7  | 0.6  | 0.7  | 0.7  | 0.6  | 14.4    | 1.0   | 0.6   |
| LAARENA         | 5.4  | 5.5  | 5.7  | 5.8  | 5.8  | 5.9  | 6.0  | 6.0  | 6.0  | 5.8  | 5.7  | 5.6  | 5.3  | 5.4  | 5.3  | 5.2  | 5.1  | 5.0  | 5.0  | 4.9  | 4.8  | 4.7  | 4.7  | 4.6  | 129.2   | 6.0   | 5.4   |
| ELCOLORADO      | 1.5  | 1.5  | 1.6  | 1.7  | 1.6  | 1.6  | 1.5  | 1.4  | 1.4  | 1.3  | 1.2  | 1.2  | 1.0  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 30.6    | 1.7   | 1.3   |
| DONGO           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| COLLIL          | 6.4  | 4.5  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.5  | 6.6  | 6.6  | 6.6  | 6.6  | 1.4  | 2.3  | 6.2  | 6.6  | 6.6  | 6.6  | 6.6  | 6.6  | 6.6  | 6.6  | 6.6  | 6.6  | 144.7   | 6.6   | 6.0   |
| QUELTEHUES      | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.4 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 707.9   | 29.5  | 29.5  |
| VOLCAN          | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 153.6   | 6.4   | 6.4   |
| GUAYACAN        | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 9.9  | 9.9  | 9.8  | 9.8  | 9.9  | 9.9  | 9.9  | 9.9  | 9.9  | 9.9  | 9.9  | 238.4   | 10.0  | 9.9   |
| FLORIDA-1       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| FLORIDA-2       | 9.8  | 10.0 | 10.1 | 10.3 | 10.3 | 9.9  | 10.0 | 10.2 | 10.3 | 9.7  | 8.6  | 9.5  | 9.8  | 10.4 | 10.4 | 9.9  | 9.2  | 10.0 | 10.1 | 9.3  | 8.7  | 9.8  | 10.0 | 10.2 | 236.5   | 10.4  | 9.9   |
| FLORIDA-3       | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 52.8    | 2.2   | 2.2   |
| PUNTILLA        | 12.1 | 11.2 | 12.0 | 11.9 | 11.8 | 11.5 | 11.8 | 12.0 | 13.5 | 14.8 | 15.0 | 14.7 | 14.9 | 14.9 | 14.4 | 14.4 | 14.4 | 14.6 | 14.8 | 14.1 | 14.2 | 14.2 | 14.4 | 14.7 | 326.3   | 15.0  | 13.6  |
| EYZAGUIRRE      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| LASVERTIENTES   | 1.0  | 1.6  | 1.7  | 1.7  | 1.0  | 1.6  | 1.7  | 1.7  | 1.2  | 1.6  | 1.4  | 1.7  | 1.7  | 1.7  | 1.1  | 1.5  | 1.7  | 1.7  | 1.0  | 1.7  | 1.4  | 1.7  | 1.7  | 1.7  | 36.7    | 1.7   | 1.5   |
| ELLLANO         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| ELRINCON        | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 6.2     | 0.3   | 0.3   |
| LOSMORROS       | 1.5  | 1.5  | 1.5  | 1.2  | 1.4  | 1.5  | 1.5  | 1.5  | 1.6  | 1.9  | 1.9  | 2.0  | 1.8  | 1.3  | 2.0  | 2.2  | 2.2  | 1.9  | 1.7  | 1.7  | 1.6  | 1.6  | 1.6  | 1.3  | 39.5    | 2.2   | 1.6   |
| LOSBAJOS        | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 5.4  | 129.4   | 5.4   | 5.4   |
| AUXDELAIPA      | 3.6  | 3.6  | 3.4  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.6  | 3.5  | 3.5  | 3.6  | 3.6  | 3.6  | 3.5  | 3.5  | 3.5  | 3.6  | 3.6  | 85.5    | 3.6   | 3.6   |
| PULLINQUE       | 20.9 | 20.8 | 20.1 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 28.6 | 32.5 | 32.2 | 32.3 | 32.3 | 32.3 | 32.3 | 32.3 | 32.3 | 32.2 | 32.0 | 32.0 | 31.9 | 31.9 | 31.9 | 24.6 | 664.8   | 32.5  | 27.7  |
| RECA            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| PANGUIPULLI     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| DONAHILDA       | 0.2  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 3.3     | 0.2   | 0.1   |
| MUCHI           | 0.2  | 0.1  | 0.2  | 0.2  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.3  | 0.3  | 0.3  | 0.2  | 0.0  | 0.0  | 0.0  | 0.0  | 4.1     | 0.3   | 0.2   |
| LASFLORES       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| PEHUI           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| MOCHO           | 9.0  | 8.9  | 9.0  | 9.0  | 9.0  | 9.1  | 9.0  | 8.9  | 9.1  | 9.0  | 9.1  | 9.1  | 8.9  | 9.0  | 8.9  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 9.5  | 220.3   | 9.5   | 9.2   |
| LICAN           | 17.4 | 17.7 | 17.6 | 17.6 | 17.6 | 17.6 | 17.5 | 16.6 | 15.4 | 14.6 | 10.5 | 8.6  | 9.3  | 9.2  | 9.3  | 8.7  | 7.2  | 6.5  | 7.2  | 14.9 | 17.6 | 17.6 | 17.6 | 17.6 | 331.2   | 17.7  | 13.8  |
| CUMBRES         | 17.6 | 17.5 | 16.7 | 15.4 | 15.6 | 15.4 | 14.9 | 15.3 | 14.7 | 14.5 | 14.4 | 14.4 | 13.8 | 14.0 | 14.0 | 13.0 | 12.5 | 12.5 | 13.0 | 11.9 | 12.0 | 11.9 | 11.8 | 10.2 | 337.0   | 17.6  | 14.0  |
| SANTAISABEL     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.6  | 0.6     | 0.0   | 0.0   |
| LOSCORRALES-1   | 1.9  | 0.3  | 1.5  | 2.3  | 2.3  | 2.3  | 2.3  | 2.1  | 0.6  | 1.2  | 2.0  | 2.0  | 2.0  | 2.0  | 1.5  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 36.7    | 2.3   | 1.5   |
| LOSCORRALES-2   | 0.7  | 0.1  | 0.2  | 0.7  | 0.7  | 0.7  | 0.7  | 0.7  | 0.3  | 0.1  | 0.6  | 0.6  | 0.6  | 0.6  | 0.4  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 9.1     | 0.7   | 0.4   |
| MSA-1           | 2.7  | 1.4  | 0.0  | 0.0  | 2.4  | 0.6  | 2.8  | 2.9  | 2.9  | 2.9  | 2.9  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 2.1  | 2.9  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 59.4 | 3.0     | 2.5   | 3.0   |
| PICHILONCO      | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 0.8  | 0.0  | 1.0  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 27.2    | 1.2   | 1.1   |
| DONWALTERIO     | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.1  | 3.2  | 3.2  | 3.2  | 3.1  | 75.1    | 3.2   | 3.1   |
| DIGUA           | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 273.7   | 11.4  | 11.4  |
| MELO            | 1.4  | 1.6  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.4  | 1.5  | 1.3  | 1.2  | 0.9  | 1.1  | 1.4  | 1.3  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1  | 0.9  | 0.8  | 0.9  | 29.8 | 1.6</   |       |       |

|                      | 1     | 2    | 3    | 4    | 5    | 6     | 7     | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15    | 16    | 17    | 18   | 19   | 20    | 21    | 22    | 23    | 24    | TOT.DIA | DMAx  | DMED  |      |
|----------------------|-------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|---------|-------|-------|------|
|                      |       |      |      |      |      |       |       |      |      |      |      |      |      |      |       |       |       |      |      |       |       |       |       |       | MWh     | MWh/h | MWh/h |      |
| PE-LLANOS-DEL-VIENTO | 111.8 | 68.4 | 27.2 | 5.3  | 0.4  | 4.4   | 0.1   | 0.9  | 2.5  | 0.7  | 0.0  | 0.0  | 7.4  | 91.1 | 120.1 | 120.1 | 120.1 | 98.7 | 75.0 | 96.3  | 37.7  | 3.7   | 0.0   | 0.0   | 991.6   | 120.1 | 41.3  |      |
| PE-CALAMA            | 1.6   | 0.1  | 0.0  | 0.0  | 0.0  | 3.0   | 9.1   | 21.4 | 20.2 | 15.0 | 10.1 | 0.2  | 0.3  | 17.8 | 97.9  | 98.6  | 98.3  | 98.6 | 91.1 | 125.6 | 132.7 | 97.2  | 23.7  | 2.8   | 1053.0  | 132.7 | 43.9  |      |
| PE-CERRO-TIGRE       | 78.3  | 37.6 | 17.6 | 6.7  | 0.2  | 0.0   | 0.0   | 0.0  | 0.2  | 0.0  | 0.0  | 0.0  | 6.6  | 91.5 | 120.1 | 120.1 | 120.1 | 99.3 | 80.0 | 84.3  | 23.8  | 0.1   | 0.0   | 0.0   | 886.4   | 120.1 | 36.9  |      |
| PE-TALTAL            | 75.0  | 70.0 | 61.7 | 73.6 | 92.1 | 100.4 | 101.0 | 98.7 | 96.9 | 97.6 | 94.9 | 94.5 | 94.5 | 94.4 | 92.0  | 78.6  | 52.6  | 9.4  | 7.2  | 6.0   | 5.8   | 34.5  | 87.1  | 96.1  | 1714.6  | 101.0 | 71.4  |      |
| PE-SARCO             | 4.4   | 0.9  | 4.1  | 13.0 | 23.6 | 22.5  | 4.8   | 0.0  | 0.0  | 0.0  | 0.9  | 0.8  | 1.8  | 6.2  | 14.5  | 17.3  | 26.6  | 40.2 | 40.2 | 143.5 | 155.5 | 163.6 | 163.6 | 161.4 | 1011.2  | 163.6 | 42.1  |      |
| PE-SANJUAN           | 18.1  | 9.2  | 16.4 | 24.2 | 24.5 | 13.2  | 5.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.2  | 12.9 | 19.1  | 20.1  | 26.0  | 30.3 | 30.2 | 142.0 | 152.8 | 168.7 | 173.9 | 179.7 | 1067.5  | 179.7 | 44.5  |      |
| PE-CABOLEONES        | 13.9  | 5.0  | 13.9 | 15.0 | 14.9 | 6.1   | 0.6   | 0.0  | 0.0  | 0.0  | 1.4  | 0.2  | 4.7  | 12.7 | 18.4  | 20.0  | 20.0  | 21.3 | 70.8 | 107.6 | 136.6 | 140.7 | 147.8 | 137.8 | 909.4   | 147.8 | 37.9  |      |
| PE-CABOLEONES-2      | 8.2   | 9.2  | 8.8  | 5.2  | 4.0  | 1.1   | 0.0   | 0.0  | 0.0  | 0.1  | 0.7  | 0.9  | 3.5  | 14.2 | 19.2  | 20.1  | 20.2  | 20.3 | 20.3 | 82.9  | 130.7 | 136.9 | 143.3 | 131.1 | 780.6   | 143.3 | 32.5  |      |
| PE-CABOLEONES-3      | 12.2  | 9.0  | 15.1 | 12.0 | 11.9 | 6.4   | 2.5   | 0.0  | 0.0  | 0.0  | 0.0  | 0.5  | 2.4  | 8.1  | 16.4  | 20.1  | 20.1  | 20.1 | 20.1 | 64.2  | 110.4 | 121.3 | 134.7 | 139.2 | 746.6   | 139.2 | 31.1  |      |
| PE-ATACAMA           | 13.2  | 10.3 | 9.2  | 8.1  | 8.3  | 2.5   | 0.4   | 0.0  | 0.0  | 0.1  | 0.2  | 1.5  | 5.6  | 6.1  | 15.3  | 20.0  | 20.0  | 20.0 | 20.0 | 62.2  | 96.3  | 96.9  | 101.8 | 106.1 | 624.0   | 106.1 | 26.0  |      |
| PE-PUNTACOLORADA     | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-ELARRAYAN         | 0.6   | 0.8  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 2.0  | 2.9  | 3.9  | 1.1   | 0.2   | 4.9   | 8.2  | 10.2 | 18.1  | 25.5  | 27.0  | 28.0  | 22.7  | 156.1   | 28.0  | 6.5   |      |
| PE-LOSCURUROS        | 0.3   | 0.1  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.2   | 3.3   | 4.5   | 4.8  | 9.7  | 14.1  | 43.1  | 40.5  | 36.2  | 25.1  | 17.8    | 201.7 | 43.1  | 8.4  |
| PE-TALINAYORIENTE    | 7.6   | 5.8  | 0.7  | 0.1  | 0.0  | 0.0   | 0.0   | 0.8  | 0.2  | 0.0  | 0.2  | 6.6  | 4.9  | 6.7  | 9.5   | 9.9   | 21.0  | 30.9 | 41.4 | 53.8  | 61.0  | 37.9  | 20.5  | 9.3   | 328.6   | 61.0  | 13.7  |      |
| PE-TALINAYOPIENTE    | 3.6   | 2.6  | 0.3  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 8.6  | 9.8  | 9.9   | 9.9   | 11.0  | 12.5 | 18.7 | 28.9  | 36.0  | 32.4  | 24.2  | 19.9  | 230.2   | 36.0  | 9.6   |      |
| PE-PUNTASIERRA       | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.5  | 2.8  | 5.1  | 12.6 | 20.2 | 12.4  | 3.2   | 2.3   | 7.1  | 11.9 | 27.2  | 29.2  | 32.8  | 29.6  | 26.2  | 222.8   | 32.8  | 9.3   |      |
| PE-MONTEREDONDO      | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 4.5  | 8.1  | 9.1  | 7.4  | 2.4   | 1.0   | 0.3   | 3.1  | 5.1  | 13.3  | 10.4  | 8.5   | 4.1   | 2.5   | 79.8    | 13.3  | 3.3   |      |
| PE-CANELA            | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 1.2  | 5.4  | 6.8  | 7.0  | 3.8   | 0.8   | 0.0   | 0.0  | 0.1  | 1.0   | 0.1   | 0.1   | 0.2   | 0.5   | 27.0    | 7.0   | 1.1   |      |
| PE-CANELA-2          | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.5  | 4.7  | 12.8 | 13.6 | 15.6 | 9.0   | 3.5   | 0.3   | 0.0  | 0.0  | 4.0   | 3.8   | 3.7   | 6.6   | 8.0   | 86.2    | 15.6  | 3.6   |      |
| PE-TOTORAL           | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 2.5  | 10.3 | 12.2 | 14.7 | 10.6  | 4.6   | 0.2   | 0.0  | 0.6  | 4.8   | 4.0   | 6.0   | 3.9   | 3.1   | 77.5    | 14.7  | 3.2   |      |
| PE-PUNTA PALMERAS    | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 3.7  | 5.0  | 6.9  | 10.7 | 9.9   | 1.5   | 0.1   | 0.0  | 0.9  | 6.3   | 6.6   | 8.0   | 3.9   | 4.1   | 67.5    | 10.7  | 2.8   |      |
| PE-UCUQUER           | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-UCUQUER-2         | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-LA-ESTRELLA       | 44.8  | 44.9 | 46.3 | 44.0 | 34.1 | 21.1  | 18.2  | 11.9 | 11.6 | 13.6 | 21.6 | 11.0 | 11.0 | 11.0 | 10.8  | 10.4  | 8.7   | 6.8  | 1.8  | 0.2   | 0.1   | 0.2   | 1.1   | 0.2   | 385.2   | 46.3  | 16.0  |      |
| PE-CARDONAL          | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-MANANTIALES       | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-LOS-CERRILLOS     | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-ELMAITEN          | 4.3   | 1.0  | 1.1  | 5.6  | 6.2  | 6.1   | 5.6   | 3.1  | 2.9  | 2.7  | 3.0  | 3.0  | 2.4  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 46.9  | 6.2   | 2.0  |
| PE-LASPENAS          | 0.9   | 2.9  | 2.7  | 2.5  | 1.1  | 2.7   | 2.9   | 1.3  | 1.9  | 3.2  | 6.7  | 5.5  | 3.9  | 4.9  | 5.4   | 5.7   | 7.3   | 7.5  | 4.9  | 4.2   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0     | 79.1  | 7.5   | 3.3  |
| PE-ALENA             | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 3.5  | 3.2   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 6.7   | 3.5   | 0.3  |
| PE-CUEL              | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-SAN-MATIAS        | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-LOS-OLMOS         | 20.3  | 37.1 | 14.3 | 20.9 | 33.0 | 51.6  | 75.6  | 78.2 | 58.3 | 60.8 | 76.0 | 75.0 | 75.8 | 66.6 | 64.3  | 47.4  | 17.6  | 33.4 | 15.4 | 6.4   | 4.6   | 1.1   | 0.0   | 0.0   | 0.0     | 933.7 | 78.2  | 38.9 |
| PE-LAESPERANZA       | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-NEGRETE           | 4.0   | 2.8  | 4.0  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0  | 2.3  | 2.5  | 4.4  | 11.8 | 13.3 | 6.5  | 3.6   | 6.2   | 6.1   | 4.1  | 8.4  | 2.3   | 3.9   | 0.8   | 0.3   | 0.0   | 0.0     | 107.1 | 13.3  | 4.5  |
| PE-LOSBUENOSAIRES    | 0.0   | 1.7  | 8.0  | 10.0 | 8.4  | 14.3  | 13.9  | 6.9  | 9.9  | 9.4  | 12.5 | 9.7  | 12.6 | 15.9 | 12.9  | 10.6  | 7.7   | 8.6  | 4.6  | 4.7   | 4.8   | 1.2   | 0.5   | 0.5   | 189.2   | 15.9  | 7.9   |      |
| PE-MESAMAVIDA        | 0.0   | 0.9  | 2.3  | 2.3  | 2.5  | 0.6   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 8.6     | 2.5   | 0.4   |      |
| CAMPO_LINDO_E1_EO    | 29.3  | 45.1 | 37.5 | 39.9 | 42.6 | 31.1  | 36.0  | 38.3 | 42.6 | 40.9 | 42.1 | 42.7 | 39.2 | 40.9 | 39.1  | 42.2  | 34.7  | 33.5 | 21.1 | 13.4  | 22.5  | 19.6  | 10.7  | 11.5  | 796.7   | 45.1  | 33.2  |      |
| PE-LEBU              | 1.0   | 1.8  | 1.6  | 1.6  | 2.1  | 1.9   | 2.0   | 1.5  | 1.7  | 1.7  | 1.5  | 2.0  | 1.4  | 1.6  | 1.5   | 0.9   | 1.1   | 0.2  | 0.1  | 0.3   | 0.1   | 0.0   | 0.0   | 0.0   | 0.0     | 27.3  | 2.1   | 1.1  |
| PE-LEBU-3            | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-EL-ARREBOL        | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.6  | 0.7  | 0.7   | 0.7   | 0.1   | 0.0   | 0.0   | 2.8     | 0.7   | 0.1   |      |
| PE-RAKI              | 4.9   | 8.1  | 4.2  | 2.8  | 4.2  | 2.9   | 7.5   | 7.1  | 7.6  | 6.7  | 5.5  | 5.4  | 2.5  | 1.4  | 1.5   | 0.5   | 0.2   | 0.1  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.6   | 73.7    | 8.1   | 3.1   |      |
| PE-HUAJACHE          | 3.1   | 2.4  | 2.8  | 2.9  | 4.5  | 3.1   | 5.4   | 2.8  | 2.1  | 3.7  | 2.8  | 4.7  | 4.7  | 5.3  | 4.6   | 3.7   | 4.0   | 1.8  | 0.9  | 1.0   | 0.4   | 0.1   | 0.0   | 0.0   | 67.0    | 5.4   | 2.8   |      |
| PE-LA-FLOR           | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |      |
| PE-ELNOGAL           | 1.9   | 0.7  | 1.1  | 0.8  | 0.9  | 1.2   | 2.2   | 3.1  | 2.5  | 1.6  | 2.6  | 1.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 19.6  | 3.1   | 0.8  |
| PE-TOLPAN-SUR        | 17.8  | 28.4 | 7.8  | 24.4 | 34.1 | 34.2  | 24.7  | 35.2 | 23.5 | 25.8 | 33.3 | 38.3 | 35.0 | 26.7 | 29.2  | 20.8  | 19.3  | 17.0 | 12.2 | 19.2  | 14.3  | 8.8   | 0.5   | 0.0   | 530.1   | 38.3  | 22.1  |      |
| PE-MALLECO-NORTE     | 28.8  | 78.0 | 54.1 | 58.4 | 92.7 | 89.9  | 70.5  | 64.0 | 51.2 | 41.1 | 55.0 | 55.0 | 55.0 | 55.0 | 54.8  | 50.1  | 38.9  | 55.0 | 54.8 | 30.0  | 26.8  | 35.6  | 25.7  | 8.2   | 1228.6  | 92.7  | 51.2  |      |
| PE-MALLECO-SUR       | 19.3  | 64.5 | 47.8 | 69.2 | 96.9 | 94.4  | 66.6  | 64.0 | 58.0 | 42.9 | 57.9 | 58.0 | 54.7 | 56.7 | 58.0  | 58.0  | 44.2  | 58.0 | 57.6 | 29.0  | 13.6  | 29.6  | 15.3  | 11.5  | 1225.8  | 96.9  | 51.1  |      |
| PE-SANGABRIEL        | 23.5  | 46.0 | 13.0 | 23.5 | 48.6 | 87.3  | 82.4  | 95.3 | 42.1 | 60.4 | 83.7 | 77.6 | 78.7 | 68.2 | 63.1  | 37.8  | 13.0  | 54.4 | 26.6 | 15.9  | 15.4  | 12.2  | 0.3   | 0.0   | 1068.8  | 95.3  | 44.5  |      |
| PE-LACABAÑA          | 14.0  | 11.6 | 44.0 |      |      |       |       |      |      |      |      |      |      |      |       |       |       |      |      |       |       |       |       |       |         |       |       |      |

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29-10-2023

|                             | 1    | 2   | 3   | 4   | 5   | 6   | 7    | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19   | 20   | 21    | 22    | 23    | 24    | TOT.DIA | DMAX  | DMED. |
|-----------------------------|------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|---------|-------|-------|
|                             |      |     |     |     |     |     |      |       |       |       |       |       |       |       |       |       |       |       |      |      |       |       |       |       | MWh     | MWh/h | MWh/h |
| PMGD-PFV-TALLADO            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.1   | 5.5   | 7.7   | 8.0   | 8.2   | 8.3   | 8.3   | 4.8   | 8.2   | 8.1   | 7.8   | 5.5  | 0.9  | 0.0   | 0.0   | 0.0   | 0.0   | 82.5    | 8.3   | 3.4   |
| PFV-CAPRICORNIO             | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 6.9   | 28.7  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 29.9 | 7.9  | 0.0   | 0.0   | 0.0   | 0.0   | 433.4   | 40.0  | 18.1  |
| PFV-URIBESOLAR              | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 8.1   | 24.3  | 30.3  | 28.9  | 28.3  | 28.3  | 28.3  | 28.3  | 28.3  | 27.1  | 26.1  | 6.7  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 321.5   | 30.3  | 13.4  |
| PFV-PAMPA-TIGRE             | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 18.5  | 50.3  | 61.1  | 54.7  | 52.0  | 52.1  | 52.0  | 52.0  | 51.7  | 46.0  | 46.0  | 44.9 | 10.5 | 0.0   | 0.0   | 0.0   | 0.0   | 591.8   | 61.1  | 24.7  |
| PFV-PMGD-LOCKMA             | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.0   | 5.9   | 8.6   | 9.1   | 9.1   | 9.1   | 9.1   | 9.1   | 9.1   | 9.1   | 8.8   | 5.5  | 0.7  | 0.0   | 0.0   | 0.0   | 0.0   | 94.2    | 9.1   | 3.9   |
| PFV-DOMEYKO                 | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 23.4  | 66.3  | 75.0  | 84.8  | 85.0  | 85.0  | 85.0  | 85.0  | 85.0  | 80.2  | 80.0  | 72.3 | 13.0 | 0.0   | 0.0   | 0.0   | 0.0   | 920.1   | 85.0  | 38.3  |
| PFV-ANDES                   | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 4.0   | 10.0  | 10.0  | 10.0  | 10.0  | 9.8   | 10.0  | 9.6   | 10.0  | 10.0  | 10.0  | 9.6  | 1.4  | 0.0   | 0.0   | 0.0   | 0.0   | 114.4   | 10.0  | 4.8   |
| PFV-ANDES-IBA               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 9.6   | 22.9  | 26.2  | 34.9  | 34.9  | 34.9  | 34.9  | 34.7  | 35.0  | 34.9  | 34.9  | 34.1 | 6.6  | 0.0   | 0.0   | 0.0   | 0.0   | 378.5   | 35.0  | 15.8  |
| PFV-ANDES-IBA               | 26.2 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 26.4  | 60.1  | 60.1  | 60.1  | 60.1  | 60.1  | 60.0  | 60.1  | 60.1  | 60.1  | 39.7 | 2.5  | 110.2 | 112.2 | 112.3 | 112.2 | 1083.7  | 112.3 | 45.2  |
| PFV-SOL-DE-LILA             | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 25.1  | 50.2  | 80.1  | 71.1  | 68.1  | 68.1  | 68.1  | 67.9  | 68.1  | 68.1  | 68.1  | 66.0 | 12.1 | 0.0   | 0.0   | 0.0   | 0.0   | 781.2   | 80.1  | 32.5  |
| PFV-DE-LOS-ANDES            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 2.1   | 7.0   | 8.2   | 8.0   | 8.6   | 7.8   | 7.9   | 8.4   | 8.6   | 8.5   | 7.7   | 4.3  | 0.3  | 0.0   | 0.0   | 0.0   | 0.0   | 87.3    | 8.6   | 3.6   |
| PFV-SOL-DEL-NORTE           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.9   | 6.3   | 7.3   | 7.3   | 7.7   | 7.3   | 7.2   | 7.5   | 7.6   | 7.6   | 6.8   | 3.8  | 0.4  | 0.0   | 0.0   | 0.0   | 0.0   | 78.5    | 7.7   | 3.3   |
| PFV-DEL-DESIERTO            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 4.2   | 5.5   | 5.2   | 5.8   | 5.3   | 5.2   | 5.4   | 5.7   | 5.5   | 5.1   | 2.8  | 0.2  | 0.0   | 0.0   | 0.0   | 0.0   | 55.7    | 5.8   | 2.3   |
| PFV-HUATACONDO              | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 7.6   | 22.7  | 32.3  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 39.5  | 22.9 | 3.5  | 0.0   | 0.0   | 0.0   | 0.0   | 408.2   | 40.0  | 17.0  |
| PFV-SANTA-ISABEL            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 14.9  | 68.2  | 85.9  | 88.2  | 86.6  | 88.2  | 90.2  | 89.9  | 89.2  | 79.3  | 74.9  | 47.3 | 7.7  | 0.0   | 0.0   | 0.0   | 0.0   | 910.4   | 90.2  | 37.9  |
| PFV-NUOVO-QUILLAGUA         | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 12.0  | 33.2  | 42.1  | 42.0  | 42.0  | 49.7  | 50.0  | 50.0  | 49.7  | 45.0  | 45.0  | 39.4 | 5.9  | 0.0   | 0.0   | 0.0   | 0.0   | 505.8   | 50.0  | 21.1  |
| PFV-LA-GRANJA               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 34.3  | 85.6  | 85.8  | 66.1  | 60.6  | 60.5  | 60.4  | 60.5  | 60.6  | 60.2  | 55.3  | 43.8 | 5.8  | 0.0   | 0.0   | 0.0   | 0.0   | 739.6   | 85.8  | 30.8  |
| PFV-ATACAMASOLAR-2          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 40.2  | 60.5  | 70.6  | 70.6  | 70.7  | 70.7  | 70.7  | 70.6  | 70.7  | 70.7  | 70.5 | 40.5 | 0.0   | 0.0   | 0.0   | 0.0   | 777.0   | 70.7  | 32.4  |
| PFV-ATACAMASOLAR            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |
| PFV-BELLAVISTA-1            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.9   | 3.8   | 4.8   | 5.1   | 5.2   | 5.2   | 5.3   | 5.4   | 5.4   | 5.3   | 5.1   | 3.7  | 0.5  | 0.0   | 0.0   | 0.0   | 0.0   | 55.8    | 5.4   | 2.3   |
| PFV-LALACKAMA               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 5.4   | 17.9  | 17.8  | 25.2  | 25.2  | 25.1  | 25.4  | 25.4  | 25.3  | 25.4  | 25.4  | 23.8 | 4.4  | 0.0   | 0.0   | 0.0   | 0.0   | 271.6   | 25.4  | 11.3  |
| PMGD-PFV-PARANAL            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 0.8   | 1.2   | 1.9   | 2.5   | 2.8   | 2.8   | 2.7   | 2.3   | 1.7   | 0.9   | 0.4  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 20.0    | 2.8   | 0.8   |
| PMGD-PFV-ARMAZONES          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.3   | 2.4   | 4.6   | 4.7   | 4.5   | 4.9   | 5.0   | 4.9   | 4.4   | 3.6   | 2.5   | 2.2  | 0.4  | 0.0   | 0.0   | 0.0   | 0.0   | 44.5    | 5.0   | 1.9   |
| PFV-LALACKAMA2              | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.9   | 5.2   | 5.1   | 7.5   | 7.7   | 7.8   | 7.6   | 7.5   | 7.6   | 7.5   | 7.6   | 6.8  | 1.3  | 0.0   | 0.0   | 0.0   | 0.0   | 80.9    | 7.8   | 3.4   |
| PFV-CONEJO                  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 13.7  | 38.3  | 50.0  | 50.0  | 50.0  | 59.2  | 60.0  | 60.0  | 59.6  | 51.9  | 47.7  | 43.7 | 10.6 | 0.0   | 0.0   | 0.0   | 0.0   | 594.5   | 60.0  | 24.8  |
| PFV-PAMPASOLARNORTE         | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 4.3   | 23.9  | 30.2  | 30.0  | 30.2  | 30.2  | 30.2  | 30.2  | 30.0  | 30.2  | 30.1  | 30.0 | 9.5  | 0.0   | 0.0   | 0.0   | 0.0   | 339.0   | 30.2  | 14.1  |
| PFV-MALGARIDA               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 38.0  | 90.3  | 90.3  | 90.3  | 90.4  | 90.4  | 90.4  | 90.4  | 90.4  | 90.4  | 90.4  | 90.0 | 26.5 | 0.0   | 0.0   | 0.0   | 0.0   | 1058.1  | 90.4  | 44.1  |
| PFV-ALMEYDA                 | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 10.0  | 25.0  | 25.0  | 37.5  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 37.2  | 24.9 | 6.9  | 0.0   | 0.0   | 0.0   | 0.0   | 406.2   | 40.0  | 16.9  |
| PFV-SOL-DE-LOS-ANDES        | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 12.6  | 34.8  | 45.2  | 45.2  | 45.2  | 45.2  | 45.2  | 45.1  | 40.2  | 40.2  | 39.1  | 9.8  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 493.1   | 45.2  | 20.5  |
| PFV-JAVIERA                 | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 10.7  | 25.9  | 30.1  | 35.0  | 35.0  | 35.0  | 35.0  | 35.0  | 35.0  | 35.0  | 35.0  | 32.1 | 4.9  | 0.0   | 0.0   | 0.0   | 0.0   | 383.7   | 35.0  | 16.0  |
| PFV-CHANARES                | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 3.5   | 11.0  | 11.0  | 16.9  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 17.0  | 15.0 | 2.9  | 0.0   | 0.0   | 0.0   | 0.0   | 179.1   | 17.0  | 7.5   |
| PFV-SALVADOR                | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 8.3   | 22.0  | 22.0  | 22.0  | 22.0  | 22.9  | 22.9  | 20.9  | 13.3  | 12.6  | 9.7   | 3.6  | 1.8  | 0.0   | 0.0   | 0.0   | 0.0   | 204.0   | 22.9  | 8.5   |
| PFV-PILARLOSAMARILLOS       | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.3   | 0.9   | 1.4   | 1.8   | 2.1   | 2.2   | 2.1   | 1.9   | 1.6   | 1.1   | 0.6   | 0.1  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 16.1    | 2.2   | 0.7   |
| PFV-DIEGODEALMAGRO          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.6   | 8.1   | 13.9  | 14.0  | 14.0  | 14.0  | 14.0  | 14.0  | 14.0  | 14.0  | 13.7  | 8.8  | 1.3  | 0.0   | 0.0   | 0.0   | 0.0   | 145.3   | 14.0  | 6.1   |
| PFV-COVADONGA               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.5   | 3.1   | 8.7   | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   | 8.7   | 5.0  | 0.7  | 0.0   | 0.0   | 0.0   | 0.0   | 89.8    | 9.0   | 3.7   |
| PFV-DAS                     | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 1.2   | 6.2   | 7.8   | 8.2   | 8.5   | 8.3   | 8.2   | 8.2   | 8.1   | 8.2   | 7.7   | 6.4  | 1.5  | 0.0   | 0.0   | 0.0   | 0.0   | 88.7    | 8.5   | 3.7   |
| PFV-DIEGO-ALMAGRO-SUR       | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 23.9  | 64.7  | 90.3  | 90.3  | 98.3  | 98.5  | 98.5  | 98.5  | 93.7  | 90.4  | 90.3  | 77.2 | 17.9 | 0.0   | 0.0   | 0.0   | 0.0   | 1032.5  | 98.5  | 43.0  |
| PFV-CARRERAPINTO            | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 4.6   | 31.8  | 40.0  | 40.1  | 40.1  | 40.1  | 39.2  | 36.9  | 39.4  | 40.1  | 40.1  | 36.9 | 7.5  | 0.0   | 0.0   | 0.0   | 0.0   | 436.7   | 40.1  | 18.2  |
| PFV-CAMPODELSOL             | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 19.4 | 170.3 | 195.2 | 183.6 | 180.2 | 180.2 | 180.2 | 180.2 | 178.0 | 165.2 | 165.2 | 165.2 | 58.2 | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 2021.0  | 195.2 | 84.2  |
| PFV-LUZDELNORTE             | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7  | 25.6  | 63.4  | 80.0  | 80.0  | 84.9  | 85.0  | 85.0  | 85.0  | 85.0  | 75.5  | 63.2  | 17.0 | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 836.0   | 85.0  | 34.8  |
| PFV-LLANODELLAMPOS          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 11.3  | 38.4  | 49.6  | 49.4  | 49.2  | 54.8  | 55.5  | 55.4  | 55.3  | 51.3  | 51.0  | 44.6 | 11.8 | 0.0   | 0.0   | 0.0   | 0.0   | 577.6   | 55.5  | 24.1  |
| PMGD-PFV-PARQUE-JOTABECHE   | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.3   | 2.4   | 2.6   | 3.2   | 3.4   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 1.9  | 0.1  | 0.0   | 0.0   | 0.0   | 0.0   | 35.4    | 3.6   | 1.5   |
| PMGD-PFV-PARQUE-LA-TRAVESIA | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.3   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 0.1  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 11.3    | 1.0   | 0.5   |
| PFV-RIO-ESCONDIDO           | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 7.4   | 18.9  | 26.0  | 78.3  | 80.0  | 80.0  | 80.0  | 80.0  | 80.0  | 75.8  | 72.7  | 67.4 | 15.3 | 0.0   | 0.0   | 0.0   | 0.0   | 761.8   | 80.0  | 31.7  |
| PFV-VALLE-ESCONDIDO         | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 5.4   | 20.1  | 31.0  | 31.0  | 31.0  | 47.2  | 50.0  | 50.0  | 49.9  | 44.0  | 44.0  | 43.4 | 11.7 | 0.0   | 0.0   | 0.0   | 0.0   | 458.8   | 50.0  | 19.1  |
| PFV-SANANDRES               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 2.7   | 11.0  | 22.0  | 22.0  | 22.0  | 22.0  | 22.0  | 22.0  | 22.0  | 22.0  | 22.0  | 14.6 | 1.6  | 0.0   | 0.0   | 0.0   | 0.0   | 227.8   | 22.0  | 9.5   |
| PFV-PILOTOCARDONES          | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 1.5     | 0.2   | 0.1   |
| PFV-ESPERANZA               | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0   | 0.0   |
| PFV-GUADALAO                | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.1   | 0.5   | 0.5   | 0.7   | 1.6   | 1.8   | 1.4   | 1.5   | 1.3   | 0.8   | 0.6   | 0.4  | 0.1  | 0.0   | 0.0   | 0.0   | 0.0   | 11.0    | 1.8   |       |

29-10-2023

29-10-2023

|                            | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20  | 21  | 22  | 23  | 24  | TOT.DIA | DMAX  | DMED. |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|---------|-------|-------|
|                            |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     | MWh     | MWh/h | MWh/h |
| PFV-LOSIERRA               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 0.6  | 0.8  | 1.1  | 0.9  | 0.5  | 0.7  | 0.5  | 0.4  | 0.4  | 0.1  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.1     | 1.1   | 0.3   |
| PFV-ALHUE                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2  | 0.6  | 0.8  | 1.1  | 1.6  | 1.2  | 1.0  | 0.8  | 1.0  | 0.4  | 0.3  | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 9.2     | 1.6   | 0.4   |
| PFV-SANTAADRIANA           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 0.1  | 0.0  | 0.2  | 1.5  | 0.7  | 0.4  | 1.0  | 0.4  | 0.3  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6     | 1.5   | 0.2   |
| PFV-LOS-MOLINOS            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7  | 1.0  | 4.3  | 6.1  | 2.7  | 3.5  | 2.5  | 3.6  | 2.0  | 1.1  | 1.0  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 28.7    | 6.1   | 1.2   |
| PFV-QUELTEHUE-SOLAR        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 0.2  | 0.2  | 0.7  | 1.0  | 0.9  | 0.6  | 0.6  | 0.4  | 0.3  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3     | 1.0   | 0.2   |
| PFV-EL-QUELTEHUE           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 0.5  | 1.0  | 1.5  | 1.1  | 1.3  | 1.1  | 1.4  | 0.7  | 0.2  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.1     | 1.5   | 0.4   |
| PFV-RLA-SOLAR              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 0.3  | 0.5  | 1.0  | 0.8  | 0.6  | 0.6  | 0.5  | 0.5  | 0.3  | 0.2  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8     | 1.0   | 0.2   |
| PMGD-PFV-DONA-IGNA         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 0.4  | 0.8  | 1.3  | 0.9  | 0.8  | 0.9  | 1.4  | 0.6  | 0.2  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7     | 1.4   | 0.3   |
| PFV-PMGD-CANtera           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 0.1  | 0.3  | 0.7  | 0.5  | 1.0  | 0.6  | 0.8  | 0.5  | 0.5  | 0.4  | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8     | 1.0   | 0.2   |
| PFV-MARCHIGUE-2            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PMGD-PFV-NEWENTUN          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7  | 1.2  | 1.6  | 1.9  | 1.8  | 1.7  | 1.5  | 2.4  | 1.4  | 1.1  | 0.8  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 16.4    | 2.4   | 0.7   |
| PMGD-PFV-MAITENLAHUE       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 0.2  | 0.4  | 0.5  | 0.5  | 0.5  | 0.5  | 0.6  | 0.5  | 0.4  | 0.4  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6     | 0.6   | 0.2   |
| PFV-MARCHIGUE-VII          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2  | 0.4  | 0.5  | 0.9  | 0.7  | 0.8  | 0.7  | 0.5  | 0.4  | 0.3  | 0.2  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7     | 0.9   | 0.2   |
| PFV-ESPERANZA2             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-POBLACION              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 0.3  | 0.3  | 0.8  | 0.7  | 0.7  | 0.8  | 0.8  | 0.4  | 0.3  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6     | 0.8   | 0.2   |
| PFV-PILPILEN               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3  | 0.3  | 0.4  | 0.8  | 1.2  | 0.9  | 1.1  | 0.9  | 1.1  | 0.5  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1     | 1.2   | 0.3   |
| PFV-PORTEZUELO             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4  | 0.3  | 0.5  | 1.2  | 1.4  | 1.2  | 1.2  | 0.9  | 0.5  | 0.4  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.5     | 1.4   | 0.4   |
| PFV-VITUCO2B               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.3  | 0.6  | 1.1  | 1.2  | 1.1  | 0.9  | 0.8  | 0.5  | 0.3  | 0.2  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6     | 1.2   | 0.3   |
| PFV-PMGD-SANTA-MARGARITA   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3  | 0.3  | 0.5  | 0.9  | 0.8  | 0.7  | 0.7  | 0.8  | 0.4  | 0.4  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.3     | 0.9   | 0.3   |
| PMGD-PFV-LO-CHACON         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6  | 0.6  | 1.0  | 1.2  | 0.7  | 0.8  | 0.5  | 0.5  | 0.3  | 0.1  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6     | 1.2   | 0.3   |
| PFV-PMGD-NIHUE             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3  | 0.5  | 0.5  | 0.6  | 0.7  | 0.8  | 0.8  | 0.6  | 0.5  | 0.4  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.9     | 0.8   | 0.2   |
| PFV-ELPILPEN               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4  | 1.3  | 1.6  | 0.9  | 1.2  | 0.9  | 1.5  | 0.5  | 0.2  | 0.1  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.7     | 1.6   | 0.4   |
| PMGD-PFV-PUANGUE           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7  | 0.8  | 1.1  | 1.0  | 1.8  | 1.3  | 2.0  | 1.1  | 0.6  | 0.7  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.5    | 2.0   | 0.5   |
| PMGD-TER-CENTRAL-TIGRE     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-LAS-MERCEDES-1         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3  | 0.8  | 0.5  | 0.6  | 0.6  | 0.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1     | 0.8   | 0.1   |
| PFV-CASABERMEJA            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4  | 1.8  | 4.0  | 2.0  | 3.0  | 4.7  | 3.6  | 3.5  | 1.3  | 0.5  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.1    | 4.7   | 1.0   |
| PFV-PMGD-ICB               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-CITRINO                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.7  | 1.3  | 0.5  | 0.4  | 0.2  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1     | 1.3   | 0.1   |
| PFV-PUENTE                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4  | 0.5  | 0.5  | 1.5  | 1.9  | 0.8  | 0.6  | 0.4  | 0.8  | 1.1  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.9     | 1.9   | 0.4   |
| PFV-PMGD-PARQUE-SANTA-CRUZ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.6 | 1.8  | 1.8  | 2.0  | 2.3  | 2.3  | 3.1  | 2.3  | 1.9  | 1.0  | 0.8  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.6    | 3.1   | 0.9   |
| PFV-LAUREL                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.0  | 2.1  | 4.8  | 4.3  | 1.5  | 1.5  | 2.3  | 1.2  | 1.1  | 0.8  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.0    | 4.8   | 0.9   |
| PFV-PMGD-SANTA-EMILIA      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-DONIHUE                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.7  | 1.3  | 1.4  | 2.9  | 1.3  | 1.0  | 1.0  | 0.8  | 0.2  | 0.3  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.3    | 2.9   | 0.5   |
| PFV-PMGD-NAN               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PMGD-ENCINO            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PMGD-PFV-ROSARIO           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PMGD-SANTA-ELIZABETH   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.7  | 2.1  | 2.0  | 3.4  | 3.7  | 2.2  | 3.7  | 1.9  | 1.8  | 0.8  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.1    | 3.7   | 1.0   |
| PFV-PMGD-COINCO            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-CRUCERO                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3  | 0.5  | 0.8  | 0.7  | 0.7  | 0.6  | 0.7  | 0.3  | 0.4  | 0.3  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6     | 0.8   | 0.2   |
| PFV-LUDERS                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5  | 0.9  | 1.1  | 0.8  | 0.9  | 1.0  | 0.4  | 0.4  | 0.3  | 0.1  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5     | 1.1   | 0.3   |
| PMGD-TER-DIESEL-COYA       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-OVEJERIA               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.8  | 1.2  | 2.4  | 4.4  | 3.5  | 5.9  | 5.0  | 7.2  | 6.5  | 0.6  | 0.4  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 38.5    | 7.2   | 1.6   |
| PFV-EL-LITRE-II            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7  | 1.0  | 1.7  | 2.2  | 4.0  | 4.5  | 0.0  | 7.9  | 8.7  | 5.5  | 0.3  | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 36.9    | 8.7   | 1.5   |
| PMGD-PFV-CLEMENTINA        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.8  | 1.5  | 2.9  | 3.7  | 5.5  | 6.0  | 6.0  | 4.7  | 1.6  | 0.9  | 0.5  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 34.7    | 6.0   | 1.4   |
| PMGD-PFV-COLINA            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.0  | 2.2  | 4.7  | 6.4  | 5.3  | 0.0  | 6.0  | 6.7  | 2.8  | 0.7  | 0.2  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.3    | 6.7   | 1.5   |
| PFV-ELROMERO               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 25.4 | 62.1 | 85.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 88.2 | 45.3 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 858.9   | 90.0  | 35.8  |
| PFV-ELPELICANO             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 9.1 | 25.1 | 45.9 | 50.1 | 64.9 | 65.0 | 65.0 | 65.0 | 65.0 | 59.5 | 44.1 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 574.6   | 65.0  | 23.9  |
| PFV-LA-HUELLA              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 7.3 | 18.9 | 35.4 | 38.0 | 38.0 | 38.0 | 38.0 | 38.0 | 38.0 | 38.0 | 35.5 | 34.1 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 | 371.4   | 38.0  | 15.5  |
| PFV-LASILLA                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5  | 0.9  | 1.4  | 1.6  | 1.4  | 1.6  | 1.6  | 1.5  | 1.3  | 1.1  | 0.2  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.3    | 1.6   | 0.6   |
| PFV-PUNTABASOLAR           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.8  | 1.4  | 1.4  | 1.6  | 1.5  | 2.0  | 1.9  | 1.9  | 1.0  | 1.1  | 0.2  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.1    | 2.0   | 0.6   |
| PFV-SOLDELNORTE            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.7  | 0.9  | 1.5  | 1.8  | 1.9  | 2.4  | 2.3  | 2.0  | 1.3  | 0.6  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1       |       |       |

29-10-2023

29-10-2023

|                               | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | TOT.DIA | DMAX  | DMED. |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-------|-------|
|                               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | MWh     | MWh/h | MWh/h |
| PMGD-PFV-HUAQUELON            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.8 | 4.4 | 6.7 | 6.7 | 5.3 | 5.7 | 6.2 | 6.7 | 6.7 | 6.6 | 5.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 63.0    | 6.7   | 2.6   |
| PFV-CASTILLA                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.1 | 2.6 | 2.6 | 2.7 | 2.6 | 2.7 | 2.7 | 2.8 | 2.4 | 1.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 24.1    | 2.7   | 1.0   |
| PFV-LOMACOLORADAS             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-CASASBLANCAS              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-BELLAVISTA                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.3 | 2.3 | 2.6 | 1.3 | 2.6 | 2.5 | 2.3 | 2.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 18.5    | 2.6   | 0.6   |
| PFV-SANTALAURA                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.8 | 2.0 | 2.0 | 1.2 | 1.0 | 0.6 | 0.8 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7     | 2.0   | 0.4   |
| PFV-PMGD-CABILDO-SUNLIGHT     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.4 | 5.3 | 6.7 | 8.4 | 7.5 | 7.9 | 5.5 | 4.7 | 4.1 | 1.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 53.7    | 8.4   | 2.2   |
| PFV-PMGD-LOS-JOTES            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.4 | 1.9 | 2.6 | 1.9 | 2.6 | 1.9 | 1.7 | 1.5 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 16.8    | 2.6   | 0.7   |
| PMGD-PFV-EL-INGENIO           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 1.6 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 1.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 8.7     | 2.6   | 0.4   |
| PMGD-PFV-MAIMALICAN           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9     | 0.1   | 0.0   |
| PFV-MONTTSOLAR                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 1.4 | 2.8 | 2.4 | 2.8 | 2.2 | 2.5 | 2.3 | 1.5 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.8    | 2.8   | 0.8   |
| PFV-JAURURO                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.2 | 1.6 | 1.9 | 2.2 | 2.0 | 2.2 | 1.3 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.1    | 2.2   | 0.6   |
| PFV-CHUCHINI                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 | 1.5 | 1.8 | 2.5 | 2.4 | 2.5 | 2.4 | 2.0 | 1.5 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 18.6    | 2.5   | 0.8   |
| PFV-CHALINGA                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 2.3 | 2.3 | 2.4 | 2.7 | 2.7 | 2.7 | 2.6 | 1.7 | 1.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 21.8    | 2.7   | 0.9   |
| PFV-ILLAPEL5X                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.0 | 1.3 | 1.8 | 2.2 | 2.7 | 2.5 | 2.2 | 1.1 | 0.6 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 16.6    | 2.7   | 0.7   |
| PFV-ALICAHUE                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 1.3 | 2.6 | 1.8 | 3.0 | 2.3 | 1.9 | 1.8 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 16.5    | 3.0   | 0.7   |
| PFV_LA_LIGUA                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 1.6 | 2.2 | 2.6 | 2.2 | 1.9 | 0.9 | 0.5 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.4    | 2.6   | 0.6   |
| PFV-PULLALLI                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 1.1 | 1.4 | 1.8 | 2.2 | 2.0 | 2.3 | 1.1 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.5    | 2.3   | 0.6   |
| PFV-SANTAJULIA                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2     | 0.7   | 0.1   |
| PMGD-PFV-TJERAL               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 1.2 | 2.1 | 2.2 | 2.3 | 2.1 | 2.0 | 1.7 | 0.9 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 15.6    | 2.3   | 0.6   |
| PMGD-PFV-JARDIN-SOLAR-PETORCA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PMGD-PFV-FLORENCIA-SOLAR      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 8.4 | 8.9 | 5.1 | 2.8 | 1.2 | 0.2 | 0.0 | 0.0 | 0.0 | 30.6    | 8.9   | 1.3   |
| PFV-PMGD-ESFENA               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-CABILSQL                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.9 | 1.5 | 1.8 | 1.4 | 2.0 | 1.7 | 1.0 | 0.9 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 12.1    | 2.0   | 0.5   |
| PFV-LOS-PALTOS                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.0 | 2.6 | 2.6 | 2.0 | 1.1 | 0.6 | 0.8 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.8    | 2.6   | 0.5   |
| PFV-CARACAS-2                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-ELQUEMADO                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.0 | 0.8 | 0.5 | 0.0 | 0.6 | 0.4 | 1.7 | 1.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6     | 1.7   | 0.3   |
| PFV-NILHUE                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.6 | 0.5 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7     | 0.6   | 0.1   |
| PFV-MARIN                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 | 1.5 | 1.7 | 1.9 | 2.0 | 1.3 | 1.3 | 0.9 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 12.1    | 2.0   | 0.5   |
| PFV-HORMIGA                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.7 | 1.0 | 0.9 | 1.3 | 0.8 | 0.7 | 0.6 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0     | 1.3   | 0.3   |
| PFV-FILOMENA                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 1.2 | 2.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8     | 2.4   | 0.2   |
| PFV-PMGD-SANTA-FRANCISCA      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.9 | 2.1 | 3.3 | 3.5 | 3.6 | 5.9 | 5.3 | 4.1 | 2.8 | 1.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 33.6    | 5.9   | 1.4   |
| PFV-TRINIDAD                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.4 | 0.7 | 0.9 | 1.1 | 1.0 | 1.1 | 0.5 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.4     | 1.1   | 0.3   |
| PFV-PMGD-MANDINGA             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 1.5 | 1.3 | 2.4 | 3.1 | 2.5 | 2.5 | 2.9 | 1.3 | 0.9 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0    | 3.1   | 0.8   |
| PFV-PMGD-PALMAS-DEL-VERNAO    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.6 | 0.9 | 0.9 | 1.0 | 0.8 | 0.4 | 0.4 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.3     | 1.0   | 0.3   |
| PFV-ELBOCO                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 3.3 | 2.0 | 4.7 | 4.4 | 3.7 | 5.1 | 4.2 | 1.4 | 1.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.9    | 5.1   | 1.3   |
| PMGD-PFV-ABASTIBLE-CONCON     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-CANESA                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.5 | 1.8 | 2.2 | 2.6 | 2.5 | 2.8 | 2.7 | 2.8 | 2.6 | 1.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 22.3    | 2.8   | 0.9   |
| PFV-OLIVILLO                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 2.7 | 7.5 | 7.5 | 6.3 | 3.3 | 2.4 | 2.3 | 0.9 | 0.9 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 35.1    | 7.5   | 1.5   |
| PFV-LINGUE                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 1.3 | 1.1 | 1.0 | 1.0 | 1.1 | 0.8 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5     | 1.3   | 0.3   |
| PFV-ARIZTIA                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.2 | 1.6 | 2.2 | 1.6 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.6     | 2.2   | 0.4   |
| PFV-PMGD-EL-HUASO             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.7 | 1.7 | 1.8 | 1.7 | 1.5 | 1.7 | 1.7 | 0.9 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0    | 1.8   | 0.5   |
| PMGD-PFV-CONDOR-PETORCA       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PMG-PARQUE-VALPARAISO     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 | 0.9 | 1.4 | 2.7 | 4.1 | 3.6 | 2.5 | 2.3 | 1.9 | 1.3 | 1.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 23.6    | 4.1   | 1.0   |
| PFV-PMGD-HELIOS               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.6 | 1.1 | 2.4 | 2.1 | 1.3 | 0.7 | 0.7 | 0.5 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 10.6    | 2.4   | 0.4   |
| PFV-PANQUEHUE-2               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.7 | 1.4 | 3.2 | 5.2 | 4.2 | 3.0 | 3.0 | 2.3 | 1.3 | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 25.5    | 5.2   | 1.1   |
| PFV-PMGD-MANAO                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.6 | 1.1 | 2.0 | 1.9 | 1.3 | 0.9 | 0.7 | 0.5 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 10.2    | 2.0   | 0.4   |
| PFV-PMGD-SLK-CB-NUEVE         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 | 2.0 | 1.8 | 2.1 | 1.5 | 1.1 | 0.7 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 10.9    | 2.1   | 0.5   |
| PMGD-PFV-PELUMPEN             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PICURIO                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.4 | 1.1 | 0.9 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3     | 1.1   | 0.2   |
| PFV-TILTIL                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.1 | 0.9 | 1.5 | 1.6 | 1.3 | 1.7 | 1.8 | 1.6 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0    | 1.8   | 0.5   |

29-10-2023

29-10-2023

|                                | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19  | 20  | 21  | 22  | 23  | 24  | TOT.DIA | DMAX  | DMED. |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|---------|-------|-------|
|                                |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     | MWh     | MWh/h | MWh/h |
| PFV-RAULI                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.1 | 1.1  | 1.3  | 1.8  | 2.6  | 4.9  | 4.5  | 2.5  | 2.3  | 1.4  | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 24.2    | 4.9   | 1.0   |
| PFV-PARAGUAY                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.3 | 1.5  | 1.5  | 2.6  | 5.0  | 6.3  | 6.2  | 7.6  | 7.6  | 6.5  | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 47.2    | 7.6   | 2.0   |
| PFV-PMGD-SAN-CAMILO            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.4  | 0.4  | 0.7  | 1.3  | 1.6  | 1.9  | 2.4  | 2.4  | 2.2  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 14.0    | 2.4   | 0.6   |
| PFV-PMGD-CURACAVI              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3  | 0.6  | 0.6  | 0.8  | 1.3  | 1.0  | 0.4  | 0.5  | 0.3  | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.2     | 1.3   | 0.3   |
| PFV-RANGUIL                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.4  | 0.4  | 0.6  | 0.7  | 1.3  | 1.4  | 1.1  | 1.1  | 1.1  | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.9     | 1.4   | 0.4   |
| PFV-TALCA                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5  | 1.5  | 1.5  | 0.9  | 0.4  | 0.6  | 0.7  | 0.4  | 0.2  | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1     | 1.5   | 0.3   |
| PMGD-PFV-ITAHUE-SOLAR          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 | 0.8  | 1.4  | 1.8  | 2.1  | 2.2  | 2.2  | 2.0  | 2.1  | 1.8  | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 17.9    | 2.2   | 0.7   |
| PFV-SAN-JAVIER                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 1.1  | 2.6  | 3.5  | 2.5  | 2.8  | 1.7  | 2.6  | 2.4  | 1.4  | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 22.7    | 3.5   | 0.9   |
| PFV-VILLA-CRUZ                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4  | 1.0  | 1.6  | 1.8  | 1.8  | 2.0  | 1.4  | 2.5  | 1.0  | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3    | 2.5   | 0.6   |
| PFV-SANTA-FE                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 | 1.2  | 2.8  | 2.5  | 3.2  | 3.4  | 2.8  | 3.3  | 3.1  | 2.3  | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 27.3    | 3.4   | 1.1   |
| PFV-VILLA-ALEGRE               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.9  | 0.0  | 0.0  | 0.0  | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4     | 1.9   | 0.2   |
| PFV-LEMU                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.0  | 0.6  | 0.4  | 1.4  | 1.8  | 2.0  | 1.1  | 2.1  | 0.6  | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 12.8    | 2.1   | 0.5   |
| PFV-LASPERDICES                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5  | 1.0  | 0.9  | 0.8  | 0.7  | 0.8  | 0.9  | 0.6  | 0.2  | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.8     | 1.0   | 0.3   |
| PFV-PMGD-PANGUILEMO-AEROPUERTO | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 1.2  | 3.5  | 2.6  | 1.6  | 1.2  | 1.7  | 2.3  | 0.8  | 0.4  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 16.6    | 3.5   | 0.7   |
| PFV-PMGD-LOS-TORDOS            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 1.1  | 2.6  | 2.5  | 1.2  | 0.9  | 1.2  | 1.2  | 0.8  | 0.4  | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 13.2    | 2.6   | 0.5   |
| PMGD-PFV-PIDUCO                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.6  | 1.9  | 2.2  | 1.0  | 1.0  | 1.0  | 1.2  | 0.7  | 0.4  | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 10.8    | 2.2   | 0.5   |
| PFV-PMGD-EL-TIUQUE             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2  | 0.4  | 0.5  | 0.5  | 0.7  | 0.4  | 0.5  | 0.5  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3     | 0.7   | 0.2   |
| PFV-PENCAHUE-ESTE              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.5  | 1.4  | 1.5  | 0.7  | 0.8  | 0.7  | 0.9  | 0.7  | 0.4  | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.4     | 1.5   | 0.3   |
| PFV-PMGD-ERINOME               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.6  | 1.6  | 1.9  | 0.8  | 1.0  | 0.8  | 0.9  | 0.6  | 0.5  | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7     | 1.9   | 0.4   |
| PFV-QUINANTU                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 2.0  | 5.3  | 4.1  | 2.3  | 1.6  | 2.2  | 2.1  | 1.6  | 1.0  | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 24.2    | 5.3   | 1.0   |
| PFV-PMGD-DON-RODRIGO           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.8  | 2.7  | 2.7  | 1.4  | 1.0  | 1.1  | 1.0  | 0.8  | 0.5  | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 13.2    | 2.7   | 0.6   |
| PFV-TRICA-DOS                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3  | 0.8  | 1.2  | 0.6  | 0.6  | 0.4  | 0.3  | 0.3  | 0.2  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 5.2     | 1.2   | 0.2   |
| PFV-QUILAPILUN                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 5.4 | 11.5 | 28.2 | 38.3 | 44.9 | 42.9 | 37.0 | 28.2 | 20.4 | 12.6 | 7.1 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 280.4   | 44.9  | 11.7  |
| PFV-EL-MANZANO                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 5.6 | 8.0  | 10.0 | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | 10.0 | 8.4 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 109.3   | 10.1  | 4.6   |
| PMGD-PFV-LIQUIDAMBAR           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 1.1  | 3.4  | 4.8  | 5.4  | 4.5  | 3.9  | 3.5  | 2.6  | 1.5  | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 32.0    | 5.4   | 1.3   |
| PFV-PMGD TER LAGUNITAS         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-CHACABUCO                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 2.1  | 5.5  | 7.4  | 7.0  | 7.4  | 4.9  | 4.3  | 4.0  | 2.9  | 0.8 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 47.3    | 7.4   | 2.0   |
| PFV-JAHUEL                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6  | 1.3  | 0.5  | 1.6  | 5.5  | 5.6  | 3.1  | 2.8  | 1.3  | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 23.3    | 5.6   | 1.0   |
| PFV-PMGD-ESCORIAL-VERANO       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2  | 0.7  | 2.5  | 2.9  | 2.1  | 2.5  | 1.9  | 1.4  | 0.9  | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 15.8    | 2.9   | 0.7   |
| PFV-KONDA                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2  | 0.8  | 1.9  | 1.4  | 2.2  | 1.7  | 1.1  | 0.9  | 0.6  | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 11.4    | 2.2   | 0.5   |
| PFV-MESETA-DE-LOS-ANDES        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-SLK808                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3  | 0.8  | 2.3  | 1.8  | 2.3  | 1.6  | 1.3  | 0.8  | 0.5  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 12.1    | 2.3   | 0.5   |
| PFV-TECHOSDEALTAMIRA           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PMGD-RECOLETA              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-GUANACO                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.2  | 0.0  | 0.0  | 0.0  | 0.0  | 1.0  | 2.4  | 1.4  | 5.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.5    | 5.0   | 0.4   |
| PFV-PMGD-GUANACO-AMPLIACION    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PMGD-PFV-MALLOCO               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6  | 0.8  | 0.9  | 1.4  | 1.4  | 1.5  | 1.9  | 0.3  | 0.3  | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6     | 1.9   | 0.4   |
| PFV-DON-ANDRONICO              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4  | 0.6  | 1.0  | 0.9  | 0.5  | 0.7  | 0.6  | 0.3  | 0.2  | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5     | 1.0   | 0.2   |
| PFV-PIRQUE                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2  | 0.3  | 0.4  | 1.2  | 1.2  | 0.4  | 0.4  | 0.4  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.2     | 1.2   | 0.2   |
| PFV-SAN-VICENTE                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1  | 0.4  | 0.4  | 1.1  | 1.1  | 0.5  | 0.5  | 0.5  | 0.4  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.2     | 1.1   | 0.2   |
| PMGD-PFV-PATRICIA-DEL-VERANO   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.5  | 2.7  | 5.6  | 6.4  | 2.8  | 1.2  | 1.7  | 1.6  | 1.2  | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 25.8    | 6.4   | 1.1   |
| PFV-FOTOVOLTSOLAR-1            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-DARLIN                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 1.4  | 0.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0     | 1.4   | 0.1   |
| PMGD-PFV-PSF-HORIZONTE         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.6  | 1.1  | 1.8  | 1.2  | 1.1  | 0.9  | 0.4  | 0.2  | 0.3  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1     | 1.8   | 0.3   |
| PFV-PMGD-PARQUE-LA-COLONIA     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 3.8  | 3.3  | 4.5  | 5.9  | 3.6  | 2.1  | 1.1  | 1.3  | 2.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 27.8    | 5.9   | 1.2   |
| PFV-PEPA                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 1.4  | 3.9  | 3.8  | 3.5  | 5.0  | 3.9  | 3.4  | 3.7  | 5.3  | 1.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 36.5    | 5.3   | 1.5   |
| PFV-FRANCISCO                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4  | 0.8  | 1.1  | 0.8  | 0.8  | 0.9  | 0.3  | 0.3  | 0.2  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.9     | 1.1   | 0.2   |
| PFV-CANDELARIA                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3  | 0.7  | 1.1  | 0.7  | 0.7  | 0.8  | 0.4  | 0.4  | 0.3  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7     | 1.1   | 0.2   |
| PFV-BLANQUINA                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.1 | 2.2  | 3.2  | 2.9  | 4.0  | 4.1  | 3.9  | 1.1  | 0.7  | 1.2  | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0    | 4.1   | 1.0   |
| PFV-TRICAHUE2                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3  | 1.1  | 1.0  | 1.2  | 1.6  | 0.9  | 0.9  | 0.8  | 0.4  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.7     | 1.6   | 0.4   |
| PFV_SAN_ISIDRO                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3  | 0.9  | 0.6  | 0.7  | 0.7  | 0.7  | 0.6  | 0.4  | 0.2  | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |         |       |       |

## RESUMEN DIARIO DE OPERACION DEL SEN

29-10-2023

29-10-2023

[illegible]

|                           | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | TOT.DIA | DMAX  | DMED. |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-------|-------|
|                           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | MWh     | MWh/h | MWh/h |
| PFV-CATEMU                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.9 | 1.3 | 1.5 | 1.5 | 0.9 | 0.8 | 0.8 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.9     | 1.5   | 0.4   |
| PFV-PLACILLASOLAR         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 3.2 | 2.3 | 2.0 | 1.1 | 0.0 | 0.8 | 0.8 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5    | 3.2   | 0.5   |
| PFV-UTFSM-VALPO-VALDES    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-UTFSM-VINA-MAR        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7     | 0.2   | 0.0   |
| PMGD-PFV-VILLA-MOSCOSO    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.6 | 1.4 | 1.0 | 1.0 | 1.2 | 0.4 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1     | 1.4   | 0.3   |
| PMGD-PFV-YAHUTELA         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.0 | 1.7 | 3.5 | 4.4 | 3.7 | 4.0 | 4.5 | 4.9 | 2.3 | 1.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 31.7    | 4.9   | 1.3   |
| PFV-PMGD-FARDELA-NEGRA    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 1.1 | 2.1 | 1.0 | 0.6 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.3     | 2.1   | 0.3   |
| PFV-PMGD-PASTRAN          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.2 | 3.3 | 4.9 | 5.2 | 5.3 | 5.3 | 3.8 | 0.0 | 4.9 | 5.3 | 4.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 44.8    | 5.3   | 1.9   |
| PFV-PMGD-FOSTER           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.6 | 0.9 | 2.4 | 2.5 | 1.0 | 1.2 | 0.5 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.2    | 2.5   | 0.4   |
| PFV-PMGD-LITORAL-SUNLIGHT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 0.9 | 2.3 | 1.2 | 2.7 | 2.7 | 1.9 | 1.7 | 1.2 | 1.0 | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 17.9    | 2.7   | 0.7   |
| PMGD-PFV-INDEPENDENCIA    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.7 | 1.5 | 1.6 | 2.3 | 2.4 | 0.7 | 0.6 | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 11.4    | 2.4   | 0.5   |
| PFV-RODEO                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 0.7 | 0.8 | 0.7 | 0.1 | 0.0 | 1.2 | 1.9 | 0.9 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.7     | 1.9   | 0.3   |
| PFV-TUCUQUERE             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.9 | 1.7 | 2.2 | 1.9 | 1.9 | 2.1 | 2.2 | 1.0 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 15.0    | 2.2   | 0.6   |
| PFV-PEDREROS              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.9 | 1.3 | 1.6 | 1.9 | 1.7 | 1.9 | 2.8 | 1.9 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 15.2    | 2.8   | 0.6   |
| PFV-DONEUGENIO            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.4 | 0.4 | 0.2 | 0.5 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1     | 0.5   | 0.1   |
| PMGD-PFV-QUEMADOS         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 1.8 | 1.0 | 4.2 | 4.9 | 1.5 | 0.7 | 0.6 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 16.2    | 4.9   | 0.7   |
| PFV-PMGD-LOS-TAURETES     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.6 | 1.2 | 1.5 | 1.0 | 1.1 | 1.4 | 1.3 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 9.1     | 1.5   | 0.4   |
| PMGD-PFV-LA-GAMBOINA      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.3 | 0.8 | 0.7 | 0.0 | 1.2 | 0.7 | 0.6 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0     | 1.3   | 0.3   |
| PFV-PMGD-EL-CASTANO       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 1.0 | 1.8 | 3.0 | 2.7 | 2.5 | 2.1 | 2.0 | 0.8 | 0.6 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0    | 3.0   | 0.8   |
| PFV-LAS-CABRAS            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.7 | 0.7 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7     | 0.7   | 0.1   |
| PMGD-PFV-AROMO-DEL-VERANO | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 1.2 | 0.8 | 0.9 | 1.0 | 0.8 | 1.2 | 0.6 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0     | 1.2   | 0.3   |
| PFV-LOS-LAGOS             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 | 0.5 | 0.7 | 0.4 | 0.6 | 0.5 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3     | 0.7   | 0.2   |
| PFV-CHANCON               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.4 | 0.8 | 1.1 | 1.1 | 1.0 | 0.7 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.1     | 1.1   | 0.3   |
| PFV-ELSAUCE               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.6 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 6.4     | 0.9   | 0.3   |
| PMGD-PFV-CHAMPA           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PMGD-PFV-PSF-EL-PERAL     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PMGD-FARAMALLA        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.6 | 0.5 | 0.6 | 1.3 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5     | 1.3   | 0.3   |
| PFV-PMGD-SOLAR-PALERMO    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-SANTAROSA             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 2.6 | 2.1 | 2.0 | 1.6 | 1.6 | 0.7 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 13.1    | 2.6   | 0.5   |
| PFV-UTFSM-VITACURA        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-PMGD-DUQUECO-SOLAR    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-MARAMBIO              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.5 | 1.2 | 0.7 | 0.7 | 0.8 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9     | 1.2   | 0.2   |
| PFV-EL-ZORZAL             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4     | 0.6   | 0.2   |
| PMGD-PFV-DON-MARTIN       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 | 0.9 | 0.7 | 1.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4     | 1.3   | 0.2   |
| PMGD-PFV-ALBOR-SOLAR      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.8 | 2.0 | 1.4 | 2.4 | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 9.0     | 2.4   | 0.4   |
| PFV-NAZARINO-DEL-VERANO   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 | 1.5 | 2.0 | 1.1 | 1.3 | 0.7 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.9     | 2.0   | 0.4   |
| PFV-LA-PALMA              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 1.9 | 2.8 | 6.2 | 4.6 | 5.1 | 3.9 | 0.0 | 5.0 | 7.1 | 3.8 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 42.9    | 7.1   | 1.8   |
| PFV-TARANTO               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.6 | 1.6 | 5.6 | 5.4 | 3.9 | 3.6 | 3.6 | 2.8 | 1.1 | 0.6 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 30.9    | 5.6   | 1.3   |
| PFV-CONDOR-PELVIN         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-SALERNO               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 | 0.7 | 1.4 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1     | 1.4   | 0.3   |
| PFV-GUADALUPE             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 2.3 | 5.8 | 4.3 | 3.6 | 3.3 | 2.0 | 1.8 | 1.3 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 26.0    | 5.8   | 1.1   |
| PFV-VILLA-ALEMANA         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0   | 0.0   |
| PFV-LAS-TENCAS            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.9 | 1.3 | 2.4 | 2.4 | 2.1 | 2.0 | 1.4 | 1.0 | 0.6 | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 15.9    | 2.4   | 0.7   |
| PFV-REXNER                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.9 | 1.8 | 2.1 | 1.5 | 1.3 | 1.1 | 1.2 | 1.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 11.7    | 2.1   | 0.5   |
| PFV-MELI                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.2 | 2.4 | 2.8 | 5.6 | 6.1 | 7.4 | 7.6 | 7.2 | 2.3 | 1.7 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 45.1    | 7.6   | 1.9   |
| PFV-CURICURA              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.8 | 1.4 | 1.2 | 2.2 | 1.7 | 2.8 | 3.1 | 1.3 | 0.8 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 16.2    | 3.1   | 0.7   |
| PMGD-PFV-ROMERIA          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.8 | 1.5 | 1.5 | 2.1 | 0.9 | 1.0 | 1.1 | 0.7 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.6    | 2.1   | 0.4   |
| PMGD-PFV-TORINO           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.4 | 0.6 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.7     | 0.9   | 0.2   |
| PFV-SAN-ANTONIO           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.9 | 1.7 | 4.3 | 2.1 | 2.8 | 2.5 | 1.5 | 0.8 | 2.1 | 3.2 | 0.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 23.4    | 4.3   | 1.0   |
| PFV-GABARDO_VERANO        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.6 | 0.6 | 1.1 | 2.2 | 0.7 | 0.2 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.4     | 2.2   | 0.3   |
| PFV-SAN_CARLOS            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.4 | 1.6 | 1.0 | 1.2 | 1.5 | 0.7 | 1.1 | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.6    | 1.6   | 0     |

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## RESUMEN DIARIO DE OPERACION DEL SEN

29-10-2023

29-10-2023

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | TOT.DIA | DMAX  | DMED. |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-------|-------|
|                            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | MWh     | MWh/h | MWh/h |
| SAN FRANCISCO DE MOSTAZAL  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| COLIHUES_INFO              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| COLIHUES_DIESEL            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| ESPERANZA-DS1_DIESEL       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| ESPERANZA-DS2_DIESEL       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| ESPERANZA-TG1_DIESEL       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| TENO_DIESEL                | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| TENO_GAS_50                | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CEMENTOSBIOBIO_F06         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CEMENTOSBIOBIO_DIESEL      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| LICANTEN_COGEN             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| VINALES_COGEN              | 31.4 | 30.5 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 20.7 | 10.8 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.6 | 12.0 | 12.0 | 12.0 | 14.7 | 25.8 | 31.9 | 31.6 | 23.9 | 449.8   | 31.9  | 18.7  |
| MAULE                      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| PINARES                    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CONSTITUCION-1-ELEK        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CONSTITUCION-2-ELEK        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CELCO_COGEN                | 2.9  | 2.5  | 2.8  | 2.2  | 2.9  | 3.0  | 3.5  | 3.0  | 3.7  | 3.9  | 3.8  | 4.0  | 4.6  | 4.1  | 5.8  | 5.1  | 4.5  | 4.0  | 6.2  | 4.9  | 4.3  | 4.0  | 4.5  | 3.8  | 93.9    | 6.2   | 3.9   |
| SAN-JAVIER-1-DIESEL        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| SAN-JAVIER-2-DIESEL        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| RASOPOWER_DIESEL           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| LINARES_DIESEL             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| SANGREGORIO_DIESEL         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| PMGD-CHILLAN               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| COGEN-PMGD-LOMAS-COLORADAS | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.5  | 0.2  | 1.1  | 1.3  | 1.3  | 1.3  | 0.9  | 6.7     | 1.3   | 0.3   |
| NUEVAALDEA-1_COGEN         | 6.2  | 6.3  | 6.4  | 6.6  | 6.7  | 6.8  | 7.0  | 7.3  | 8.0  | 6.0  | 7.0  | 6.3  | 5.8  | 5.7  | 6.8  | 7.2  | 7.6  | 6.9  | 6.9  | 7.1  | 7.7  | 7.9  | 7.8  | 7.7  | 7.3     | 167.0 | 8.0   |
| NUEVAALDEA-2_DIESEL        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| NUEVAALDEA-3_COGEN         | 29.8 | 27.7 | 28.6 | 29.2 | 27.4 | 25.9 | 21.9 | 20.9 | 25.2 | 26.3 | 32.4 | 38.4 | 40.4 | 40.3 | 41.4 | 40.3 | 40.0 | 39.0 | 39.6 | 39.5 | 41.1 | 39.0 | 38.9 | 0.0  | 772.9   | 41.4  | 32.2  |
| LAJAVE                     | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 4.0  | 5.0  | 5.0  | 5.0  | 5.0  | 102.0   | 6.0   | 4.3   |
| MASISA_COGEN               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-1_GNL               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-2_GNL               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-3_GNL               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-1_GNA               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-2_GNA               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-3_GNA               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-1_DIESEL            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-2_DIESEL            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-3_DIESEL            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| YUNGAY-4_DIESEL            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| SANTALIDIA_DIESEL          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| SANTAFE_COGEN              | 16.1 | 25.0 | 22.6 | 17.4 | 26.0 | 22.4 | 18.7 | 15.1 | 20.7 | 23.8 | 31.3 | 33.5 | 36.5 | 51.4 | 48.3 | 41.5 | 40.4 | 42.4 | 43.2 | 42.1 | 45.1 | 45.4 | 45.2 | 33.3 | 787.4   | 51.4  | 32.8  |
| CMPCLAJA_COGEN             | 16.9 | 13.2 | 15.3 | 12.8 | 11.7 | 5.5  | 11.0 | 12.7 | 8.9  | 9.4  | 8.7  | 12.1 | 10.6 | 10.0 | 11.6 | 14.0 | 9.3  | 8.2  | 9.5  | 12.0 | 8.6  | 14.1 | 18.1 | 17.9 | 282.1   | 18.1  | 11.8  |
| CMPCPACIFICO_COGEN         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 6.4  | 10.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 3.4  | 10.6 | 9.4  | 10.1 | 8.6  | 0.6  | 3.1  | 2.9  | 5.5  | 9.5  | 80.5    | 10.6  | 3.4   |
| PMGD-CMPCSANTAFE_COGEN     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| LOSPINOS_DIESEL            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| LOSQUINDOS_DIESEL          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| LOSQUINDOS_2_DIESEL        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| ARAUCO-MAPA                | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| CHOLGUAN_COGEN             | 4.2  | 1.4  | 0.4  | 0.3  | 0.2  | 0.4  | 0.6  | 0.6  | 0.7  | 0.7  | 0.8  | 0.9  | 1.0  | 1.0  | 0.7  | 0.7  | 0.7  | 0.8  | 0.8  | 4.0  | 10.1 | 10.2 | 10.7 | 4.2  | 56.0    | 10.7  | 2.3   |
| NEWEN_PROPANO              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| NEWEN_BUTANO               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0     | 0.0   | 0.0   |
| NEWEN_DIESEL               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |      |      |      |      |      |      |      |      |      |      |         |       |       |

|                                    | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | TOT DIA | OMAX | DMED. |     |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|------|-------|-----|
|                                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | MWh     | MWhh | MWhh  |     |
| PMGD-SEPULTURA                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-LAS-QUEMAS                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CASABLANCA-1                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CASABLANCA-2                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| TAPIHUE                            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CURAUMA                            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-TER-CENTRAL-DE-RESPALDO-EGIDO | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-AGNI                          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-DEUCO                         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-CHORRILLOS                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| TREBALMAPOCHO                      | 0.4 | 0.1 | 0.8 | 1.1 | 1.3 | 1.4 | 1.5 | 1.4 | 1.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 10.1 | 1.5   | 0.4 |
| ELNOGAL                            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PFV-PMGD-JAVIERA-CARRERA           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.8 | 2.0 | 5.7 | 3.5 | 3.4 | 6.8 | 2.9 | 1.7 | 0.6 | 0.5 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 28.4 | 6.8   | 1.2 |
| ESTANCILLA                         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-COPULEMU                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PFV-PMGD-BERLIOZ                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-EL-CAMPESINO1                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.0     | 0.1  | 0.0   |     |
| PMGD-MIMBRE                        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| SANTAIRENE                         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| LASPAMPAS                          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| TAMM                               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-YUMBEL                        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CURICO                             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CHILE_GEN                          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-ORAF TI                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-ZAPALLAR                      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-TER-LA-GLORIA-21              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| ENERGIA BIOBIO                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| COELEMU                            | 2.4 | 2.9 | 3.1 | 3.2 | 3.2 | 3.3 | 3.1 | 3.0 | 2.9 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 2.0 | 2.6 | 3.0 | 3.0 | 39.4    | 3.3  | 1.6   |     |
| CANETE                             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| TRONGOL                            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.5 | 0.0 | 0.9     | 0.5  | 0.0   |     |
| LEBU                               | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| TIRUA                              | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.1 | 0.2 | 0.9 | 0.6 | 0.1 | 1.1 | 1.1 | 1.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1     | 1.1  | 0.3   |     |
| CONTULMO                           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| LOSALAMOS                          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| JCE                                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| HBS                                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| HBS_GNL                            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| ANCALI                             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| QUITRALMAN                         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PICOLTUE                           | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-BOLDO                         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-TER-LOS-PINOS                 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 52.2    | 2.2  | 2.2   |     |
| PFV-PMGD-AVEL-SOLAR                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 3.8 | 2.2 | 2.6 | 0.0 | 1.5 | 3.1 | 1.7 | 3.7 | 6.7 | 6.1 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.8    | 6.7  | 1.4   |     |
| PMGD-LOSSAUCES                     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-LOSSAUCES-1                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-LOSSAUCES-2                   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-MALLECO                       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CHUFKEN                            | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| CURACAUTIN                         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| LONGUIMAY                          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| EAGON                              | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0     | 0.0  | 0.0   |     |
| PMGD-TER-LOUSIANA-PACIFIC          | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |         |      |       |     |

|                        | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | TOT.DIA | DMAX   | DMED. |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|-------|
|                        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | MWh     | MWh/h  | MWh/h |
| TOTAL HORA.            | 6524.6 | 6345.4 | 6160.5 | 6072.9 | 5965.1 | 5899.2 | 5855.5 | 5670.6 | 5618.7 | 5969.0 | 6399.5 | 6631.2 | 6644.5 | 6647.6 | 6581.3 | 6440.1 | 6227.4 | 6156.7 | 6194.9 | 6884.0 | 7632.0 | 7801.6 | 7682.7 | 7251.3 | 155,256 |        |       |
| TOTAL HORA. SING       | 2404   | 2200   | 2092   | 2008   | 1991   | 2036   | 2163   | 2231   | 2418   | 2389   | 2293   | 2274   | 2431   | 2666   | 2750   | 2786   | 2863   | 2940   | 2970   | 2629   | 2492   | 2328   | 2210   | 2087   | 57,650  |        |       |
| TOTAL SEN              | 8929   | 8545   | 8252   | 8081   | 7957   | 7935   | 8018   | 7902   | 8037   | 8358   | 8692   | 8906   | 9075   | 9313   | 9331   | 9226   | 9090   | 9097   | 9165   | 9513   | 10124  | 10129  | 9893   | 9336   | 212,906 |        |       |
| CONS. PROPIOS          | 102    | 101    | 101    | 101    | 101    | 101    | 101    | 101    | 96     | 87     | 87     | 87     | 87     | 87     | 87     | 92     | 101    | 101    | 102    | 114    | 114    | 114    | 114    | 103    | 2,383   |        |       |
| CONS. PROPIOS SING     | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 126    | 3,024   |        |       |
| FLUJO CHANGOS->CUMBRES | -455   | -614   | -628   | -788   | -802   | -768   | -698   | -583   | -366   | -376   | -450   | -459   | -278   | -93    | -23    | -11    | 53     | 152    | 208    | -226   | -408   | -592   | -712   | -681   | (9,598) |        |       |
| PERDIDAS APROX.        | 164    | 147    | 137    | 126    | 120    | 119    | 120    | 117    | 124    | 141    | 159    | 170    | 181    | 191    | 191    | 184    | 175    | 177    | 182    | 196    | 229    | 228    | 214    | 191    | 3,981   |        |       |
| PERDIDAS APROX. SING   | 127    | 120    | 105    | 117    | 116    | 118    | 127    | 120    | 115    | 112    | 108    | 107    | 103    | 111    | 113    | 117    | 119    | 115    | 111    | 126    | 134    | 137    | 138    | 112    | 2,827   |        |       |
| DEMANDA APROX.         | 5804   | 5483   | 5294   | 5058   | 4942   | 4911   | 4936   | 4870   | 5032   | 5366   | 5704   | 5915   | 6099   | 6277   | 6280   | 6153   | 6004   | 6031   | 6119   | 6349   | 6881   | 6867   | 6643   | 6276   | 139,294 |        |       |
| DEMANDA APROX. SING    | 2606   | 2568   | 2489   | 2553   | 2551   | 2560   | 2608   | 2568   | 2543   | 2527   | 2509   | 2501   | 2480   | 2522   | 2534   | 2554   | 2565   | 2547   | 2525   | 2602   | 2640   | 2656   | 2658   | 2530   | 61,396  |        |       |
| HORA                   | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | DMAX    | 7801.6 | 7802  |

ANEXO N°3

Detalle del Movimiento de Centrales e Informe Diario del CDC correspondientes al día  
29 de octubre de 2023

| 29-10-2023 |          |                 |                                                 |          |        |     |              |                      |                 |                                                 |                                 |           |                                                     |                          |      |           | SS.CC. |  |
|------------|----------|-----------------|-------------------------------------------------|----------|--------|-----|--------------|----------------------|-----------------|-------------------------------------------------|---------------------------------|-----------|-----------------------------------------------------|--------------------------|------|-----------|--------|--|
| Hora Movi. | Equipo / | Central-Unidad  | Configuración                                   | Despacho | Estado | EO  | Consigna/Cmg | Consigna/ Limitación | Instrucción Cmg | Motivo                                          | Zona Desacople                  | Condición | Neomante                                            | Centro de                | SSCC | BASEPOINT |        |  |
| 00:00      | -        | COLBUN          | COLBUN                                          | -        | -      | -   | -            | -                    | RE              | Se declara en condición de vertimiento.         | -                               | V         | IL 2023001650                                       | COLBUN                   | -    | -         |        |  |
| 00:00      | -        | PEHUENCHE       | PEHUENCHE                                       | -        | -      | -   | -            | -                    | RE              | Se declara en condición de vertimiento.         | -                               | V         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | RALCO           | RALCO                                           | -        | -      | -   | -            | -                    | RE              | Se declara en condición de vertimiento.         | -                               | V         | IL 2023000772                                       | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | ATACAMA-1TG1AB  | ATACAMA-1TG1AB-TG1A+TG1B+TV1_GNL_C              | PC       | RO     | LC  | PC           | -                    | OM              | Cambio de combustible de GNL_B a GNL_C          | -                               | -         | IL 2021001953                                       | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | ATACAMA-2TG2AB  | ATACAMA-2TG2AB-TG2A+TG2B+TV2_GNL_B              | PC       | LF     | LC  | PC           | PCP                  | OM              | Cambio de combustible de GNL_C a GNL_B          | -                               | -         | IL 2021001953                                       | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | SANTAFE         | SANTAFE BL1+BL2+BL3 COGEN                       | PC       | N      | -   | PC           | -                    | OM              | Cambio en política de precios.                  | -                               | -         | -                                                   | SANTA FE                 | -    | -         |        |  |
| 00:00      | -        | GUACOLDA-3      | GUACOLDA-3_CAR                                  | MT       | RO     | -   | MT           | -                    | OM              | Más SSSC                                        | -                               | -         | IL 2023001070 -<br>IL 2023000134 -<br>IL 2023000521 | RNE                      | -    | -         |        |  |
| 00:00      | -        | RAPEL-1         | RAPEL                                           | MT       | RO     | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | N         | IL 2021001064                                       | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | RAPEL-2         | RAPEL                                           | MT       | N      | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | N         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | RAPEL-3         | RAPEL                                           | MT       | RO     | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | N         | IL 2023000805                                       | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | RAPEL-4         | RAPEL                                           | MT       | RO     | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | N         | IL 2021001067                                       | ENEL GENERACION          | -    | -         |        |  |
| 00:00      | -        | RAPEL-5         | RAPEL                                           | MT       | RO     | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION          | -    | -         |        |  |
| 00:01      | -        | CDC             | -                                               | -        | -      | -   | -            | -                    | -               | Movimiento para estimación del Cmg On-Line      | -                               | -         | -                                                   | -                        | -    | -         |        |  |
| 00:11      | -        | TALTAL-1        | TALTAL-1_GNL_C                                  | MT       | N      | LC  | PS           | -                    | OM              | -                                               | -                               | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 00:20      | -        | TALTAL-1        | TALTAL-1_GNL_C                                  | 0        | DN     | DLC | FS           | -                    | OM              | -                                               | -                               | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 00:25      | -        | MASISA          | MASISA_COGEN                                    | -        | DF     | -   | FS           | PCP                  | SDCF            | Reparación en parrilla de caldera.              | -                               | -         | IL 2023001341 -<br>SDCF202309861<br>2               | STS                      | -    | -         |        |  |
| 00:45      | -        | ELTORO          | ELTORO_vrucu_quill                              | -        | -      | -   | -            | -                    | RE              | C. Rucúe vierte, cambio de configuración.       | -                               | N         | IL 2021001180                                       | ENEL GENERACION          | -    | -         |        |  |
| 01:00      | -        | MOV. CMG        | -                                               | -        | -      | -   | -            | -                    | -               | Movimiento para estimar CMG On-Line             | -                               | -         | -                                                   | CDC                      | -    | -         |        |  |
| 01:06      | -        | MEJILLONES-EM   | MEJILLONES-EM_CAR                               | MT       | N      | -   | MT           | -                    | OM              | -                                               | -                               | -         | -                                                   | ENGIE                    | -    | -         |        |  |
| 01:06      | -        | ENAPACONCAGUA   | ENAPACONCAGUA_COGEN                             | MT       | RO     | -   | MT           | CF                   | OM              | -                                               | -                               | -         | IL 2023001308                                       | ENAP                     | -    | -         |        |  |
| 01:06      | -        | GUACOLDA-1      | GUACOLDA-1_CAR                                  | MT       | N      | -   | MT           | PCP                  | OM              | Más SSSC                                        | -                               | -         | IL 2023001376 -<br>IL 2023001631                    | RNE                      | -    | -         |        |  |
| 01:06      | -        | GUACOLDA-2      | GUACOLDA-2_CAR                                  | MT       | N      | -   | MT           | PCP                  | OM              | Más SSSC                                        | -                               | -         | IL 2023000905 -<br>IL 2023001377                    | RNE                      | -    | -         |        |  |
| 01:06      | -        | CHOIGUAN        | CHOIGUAN BL1 COGEN                              | MT       | N      | -   | MT           | -                    | OM              | -                                               | -                               | -         | -                                                   | ARAUCO                   | -    | -         |        |  |
| 01:06      | -        | SANISIDRO-2     | SANISIDRO-2_TG1+TV1_FSTVU_GN_A                  | MT       | RO     | LC  | MT           | -                    | OM              | -                                               | -                               | -         | IL 2022001909                                       | ENEL GENERACION          | -    | -         |        |  |
| 01:06      | -        | LAUTARO-2       | LAUTARO-2 BL1 COGEN                             | PC       | N      | -   | PC           | -                    | OM              | -                                               | -                               | -         | -                                                   | COMASA                   | -    | -         |        |  |
| 01:06      | -        | ESCUADRON       | ESCUADRON COGEN                                 | MT       | LF     | -   | MT           | PCP                  | OM              | -                                               | -                               | -         | IL 2023001648                                       | ESCUADRON                | -    | -         |        |  |
| 02:00      | -        | RAPEL-5         | RAPEL                                           | MT       | RO     | -   | PS           | -                    | OT              | Finaliza SSSC                                   | -                               | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION          | -    | -         |        |  |
| 02:03      | -        | RAPEL-5         | RAPEL                                           | 0        | DRO    | -   | FS           | -                    | OT              | -                                               | -                               | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION          | -    | -         |        |  |
| 02:16      | -        | COLBUN-1        | COLBUN vsign                                    | 200      | RO     | -   | CI           | -                    | RE              | Control cota Machicura                          | -                               | V         | IL 2023001650                                       | COLBUN                   | -    | -         |        |  |
| 02:16      | -        | COLBUN-2        | COLBUN vsign                                    | 200      | RO     | -   | CI           | -                    | RE              | Control cota Machicura                          | -                               | V         | IL 2023001650                                       | COLBUN                   | -    | -         |        |  |
| 02:17      | -        | ESCUADRON       | ESCUADRON COGEN                                 | PC       | LF     | -   | PC           | PCP                  | OM              | -                                               | -                               | -         | IL 2023001648                                       | ESCUADRON                | -    | -         |        |  |
| 02:17      | -        | LAUTARO-2       | LAUTARO-2 BL1+BL2 COGEN                         | PC       | N      | -   | PC           | -                    | OM              | -                                               | -                               | -         | -                                                   | COMASA                   | -    | -         |        |  |
| 02:17      | -        | SANISIDRO-2     | SANISIDRO-2_TG1+TV1_FSTVU_GN_A                  | PC       | RO     | LC  | PC           | -                    | OM              | -                                               | -                               | -         | IL 2022001909                                       | ENEL GENERACION          | -    | -         |        |  |
| 03:00      | -        | ATACAMA-1TG1AB  | ATACAMA-1TG1AB-TG1A+TG1B+TV1_GNL_B              | PC       | RO     | LC  | PC           | -                    | OM              | Cambio de combustible de GNL_C a GNL_B          | -                               | -         | IL 2021001953                                       | ENEL GENERACION          | -    | -         |        |  |
| 03:00      | -        | ATACAMA-2TG2AB  | ATACAMA-2TG2AB-TG2A+TG2B+TV2_GNL_C              | PC       | LF     | LC  | PC           | PCP                  | OM              | Cambio de combustible de GNL_B a GNL_C          | -                               | -         | IL 2021001953                                       | ENEL GENERACION          | -    | -         |        |  |
| 03:31      | -        | SANISIDRO-2     | SANISIDRO-2_TG1+TV1_FSTVU_GN_A                  | MT       | RO     | LC  | MT           | -                    | OM              | -                                               | -                               | -         | IL 2022001909                                       | ENEL GENERACION          | -    | -         |        |  |
| 03:31      | -        | LAUTARO-2       | LAUTARO-2 BL1 COGEN                             | PC       | N      | -   | PC           | -                    | OM              | -                                               | -                               | -         | -                                                   | COMASA                   | -    | -         |        |  |
| 03:31      | -        | ESCUADRON       | ESCUADRON COGEN                                 | MT       | LF     | -   | MT           | PCP                  | OM              | -                                               | -                               | -         | IL 2023001648                                       | ESCUADRON                | -    | -         |        |  |
| 03:31      | -        | NEHUENCO-2      | NEHUENCO-2_TG1+TV1_GN_A                         | MT       | RO     | LC  | MT           | -                    | OM              | -                                               | -                               | -         | IL 2023000829 -<br>IL 2023001565                    | COLBUN                   | -    | -         |        |  |
| 04:00      | -        | ATACAMA-1TG1AB  | ATACAMA-1TG1AB-TG1A+TG1B+TV1_GNL_C              | PC       | RO     | LC  | PC           | -                    | OM              | Cambio de combustible de GNL_B a GNL_C          | -                               | -         | IL 2021001953                                       | ENEL GENERACION          | -    | -         |        |  |
| 04:00      | -        | ATACAMA-2TG2AB  | ATACAMA-2TG2AB-TG2A+TG2B+TV2_GNL_B              | PC       | LF     | LC  | PC           | PCP                  | OM              | Cambio de combustible de GNL_C a GNL_B          | -                               | -         | IL 2021001953                                       | ENEL GENERACION          | -    | -         |        |  |
| 04:01      | -        | CANUTILLAR-1    | CANUTILLAR                                      | MT       | N      | -   | MT           | -                    | OM              | -                                               | LT 220 kV Lastarria - Ciriuelos | N         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:35      | -        | PANGUE-1        | RALCO_sinv                                      | 100      | RO     | -   | CI           | -                    | OM              | -                                               | -                               | -         | IL 2023000484                                       | ENEL GENERACION          | -    | -         |        |  |
| 04:35      | -        | PANGUE-2        | RALCO_sinv                                      | 100      | RO     | -   | CI           | -                    | OM              | -                                               | -                               | -         | IL 2023000484                                       | ENEL GENERACION          | -    | -         |        |  |
| 04:35      | -        | ANGOSTURA-1     | RALCO_sinv                                      | MT       | N      | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | -         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:35      | -        | ANGOSTURA-2     | RALCO_sinv                                      | MT       | N      | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | -         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:35      | -        | ANGOSTURA-3     | RALCO_sinv                                      | MT       | N      | -   | MT           | -                    | OT              | Más SSSC                                        | -                               | -         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:50      | -        | CDC             | Finaliza Ctx                                    | -        | -      | -   | -            | -                    | -               | Finaliza Ctx LT 220 kV Lastarria - Ciriuelos    | LT 220 kV Lastarria - Ciriuelos | -         | -                                                   | CDC                      | -    | -         |        |  |
| 04:50      | -        | CDC             | Inicio Ctx                                      | -        | -      | -   | -            | -                    | -               | Inicio Ctx LT 220 kV Charrúa - Santa Clara      | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | CDC                      | -    | -         |        |  |
| 04:50      | -        | CANUTILLAR-2    | CANUTILLAR                                      | MT       | N      | -   | PS           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | N         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:50      | -        | LAUTARO-1       | LAUTARO-1 BL1 COGEN                             | -        | N      | -   | PC           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | COMASA                   | -    | -         |        |  |
| 04:55      | -        | CANUTILLAR-2    | CANUTILLAR                                      | -        | DN     | -   | FS           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | N         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:57      | -        | CANUTILLAR-1    | CANUTILLAR                                      | MT       | N      | -   | MT           | -                    | OT              | Regulación de tensión.                          | LT 220 kV Charrúa - Santa Clara | N         | -                                                   | COLBUN                   | -    | -         |        |  |
| 04:57      | -        | LAUTARO-1       | LAUTARO-1 BL1 COGEN                             | MT       | N      | -   | MT           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | COMASA                   | -    | -         |        |  |
| 04:57      | -        | LAUTARO-2       | LAUTARO-2 BL1 COGEN                             | MT       | N      | -   | MT           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | COMASA                   | -    | -         |        |  |
| 04:57      | -        | VALDIVIA        | VALDIVIA BL1 COGEN_EUCA                         | MT       | N      | -   | MT           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ARAUCO                   | -    | -         |        |  |
| 04:57      | -        | CDC             | Inicio Prorrata LT 220 kV Charrúa - Santa Clara | -80      | -      | -   | -            | -                    | -               | Inicio Prorrata LT 220 kV Charrúa - Santa Clara | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | -                        | -    | -         |        |  |
| 04:57      | -        | PE-SANGABRIEL   | PE-SANGABRIEL                                   | 73       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ACCIONA                  | -    | -         |        |  |
| 04:57      | -        | PE-TOLPANSUR    | PE-TOLPANSUR                                    | 52       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ACCIONA                  | -    | -         |        |  |
| 04:57      | -        | PE-LOSOLMOS     | PE-LOSOLMOS                                     | 60       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | AES ANDES                | -    | -         |        |  |
| 04:57      | -        | PE-LAFLOR       | PE-LAFLOR                                       | 18       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | UCUQUER                  | -    | -         |        |  |
| 04:57      | -        | PILMAIQUEN-1    | PILMAIQUEN-1                                    | 5        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 04:57      | -        | PILMAIQUEN-3    | PILMAIQUEN-3                                    | 5        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 04:57      | -        | PILMAIQUEN-4    | PILMAIQUEN-4                                    | 6        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 04:57      | -        | PULLINQUE-1     | PULLINQUE-1                                     | 9        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 04:57      | -        | PULLINQUE-3     | PULLINQUE-3                                     | 9        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENEL GENERACION          | -    | -         |        |  |
| 04:57      | -        | PE-RENAICO      | PE-RENAICO                                      | 62       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENEL GREEN POWER         | -    | -         |        |  |
| 04:57      | -        | PE-AUROLA       | PE-AUROLA                                       | 17       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | INNERGEX(ENERGIA LLAIMA) | -    | -         |        |  |
| 04:57      | -        | PE-MALLECOSUR   | PE-MALLECOSUR                                   | 96       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | RNE                      | -    | -         |        |  |
| 04:57      | -        | PE-MALLECONORTE | PE-MALLECONORTE                                 | 97       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | RNE                      | -    | -         |        |  |
| 04:57      | -        | RUCATAYO        | RUCATAYO                                        | 22       | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | RUCATAYO                 | -    | -         |        |  |
| 04:57      | -        | PE-SANPEDRO     | PE-SANPEDRO                                     | 9        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | ENGIE RENOVABLE          | -    | -         |        |  |
| 04:57      | -        | RIOPICOIQUEN-1  | RIOPICOIQUEN-1                                  | 9        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | SCOTTA                   | -    | -         |        |  |
| 04:57      | -        | RIOPICOIQUEN-2  | RIOPICOIQUEN-2                                  | 9        | N      | -   | CI           | -                    | OM              | -                                               | LT 220 kV Charrúa - Santa Clara | -         | -                                                   | SCOTTA                   | -    | -         |        |  |

| 29-10-2023 |          |                    |                                                   |          |        |     |              |                     |                 |                                                   |                                 |           |                               |                  |      |           | SS.CC. |
|------------|----------|--------------------|---------------------------------------------------|----------|--------|-----|--------------|---------------------|-----------------|---------------------------------------------------|---------------------------------|-----------|-------------------------------|------------------|------|-----------|--------|
| Hora Movt. | Equipo / | Central-Unidad     | Configuración                                     | Despacho | Estado | EO  | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                            | Zona Desacople                  | Condición | Neomante                      | Centro de        | SSCC | BASEPOINT |        |
| 00:00      | -        | COLBUN             | COLBUN                                            | -        | -      | -   | -            | -                   | RE              | Se declara en condición de vertimiento.           | -                               | V         | IL 2023001650                 | COLBUN           | -    | -         |        |
| 04:57      | -        | PE-SANPEDRO-2      | PE-SANPEDRO-2                                     | 32       | N      | -   | CI           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | ENGEI RENOVABLE  | -    | -         |        |
| 04:57      | -        | PE-PUELCHESUR      | PE-PUELCHESUR                                     | 37       | N      | -   | CI           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | ENORCHILE        | -    | -         |        |
| 04:57      | -        | PE-CAMPOLINDO      | PE-CAMPOLINDO                                     | 33       | N      | -   | CI           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | AES ANDES        | -    | -         |        |
| 04:57      | -        | PE-RENAICO-2       | PE-RENAICO-2                                      | 115      | N      | -   | CI           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | ENEL GREEN POWER | -    | -         |        |
| 05:00      | -        | ATACAMA-1TG1A8     | ATACAMA-1TG1A8_TG1A+TG1B+TV1_GNL_B                | PC       | RO     | LC  | PC           | -                   | OM              | Cambio de combustible de GNL_C a GNL_B            | -                               | -         | IL 2021001953                 | ENEL GENERACION  | -    | -         |        |
| 05:00      | -        | RAPEL-1            | RAPEL                                             | MT       | RO     | -   | PS           | -                   | OT              | Finaliza SSSC                                     | -                               | N         | IL 2021001064                 | ENEL GENERACION  | -    | -         |        |
| 05:00      | -        | RAPEL-3            | RAPEL                                             | MT       | RO     | -   | PS           | -                   | OT              | Finaliza SSSC                                     | -                               | N         | IL 2023000805                 | ENEL GENERACION  | -    | -         |        |
| 05:03      | -        | RAPEL-1            | RAPEL                                             | 0        | DRO    | -   | FS           | -                   | OT              | -                                                 | -                               | N         | IL 2021001064                 | ENEL GENERACION  | -    | -         |        |
| 05:03      | -        | RAPEL-3            | RAPEL                                             | 0        | DRO    | -   | FS           | -                   | OT              | -                                                 | -                               | N         | IL 2023000805                 | ENEL GENERACION  | -    | -         |        |
| 05:20      | -        | ANGOSTURA-1        | RALCO_sinv                                        | PC       | N      | -   | PC           | -                   | OT              | Menos SSSC                                        | -                               | -         | -                             | COLBUN           | -    | -         |        |
| 05:20      | -        | ANGOSTURA-2        | RALCO_sinv                                        | PC       | N      | -   | PC           | -                   | OT              | Menos SSSC                                        | -                               | -         | -                             | COLBUN           | -    | -         |        |
| 05:20      | -        | ANGOSTURA-3        | RALCO_sinv                                        | PC       | N      | -   | PC           | -                   | OT              | Menos SSSC                                        | -                               | -         | -                             | COLBUN           | -    | -         |        |
| 05:45      | -        | PANGUE-1           | RALCO_sinv                                        | PC       | RO     | -   | PC           | -                   | OM              | -                                                 | -                               | -         | IL 2023000484                 | ENEL GENERACION  | -    | -         |        |
| 05:45      | -        | PANGUE-2           | RALCO_sinv                                        | PC       | RO     | -   | PC           | -                   | OM              | -                                                 | -                               | -         | IL 2023000484                 | ENEL GENERACION  | -    | -         |        |
| 06:00      | -        | ATACAMA-2TG2A8     | ATACAMA-2TG2A8_TG2A+TG2B+TV2_GNL_C                | PC       | LF     | LC  | PC           | PCP                 | OM              | Cambio de combustible de GNL_B a GNL_C            | -                               | -         | IL 2021001953                 | ENEL GENERACION  | -    | -         |        |
| 06:00      | -        | CDC                | Finaliza Prorrata LT 220 kV Charrúa - Santa Clara | -        | -      | -   | -            | -                   | -               | Finaliza Prorrata LT 220 kV Charrúa - Santa Clara | LT 220 kV Charrúa - Santa Clara | -         | -                             | -                | -    | -         |        |
| 06:00      | -        | LAUTARO-1          | LAUTARO-1_BLI_COGEN                               | PC       | N      | -   | PC           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | COMASA           | -    | -         |        |
| 06:00      | -        | LAUTARO-2          | LAUTARO-2_BLI_COGEN                               | PC       | N      | -   | PC           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | COMASA           | -    | -         |        |
| 06:00      | -        | VALDIVIA           | VALDIVIA_BLI+BL2+BL3_COGEN_EUCA                   | PC       | N      | -   | PC           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | -         | -                             | ARAUCO           | -    | -         |        |
| 06:00      | -        | CANUTILLAR-1       | CANUTILLAR                                        | PC       | N      | -   | PC           | -                   | OM              | -                                                 | LT 220 kV Charrúa - Santa Clara | N         | -                             | COLBUN           | -    | -         |        |
| 06:13      | -        | CANUTILLAR-2       | CANUTILLAR                                        | -        | DN     | -   | PP           | -                   | OM              | -                                                 | -                               | N         | -                             | COLBUN           | -    | -         |        |
| 06:18      | -        | CANUTILLAR-2       | CANUTILLAR                                        | PC       | N      | -   | PC           | -                   | OM              | Sincronizada.                                     | -                               | N         | -                             | COLBUN           | -    | -         |        |
| 06:18      | -        | CDC                | Finaliza Ctx                                      | -        | -      | -   | -            | -                   | -               | Finaliza Ctx LT 220 kV Charrúa - Santa Clara      | LT 220 kV Charrúa - Santa Clara | -         | -                             | CDC              | -    | -         |        |
| 06:18      | -        | LAUTARO-1          | LAUTARO-1_BLI+BL2_COGEN                           | PC       | N      | -   | PC           | -                   | OM              | -                                                 | -                               | -         | -                             | COMASA           | -    | -         |        |
| 06:50      | -        | ANGOSTURA-1        | RALCO_sinv                                        | MT       | N      | -   | MT           | -                   | OT              | Más SSSC                                          | -                               | -         | -                             | COLBUN           | -    | -         |        |
| 06:50      | -        | ANGOSTURA-2        | RALCO_sinv                                        | MT       | N      | -   | MT           | -                   | OT              | Más SSSC                                          | -                               | -         | -                             | COLBUN           | -    | -         |        |
| 06:50      | -        | ANGOSTURA-3        | RALCO_sinv                                        | MT       | N      | -   | MT           | -                   | OT              | Más SSSC                                          | -                               | -         | -                             | COLBUN           | -    | -         |        |
| 06:51      | -        | ATACAMA-2TG2A8     | ATACAMA-2TG2A8_TG2A+TG2B+TV2_GNL_C                | MT       | LF     | LC  | MT           | PCP                 | OM              | -                                                 | -                               | -         | IL 2021001953                 | ENEL GENERACION  | -    | -         |        |
| 06:56      | -        | RAPEL-1            | RAPEL                                             | 0        | DRO    | -   | PP           | -                   | OT              | Por SSSC                                          | -                               | N         | IL 2021001064                 | ENEL GENERACION  | -    | -         |        |
| 06:56      | -        | RAPEL-3            | RAPEL                                             | 0        | DRO    | -   | PP           | -                   | OT              | Por SSSC                                          | -                               | N         | IL 2023000805                 | ENEL GENERACION  | -    | -         |        |
| 07:00      | -        | RAPEL-1            | RAPEL                                             | MT       | RO     | -   | MT           | -                   | OT              | Sincronizada más SSSC                             | -                               | N         | IL 2021001064                 | ENEL GENERACION  | -    | -         |        |
| 07:00      | -        | RAPEL-3            | RAPEL                                             | MT       | RO     | -   | MT           | -                   | OT              | Sincronizada más SSSC                             | -                               | N         | IL 2023000805                 | ENEL GENERACION  | -    | -         |        |
| 07:00      | -        | GUACOLDA-2         | GUACOLDA-2_CAR                                    | MT       | N      | -   | PS           | PCP                 | OM              | -                                                 | -                               | -         | IL 2023000905 - IL 2023001377 | RNE              | -    | -         |        |
| 07:00      | -        | SANISIRO-2         | SANISIRO-2_TG1+TV1_FSTVU_GNL_A                    | MT       | RO     | LC  | PS           | -                   | OM              | -                                                 | -                               | -         | IL 2022001909                 | ENEL GENERACION  | -    | -         |        |
| 07:00      | -        | ATACAMA-2TG2A8     | ATACAMA-2TG2A8_TG2A+TG2B+TV2_GNL_C                | MT       | LF     | LC  | PS           | PCP                 | OM              | -                                                 | -                               | -         | IL 2021001953                 | ENEL GENERACION  | -    | -         |        |
| 07:00      | -        | NORGENER-NT02      | NORGENER-NT02_CAR                                 | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2023001479                 | AES ANDES        | -    | -         |        |
| 07:00      | -        | EPACIFICO          | EPACIFICO_COGEN                                   | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2022002169                 | ENERGIA PACIFICO | -    | -         |        |
| 07:00      | -        | LAUTARO-1          | LAUTARO-1_BLI_COGEN                               | -        | N      | -   | PC           | -                   | OM              | -                                                 | -                               | -         | -                             | COMASA           | -    | -         |        |
| 07:00      | -        | SANTAFE            | SANTAFE_BLI+BL2_COGEN                             | -        | N      | -   | PC           | -                   | OM              | -                                                 | -                               | -         | -                             | SANTA FE         | -    | -         |        |
| 07:00      | -        | ANGAMOS-ANG2       | ANGAMOS-ANG2_CAR                                  | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2022001546                 | AES ANDES        | -    | -         |        |
| 07:00      | -        | ANGAMOS-ANG1       | ANGAMOS-ANG1_CAR                                  | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2022000696                 | AES ANDES        | -    | -         |        |
| 07:00      | -        | COCHRANE-CCH1      | COCHRANE-CCH1_CAR                                 | MT       | RO     | -   | MT           | -                   | OT              | -                                                 | -                               | -         | IL 2022000634                 | AES ANDES        | -    | -         |        |
| 07:00      | -        | COCHRANE-CCH2      | COCHRANE-CCH2_CAR                                 | MT       | RO     | -   | MT           | -                   | OT              | -                                                 | -                               | -         | IL 2022000639                 | AES ANDES        | -    | -         |        |
| 07:00      | -        | LAIJAEVE-1         | LAIJAEVE-1_COGEN                                  | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | AES ANDES        | -    | -         |        |
| 07:16      | -        | ATACAMA-2TG2A      | ATACAMA-2TG2A_TG2A_GNL_B                          | -        | LF     | LC  | PS           | -                   | OM              | -                                                 | -                               | -         | IL 2021001953 - IL 2023001510 | ENEL GENERACION  | -    | -         |        |
| 07:16      | -        | ATACAMA-2TG2B      | ATACAMA-2TG2B_TG2B+0.5TV2_GNL_B                   | -        | LF     | LC  | PS           | -                   | OM              | Desacopla TG2A                                    | -                               | -         | IL2023001662                  | ENEL GENERACION  | -    | -         |        |
| 07:19      | -        | SANISIRO-2         | SANISIRO-2_TG1_GN_A                               | -        | RO     | LC  | PS           | -                   | OM              | F/S TV                                            | -                               | -         | IL 2022001909                 | ENEL GENERACION  | -    | -         |        |
| 07:22      | -        | ATACAMA-2TG2B      | ATACAMA-2TG2B_TG2B_GNL_B                          | -        | LF     | LC  | PS           | -                   | OM              | F/S TV2C                                          | -                               | -         | IL2023001662                  | ENEL GENERACION  | -    | -         |        |
| 07:23      | -        | ATACAMA-2TG2A      | ATACAMA-2TG2A_TG2A_GNL_B                          | -        | DLF    | DLC | FS           | -                   | OM              | F/S TG2A                                          | -                               | -         | IL 2021001953 - IL 2023001510 | ENEL GENERACION  | -    | -         |        |
| 07:24      | -        | ATACAMA-2TG2B      | ATACAMA-2TG2B_TG2B_GNL_B                          | -        | DLF    | DLC | FS           | -                   | OM              | F/S TG2B                                          | -                               | -         | IL2023001662                  | ENEL GENERACION  | -    | -         |        |
| 07:26      | -        | SANISIRO-2         | SANISIRO-2_TG1_GN_A                               | -        | DRO    | DLC | FS           | -                   | OM              | F/S TG                                            | -                               | -         | IL 2022001909                 | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | ATACAMA-1TG1A8     | ATACAMA-1TG1A8_TG1A+TG1B+TV1_GNL_B                | MT       | RO     | LC  | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2021001953                 | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | ARAUCO             | ARAUCO_COGEN                                      | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | ARAUCO           | -    | -         |        |
| 07:28      | -        | CANUTILLAR-1       | CANUTILLAR                                        | MT       | N      | -   | MT           | -                   | OT              | Regulación de tensión.                            | -                               | N         | -                             | COLBUN           | -    | -         |        |
| 07:28      | -        | CANUTILLAR-2       | CANUTILLAR                                        | -        | N      | -   | PS           | -                   | OM              | -                                                 | -                               | N         | -                             | COLBUN           | -    | -         |        |
| 07:28      | -        | SANTAFE            | SANTAFE_BLI_COGEN                                 | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | SANTA FE         | -    | -         |        |
| 07:28      | -        | VALDIVIA           | VALDIVIA_BLI_COGEN_EUCA                           | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | ARAUCO           | -    | -         |        |
| 07:28      | -        | LAUTARO-1          | LAUTARO-1_BLI_COGEN                               | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | COMASA           | -    | -         |        |
| 07:28      | -        | LAUTARO-2          | LAUTARO-2_BLI_COGEN                               | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | COMASA           | -    | -         |        |
| 07:28      | -        | CELCO              | CELCO_BLI_COGEN                                   | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | ARAUCO           | -    | -         |        |
| 07:28      | -        | CIPRESES-1         | CIPRESES_vcolb_pehu_loma                          | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | N         | -                             | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | CIPRESES-2         | CIPRESES_vcolb_pehu_loma                          | MT       | N      | -   | PS           | -                   | OM              | -                                                 | -                               | N         | -                             | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | CIPRESES-3         | CIPRESES_vcolb_pehu_loma                          | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | N         | -                             | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | LOMALOSCOLORADOS-2 | LOMALOSCOLORADOS-2_BIOGAS                         | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | KDM              | -    | -         |        |
| 07:28      | -        | NUEVAALDEA         | NUEVAALDEA_BLI_COGEN                              | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | ARAUCO           | -    | -         |        |
| 07:28      | -        | SANTAMARTA         | SANTAMARTA_COGEN                                  | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | SANTA MARTA      | -    | -         |        |
| 07:28      | -        | ENAPBIOBIO_COGEN   | ENAPBIOBIO_COGEN                                  | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | ENAP BIOBIO      | -    | -         |        |
| 07:28      | -        | RALCO-1            | RALCO_sinv                                        | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | N         | IL 2023000772                 | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | RALCO-2            | RALCO_sinv                                        | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | N         | IL 2023000772                 | ENEL GENERACION  | -    | -         |        |
| 07:28      | -        | VINALES            | VINALES_BLI_COGEN                                 | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | ARAUCO           | -    | -         |        |
| 07:28      | -        | LAIJAEVE-2         | LAIJAEVE-2_COGEN                                  | MT       | N      | -   | MT           | -                   | OM              | -                                                 | -                               | -         | -                             | AES ANDES        | -    | -         |        |
| 07:33      | -        | CIPRESES-2         | CIPRESES_vcolb_pehu_loma                          | -        | DN     | -   | FS           | -                   | OM              | -                                                 | -                               | N         | -                             | ENEL GENERACION  | -    | -         |        |
| 07:36      | -        | CANUTILLAR-2       | CANUTILLAR                                        | -        | DN     | -   | FS           | -                   | OM              | -                                                 | -                               | N         | -                             | COLBUN           | -    | -         |        |
| 07:43      | -        | ATACAMA-1TG1A8     | ATACAMA-1TG1A8_TG1A+TG1B+TV1_GNL_B                | -        | RO     | LC  | PS           | -                   | OM              | -                                                 | -                               | -         | IL 2021001953                 | ENEL GENERACION  | -    | -         |        |
| 07:50      | -        | PANGUE-1           | RALCO_sinv                                        | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2023000484                 | ENEL GENERACION  | -    | -         |        |
| 07:50      | -        | PANGUE-2           | RALCO_sinv                                        | MT       | RO     | -   | MT           | -                   | OM              | -                                                 | -                               | -         | IL 2023000484                 | ENEL GENERACION  | -    | -         |        |
| 07:50      | -        | PFV-ELENA          | PFV-ELENA                                         | MT       | P      | -   | EP           | -                   | EP              | -                                                 | SEN                             | -         | SI 2023055274                 | ENOR CHILE       | -    | -         |        |
| 07:50      | -        | PFV-LAS SALINAS    | PFV-LAS SALINAS                                   | MT       | P      | -   | EP           | -                   | EP              | -                                                 | SEN                             | -         | SI 2023075577                 | ENEL GREEN POWER | -    | -         |        |
| 07:50      | -        | PE-LA CABAÑA       | PE-LA CABAÑA                                      | PC       | P      | -   | EP           | -                   | EP              | Pruebas a PC                                      | SEN                             | -         | SI 2023076253-SI 2023093515   | ENEL GREEN POWER | -    | -         |        |
| 07:50      | -        | PFV-EL MANZANO     | PFV-EL MANZANO                                    | PC       | P      | -   | EP           | -                   | EP              | Pruebas a PC_Según SI 2023093922                  | SEN                             | -         | SI 2023086426                 | ENEL GREEN POWER | -    | -         |        |
| 07:50      | -        | PFV-WILLKA         | PFV-WILLKA                                        | PC       | P      | -   | EP           | -                   | EP              | Pruebas a PC                                      | SEN                             | -         | SI 2023091028                 | SIEMENS          | -    | -         |        |

| 29-10-2023 |          |                     |                                          |          |        |    |              |                     |                 |                                                        |                |           |               |                   |      |           | SS.CC. |  |
|------------|----------|---------------------|------------------------------------------|----------|--------|----|--------------|---------------------|-----------------|--------------------------------------------------------|----------------|-----------|---------------|-------------------|------|-----------|--------|--|
| Hora Mov.  | Equipo / | Central-Unidad      | Configuración                            | Despacho | Estado | EO | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                                 | Zona Desacople | Condición | Neomante      | Centro de         | SSCC | BASEPOINT |        |  |
| 00:00      | -        | COLBUN              | COLBUN                                   | -        | -      | -  | -            | -                   | RE              | Se declara en condición de vertimiento.                | -              | V         | IL 2023001650 | COLBUN            | -    | -         |        |  |
| 07:50      | -        | CDC                 | Inicio Prorrata Generalizada costo SEN 0 | -100     | -      | -  | -            | -                   | -               | Inicio Prorrata Generalizada costo SEN 0               | SEN            | -         | -             | -                 | -    | -         |        |  |
| 07:50      | -        | PE-PUNTAPALMERAS    | PE-PUNTAPALMERAS                         | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PE-SANGABRIEL       | PE-SANGABRIEL                            | 56       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PE-TOLPANSUR        | PE-TOLPANSUR                             | 31       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PFV-ALMEYDA         | PFV-ALMEYDA                              | 25       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PFV-ELROMERO        | PFV-ELROMERO                             | 19       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PFV-USYA            | PFV-USYA                                 | 8        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PFV-MALGARIDA       | PFV-MALGARIDA                            | 90       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ACCIONA           | -    | -         |        |  |
| 07:50      | -        | PE-LOSCURIUROS      | PE-LOSCURIUROS                           | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | PE-LOSOLIMOS        | PE-LOSOLIMOS                             | 69       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | PFV-ANDES           | PFV-ANDES                                | 10       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | PFV-ANDES2A         | PFV-ANDES2A                              | 23       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | PE-MESAMAVIDA       | PE-MESAMAVIDA                            | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | PE-CAMPOLINDO       | PE-CAMPOLINDO                            | 43       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | PFV-ANDES2B         | PFV-ANDES2B                              | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | AES ANDES         | -    | -         |        |  |
| 07:50      | -        | ELPASO-1            | ELPASO-1                                 | 11       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ANPAC             | -    | -         |        |  |
| 07:50      | -        | CONVENTOVIEJO       | CONVENTOVIEJO                            | 6        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | BESALCO ENERGÍA   | -    | -         |        |  |
| 07:50      | -        | LOSHIERROS1-1       | LOSHIERROS1-1                            | 10       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | BESALCO ENERGÍA   | -    | -         |        |  |
| 07:50      | -        | LOSHIERROS1-2       | LOSHIERROS1-2                            | 10       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | BESALCO ENERGÍA   | -    | -         |        |  |
| 07:50      | -        | CAPULLO             | CAPULLO                                  | 7        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | CAPULLO           | -    | -         |        |  |
| 07:50      | -        | PULELFU-1           | PULELFU-1                                | 5        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | CAPULLO           | -    | -         |        |  |
| 07:50      | -        | PULELFU-2           | PULELFU-2                                | 5        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | CAPULLO           | -    | -         |        |  |
| 07:50      | -        | QUILLECO-1          | QUILLECO-1                               | 34       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | COLBUN            | -    | -         |        |  |
| 07:50      | -        | QUILLECO-2          | QUILLECO-2                               | 34       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | COLBUN            | -    | -         |        |  |
| 07:50      | -        | RUCUE-1             | RUCUE-1                                  | 85       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | COLBUN            | -    | -         |        |  |
| 07:50      | -        | RUCUE-2             | RUCUE-2                                  | 86       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | COLBUN            | -    | -         |        |  |
| 07:50      | -        | PFV-DIEGOALMAGROSUR | PFV-DIEGOALMAGROSUR                      | 58       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | COLBUN            | -    | -         |        |  |
| 07:50      | -        | PE-LEBU             | PE-LEBU                                  | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | CRISTALERÍAS TORO | -    | -         |        |  |
| 07:50      | -        | ANTUCO-1            | ANTUCO-1                                 | 117      | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | ANTUCO-2            | ANTUCO-2                                 | 132      | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | CURILLINQUE         | CURILLINQUE                              | 84       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | ISLA-1              | ISLA-1                                   | 24       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | ISLA-2              | ISLA-2                                   | 34       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | PULLINQUE-1         | PULLINQUE-1                              | 10       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | PULLINQUE-3         | PULLINQUE-3                              | 10       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | OJOSDEAGUA          | OJOSDEAGUA                               | 7        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GENERACIÓN   | -    | -         |        |  |
| 07:50      | -        | PE-LOSBUENOSAIRE    | PE-LOSBUENOSAIRE                         | 10       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-CANELA           | PE-CANELA                                | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-CANELA-2         | PE-CANELA-2                              | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-RENAICO          | PE-RENAICO                               | 7        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-SIERRAGORDA      | PE-SIERRAGORDA                           | 57       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-TALINAYORIENTE   | PE-TALINAYORIENTE                        | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-TALINAYPONIENTE  | PE-TALINAYPONIENTE                       | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-TALTAL           | PE-TALTAL                                | 95       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-VALLEDELOSIENTOS | PE-VALLEDELOSIENTOS                      | 12       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-CHANARES        | PFV-CHANARES                             | 11       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-FINISTERRAE     | PFV-FINISTERRAE                          | 105      | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-LALACAMA        | PFV-LALACAMA                             | 19       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-LALACAMA-2      | PFV-LALACAMA-2                           | 4        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-SOLDELLIA       | PFV-SOLDELLIA                            | 40       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-AZABACHE        | PFV-AZABACHE                             | 31       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-CAMPODELSOL     | PFV-CAMPODELSOL                          | 165      | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-VALLEDELSOL     | PFV-VALLEDELSOL                          | 60       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PFV-GUANCHOI        | PFV-GUANCHOI                             | 220      | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | PE-RENAICO-II       | PE-RENAICO-II                            | 20       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENEL GREEN POWER  | -    | -         |        |  |
| 07:50      | -        | CHAPIQUINA-1        | CHAPIQUINA-1                             | 3        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | CHAPIQUINA-2        | CHAPIQUINA-2                             | 3        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PE-CALAMA           | PE-CALAMA                                | 12       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PE-MONTEREDONDO     | PE-MONTEREDONDO                          | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | LAI1-1              | LAI1-1                                   | 2        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | LAI1-2              | LAI1-2                                   | 16       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PFV-LOSOLOROS       | PFV-LOSOLOROS                            | 4        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PFV-TAMAYA          | PFV-TAMAYA                               | 50       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PE-SANPEDRO-1       | PE-SANPEDRO-1                            | 9        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PE-SANPEDRO-2       | PE-SANPEDRO-2                            | 25       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PFV-CAPRICORNIO     | PFV-CAPRICORNIO                          | 25       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PFV-COYA            | PFV-COYA                                 | 52       | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENGIE RENOVABLE   | -    | -         |        |  |
| 07:50      | -        | PFV-TENOSOLAR       | PFV-TENOSOLAR                            | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENLASA            | -    | -         |        |  |
| 07:50      | -        | PE-CABOLEONES-1     | PE-CABOLEONES-1                          | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENOR CHILE        | -    | -         |        |  |
| 07:50      | -        | PE-CABOLEONES-2     | PE-CABOLEONES-2                          | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENOR CHILE        | -    | -         |        |  |
| 07:50      | -        | PE-CABOLEONES-3     | PE-CABOLEONES-3                          | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENOR CHILE        | -    | -         |        |  |
| 07:50      | -        | PE-ELARRAYAN        | PE-ELARRAYAN                             | 0        | N      | -  | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : 0 | SEN            | -         | -             | ENOR CHILE        | -    | -         |        |  |
|            |          |                     |                                          |          |        |    |              |                     |                 |                                                        |                |           |               |                   |      |           |        |  |

| 29-10-2023 |          |                     |                                 |          |        |     |              |                     |                 |                                                         |                |           |                               |                          |      |           | SS.CC. |
|------------|----------|---------------------|---------------------------------|----------|--------|-----|--------------|---------------------|-----------------|---------------------------------------------------------|----------------|-----------|-------------------------------|--------------------------|------|-----------|--------|
| Hora Movi. | Equipo / | Central-Unidad      | Configuración                   | Despacho | Estado | EO  | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                                  | Zona Desacople | Condición | Neomante                      | Centro de                | SSCC | BASEPOINT |        |
| 00:00      | -        | COLBUN              | COLBUN                          | -        | -      | -   | -            | -                   | RE              | Se declara en condición de vertimiento.                 | -              | V         | IL 2023001650                 | COLBUN                   | -    | -         |        |
| 07:50      | -        | PFV-LACRUZSOLAR     | PFV-LACRUZSOLAR                 | 21       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PE-TCHAMMA          | PE-TCHAMMA                      | 119      | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PFV-DONACARMEN      | PFV-DONACARMEN                  | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PFV-SANPEDRO        | PFV-SANPEDRO                    | 56       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PFV- NUEVOQUILLAGUA | PFV-NUEVOQUILLAGUA              | 28       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PFV-IAMA-2          | PFV-IAMA-2                      | 14       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PFV-VALLEESCONDIDO  | PFV-VALLEESCONDIDO              | 13       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PFV-PAMPATIGRE      | PFV-PAMPATIGRE                  | 47       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PE-CERROTIGRE       | PE-CERROTIGRE                   | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PE-LLANOSDELVIENTO  | PE-LLANOSDELVIENTO              | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PE-ATACAMA          | PE-ATACAMA                      | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENOR CHILE               | -    | -         |        |
| 07:50      | -        | PE-PUELCHESUR       | PE-PUELCHESUR                   | 27       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | ENORCHILE                | -    | -         |        |
| 07:50      | -        | PFV-SANTIAGOSOLAR   | PFV-SANTIAGOSOLAR               | 4        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | GENERADORA METROPOLITANA | -    | -         |        |
| 07:50      | -        | MARIPOSAS           | MARIPOSAS                       | 3        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | HIDRO MAULE              | -    | -         |        |
| 07:50      | -        | LIRCAY-1            | LIRCAY-1                        | 10       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | HIDRO MAULE              | -    | -         |        |
| 07:50      | -        | LIRCAY-2            | LIRCAY-2                        | 10       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | HIDRO MAULE              | -    | -         |        |
| 07:50      | -        | PFV-SALVADOR        | PFV-SALVADOR                    | 22       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | INNERGEX(ENERGÍA LLAIMA) | -    | -         |        |
| 07:50      | -        | PE-AURORA           | PE-AURORA                       | 25       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | INNERGEX(ENERGÍA LLAIMA) | -    | -         |        |
| 07:50      | -        | PE-CUEL             | PE-CUEL                         | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | INNERGEX(ENERGÍA LLAIMA) | -    | -         |        |
| 07:50      | -        | PE-SARCO            | PE-SARCO                        | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | INNERGEX(ENERGÍA LLAIMA) | -    | -         |        |
| 07:50      | -        | PFV-SANANDRES       | PFV-SANANDRES                   | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | INNERGEX(ENERGÍA LLAIMA) | -    | -         |        |
| 07:50      | -        | PE-SANJUAN          | PE-SANJUAN                      | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | LAP                      | -    | -         |        |
| 07:50      | -        | PE-TOTORAL          | PE-TOTORAL                      | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | LAP                      | -    | -         |        |
| 07:50      | -        | PE-PUNTASIERRA      | PE-PUNTASIERRA                  | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PACIFIC HYDRO            | -    | -         |        |
| 07:50      | -        | ALTORENAICO         | ALTORENAICO                     | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | POTENCIA                 | -    | -         |        |
| 07:50      | -        | RENAICO             | RENAICO                         | 6        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | POTENCIA                 | -    | -         |        |
| 07:50      | -        | PFV-ANTAY           | PFV-ANTAY                       | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PRIME ENERGIA            | -    | -         |        |
| 07:50      | -        | PFV-CARACAS-II      | PFV-CARACAS-II                  | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PRIME ENERGIA            | -    | -         |        |
| 07:50      | -        | FLORIDA3-1          | FLORIDA3-1                      | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PUNTILLA                 | -    | -         |        |
| 07:50      | -        | FLORIDA3-2          | FLORIDA3-2                      | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PUNTILLA                 | -    | -         |        |
| 07:50      | -        | PUNTILLA-2          | PUNTILLA-2                      | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PUNTILLA                 | -    | -         |        |
| 07:50      | -        | PUNTILLA-3          | PUNTILLA-3                      | 5        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | PUNTILLA                 | -    | -         |        |
| 07:50      | -        | ANCOA-1             | ANCOA-1                         | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RÍO COLORADO             | -    | -         |        |
| 07:50      | -        | ANCOA-2             | ANCOA-2                         | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RÍO COLORADO             | -    | -         |        |
| 07:50      | -        | RIOCOLORADO-1       | RIOCOLORADO-1                   | 7        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RÍO COLORADO             | -    | -         |        |
| 07:50      | -        | RIOCOLORADO-2       | RIOCOLORADO-2                   | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RÍO COLORADO             | -    | -         |        |
| 07:50      | -        | PE-ELMAITEN         | PE-ELMAITEN                     | 3        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-CARRERAPINTO    | PFV-CARRERAPINTO                | 31       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-DIEGODEALMAGRO  | PFV-DIEGODEALMAGRO              | 7        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-PAMPASOLARNORTE | PFV-PAMPASOLARNORTE             | 23       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PE-MALLECOSUR       | PE-MALLECOSUR                   | 59       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PE-MALLECONORTE     | PE-MALLECONORTE                 | 56       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PE-NEGRET           | PE-NEGRET                       | 4        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-HUATACONDO      | PFV-HUATACONDO                  | 22       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-JAVIERA         | PFV-JAVIERA                     | 25       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-LAHUELLA        | PFV-LAHUELLA                    | 6        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-ATACAMASOLAR-2  | PFV-ATACAMASOLAR-2              | 40       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-SOLDEDESERTO    | PFV-SOLDEDESERTO                | 94       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-DOMEYKO         | PFV-DOMEYKO                     | 65       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PE-DUQUECO          | PE-DUQUECO                      | 37       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | PFV-QUILAPILUN      | PFV-QUILAPILUN                  | 4        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | RNE                      | -    | -         |        |
| 07:50      | -        | HIDROMOCHO          | HIDROMOCHO                      | 9        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | CALLAO-1            | CALLAO-1                        | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | CALLAO-2            | CALLAO-2                        | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | CORRENTOSO          | CORRENTOSO                      | 5        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | CUMBRES             | CUMBRES                         | 15       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | NALCAS-1            | NALCAS-1                        | 2        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | NALCAS-2            | NALCAS-2                        | 2        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | NALCAS-3            | NALCAS-3                        | 1        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | PALMAR-2            | PALMAR-2                        | 4        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | RIOPICOIQUEN-1      | RIOPICOIQUEN-1                  | 9        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | RIOPICOIQUEN-2      | RIOPICOIQUEN-2                  | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | CENTRALBONITO-MC1   | CENTRALBONITO-MC1               | 8        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | CENTRALFEO-MC2      | CENTRALFEO-MC2                  | 2        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SCOTTA                   | -    | -         |        |
| 07:50      | -        | PE-ALENA            | PE-ALENA                        | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SIEMENS                  | -    | -         |        |
| 07:50      | -        | PFV-GRANJA          | PFV-GRANJA                      | 79       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SIEMENS                  | -    | -         |        |
| 07:50      | -        | PFV-RIOSCONDIDO     | PFV-RIOSCONDIDO                 | 16       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SIEMENS                  | -    | -         |        |
| 07:50      | -        | PFV-LUZDELNORTE     | PFV-LUZDELNORTE                 | 0        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SUN POWER                | -    | -         |        |
| 07:50      | -        | PFV-ELPELICANO      | PFV-ELPELICANO                  | 6        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | SUN POWER                | -    | -         |        |
| 07:50      | -        | PE-UCUQUER-2        | PE-UCUQUER-2                    | 2        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | UCUQUER                  | -    | -         |        |
| 07:50      | -        | PE-LASPERANZA       | PE-LASPERANZA                   | 2        | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | UCUQUER                  | -    | -         |        |
| 07:50      | -        | PE-LAFOR            | PE-LAFOR                        | 12       | N      | -   | CI           | -                   | OM              | Prorrata Generalizada costo SEN 0 / Monto Prorrata : -0 | SEN            | -         | -                             | UCUQUER                  | -    | -         |        |
| 07:56      | -        | ATACAMA-1TG1A       | ATACAMA-1TG1A TG1A GNL_B        | MT       | RO     | LC  | PS           | -                   | OM              | -                                                       | -              | -         | IL 2021001953                 | ENEL GENERACION          | -    | -         |        |
| 07:56      | -        | ATACAMA-1TG1B       | ATACAMA-1TG1B TG1B+0.STV1_GNL_B | MT       | RO     | LC  | PS           | -                   | OM              | Desacopla TG1A                                          | -              | -         | IL 2021001953                 | ENEL GENERACION          | -    | -         |        |
| 08:01      | -        | ATACAMA-1TG1B       | ATACAMA-1TG1B TG1B GNL_B        | -        | RO     | LC  | PS           | -                   | OM              | F/S TV1C                                                | -              | -         | IL 2021001953                 | ENEL GENERACION          | -    | -         |        |
| 08:03      | -        | ATACAMA-1TG1A       | ATACAMA-1TG1A TG1A GNL_B        | -        | DRO    | DLC | FS           | -                   | OM              | F/S TG1A                                                | -              | -         | IL 2021001953                 | ENEL GENERACION          | -    | -         |        |
| 08:04      | -        | RAPEL-1             | RAPEL-1                         | MT       | RO     | -   | PS           | -                   | OM              | -                                                       | -              | N         | IL 2021001064                 | ENEL GENERACION          | -    | -         |        |
| 08:04      | -        | RAPEL-3             | RAPEL-3                         | MT       | RO     | -   | PS           | -                   | OM              | -                                                       | -              | N         | IL 2023000805                 | ENEL GENERACION          | -    | -         |        |
| 08:06      | -        | RAPEL-1             | RAPEL-1                         | -        | DRO    | -   | FS           | -                   | OM              | -                                                       | -              | N         | IL 2021001064                 | ENEL GENERACION          | -    | -         |        |
| 08:06      | -        | ATACAMA-1TG1B       | ATACAMA-1TG1B TG1B GNL_B        | -        | DRO    | DLC | FS           | -                   | OM              | F/S TG1B                                                | -              | -         | IL 2021001953                 | ENEL GENERACION          | -    | -         |        |
| 08:07      | -        | RAPEL-3             | RAPEL-3                         | -        | DRO    | -   | FS           | -                   | OM              | -                                                       | -              | N         | IL 2023000805                 | ENEL GENERACION          | -    | -         |        |
| 08:16      | -        | GUACOLDA-2          | GUACOLDA-2_CAR                  | 0        | DLF    | -   | FS           | PCP                 | OM              | -                                                       | -              | -         | IL 2023000905 - IL 2023001377 | RNE                      | -    | -         |        |
| 08:53      | -        | RAPEL-3             | RAPEL-3                         | -        | DRO    | -   | PP           | -                   | OM              | -                                                       | -              | N         | IL 2023000805                 | ENEL GENERACION          | -    | -         |        |
| 08:54      | -        | CANUTILLAR-1        | CANUTILLAR-1                    | -        | N      | -   | PS           | -                   | OT              | -                                                       | -              | N         | -                             | COLBUN                   | -    | -         |        |
| 08:56      | -        | RAPEL-3             | RAPEL-3                         | -        | DN     | -   | FS           | -                   | OM              | -                                                       | -              | N         | IL 2023000805                 | ENEL GENERACION          | -    | -         |        |
| 08:57      | -        | CANUTILLAR-1        | CANUTILLAR-1                    | -        | DN     | -   | FS           | -                   | OM              | -                                                       | -              | N         | -                             | COLBUN                   | -    | -         |        |
| 09:04      | -        | RAPEL-2             | RAPEL-2                         | MT       | N      | -   | PS           | -                   | OM              | -                                                       | -              | N         | -                             | ENEL GENERACION          | -    | -         |        |
| 09:06      | -        | RAPEL-2             | RAPEL-2                         | -        | DN     | -   | FS           | -                   | OM              | -                                                       | -              | N         | -                             | ENEL GENERACION          | -    | -         |        |
| 09:40      | -        | PANGUE-2            | RALCO_sinv                      | MT       | RO     | -   | PS           | -                   | OM              | -                                                       | -              | -         | IL 2023000484                 | ENEL GENERACION          | -    | -         |        |
| 10:00      | -        | RAPEL-3             | RAPEL-3                         | -        | RO     | -   | PS           | -                   | OM              | -                                                       | -              | N         | IL 2023000805                 | ENEL GENERACION          | -    | -         |        |

| 29-10-2023 |          |                     |                                                   |          |        |     |              |                     |                 |                                                   |                |           |                                                     |                          | SS.CC. |           |
|------------|----------|---------------------|---------------------------------------------------|----------|--------|-----|--------------|---------------------|-----------------|---------------------------------------------------|----------------|-----------|-----------------------------------------------------|--------------------------|--------|-----------|
| Hora Movi. | Equipo / | Central-Unidad      | Configuración                                     | Despacho | Estado | EO  | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                            | Zona Desacople | Condición | Neomante                                            | Centro de                | SSCC   | BASEPOINT |
| 00:00      | -        | COLBUN              | COLBUN                                            | -        | -      | -   | -            | -                   | RE              | Se declara en condición de vertimiento.           | -              | V         | IL 2023001650                                       | COLBUN                   | -      | -         |
| 10:00      | -        | CIPRESES-1          | CIPRESES_vcolb_pehu_loma                          | -        | N      | -   | PS           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 10:00      | -        | CIPRESES-3          | CIPRESES_vcolb_pehu_loma                          | -        | N      | -   | PS           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 10:01      | -        | CDC                 | Finaliza Prorrata LT 66 kV Los Angeles - Victoria | -        | -      | -   | -            | -                   | -               | Finaliza Prorrata LT 66 kV Los Angeles - Victoria | -              | -         | -                                                   | -                        | -      | -         |
| 10:02      | -        | RAPEL-3             | RAPEL                                             | -        | DRO    | -   | FS           | -                   | OM              | -                                                 | -              | N         | IL 2023000805                                       | ENEL GENERACION          | -      | -         |
| 10:03      | -        | ANGOSTURA-1         | RALCO_sinv                                        | MT       | N      | -   | PS           | -                   | OM              | -                                                 | -              | -         | -                                                   | COLBUN                   | -      | -         |
| 10:04      | -        | CIPRESES-1          | CIPRESES_vcolb_pehu_loma                          | -        | DN     | -   | FS           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 10:04      | -        | CIPRESES-3          | CIPRESES_vcolb_pehu_loma                          | -        | DN     | -   | FS           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 10:08      | -        | ANGOSTURA-1         | RALCO_sinv                                        | -        | DN     | -   | FS           | -                   | OM              | -                                                 | -              | -         | -                                                   | COLBUN                   | -      | -         |
| 10:53      | -        | RAPEL-1             | RAPEL                                             | -        | DRO    | -   | PP           | -                   | OM              | -                                                 | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -      | -         |
| 10:57      | -        | RAPEL-1             | RAPEL                                             | -        | RO     | -   | MT           | -                   | OM              | -                                                 | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -      | -         |
| 10:59      | -        | RAPEL-4             | RAPEL                                             | MT       | RO     | -   | PS           | -                   | OM              | -                                                 | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -      | -         |
| 11:02      | -        | RAPEL-4             | RAPEL                                             | -        | DRO    | -   | FS           | -                   | OM              | -                                                 | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -      | -         |
| 11:20      | -        | ELTORO              | ELTORO quill                                      | -        | RE     | -   | RE           | -                   | RE              | C. Rucúe deja de verter, cambia configuración.    | -              | N         | IL 2021001180                                       | ENEL GENERACION          | -      | -         |
| 11:54      | -        | RAPEL-2             | RAPEL                                             | -        | DN     | -   | PP           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 11:56      | -        | RAPEL-2             | RAPEL                                             | -        | N      | -   | MT           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 12:00      | -        | COLBUN-1            | COLBUN_vsign                                      | 125      | RO     | -   | CI           | -                   | RE              | Par control cota machicura                        | -              | N         | IL 2023001650                                       | COLBUN                   | -      | -         |
| 12:00      | -        | COLBUN-2            | COLBUN_vsign                                      | 125      | RO     | -   | CI           | -                   | RE              | Par control cota machicura                        | -              | V         | IL 2023001650                                       | COLBUN                   | -      | -         |
| 12:24      | -        | NUEVAERENCA         | NUEVAERENCA_TG1+TV1_GNL_A                         | -        | DRO    | DLC | PP           | -                   | OM              | -                                                 | -              | -         | IL 2020001697 -<br>IL 2020001933 -<br>IL 2023001462 | GENERADORA METROPOLITANA | -      | -         |
| 12:51      | -        | CIPRESES-1          | CIPRESES_vcolb_pehu_loma                          | -        | DN     | -   | PP           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 12:58      | -        | CIPRESES-1          | CIPRESES_vcolb_pehu_loma                          | -        | N      | -   | MT           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 13:00      | -        | RAPEL-1             | RAPEL                                             | -        | RO     | -   | PS           | -                   | OM              | -                                                 | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -      | -         |
| 13:00      | -        | RAPEL-2             | RAPEL                                             | -        | N      | -   | PS           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 13:01      | -        | RAPEL-1             | RAPEL                                             | -        | DRO    | -   | FS           | -                   | OM              | -                                                 | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -      | -         |
| 13:01      | -        | RAPEL-2             | RAPEL                                             | -        | DN     | -   | FS           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 13:02      | -        | CIPRESES-3          | CIPRESES_vcolb_pehu_loma                          | -        | DN     | -   | PP           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 13:08      | -        | CIPRESES-3          | CIPRESES_vcolb_pehu_loma                          | -        | N      | -   | MT           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 14:00      | -        | ATACAMA-1TG1AB      | 1TG1AB TG1A+TG1B+TV1 GNL B                        | -        | DRO    | DLC | PP           | -                   | OM              | -                                                 | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -      | -         |
| 14:08      | -        | MOV. CMG            | -                                                 | -        | -      | -   | -            | -                   | -               | Movimiento para estimar CMG horario_1h            | -              | -         | -                                                   | CDC                      | -      | -         |
| 14:57      | -        | RAPEL-1             | RAPEL                                             | -        | DRO    | -   | PP           | -                   | OM              | -                                                 | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -      | -         |
| 14:57      | -        | RAPEL-4             | RAPEL                                             | -        | DRO    | -   | PP           | -                   | OM              | -                                                 | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -      | -         |
| 15:00      | -        | ATACAMA-2TG2AB      | 2TG2AB TG2A+TG2B+TV2_GNL_B                        | -        | DLF    | DLC | PP           | PCP                 | OM              | -                                                 | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -      | -         |
| 15:00      | -        | SANISIDRO-2         | SANISIDRO-2_TG1+TV1_FSTVU_GNL_A                   | -        | DRO    | DLC | PP           | -                   | OM              | -                                                 | -              | -         | IL 2022001909                                       | ENEL GENERACION          | -      | -         |
| 15:01      | -        | RAPEL-1             | RAPEL                                             | -        | RO     | -   | MT           | -                   | OM              | -                                                 | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -      | -         |
| 15:01      | -        | RAPEL-4             | RAPEL                                             | -        | RO     | -   | MT           | -                   | OM              | -                                                 | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -      | -         |
| 15:20      | -        | ATACAMA-1TG1B       | ATACAMA-1TG1B TG1B GNL B                          | -        | RO     | LC  | PMT          | -                   | OM              | E/S TG1B                                          | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -      | -         |
| 15:32      | -        | SANISIDRO-2         | SANISIDRO-2 TG1 GN A                              | -        | RO     | LC  | PMT          | -                   | OM              | E/S TG                                            | -              | -         | IL 2022001909                                       | ENEL GENERACION          | -      | -         |
| 15:46      | -        | ATACAMA-2TG2B       | ATACAMA-2TG2B TG2B GNL B                          | -        | LF     | LC  | PMT          | -                   | OM              | E/S TG2B                                          | -              | -         | IL2023001662                                        | ENEL GENERACION          | -      | -         |
| 15:55      | -        | RAPEL-2             | RAPEL                                             | -        | DN     | -   | PP           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 15:55      | -        | RAPEL-3             | RAPEL                                             | -        | DRO    | -   | PP           | -                   | OM              | -                                                 | -              | N         | IL 2023000805                                       | ENEL GENERACION          | -      | -         |
| 15:59      | -        | RAPEL-2             | RAPEL                                             | -        | N      | -   | MT           | -                   | OM              | -                                                 | -              | N         | -                                                   | ENEL GENERACION          | -      | -         |
| 15:59      | -        | RAPEL-3             | RAPEL                                             | -        | RO     | -   | MT           | -                   | OM              | -                                                 | -              | N         | IL 2023000805                                       | ENEL GENERACION          | -      | -         |
| 16:00      | -        | CDC                 | Ajuste Prorrata Generalizada costo SEN 0          | -300     | -      | -   | -            | -                   | -               | Ajuste Prorrata Generalizada costo SEN 0          | SEN            | -         | -                                                   | -                        | -      | -         |
| 16:00      | -        | PE-PUNTAPALMERAS    | PE-PUNTAPALMERAS                                  | 0        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PE-SANGABRIEL       | PE-SANGABRIEL                                     | 37       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PE-TOLPANSUR        | PE-TOLPANSUR                                      | 14       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PFV-ALMEYDA         | PFV-ALMEYDA                                       | 40       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PFV-ELROMERO        | PFV-ELROMERO                                      | 89       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PFV-USYA            | PFV-USYA                                          | 24       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PFV-MALGARIDA       | PFV-MALGARIDA                                     | 90       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ACCIONA                  | -      | -         |
| 16:00      | -        | PE-LOSCURUROS       | PE-LOSCURUROS                                     | 4        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | PE-LOSOLMOS         | PE-LOSOLMOS                                       | 33       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | PE-CAMPOLINDO       | PE-CAMPOLINDO                                     | 43       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | QUELTEHUES-2        | QUELTEHUES-2                                      | 15       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | QUELTEHUES-3        | QUELTEHUES-3                                      | 14       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | PFV-ANDES           | PFV-ANDES                                         | 10       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | PFV-ANDES2A         | PFV-ANDES2A                                       | 35       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | PFV-ANDES2B         | PFV-ANDES2B                                       | 60       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | AES ANDES                | -      | -         |
| 16:00      | -        | ELPASO-1            | ELPASO-1                                          | 8        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ANPAC                    | -      | -         |
| 16:00      | -        | SANANDRES-2         | SANANDRES-2                                       | 5        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ANPAC                    | -      | -         |
| 16:00      | -        | CONVENTOVIEJO       | CONVENTOVIEJO                                     | 6        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | BESALCO ENERGÍA          | -      | -         |
| 16:00      | -        | LOSHIERROS1-1       | LOSHIERROS1-1                                     | 10       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | BESALCO ENERGÍA          | -      | -         |
| 16:00      | -        | LOSHIERROS1-2       | LOSHIERROS1-2                                     | 10       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | BESALCO ENERGÍA          | -      | -         |
| 16:00      | -        | CAPULLO             | CAPULLO                                           | 7        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | CAPULLO                  | -      | -         |
| 16:00      | -        | PULELFU-1           | PULELFU-1                                         | 4        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | CAPULLO                  | -      | -         |
| 16:00      | -        | PULELFU-2           | PULELFU-2                                         | 4        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | CAPULLO                  | -      | -         |
| 16:00      | -        | CH-HORNITOS         | CH-HORNITOS                                       | 19       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | COLBUN                   | -      | -         |
| 16:00      | -        | QUILLECO-1          | QUILLECO-1                                        | 34       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | COLBUN                   | -      | -         |
| 16:00      | -        | QUILLECO-2          | QUILLECO-2                                        | 34       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | COLBUN                   | -      | -         |
| 16:00      | -        | RUCUE-1             | RUCUE-1                                           | 85       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | COLBUN                   | -      | -         |
| 16:00      | -        | RUCUE-2             | RUCUE-2                                           | 72       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | COLBUN                   | -      | -         |
| 16:00      | -        | PFV-DIEGOALMAGROSUR | PFV-DIEGOALMAGROSUR                               | 90       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | COLBUN                   | -      | -         |
| 16:00      | -        | PEHUENCHE-1         | PEHUENCHE-1                                       | 210      | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PEHUENCHE-2         | PEHUENCHE-2                                       | 236      | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | RALCO-1             | RALCO-1                                           | 156      | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | RALCO-2             | RALCO-2                                           | 154      | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PANGUE-1            | PANGUE-1                                          | 80       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | LOSMOLLES-1         | LOSMOLLES-1                                       | 4        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | ANTUCO-1            | ANTUCO-1                                          | 110      | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | ANTUCO-2            | ANTUCO-2                                          | 117      | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | CURILLUNQUE         | CURILLUNQUE                                       | 68       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | ISLA-1              | ISLA-1                                            | 32       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | ISLA-2              | ISLA-2                                            | 27       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PILMAIQUEN-1        | PILMAIQUEN-1                                      | 5        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PILMAIQUEN-3        | PILMAIQUEN-3                                      | 5        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PILMAIQUEN-4        | PILMAIQUEN-4                                      | 9        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PULLINQUE-1         | PULLINQUE-1                                       | 10       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PULLINQUE-2         | PULLINQUE-2                                       | 11       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PULLINQUE-3         | PULLINQUE-3                                       | 11       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | OJOSDEAGUA          | OJOSDEAGUA                                        | 7        | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GENERACION          | -      | -         |
| 16:00      | -        | PE-LOSBUENOSAIRES   | PE-LOSBUENOSAIRES                                 | 11       | N      | -   | CI           | -                   | OM              | -                                                 | SEN            | -         | -                                                   | ENEL GREEN POWER         | -      | -         |

| 29-10-2023 |          |                     |                     |          |        |    |              |                     |                 |                                         |                |           |               |                          |      | SS.CC.    |  |
|------------|----------|---------------------|---------------------|----------|--------|----|--------------|---------------------|-----------------|-----------------------------------------|----------------|-----------|---------------|--------------------------|------|-----------|--|
| Hora Movi. | Equipo / | Central-Unidad      | Configuración       | Despacho | Estado | EO | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                  | Zona Desacople | Condición | Neomante      | Centro de                | SSCC | BASEPOINT |  |
| 00:00      | -        | COLBUN              | COLBUN              | -        | -      | -  | -            | -                   | RE              | Se declara en condición de vertimiento. | -              | V         | IL 2023001650 | COLBUN                   |      |           |  |
| 16:00      | -        | PE-CANELA           | PE-CANELA           | 0        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-CANELA-2         | PE-CANELA-2         | 2        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-RENAICO          | PE-RENAICO          | 8        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-SIERRAGORDA      | PE-SIERRAGORDA      | 60       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-TALINAYORIENTE   | PE-TALINAYORIENTE   | 10       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-TALINAYPONIENTE  | PE-TALINAYPONIENTE  | 10       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-TALTAL           | PE-TALTAL           | 68       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-VALLEDELOSIENTOS | PE-VALLEDELOSIENTOS | 29       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-RENAICO-II       | PE-RENAICO-II       | 21       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-CHANARES        | PFV-CHANARES        | 17       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-FINISTERRAE     | PFV-FINISTERRAE     | 120      | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-LALACKAMA       | PFV-LALACKAMA       | 27       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-LALACKAMA-2     | PFV-LALACKAMA-2     | 6        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-LASILILA        | PFV-LASILILA        | 2        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-SOLDELLILA      | PFV-SOLDELLILA      | 68       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-AZABACHE        | PFV-AZABACHE        | 30       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-CAMPODELSOL     | PFV-CAMPODELSOL     | 164      | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-VALLEDELSOL     | PFV-VALLEDELSOL     | 68       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PFV-GUANCHOI        | PFV-GUANCHOI        | 172      | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENEL GREEN POWER         | -    |           |  |
| 16:00      | -        | PE-CALAMA           | PE-CALAMA           | 97       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PE-MONTEREDONDO     | PE-MONTEREDONDO     | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PE-SANPEDRO-1       | PE-SANPEDRO-1       | 18       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PE-SANPEDRO-2       | PE-SANPEDRO-2       | 25       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | CHAPIQUINA-2        | CHAPIQUINA-2        | 4        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | LAIJA1-1            | LAIJA1-1            | 12       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | LAIJA1-2            | LAIJA1-2            | 13       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-ELAGUILA        | PFV-ELAGUILA        | 2        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-PAMPACAMARONES  | PFV-PAMPACAMARONES  | 3        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-LOSOLOROS       | PFV-LOSOLOROS       | 16       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-TAMAYA          | PFV-TAMAYA          | 50       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-CAPRICORNIO     | PFV-CAPRICORNIO     | 41       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-COYA            | PFV-COYA            | 75       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENGIE RENOVOABLE         | -    |           |  |
| 16:00      | -        | PFV-TENOSOLAR       | PFV-TENOSOLAR       | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENLASA                   | -    |           |  |
| 16:00      | -        | PE-CABOLEONES-1     | PE-CABOLEONES-1     | 20       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-CABOLEONES-2     | PE-CABOLEONES-2     | 20       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-CABOLEONES-3     | PE-CABOLEONES-3     | 20       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-ELARRAYAN        | PE-ELARRAYAN        | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-PUNTACOLORADA    | PE-PUNTACOLORADA    | 0        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-LAESTRELLA       | PE-LAESTRELLA       | 10       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-TCHAMMA          | PE-TCHAMMA          | 69       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-CERROTIGRE       | PE-CERROTIGRE       | 120      | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-LLANOSDELVIENTO  | PE-LLANOSDELVIENTO  | 120      | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-BOLERO-1        | PFV-BOLERO-1        | 68       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-CERRODOMINADOR  | PFV-CERRODOMINADOR  | 46       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-CONEJO          | PFV-CONEJO          | 50       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-JAMA-1          | PFV-JAMA-1          | 0        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-LAHUAYCA-2      | PFV-LAHUAYCA-2      | 13       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-LLANODELLAMPOS  | PFV-LLANODELLAMPOS  | 52       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-MARIAELENA      | PFV-MARIAELENA      | 29       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-POZOALMONTE-2   | PFV-POZOALMONTE-2   | 7        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-POZOALMONTE-3   | PFV-POZOALMONTE-3   | 14       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-URIBESOLAR      | PFV-URIBESOLAR      | 28       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-SOLDELOSANDES   | PFV-SOLDELOSANDES   | 40       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-PUERTOSECO      | PFV-PUERTOSECO      | 8        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-SANTAISABEL     | PFV-SANTAISABEL     | 0        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-LACRUZSOLAR     | PFV-LACRUZSOLAR     | 30       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-DONACARMEN      | PFV-DONACARMEN      | 15       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-SANPEDRO        | PFV-SANPEDRO        | 50       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-NUEVOQUILLAGUA  | PFV-NUEVOQUILLAGUA  | 45       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-JAMA-2          | PFV-JAMA-2          | 18       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-VALLEESCONDIDO  | PFV-VALLEESCONDIDO  | 44       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PFV-PAMPATIGRE      | PFV-PAMPATIGRE      | 46       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENOR CHILE               | -    |           |  |
| 16:00      | -        | PE-PUELCHESUR       | PE-PUELCHESUR       | 28       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | ENORCHILE                | -    |           |  |
| 16:00      | -        | PFV-SANTIAGOSOLAR   | PFV-SANTIAGOSOLAR   | 93       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | GENERADORA METROPOLITANA | -    |           |  |
| 16:00      | -        | MARIPOSAS           | MARIPOSAS           | 4        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | HIDRO MAULE              | -    |           |  |
| 16:00      | -        | LIRCAY-1            | LIRCAY-1            | 10       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | HIDRO MAULE              | -    |           |  |
| 16:00      | -        | LIRCAY-2            | LIRCAY-2            | 10       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | HIDRO MAULE              | -    |           |  |
| 16:00      | -        | PE-AURORA           | PE-AURORA           | 25       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | INNERGEX(ENERGIA LLAIMA) | -    |           |  |
| 16:00      | -        | PE-SARCO            | PE-SARCO            | 17       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | INNERGEX(ENERGIA LLAIMA) | -    |           |  |
| 16:00      | -        | PFV-SALVADOR        | PFV-SALVADOR        | 13       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | INNERGEX(ENERGIA LLAIMA) | -    |           |  |
| 16:00      | -        | PFV-SANANDRES       | PFV-SANANDRES       | 22       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | INNERGEX(ENERGIA LLAIMA) | -    |           |  |
| 16:00      | -        | PE-SANJUAN          | PE-SANJUAN          | 20       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | LAP                      | -    |           |  |
| 16:00      | -        | PE-TOTORAL          | PE-TOTORAL          | 2        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | LAP                      | -    |           |  |
| 16:00      | -        | PE-PUNTASIERRA      | PE-PUNTASIERRA      | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PACIFIC HYDRO            | -    |           |  |
| 16:00      | -        | CHACAYES-1          | CHACAYES-1          | 44       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PACIFIC HYDRO            | -    |           |  |
| 16:00      | -        | CHACAYES-2          | CHACAYES-2          | 39       | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PACIFIC HYDRO            | -    |           |  |
| 16:00      | -        | ALTORENAICO         | ALTORENAICO         | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | POTENCIA                 | -    |           |  |
| 16:00      | -        | RENAICO             | RENAICO             | 6        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | POTENCIA                 | -    |           |  |
| 16:00      | -        | PFV-ANTAY           | PFV-ANTAY           | 8        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PRIME ENERGIA            | -    |           |  |
| 16:00      | -        | PFV-CARACAS-II      | PFV-CARACAS-II      | 8        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PRIME ENERGIA            | -    |           |  |
| 16:00      | -        | FLORIDA3-1          | FLORIDA3-1          | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PUNTILLA                 | -    |           |  |
| 16:00      | -        | FLORIDA3-2          | FLORIDA3-2          | 1        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PUNTILLA                 | -    |           |  |
| 16:00      | -        | PUNTILLA-2          | PUNTILLA-2          | 7        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PUNTILLA                 | -    |           |  |
| 16:00      | -        | PUNTILLA-3          | PUNTILLA-3          | 6        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | PUNTILLA                 | -    |           |  |
| 16:00      | -        | ANCOA-1             | ANCOA-1             | 8        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | RÍO COLORADO             | -    |           |  |
| 16:00      | -        | ANCOA-2             | ANCOA-2             | 8        | N      | -  | CI           | -                   | OM              | -                                       | SEN            | -         | -             | RÍO COLORADO             | -    |           |  |

| 29-10-2023 |          |                     |                                    |          |        |    |              |                     |                 |                                                              |                |           |                                                     |                          |      |           |  | SS.CC. |
|------------|----------|---------------------|------------------------------------|----------|--------|----|--------------|---------------------|-----------------|--------------------------------------------------------------|----------------|-----------|-----------------------------------------------------|--------------------------|------|-----------|--|--------|
| Hora Movi. | Equipo / | Central-Unidad      | Configuración                      | Despacho | Estado | EO | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                                       | Zona Desacople | Condición | Neomante                                            | Centro de                | SSCC | BASEPOINT |  |        |
| 00:00      | -        | COLBUN              | COLBUN                             | -        | -      | -  | -            | -                   | RE              | Se declara en condición de vertimiento.                      | -              | V         | IL 2023001650                                       | COLBUN                   |      |           |  |        |
| 16:00      | -        | RIOCOLORADO-1       | RIOCOLORADO-1                      | 7        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RÍO COLORADO             | -    |           |  |        |
| 16:00      | -        | RIOCOLORADO-2       | RIOCOLORADO-2                      | 8        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RÍO COLORADO             | -    |           |  |        |
| 16:00      | -        | PE-ELMAITEN         | PE-ELMAITEN                        | 0        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PE-MALLECOSUR       | PE-MALLECOSUR                      | 59       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PE-MALLECONORTE     | PE-MALLECONORTE                    | 56       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PE-NEGRET           | PE-NEGRET                          | 12       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PE-DUQUECO          | PE-DUQUECO                         | 37       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-CARRERAPINTO    | PFV-CARRERAPINTO                   | 40       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-DIEGODEALMAGRO  | PFV-DIEGODEALMAGRO                 | 14       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-PAMPASOLARNORTE | PFV-PAMPASOLARNORTE                | 30       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-HUATACONDO      | PFV-HUATACONDO                     | 41       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-JAVIERA         | PFV-JAVIERA                        | 35       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-LAHUELLA        | PFV-LAHUELLA                       | 38       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-ATACAMASOLAR-2  | PFV-ATACAMASOLAR-2                 | 71       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-SOLDELDESIERTO  | PFV-SOLDELDESIERTO                 | 108      | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-DOMEYKO         | PFV-DOMEYKO                        | 85       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | PFV-QUILAPILUN      | PFV-QUILAPILUN                     | 28       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RNE                      | -    |           |  |        |
| 16:00      | -        | RUCATAYO            | RUCATAYO                           | 26       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | RUCATAYO                 | -    |           |  |        |
| 16:00      | -        | HIDROMOCHO          | HIDROMOCHO                         | 9        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | CALLAO-1            | CALLAO-1                           | 1        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | CALLAO-2            | CALLAO-2                           | 1        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | CORRENTOSO          | CORRENTOSO                         | 5        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | CUMBRES             | CUMBRES                            | 13       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | NALCAS-1            | NALCAS-1                           | 2        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | NALCAS-2            | NALCAS-2                           | 2        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | NALCAS-3            | NALCAS-3                           | 1        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | PALMAR-2            | PALMAR-2                           | 3        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | RIOPICOQUEN-1       | RIOPICOQUEN-1                      | 10       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | RIOPICOQUEN-2       | RIOPICOQUEN-2                      | 10       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | CENTRALBONITO-MC1   | CENTRALBONITO-MC1                  | 7        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | CENTRALFEO-MC2      | CENTRALFEO-MC2                     | 2        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SCOTTA                   | -    |           |  |        |
| 16:00      | -        | PFV-GRANJA          | PFV-GRANJA                         | 60       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SIEMENS                  | -    |           |  |        |
| 16:00      | -        | PFV-RIOESCONDIDO    | PFV-RIOESCONDIDO                   | 81       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SIEMENS                  | -    |           |  |        |
| 16:00      | -        | PFV-LUZDELNORTE     | PFV-LUZDELNORTE                    | 0        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SUN POWER                | -    |           |  |        |
| 16:00      | -        | PFV-ELPELICANO      | PFV-ELPELICANO                     | 65       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | SUN POWER                | -    |           |  |        |
| 16:00      | -        | PE-UCUQUER-2        | PE-UCUQUER-2                       | 2        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | UCUQUER                  | -    |           |  |        |
| 16:00      | -        | PE-LAESPERANZA      | PE-LAESPERANZA                     | 2        | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | UCUQUER                  | -    |           |  |        |
| 16:00      | -        | PE-LAFLO            | PE-LAFLO                           | 16       | N      | -  | CI           | -                   | OM              | -                                                            | SEN            | -         | -                                                   | UCUQUER                  | -    |           |  |        |
| 16:03      | -        | RAPEL-1             | RAPEL                              | -        | RO     | -  | PS           | -                   | OM              | -                                                            | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -    |           |  |        |
| 16:03      | -        | RAPEL-4             | RAPEL                              | -        | RO     | -  | PS           | -                   | OM              | -                                                            | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -    |           |  |        |
| 16:06      | -        | RAPEL-1             | RAPEL                              | -        | DRO    | -  | FS           | -                   | OM              | -                                                            | -              | N         | IL 2021001064                                       | ENEL GENERACION          | -    |           |  |        |
| 16:06      | -        | RAPEL-4             | RAPEL                              | -        | DRO    | -  | FS           | -                   | OM              | -                                                            | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -    |           |  |        |
| 16:13      | -        | ATACAMA-1TG1B       | ATACAMA-1TG1B_TG1B+0.5TV1_GNL_B    | -        | RO     | LC | PMT          | -                   | OM              | E/S TV1C                                                     | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -    |           |  |        |
| 16:31      | -        | ATACAMA-1TG1A       | ATACAMA-1TG1A TG1A GNL B           | -        | RO     | LC | PMT          | -                   | OM              | E/S TG1A                                                     | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -    |           |  |        |
| 16:39      | -        | ATACAMA-2TG2B       | ATACAMA-2TG2B TG2B+0.5TV2_GNL_B    | -        | LF     | LC | PMT          | -                   | OM              | E/S TV2C                                                     | -              | -         | IL2023001662                                        | ENEL GENERACION          | -    |           |  |        |
| 16:52      | -        | ATACAMA-2TG2A       | ATACAMA-2TG2A_TG2A_GNL_B           | -        | LF     | LC | PMT          | -                   | OM              | E/S TG2A                                                     | -              | -         | IL 2021001953 -<br>IL 2023001510                    | ENEL GENERACION          | -    |           |  |        |
| 16:54      | -        | RAPEL-4             | RAPEL                              | -        | DRO    | -  | PP           | -                   | OM              | -                                                            | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -    |           |  |        |
| 16:54      | -        | NUEVARENCA          | NUEVARENCA_TG1_GNL_A               | -        | RO     | LC | PMT          | -                   | OM              | E/S TG                                                       | -              | -         | IL 2020001697 -<br>IL 2022001933 -<br>IL 2023001462 | GENERADORA METROPOLITANA | -    |           |  |        |
| 16:55      | -        | ANGOSTURA-1         | RALCO sinv                         | -        | DN     | -  | PP           | -                   | OM              | -                                                            | -              | -         | -                                                   | COLBUN                   | -    |           |  |        |
| 16:58      | -        | ELTORO              | ELTORO sinv                        | -        | -      | -  | RE           | -                   | RE              | C. Quileco deja de verter, cambia configuración.             | -              | N         | IL 2021001180                                       | ENEL GENERACION          | -    |           |  |        |
| 17:00      | -        | RAPEL-4             | RAPEL                              | -        | RO     | -  | MT           | -                   | OM              | -                                                            | -              | N         | IL 2021001067                                       | ENEL GENERACION          | -    |           |  |        |
| 17:00      | -        | ANGOSTURA-1         | RALCO sinv                         | -        | N      | -  | PC           | -                   | OM              | -                                                            | -              | -         | -                                                   | COLBUN                   | -    |           |  |        |
| 17:00      | -        | RAPEL-2             | RAPEL                              | -        | N      | -  | PS           | -                   | OM              | -                                                            | -              | N         | -                                                   | ENEL GENERACION          | -    |           |  |        |
| 17:00      | -        | RAPEL-3             | RAPEL                              | -        | RO     | -  | PS           | -                   | OM              | -                                                            | -              | N         | IL 2023000805                                       | ENEL GENERACION          | -    |           |  |        |
| 17:00      | -        | PANGUE-2            | RALCO sinv                         | -        | DRO    | -  | PP           | -                   | OM              | -                                                            | -              | -         | IL 2023000484                                       | ENEL GENERACION          | -    |           |  |        |
| 17:00      | -        | PANGUE-1            | RALCO sinv                         | PC       | RO     | -  | PC           | -                   | OM              | -                                                            | -              | -         | IL 2023000484                                       | ENEL GENERACION          | -    |           |  |        |
| 17:03      | -        | RAPEL-2             | RAPEL                              | -        | DN     | -  | FS           | -                   | OM              | -                                                            | -              | N         | -                                                   | ENEL GENERACION          | -    |           |  |        |
| 17:03      | -        | RAPEL-3             | RAPEL                              | -        | DRO    | -  | FS           | -                   | OM              | -                                                            | -              | N         | IL 2023000805                                       | ENEL GENERACION          | -    |           |  |        |
| 17:07      | -        | ATACAMA-1TG1AB      | ATACAMA-1TG1AB TG1A+TG1B+TV1 GNL B | -        | RO     | LC | PMT          | -                   | OM              | Acopla TG1A                                                  | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -    |           |  |        |
| 17:10      | -        | NUEVARENCA          | NUEVARENCA_TG1+TV1_GNL_A           | -        | RO     | LC | PMT          | -                   | OM              | E/S TV                                                       | -              | -         | IL 2020001697 -<br>IL 2022001933 -<br>IL 2023001462 | GENERADORA METROPOLITANA | -    |           |  |        |
| 17:14      | -        | ATACAMA-1TG1AB      | ATACAMA-1TG1AB TG1A+TG1B+TV1_GNL_B | -        | RO     | LC | MT           | -                   | OM              | En MT estble                                                 | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -    |           |  |        |
| 17:27      | -        | PANGUE-2            | RALCO sinv                         | PC       | RO     | -  | PC           | -                   | OM              | -                                                            | -              | -         | IL 2023000484                                       | ENEL GENERACION          | -    |           |  |        |
| 17:28      | -        | ATACAMA-2TG2AB      | ATACAMA-2TG2AB TG2A+TG2B+TV2_GNL B | -        | LF     | LC | PMT          | PCP                 | OM              | Acopla TG2A                                                  | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -    |           |  |        |
| 17:42      | -        | ATACAMA-2TG2AB      | ATACAMA-2TG2AB TG2A+TG2B+TV2_GNL B | -        | LF     | LC | MT           | PCP                 | OM              | En MT estble                                                 | -              | -         | IL 2021001953                                       | ENEL GENERACION          | -    |           |  |        |
| 17:45      | -        | SANISIDRO-2         | SANISIDRO-2_TG1+TV1_FSTVU_GN_A     | -        | RO     | LC | PMT          | -                   | OM              | E/S TV                                                       | -              | -         | IL 2022001909                                       | ENEL GENERACION          | -    |           |  |        |
| 18:00      | -        | COCHRANE-CH2        | COCHRANE-CH2 CAR                   | PC       | RO     | -  | PC           | -                   | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | IL 2022000639                                       | AES ANDES                | -    |           |  |        |
| 18:00      | -        | COCHRANE-CH1        | COCHRANE-CH1 CAR                   | PC       | RO     | -  | PC           | -                   | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | IL 2022000634                                       | AES ANDES                | -    |           |  |        |
| 18:00      | -        | ANGAMOS-ANG1        | ANGAMOS-ANG1 CAR                   | PC       | N      | -  | PC           | -                   | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | IL 2022000696                                       | AES ANDES                | -    |           |  |        |
| 18:00      | -        | ANGAMOS-ANG2        | ANGAMOS-ANG2 CAR                   | PC       | N      | -  | PC           | -                   | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | IL 2022001546                                       | AES ANDES                | -    |           |  |        |
| 18:00      | -        | GUACOLDA-1          | GUACOLDA-1_CAR                     | PC       | N      | -  | PC           | PCP                 | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | IL 2023001376 -<br>IL 2023001631                    | RNE                      | -    |           |  |        |
| 18:00      | -        | MEJILLONES-IEM      | MEJILLONES-IEM CAR                 | PC       | N      | -  | PC           | -                   | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | -                                                   | ENGIE                    | -    |           |  |        |
| 18:00      | -        | GUACOLDA-3          | GUACOLDA-3_CAR                     | PC       | RO     | -  | PC           | -                   | OT              | Subida anticipada por retiro de generación ERNC Fotovoltaica | -              | -         | IL 2023001070 -<br>IL 2023000134 -<br>IL 2023000521 | RNE                      | -    |           |  |        |
| 18:00      | -        | ANGOSTURA-3         | RALCO sinv                         | MT       | N      | -  | PS           | -                   | OM              | -                                                            | -              | -         | -                                                   | COLBUN                   | -    |           |  |        |
| 18:05      | -        | ANGOSTURA-3         | RALCO sinv                         | -        | DN     | -  | FS           | -                   | OM              | -                                                            | -              | -         | -                                                   | COLBUN                   | -    |           |  |        |

| 29-10-2023 |          |                    |                                            |          |        |     |              |                     |                 |                                           |                |           |                                                                       |                          |      |           | SS.CC. |
|------------|----------|--------------------|--------------------------------------------|----------|--------|-----|--------------|---------------------|-----------------|-------------------------------------------|----------------|-----------|-----------------------------------------------------------------------|--------------------------|------|-----------|--------|
| Hora Movi. | Equipo / | Central-Unidad     | Configuración                              | Despacho | Estado | EO  | Consigna/Cmg | Consigna/Limitación | Instrucción Cmg | Motivo                                    | Zona Desacople | Condición | Neomante                                                              | Centro de                | SSCC | BASEPOINT |        |
| 00:00      | -        | COLBUN             | COLBUN                                     | -        | -      | -   | -            | -                   | RE              | Se declara en condición de vertimiento.   | -              | V         | IL 2023001650                                                         | COLBUN                   |      |           |        |
| 18:07      | -        | SANISIDRO-2        | SANISIDRO-2_TG1+TV1_FSTVU_GN_A             | -        | RO     | LC  | MT           | -                   | OM              | En MT estbale                             | -              | -         | IL 2022001909                                                         | ENEL GENERACION          | -    |           |        |
| 18:24      | -        | NUEVAERENCA        | NUEVAERENCA_TG1+TV1_GNL_A                  | -        | RO     | LC  | MT           | -                   | OM              | En MT estbale                             | -              | -         | IL 2020001697 -<br>IL 2022001933 -<br>IL 2023001462                   | GENERADORA METROPOLITANA | -    |           |        |
| 18:27      | -        | CANDELARIA-2       | CANDELARIA-2_GN_A                          | -        | DN     | DLC | PP           | -                   | OM              | -                                         | -              | -         | -                                                                     | COLBUN                   | -    |           |        |
| 18:43      | -        | CANDELARIA-2       | CANDELARIA-2_GN_A                          | -        | N      | LC  | PMT          | -                   | OM              | -                                         | -              | -         | -                                                                     | COLBUN                   | -    |           |        |
| 18:49      | -        | CIPRESES-2         | CIPRESES_vcolb_pehu_loma                   | -        | DN     | -   | PP           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 18:49      | -        | CANDELARIA-2       | CANDELARIA-2_GN_A                          | -        | N      | LC  | MT           | -                   | OM              | En MT estbale                             | -              | -         | -                                                                     | COLBUN                   | -    |           |        |
| 18:52      | -        | RAPEL-1            | RAPEL                                      | -        | DRO    | -   | PP           | -                   | OM              | -                                         | -              | N         | IL 2021001064                                                         | ENEL GENERACION          | -    |           |        |
| 18:52      | -        | RAPEL-2            | RAPEL                                      | -        | DN     | -   | PP           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 18:56      | -        | RAPEL-3            | RAPEL                                      | -        | DRO    | -   | PP           | -                   | OM              | -                                         | -              | N         | IL 2023000805                                                         | ENEL GENERACION          | -    |           |        |
| 18:56      | -        | RAPEL-5            | RAPEL                                      | -        | DRO    | -   | PP           | -                   | OM              | -                                         | -              | N         | IL 2021001068 -<br>SD2023093107                                       | ENEL GENERACION          | -    |           |        |
| 18:56      | -        | CIPRESES-2         | CIPRESES_vcolb_pehu_loma                   | -        | N      | -   | MT           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 18:56      | -        | RAPEL-1            | RAPEL                                      | -        | RO     | -   | MT           | -                   | OM              | -                                         | -              | N         | IL 2021001064                                                         | ENEL GENERACION          | -    |           |        |
| 18:56      | -        | RAPEL-2            | RAPEL                                      | -        | N      | -   | MT           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:00      | -        | MOV. CMG           | -                                          | -        | -      | -   | -            | -                   | -               | Movimiento para estimar CMG horario 1h    | -              | -         | -                                                                     | CDC                      | -    |           |        |
| 19:00      | -        | RAPEL-3            | RAPEL                                      | -        | RO     | -   | MT           | -                   | OM              | -                                         | -              | N         | IL 2023000805                                                         | ENEL GENERACION          | -    |           |        |
| 19:00      | -        | RAPEL-5            | RAPEL                                      | -        | RO     | -   | MT           | -                   | OM              | -                                         | -              | N         | IL 2021001068 -<br>SD2023093107                                       | ENEL GENERACION          | -    |           |        |
| 19:04      | -        | TALTAL-1           | TALTAL-1_GNL_C                             | -        | DN     | DLC | PP           | -                   | OM              | -                                         | -              | -         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:04      | -        | TALTAL-2           | TALTAL-2_GNL_C                             | -        | DN     | DLC | PP           | -                   | OM              | -                                         | -              | -         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:04      | -        | SANISIDRO-1        | SANISIDRO-1_TG1_GN_A                       | -        | DRO    | DLC | PP           | -                   | OM              | -                                         | -              | -         | IL 2022001908                                                         | ENEL GENERACION          | -    |           |        |
| 19:16      | -        | TALTAL-1           | TALTAL-1_GNL_C                             | -        | N      | LC  | PMT          | -                   | OM              | Sincronizada                              | -              | -         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:19      | -        | TALTAL-2           | TALTAL-2_GNL_C                             | -        | N      | LC  | PMT          | -                   | OM              | Sincronizada                              | -              | -         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:21      | -        | CANDELARIA-1       | CANDELARIA-1_GN_A                          | -        | DN     | DLC | PP           | -                   | OM              | -                                         | -              | -         | -                                                                     | COLBUN                   | -    |           |        |
| 19:26      | -        | TALTAL-2           | TALTAL-2_GNL_C                             | MT       | N      | LC  | MT           | -                   | OT              | Más SSCC                                  | -              | -         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:30      | -        | TALTAL-1           | TALTAL-1_GNL_C                             | MT       | N      | LC  | MT           | -                   | OT              | Más SSCC                                  | -              | -         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:30      | -        | CDC                | Finaliza Prorrata Generalizada costo SEN 0 | -        | -      | -   | -            | -                   | -               | Finaliza Generalizada costo SEN 0         | SEN            | -         | -                                                                     | CDC                      | -    |           |        |
| 19:34      | -        | CMPLAJA            | CMPLAJA_BLI+BL2_COGEN                      | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | SANTA FE                 | -    |           |        |
| 19:34      | -        | LAJAEVE-2          | LAJAEVE-2_COGEN                            | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | AES ANDES                | -    |           |        |
| 19:34      | -        | NUEVAALDEA         | NUEVAALDEA_BLI+BL2+BL3_COGEN               | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ARAUCO                   | -    |           |        |
| 19:34      | -        | VALDIVIA           | VALDIVIA_BLI+BL2+BL3_COGEN_EUCA            | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ARAUCO                   | -    |           |        |
| 19:34      | -        | VINALES            | VINALES_BLI_COGEN                          | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ARAUCO                   | -    |           |        |
| 19:34      | -        | PEHUENCHE-1        | PEHUENCHE                                  | PC       | N      | -   | PC           | -                   | RE              | -                                         | -              | V         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | PEHUENCHE-2        | PEHUENCHE                                  | PC       | N      | -   | PC           | -                   | RE              | -                                         | -              | V         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | RALCO-1            | RALCO_sinv                                 | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | N         | IL 2023000772                                                         | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | RALCO-2            | RALCO_sinv                                 | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | V         | IL 2023000772                                                         | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | COLBUN-1           | COLBUN_vsign                               | PC       | RO     | -   | PC           | -                   | RE              | -                                         | -              | V         | IL 2023001650                                                         | COLBUN                   | -    |           |        |
| 19:34      | -        | COLBUN-2           | COLBUN_vsign                               | PC       | RO     | -   | PC           | -                   | RE              | -                                         | -              | V         | IL 2023001650                                                         | COLBUN                   | -    |           |        |
| 19:34      | -        | ENAPBIOBIO_COGEN   | ENAPBIOBIO_COGEN                           | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ENAP BIOBIO              | -    |           |        |
| 19:34      | -        | SANTAMARTA         | SANTAMARTA_COGEN                           | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | SANTA MARTA              | -    |           |        |
| 19:34      | -        | LOMALOSCOLORADOS-2 | LOMALOSCOLORADOS-2_BIOGAS                  | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | KDM                      | -    |           |        |
| 19:34      | -        | SANTAFE            | SANTAFE_BLI+BL2+BL3+BL4_COGEN              | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | SANTA FE                 | -    |           |        |
| 19:34      | -        | CELCO              | CELCO_BLI_COGEN                            | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ARAUCO                   | -    |           |        |
| 19:34      | -        | CIPRESES-1         | CIPRESES_vcolb_pehu_loma                   | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | CIPRESES-2         | CIPRESES_vcolb_pehu_loma                   | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | CIPRESES-3         | CIPRESES_vcolb_pehu_loma                   | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | N         | -                                                                     | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | LAUTARO-2          | LAUTARO-2_BLI+BL2_COGEN                    | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | COMASA                   | -    |           |        |
| 19:34      | -        | LAUTARO-1          | LAUTARO-1_BLI+BL2_COGEN                    | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | COMASA                   | -    |           |        |
| 19:34      | -        | ARAUCO             | ARAUCO_COGEN                               | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ARAUCO                   | -    |           |        |
| 19:34      | -        | CANUTILLAR-1       | CANUTILLAR                                 | -        | DN     | -   | PP           | -                   | OM              | -                                         | -              | N         | -                                                                     | COLBUN                   | -    |           |        |
| 19:34      | -        | CANUTILLAR-2       | CANUTILLAR                                 | -        | DN     | -   | PP           | -                   | OM              | -                                         | -              | N         | -                                                                     | COLBUN                   | -    |           |        |
| 19:34      | -        | LAJAEVE-1          | LAJAEVE-1_COGEN                            | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | AES ANDES                | -    |           |        |
| 19:34      | -        | ATACAMA-1TG1AB     | ATACAMA-1TG1AB_TG1A+TG1B+TV1_GNL_B         | PC       | RO     | LC  | PC           | -                   | OM              | -                                         | -              | -         | IL 2021001953                                                         | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | ATACAMA-2TG2AB     | ATACAMA-2TG2AB_TG2A+TG2B+TV2_GNL_B         | PC       | RO     | LC  | PC           | PCP                 | OM              | -                                         | -              | -         | IL 2021001953                                                         | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | COCHRANE-CCH2      | COCHRANE-CCH2_CAR                          | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2022000639                                                         | AES ANDES                | -    |           |        |
| 19:34      | -        | COCHRANE-CCH1      | COCHRANE-CCH1_CAR                          | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2022000634                                                         | AES ANDES                | -    |           |        |
| 19:34      | -        | ANGAMOS-ANG1       | ANGAMOS-ANG1_CAR                           | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2022000696                                                         | AES ANDES                | -    |           |        |
| 19:34      | -        | EPACIFICO          | EPACIFICO_COGEN                            | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2022002169                                                         | ENERGIA PACIFICO         | -    |           |        |
| 19:34      | -        | ANGAMOS-ANG2       | ANGAMOS-ANG2_CAR                           | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2022001546                                                         | AES ANDES                | -    |           |        |
| 19:34      | -        | NUEVAERENCA        | NUEVAERENCA_TG1+TV1_GNL_A                  | PC       | LF     | LC  | PC           | PCP                 | OM              | Limitada a conectar FA según IL2023001669 | -              | -         | IL 2020001697 -<br>IL 2022001933 -<br>IL 2023001462 -<br>IL2023001669 | GENERADORA METROPOLITANA | -    |           |        |
| 19:34      | -        | NORGENER-NT02      | NORGENER-NT02_CAR                          | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2023001479                                                         | AES ANDES                | -    |           |        |
| 19:34      | -        | NEHUENCO-2         | NEHUENCO-2_TG1+TV1_GN_A                    | PC       | RO     | LC  | PC           | -                   | OM              | -                                         | -              | -         | IL 2023000829 -<br>IL 2023001565                                      | COLBUN                   | -    |           |        |
| 19:34      | -        | ESCUADRON          | ESCUADRON_COGEN                            | PC       | LF     | -   | PC           | PCP                 | OM              | -                                         | -              | -         | IL 2023001648                                                         | ESCUADRON                | -    |           |        |
| 19:34      | -        | SANISIDRO-2        | SANISIDRO-2_TG1+TV1_FSTVU_GN_A             | PC       | RO     | LC  | PC           | -                   | OM              | -                                         | -              | -         | IL 2022001909                                                         | ENEL GENERACION          | -    |           |        |
| 19:34      | -        | CHOLGUAN           | CHOLGUAN_BLI_COGEN                         | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ARAUCO                   | -    |           |        |
| 19:34      | -        | ENAPACONCAGUA      | ENAPACONCAGUA_COGEN                        | PC       | RO     | -   | PC           | CF                  | OM              | -                                         | -              | -         | IL 2023001308                                                         | ENAP                     | -    |           |        |
| 19:34      | -        | GUACOLDA-1         | GUACOLDA-1_CAR                             | PC       | N      | -   | PC           | PCP                 | OM              | -                                         | -              | -         | IL 2023001376 -<br>IL 2023001631                                      | RNE                      | -    |           |        |
| 19:34      | -        | MEJILLONES-1EM     | MEJILLONES-1EM_CAR                         | PC       | N      | -   | PC           | -                   | OM              | -                                         | -              | -         | -                                                                     | ENGIE                    | -    |           |        |
| 19:34      | -        | GUACOLDA-3         | GUACOLDA-3_CAR                             | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | -         | IL 2023001070 -<br>IL 2023000134 -<br>IL 2023000521                   | RNE                      | -    |           |        |
| 19:38      | -        | CMPPCORDILLERA     | CMPPCORDILLERA_GN_A                        | -        | DN     | DLC | FS           | -                   | OM              | -                                         | -              | -         | -                                                                     | SANTA FE                 | -    |           |        |
| 19:42      | -        | COLBUN-1           | COLBUN_vsign                               | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | V         | IL 2023001650                                                         | COLBUN                   | -    |           |        |
| 19:42      | -        | COLBUN-2           | COLBUN_vsign                               | PC       | RO     | -   | PC           | -                   | OM              | -                                         | -              | V         | IL 2023001650                                                         | COLBUN                   | -    |           |        |
| 19:43      | -        | CANUTILLAR-1       | CANUTILLAR                                 | PC       | N      | -   | PC           | -                   | OM              | Sincronizada                              | -              | N         | -                                                                     | COLBUN                   | -    |           |        |
| 19:48      | -        | SANISIDRO-1        | SANISIDRO-1_TG1_GN_A                       | -        | RO     | LC  | PMT          | -                   | OM              | Sincronizada                              | -              | -         | IL 2022001908                                                         | ENEL GENERACION          | -    |           |        |

| 29-10-2023 |          |                |                                    |          |        |     |              |                      |                 | SS.CC.                                                 |                |           |                                                     |                 |      |           |
|------------|----------|----------------|------------------------------------|----------|--------|-----|--------------|----------------------|-----------------|--------------------------------------------------------|----------------|-----------|-----------------------------------------------------|-----------------|------|-----------|
| Hora Movi. | Equipo / | Central-Unidad | Configuración                      | Despacho | Estado | EO  | Consigna/Cmg | Consigna/ Limitación | Instrucción Cmg | Motivo                                                 | Zona Desacople | Condición | Neomante                                            | Centro de       | SSCC | BASEPOINT |
| 00:00      | -        | COLBUN         | COLBUN                             | -        | -      | -   | -            | -                    | RE              | Se declara en condición de vertimiento.                | -              | V         | IL 2023001650                                       | COLBUN          | -    | -         |
| 19:50      | -        | CANUTILLAR-2   | CANUTILLAR                         | PC       | N      | -   | PC           | -                    | OM              | Sincronizada.                                          | -              | N         | -                                                   | COLBUN          | -    | -         |
| 19:57      | -        | SANISIDRO-1    | SANISIDRO-1 TG1 GN A               | MT       | RO     | LC  | MT           | -                    | OM              | MT estable.                                            | -              | -         | IL 2022001908                                       | ENEL GENERACION | -    | -         |
| 20:00      | -        | PANGUE-1       | RALCO sinv                         | 150      | RO     | -   | CI           | -                    | OM              | -                                                      | -              | -         | IL 2023000484                                       | ENEL GENERACION | -    | -         |
| 20:00      | -        | PANGUE-2       | RALCO sinv                         | 150      | RO     | -   | CI           | -                    | OM              | -                                                      | -              | -         | IL 2023000484                                       | ENEL GENERACION | -    | -         |
| 20:09      | -        | CMPCCORDILLERA | CMPCCORDILLERA GN A                | MT       | N      | LC  | PMT          | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 20:12      | -        | CMPCCORDILLERA | CMPCCORDILLERA GN A                | MT       | N      | LC  | MT           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 20:33      | -        | PANGUE-1       | RALCO sinv                         | PC       | RO     | -   | PC           | -                    | OM              | -                                                      | -              | -         | IL 2023000484                                       | ENEL GENERACION | -    | -         |
| 20:33      | -        | PANGUE-2       | RALCO sinv                         | PC       | RO     | -   | PC           | -                    | OM              | -                                                      | -              | -         | IL 2023000484                                       | ENEL GENERACION | -    | -         |
| 20:57      | -        | CMPLAJA        | CMPLAJA BL1+BL2+BL3 COGEN          | PC       | N      | -   | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 20:57      | -        | TALTAL-1       | TALTAL-1 GNL C                     | PC       | N      | LC  | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | ENEL GENERACION | -    | -         |
| 20:57      | -        | TALTAL-2       | TALTAL-2 GNL C                     | PC       | N      | LC  | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | ENEL GENERACION | -    | -         |
| 20:57      | -        | SANISIDRO-1    | SANISIDRO-1 TG1 GN A               | PC       | RO     | LC  | PC           | -                    | OM              | -                                                      | -              | -         | IL 2022001908                                       | ENEL GENERACION | -    | -         |
| 20:57      | -        | CMPCCORDILLERA | CMPCCORDILLERA GN A                | PC       | N      | LC  | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 21:17      | -        | CMPCCORDILLERA | CMPCCORDILLERA GN A                | MT       | N      | LC  | PS           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 21:17      | -        | SANISIDRO-1    | SANISIDRO-1 TG1 GN A               | MT       | RO     | LC  | MT           | -                    | OM              | -                                                      | -              | -         | IL 2022001908                                       | ENEL GENERACION | -    | -         |
| 21:17      | -        | TALTAL-1       | TALTAL-1 GNL C                     | MT       | N      | LC  | MT           | -                    | OM              | Más SSSC                                               | -              | -         | -                                                   | ENEL GENERACION | -    | -         |
| 21:17      | -        | TALTAL-2       | TALTAL-2 GNL C                     | MT       | N      | LC  | MT           | -                    | OM              | -                                                      | -              | -         | -                                                   | ENEL GENERACION | -    | -         |
| 21:17      | -        | CMPLAJA        | CMPLAJA BL1+BL2 COGEN              | PC       | N      | -   | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 21:34      | -        | CMPCCORDILLERA | CMPCCORDILLERA GN A                | 0        | DN     | DLC | FS           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 22:18      | -        | SANISIDRO-1    | SANISIDRO-1 TG1 GN A               | RO       | LC     | PS  | -            | -                    | OM              | -                                                      | -              | -         | IL 2022001908                                       | ENEL GENERACION | -    | -         |
| 22:27      | -        | SANISIDRO-1    | SANISIDRO-1 TG1 GN A               | 0        | DRO    | DLC | FS           | -                    | OM              | -                                                      | -              | -         | IL 2022001908                                       | ENEL GENERACION | -    | -         |
| 22:41      | -        | GUACOLDA-3     | GUACOLDA-3_CAR                     | MT       | RO     | -   | MT           | -                    | OM              | Más SSSC                                               | -              | -         | IL 2023001070 -<br>IL 2023000134 -<br>IL 2023000521 | RNE             | -    | -         |
| 22:41      | -        | MEJILLONES-1EM | MEJILLONES-1EM_CAR                 | MT       | N      | -   | MT           | -                    | OM              | -                                                      | -              | -         | -                                                   | ENGIE           | -    | -         |
| 22:41      | -        | SANTAFE        | SANTAFE BL1+BL2+BL3 COGEN          | PC       | N      | -   | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | SANTA FE        | -    | -         |
| 22:41      | -        | GUACOLDA-1     | GUACOLDA-1_CAR                     | MT       | N      | -   | MT           | PCP                  | OM              | Más SSSC                                               | -              | -         | IL 2023001376 -<br>IL 2023001631                    | RNE             | -    | -         |
| 22:41      | -        | ENAPACONCAGUA  | ENAPACONCAGUA COGEN                | MT       | RO     | -   | MT           | CF                   | OM              | -                                                      | -              | -         | IL 2023001308                                       | ENAP            | -    | -         |
| 22:41      | -        | CHOLGUAN       | CHOLGUAN BL1 COGEN                 | MT       | N      | -   | MT           | -                    | OM              | -                                                      | -              | -         | -                                                   | ARAUCO          | -    | -         |
| 22:41      | -        | LAUTARO-2      | LAUTARO-2 BL1 COGEN                | PC       | N      | -   | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | COMASA          | -    | -         |
| 22:41      | -        | SANISIDRO-2    | SANISIDRO-2 TG1+TV1_FSTVU_GN_A     | 200      | RO     | LC  | CI           | -                    | OM              | -                                                      | -              | -         | IL 2022001909                                       | ENEL GENERACION | -    | -         |
| 22:53      | -        | RAPEL-5        | RAPEL                              | MT       | RO     | -   | PS           | -                    | OT              | Finaliza SSSC                                          | -              | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION | -    | -         |
| 22:56      | -        | ANGOSTURA-3    | RALCO sinv                         | -        | DN     | -   | PP           | -                    | OT              | -                                                      | -              | -         | -                                                   | COLBUN          | -    | -         |
| 22:56      | -        | SANISIDRO-2    | SANISIDRO-2 TG1+TV1_FSTVU_GN_A     | PC       | RO     | LC  | PC           | -                    | OM              | -                                                      | -              | -         | IL 2022001909                                       | ENEL GENERACION | -    | -         |
| 22:57      | -        | RAPEL-5        | RAPEL                              | 0        | DRO    | -   | FS           | -                    | OT              | -                                                      | -              | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION | -    | -         |
| 22:58      | -        | NUEVAALDEA     | NUEVAALDEA BL1 COGEN               | DF       | -      | -   | FS           | -                    | SIF             | Salen del servicio en forma intempestiva Nueva Aldea 3 | -              | -         | -                                                   | ARAUCO          | -    | -         |
| 23:00      | -        | ATACAMA-1TG1AB | ATACAMA-1TG1AB TG1A+TG1B+TV1_GNL_C | PC       | RO     | LC  | PC           | -                    | OM              | Cambio de combustible de GNL_B a GNL_C                 | -              | -         | IL 2021001953                                       | ENEL GENERACION | -    | -         |
| 23:00      | -        | ATACAMA-2TG2AB | ATACAMA-2TG2AB TG2A+TG2B+TV2_GNL_C | PC       | RO     | LC  | PC           | -                    | OM              | Cambio de combustible de GNL_B a GNL_C                 | -              | -         | IL 2021001953                                       | ENEL GENERACION | -    | -         |
| 23:00      | -        | ANGOSTURA-3    | RALCO sinv                         | MT       | N      | -   | MT           | -                    | OT              | Sincronizada                                           | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:00      | -        | CANDELARIA-1   | CANDELARIA-1 GN A                  | MT       | N      | LC  | MT           | -                    | OM              | Finaliza SSSC                                          | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:00      | -        | CANDELARIA-2   | CANDELARIA-2 GN A                  | MT       | N      | LC  | MT           | -                    | OM              | Finaliza SSSC                                          | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:11      | -        | CANDELARIA-1   | CANDELARIA-1 GN A                  | MT       | N      | LC  | PS           | -                    | OM              | -                                                      | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:18      | -        | CANDELARIA-2   | CANDELARIA-2 GN A                  | MT       | N      | LC  | PS           | -                    | OM              | -                                                      | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:19      | -        | CANDELARIA-1   | CANDELARIA-1 GN A                  | 0        | DN     | DLC | FS           | -                    | OM              | -                                                      | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:25      | -        | CANDELARIA-2   | CANDELARIA-2 GN A                  | 0        | DN     | DLC | FS           | -                    | OM              | -                                                      | -              | -         | -                                                   | COLBUN          | -    | -         |
| 23:34      | -        | SANISIDRO-2    | SANISIDRO-2 TG1+TV1_FSTVU_GN_A     | 200      | RO     | LC  | CI           | -                    | OM              | -                                                      | -              | -         | IL 2022001909                                       | ENEL GENERACION | -    | -         |
| 23:43      | -        | SANISIDRO-2    | SANISIDRO-2 TG1+TV1_FSTVU_GN_A     | MT       | RO     | LC  | MT           | -                    | OM              | -                                                      | -              | -         | IL 2022001909                                       | ENEL GENERACION | -    | -         |
| 23:43      | -        | ESCUADRON      | ESCUADRON COGEN                    | MT       | LF     | -   | MT           | PCP                  | OM              | -                                                      | -              | -         | IL 2023001648                                       | ESCUADRON       | -    | -         |
| 23:43      | -        | NEHUENCO-2     | NEHUENCO-2 TG1+TV1_GN_A            | MT       | RO     | LC  | MT           | -                    | OM              | -                                                      | -              | -         | IL 2023000829 -<br>IL 2023001565                    | COLBUN          | -    | -         |
| 23:46      | -        | NORGENER-NT02  | NORGENER-NT02_CAR                  | MT       | RO     | -   | MT           | -                    | OM              | -                                                      | -              | -         | IL 2023001479                                       | AES ANDES       | -    | -         |
| 23:46      | -        | LAUTARO-1      | LAUTARO-1 BL1 COGEN                | PC       | N      | -   | PC           | -                    | OM              | -                                                      | -              | -         | -                                                   | COMASA          | -    | -         |
| 23:55      | -        | RAPEL-5        | RAPEL                              | -        | DRO    | -   | PP           | -                    | OT              | Por SSSC                                               | -              | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION | -    | -         |
| 23:59      | -        | RAPEL-5        | RAPEL                              | MT       | RO     | -   | MT           | -                    | OT              | Sincronizada más SSSC                                  | -              | N         | IL 2021001068 -<br>SD2023093107                     | ENEL GENERACION | -    | -         |
| 23:59      | -        | MOV. CMG       | -                                  | -        | -      | -   | -            | -                    | -               | Movimiento para estimar CMG horario fh                 | -              | -         | -                                                   | CDC             | -    | -         |
| 23:59      | -        | -              | -                                  | -        | -      | -   | -            | -                    | -               | Movimiento para estimación del Cmg On-Line             | -              | -         | -                                                   | -               | -    | -         |

# INFORME DIARIO

Domingo 29 de Octubre del 2023



## DESVIACIONES DE LA PROGRAMACION

### 1.1. Centrales

| Centrales                 | Prog.   | Real    | Desv %       | Estado | Centrales                   | Prog. | Real  | Desv %     | Estado  |
|---------------------------|---------|---------|--------------|--------|-----------------------------|-------|-------|------------|---------|
| BESS Andes                | -       | 0.0     | -            | DF     | PMG HP Renaico              | 104.7 | 128.8 | +22.96 %   | PMG     |
| BESS Angamos              | -       | 5.9     | GNP          |        | PMG HP Rio Huasco           | 24.4  | 25.4  | +4.05 %    | PMG     |
| BESS Arica                | 2.0     | 0.0     | -100.00 %    |        | PMG HP San Clemente         | 92.5  | 101.8 | +10.05 %   | PMG     |
| BESS Cochrane             | -       | 0.0     | -            | LF     | PMG PE La Esperanza         | 58.1  | 0.0   | -100.00 %  | PMG     |
| BESS Diego de Almagro Sur | -       | 32.3    | GNP          |        | PMG PFV Antay               | 30.6  | 74.5  | +143.36 %  | PMG     |
| BESS Salvador             | -       | 292.4   | GNP          |        | PMG PFV Caracas II          | 0.0   | 0.0   | -          | PMG     |
| CSP Cerro Dominador       | 0.0     | 0.0     | -            | DF     | PMG PFV Castilla            | 19.5  | 24.1  | +23.90 %   | PMG     |
| GEO Cerro Pabellon        | 1176.0  | 1338.1  | +13.78 %     |        | PMG PFV Chercan             | -     | 64.9  | -          | PMG     |
| HE Angostura              | 6699.2  | 4867.0  | (*) -27.35 % |        | PMG PFV De los Andes        | 91.0  | 87.3  | -4.04 %    | PMG     |
| HE Antuco                 | 6033.8  | 5485.6  | -9.09 %      |        | PMG PFV Del Desierto        | 60.3  | 55.7  | -7.49 %    | PMG     |
| HE Canutillar             | 783.9   | 1566.0  | +99.78 %     |        | PMG PFV Loma Los Colorados  | 3.6   | 4.7   | +30.56 %   | PMG, P  |
| HE Cipreses               | 569.4   | 800.2   | +40.54 %     |        | PMG PFV Lucas Solar         | -     | 0.0   | -          | PMG     |
| HE Colbún                 | 10080.0 | 8810.0  | (*) -12.60 % |        | PMG PFV Machicura           | 27.8  | 15.9  | -42.83 %   | PMG     |
| HE El Toro                | 0.0     | 19.6    | GNP          |        | PMG PFV North West          | -     | 0.0   | -          | PMG     |
| HE Machicura              | 2016.0  | 1953.0  | -3.12 %      | RO     | PMG PFV Palermo             | -     | 0.0   | -          | PMG     |
| HE Pangué                 | 5953.1  | 6390.2  | +7.34 %      |        | PMG PFV Pilar Los Amarillos | 0.3   | 16.1  | +5534.64 % | PMG     |
| HE Pehuenche              | 11780.8 | 11387.9 | -3.33 %      |        | PMG PFV Piloto Cardones     | 1.7   | 1.5   | -13.87 %   | PMG     |
| HE Pilmaiquén             | 687.0   | 610.9   | -11.08 %     | RO     | PMG PFV Puerto Seco         | 78.1  | 87.6  | +12.21 %   | PMG     |
| HE Ralco                  | 11231.9 | 10987.4 | -2.18 %      |        | PMG PFV Quilmo              | -     | 0.0   | -          | PMG     |
| HE Rapel                  | 3431.4  | 3222.5  | -6.09 %      |        | PMG PFV SDGx01              | 6.2   | 5.6   | -9.68 %    | PMG, DF |
| HP Abanico                | 909.2   | 890.2   | -2.08 %      |        | PMG PFV Sol del Norte       | 78.6  | 78.5  | -0.09 %    | PMG     |
| HP Alfalfal               | 1629.2  | 1487.4  | -8.70 %      |        | PMG PFV Teno Solar          | 12.0  | 16.0  | +33.92 %   | PMG     |
| HP Alfalfal 2             | 0.0     | 0.0     | -            |        | PMG PFV Venezia             | -     | 0.0   | -          | PMG     |
| HP Ancoa                  | 391.2   | 373.6   | -4.49 %      | LF     | PMG TER Aguas Blancas       | 0.0   | 0.0   | -          | PMG     |
| HP Blanco                 | 563.0   | 642.1   | +14.05 %     |        | PMG TER CMPC Tissue         | -     | 27.7  | -          | PMG     |
| HP Capullo                | 276.0   | 273.3   | -0.98 %      |        | PMG TER Calle Calle         | 0.0   | 0.0   | -          | PMG, DF |
| HP Carilafquen            | 384.0   | 199.8   | -47.96 %     |        | PMG TER Celco               | 84.2  | 93.9  | +11.46 %   | PMG     |
| HP Chacabucuito           | 439.8   | 443.7   | +0.89 %      |        | PMG TER Chiloé              | 4.3   | 0.0   | -100.00 %  | PMG     |
| HP Chacayes               | 2086.7  | 2367.1  | +13.44 %     |        | PMG TER Concón              | 0.0   | 0.0   | -          | PMG     |
| HP Chapiquina             | 131.0   | 124.2   | -5.19 %      |        | PMG TER Constitución        | 0.0   | 0.0   | -          | PMG     |
| HP Convento Viejo         | 360.0   | 363.0   | +0.83 %      |        | PMG TER El Totoral          | 0.0   | 0.0   | -          | PMG     |
| HP Coya                   | 0.0     | 0.0     | -            |        | PMG TER Las Vegas           | 0.0   | 0.0   | -          | PMG     |
| HP Cumbres                | 363.0   | 337.0   | -7.16 %      |        | PMG TER Licantén            | 0.0   | 0.0   | -          | PMG, DF |
| HP Curillinque            | 1821.3  | 1862.5  | +2.26 %      |        | PMG TER Linares Norte       | 0.0   | 0.0   | -          | PMG     |
| HP Digua                  | 240.0   | 273.7   | +14.05 %     |        | PMG TER Loma Los Colorados  | 0.0   | 0.0   | -          | PMG     |
| HP El Paso                | 348.0   | 253.3   | -27.21 %     |        | PMG TER Maule               | 0.0   | 0.0   | -          | PMG     |
| HP El Pinar               | 0.0     | 0.0     | -            | P      | PMG TER Placilla            | 0.0   | 0.0   | -          | PMG, MM |
| HP Florida II             | 269.0   | 236.5   | -12.08 %     |        | PMG TER Quintay             | 0.0   | 0.0   | -          | PMG     |
| HP Guayacán               | 212.6   | 238.4   | +12.14 %     |        | PMG TER San Gregorio        | 0.0   | 0.0   | -          | PMG     |
| HP Hornitos               | 412.0   | 472.6   | +14.71 %     |        | PMGD PFV Blu                | -     | 0.0   | -          |         |
| HP Isla                   | 1460.7  | 1508.2  | +3.25 %      |        | PMGD PFV Paillihue          | -     | 0.0   | -          |         |
| HP Itata                  | 166.0   | 478.0   | +187.95 %    |        | TER Andes Generación Diésel | 0.0   | 0.0   | -          |         |

| Centrales         | Prog.  | Real   | Desv %    | Estado |
|-------------------|--------|--------|-----------|--------|
| HP Juncal         | 335.0  | 386.1  | +15.25 %  |        |
| HP La Confluencia | 0.0    | 0.0    | -         | DF     |
| HP La Higuera     | 0.0    | 0.0    | -         | DF     |
| HP La Mina        | 0.0    | 0.0    | -         |        |
| HP Laja I         | 614.6  | 554.4  | -9.80 %   |        |
| HP Las Lajas      | 0.0    | 0.0    | -         | DF     |
| HP Lican          | 155.0  | 331.2  | +113.70 % |        |
| HP Lircay         | 480.0  | 483.7  | +0.77 %   |        |
| HP Loma Alta      | 0.0    | 0.0    | -         | MM     |
| HP Los Hierros    | 504.0  | 484.4  | -3.89 %   |        |
| HP Los Hierros II | 0.0    | 0.0    | -         | DF     |
| HP Los Molles     | 39.8   | 40.7   | +2.13 %   |        |
| HP Los Quilos     | 733.0  | 752.7  | +2.69 %   |        |
| HP Maitenes       | 0.0    | 0.0    | -         |        |
| HP Malalcahuello  | 192.0  | 113.2  | -41.04 %  |        |
| HP Mampil         | 792.6  | 490.3  | -38.14 %  |        |
| HP Mocho          | 300.0  | 220.3  | -26.57 %  |        |
| HP Palmucho       | 768.0  | 752.7  | -1.99 %   |        |
| HP Peuchen        | 1088.8 | 361.9  | -66.76 %  |        |
| HP Providencia    | 0.0    | 0.0    | -         | DF     |
| HP Pullinque      | 756.6  | 664.8  | -12.14 %  |        |
| HP Puntilla       | 284.5  | 326.3  | +14.69 %  | DF     |
| HP Queltehués     | 768.0  | 707.9  | -7.83 %   | DF     |
| HP Quilleco       | 1680.0 | 1605.0 | -4.46 %   |        |
| HP Río Colorado   | 379.2  | 369.9  | -2.45 %   |        |
| HP Río Picoiquén  | 243.5  | 431.2  | +77.06 %  |        |
| HP Rucatayo       | 762.0  | 692.9  | -9.06 %   |        |
| HP Rucue          | 4272.0 | 3963.0 | -7.23 %   |        |
| HP San Andrés     | 203.2  | 76.0   | -62.61 %  |        |
| HP San Ignacio    | 0.0    | 0.0    | -         | MM     |
| HP Sauzal         | 1375.0 | 1545.7 | +12.42 %  |        |
| HP Sauzal 60 Hz   | -      | 0.0    | -         |        |
| HP Sauzalito      | 214.0  | 0.0    | -100.00 % | DF     |
| HP Volcán         | 151.2  | 153.6  | +1.59 %   |        |
| PE Alena          | 501.4  | 6.7    | -98.66 %  |        |
| PE Atacama        | 1067.8 | 624.0  | -41.57 %  |        |
| PE Aurora         | 1091.9 | 992.4  | -9.11 %   |        |
| PE Cabo Leones 1  | 805.4  | 909.4  | +12.91 %  |        |
| PE Cabo Leones 2  | 1445.9 | 780.6  | -46.02 %  |        |
| PE Cabo Leones 3  | 911.9  | 746.6  | -18.14 %  |        |
| PE Calama         | 792.7  | 1053.0 | +32.83 %  |        |
| PE Campo Lindo    | 342.5  | 796.7  | +132.63 % |        |
| PE Canela         | 22.4   | 27.0   | +20.89 %  |        |
| PE Canela 2       | 114.3  | 86.2   | -24.60 %  |        |
| PE Cardonal       | -      | 0.0    | -         |        |
| PE Cerro Tigre    | 857.5  | 886.4  | +3.36 %   |        |
| PE Cuel           | 226.1  | 0.0    | -100.00 % |        |
| PE El Arrayán     | 422.7  | 156.1  | -63.07 %  |        |
| PE El Maitén      | 58.4   | 46.9   | -19.82 %  |        |
| PE La Cabaña      | 0.0    | 608.9  | GNP       | P      |
| PE La Estrella    | 361.9  | 385.2  | +6.43 %   |        |

| Centrales                   | Prog.  | Real   | Desv %    | Estado |
|-----------------------------|--------|--------|-----------|--------|
| TER Andes Generación FO6    | 1.5    | 0.0    | -100.00 % |        |
| TER Angamos-ANG1            | 4457.4 | 4334.5 | -2.76 %   |        |
| TER Angamos-ANG2            | 4511.8 | 4341.1 | -3.78 %   |        |
| TER Antihue                 | 0.0    | 0.0    | -         |        |
| TER Arauco                  | 178.5  | 56.0   | -68.62 %  |        |
| TER Arauco MAPA             | 570.0  | 0.0    | -100.00 % | P      |
| TER Arica-GMAR              | 0.0    | 0.0    | -         |        |
| TER Arica-M1AR              | 0.0    | 0.0    | -         | LF     |
| TER Arica-M2AR              | 0.0    | 0.0    | -         |        |
| TER Atacama 1 Diésel        | 0.0    | 0.0    | -         | LF     |
| TER Atacama 1 GNL           | 3004.1 | 4004.6 | +33.30 %  |        |
| TER Atacama 1 Gas Arg       | 0.0    | 0.0    | -         |        |
| TER Atacama 2 Diésel        | 0.0    | 0.0    | -         |        |
| TER Atacama 2 GNL           | 2822.4 | 3237.2 | +14.69 %  | LF     |
| TER Atacama 2 Gas Arg       | 0.0    | 0.0    | -         |        |
| TER CBB Centro Diésel       | 0.0    | 0.0    | -         | LF     |
| TER CBB Centro FO6          | 0.0    | 0.0    | -         | LF     |
| TER CMPC Cordillera GNL     | 0.0    | 0.0    | -         |        |
| TER CMPC Cordillera Gas Arg | 0.0    | 52.2   | GNP       |        |
| TER CMPC Laja               | 192.1  | 282.1  | +46.85 %  |        |
| TER CMPC Pacífico           | 0.0    | 80.5   | GNP       | MM     |
| TER CMPC Santa Fe           | 120.0  | 0.0    | -100.00 % |        |
| TER Campiche                | 0.0    | 0.0    | -         |        |
| TER Candelaria 1 Diésel     | 0.0    | 0.0    | -         |        |
| TER Candelaria 1 GNL        | 0.0    | 0.0    | -         |        |
| TER Candelaria 1 Gas Arg    | 186.2  | 210.0  | +12.79 %  |        |
| TER Candelaria 2 Diésel     | 0.0    | 0.0    | -         |        |
| TER Candelaria 2 GNL        | 0.0    | 0.0    | -         |        |
| TER Candelaria 2 Gas Arg    | 241.3  | 271.0  | +12.30 %  |        |
| TER Cardones                | 0.0    | 0.0    | -         |        |
| TER Cenizas                 | 0.0    | 0.0    | -         |        |
| TER Chagual                 | 0.0    | 0.0    | -         |        |
| TER Cholguán                | 116.1  | 56.0   | -51.79 %  |        |
| TER Chuyaca                 | 0.0    | 0.0    | -         | LF     |
| TER Cochrane-CCH1           | 4173.0 | 4175.6 | +0.06 %   |        |
| TER Cochrane-CCH2           | 4172.3 | 4209.4 | +0.89 %   |        |
| TER Cogeneradora Aconcagua  | 258.6  | 0.0    | -100.00 % |        |
| TER Cogeneradora Biobío     | 492.0  | 1100.5 | +123.68 % |        |
| TER Colihues Diésel         | 0.0    | 0.0    | -         | DF     |
| TER Colihues HFO            | 0.0    | 0.0    | -         |        |
| TER Colmito Diésel          | 0.0    | 0.0    | -         | MM     |
| TER Colmito GNL             | 0.0    | 0.0    | -         | MM     |
| TER Colmito Gas Arg         | 0.0    | 0.0    | -         | MM     |
| TER Combarbala              | 0.0    | 0.0    | -         |        |
| TER Coronel Diésel          | 0.0    | 0.0    | -         |        |
| TER Coronel GNL             | 0.0    | 0.0    | -         |        |
| TER Coronel Gas Arg         | 0.0    | 0.0    | -         |        |
| TER Degañ                   | 0.0    | 0.0    | -         |        |
| TER Degañ 2                 | 0.0    | 0.0    | -         |        |
| TER Diego de Almagro        | 0.0    | 0.0    | -         |        |
| TER El Peñón                | 1.3    | 0.0    | -100.00 % |        |

| Centrales               | Prog.  | Real   | Desv %       | Estado |
|-------------------------|--------|--------|--------------|--------|
| PE La Flor              | 207.2  | 0.0    | -100.00 %    |        |
| PE Lebu                 | 81.4   | 27.3   | -66.45 %     |        |
| PE Llanos del Viento    | 985.6  | 991.6  | +0.61 %      |        |
| PE Lomas de Duqueco     | 568.8  | 585.0  | +2.85 %      |        |
| PE Los Buenos Aires     | 205.0  | 189.2  | -7.71 %      |        |
| PE Los Cerrillos        | -      | 0.0    | -            |        |
| PE Los Cururos          | 215.9  | 201.7  | -6.59 %      |        |
| PE Los Olmos            | 522.2  | 933.7  | +78.82 %     | LF     |
| PE Malleco Norte        | 851.4  | 1228.6 | +44.30 %     |        |
| PE Malleco Sur          | 747.5  | 1225.8 | +63.99 %     |        |
| PE Manantiales          | -      | 0.0    | -            |        |
| PE Mesamavida           | 366.2  | 8.6    | -97.65 %     |        |
| PE Monte Redondo        | 87.1   | 79.8   | -8.36 %      |        |
| PE Negrete              | 199.4  | 107.1  | -46.30 %     |        |
| PE Puelche Sur          | 1023.5 | 1140.8 | +11.46 %     |        |
| PE Punta Colorada       | 10.4   | 0.0    | -100.00 %    | LF     |
| PE Punta Palmeras       | 54.1   | 67.5   | +24.88 %     |        |
| PE Punta Sierra         | 349.4  | 222.8  | -36.22 %     |        |
| PE Renaico              | 371.0  | 390.2  | +5.19 %      |        |
| PE Renaico II           | 331.4  | 752.2  | +126.98 %    |        |
| PE San Gabriel          | 1134.7 | 1068.8 | -5.81 %      |        |
| PE San Juan             | 3077.7 | 1067.5 | (*) -65.32 % |        |
| PE San Matías           | -      | 0.0    | -            |        |
| PE San Pedro            | 392.8  | 339.2  | -13.65 %     |        |
| PE San Pedro 2          | 685.9  | 759.0  | +10.65 %     |        |
| PE Sarco                | 947.9  | 1011.2 | +6.68 %      |        |
| PE Sierra Gorda Este    | 612.3  | 764.6  | +24.89 %     | LF     |
| PE Talinay Oriente      | 392.4  | 328.6  | -16.25 %     |        |
| PE Talinay Poniente     | 239.2  | 230.2  | -3.75 %      |        |
| PE Taltal               | 1094.3 | 1714.6 | +56.68 %     |        |
| PE Tchamma              | 667.1  | 1065.8 | +59.77 %     |        |
| PE Tolpan Sur           | 436.0  | 530.1  | +21.56 %     |        |
| PE Totoral              | 140.9  | 77.5   | -45.00 %     |        |
| PE Ucuquer 2            | 65.2   | 0.0    | -100.00 %    | LF     |
| PE Valle de los Vientos | 380.9  | 504.1  | +32.35 %     |        |
| PFV Almeyda             | 418.7  | 406.2  | -2.99 %      |        |
| PFV Andes Solar         | 159.4  | 114.4  | -28.23 %     |        |
| PFV Andes Solar II-A    | 646.5  | 378.5  | -41.45 %     |        |
| PFV Andes Solar II-B    | 1412.3 | 1083.7 | -23.27 %     |        |
| PFV Andes Solar IV      | -      | 0.0    | -            |        |
| PFV Atacama Solar II    | 663.3  | 777.0  | +17.14 %     | LF     |
| PFV Azabache            | 453.9  | 347.7  | -23.41 %     | LF     |
| PFV Bolero              | 842.6  | 732.4  | -13.08 %     |        |
| PFV CEME 1              | -      | 0.0    | -            |        |
| PFV Campos del Sol      | 1670.9 | 2021.0 | +20.95 %     |        |
| PFV Capricornio         | 736.2  | 433.4  | -41.13 %     |        |
| PFV Carrera Pinto       | 392.6  | 436.7  | +11.24 %     |        |
| PFV Cerro Dominador     | 279.8  | 546.1  | +95.16 %     |        |
| PFV Chañares            | 3.1    | 179.1  | +5639.42 %   |        |
| PFV Conejo              | 20.5   | 594.5  | +2800.62 %   |        |

| Centrales                   | Prog.  | Real   | Desv %    | Estado |
|-----------------------------|--------|--------|-----------|--------|
| TER El Salvador             | 0.0    | 0.0    | -         |        |
| TER Emelda                  | 0.0    | 0.0    | -         |        |
| TER Energía Pacífico        | 270.0  | 363.7  | +34.69 %  | LF     |
| TER Escuadrón               | 42.1   | 25.7   | -38.92 %  | LF     |
| TER Esperanza-DS1           | 0.0    | 0.0    | -         |        |
| TER Esperanza-DS2           | 0.0    | 0.0    | -         |        |
| TER Esperanza-TG1           | 0.0    | 0.0    | -         |        |
| TER Guacolda 1              | 2241.0 | 2061.0 | -8.03 %   | LF     |
| TER Guacolda 2              | 809.0  | 733.7  | -9.30 %   | LF     |
| TER Guacolda 3              | 2076.3 | 2110.1 | +1.63 %   |        |
| TER Guacolda 4              | 0.0    | 0.0    | -         |        |
| TER Guacolda 5              | 0.0    | 0.0    | -         |        |
| TER Horcones Diésel         | 0.0    | 0.0    | -         |        |
| TER Horcones Gas Arg        | -      | 0.0    | -         |        |
| TER Huasco Diésel           | 0.0    | 0.0    | -         |        |
| TER Huasco IFO              | 0.0    | 0.0    | -         |        |
| TER IEM                     | 4729.1 | 4867.1 | +2.92 %   |        |
| TER Kelar Diésel            | 0.0    | 0.0    | -         |        |
| TER Kelar GNL               | 0.0    | 0.0    | -         | DF     |
| TER Kelar Gas Arg           | 0.0    | 0.0    | -         |        |
| TER La Portada              | 0.0    | 0.0    | -         |        |
| TER Laja Energía Verde      | 107.0  | 102.0  | -4.63 %   |        |
| TER Lautaro I               | 126.0  | 389.1  | +208.84 % |        |
| TER Lautaro II              | 104.0  | 419.7  | +303.55 % |        |
| TER Llanos Blancos          | 0.0    | 0.0    | -         |        |
| TER Loma Los Colorados II   | 182.0  | 240.3  | +32.03 %  |        |
| TER Los Espinos             | 0.0    | 0.0    | -         |        |
| TER Los Guindos TG1         | 0.0    | 0.0    | -         |        |
| TER Los Guindos TG2         | 0.0    | 0.0    | -         |        |
| TER Los Pinos               | 0.0    | 0.0    | -         |        |
| TER Los Vientos Diésel      | 0.0    | 0.0    | -         |        |
| TER Los Vientos GNL         | 0.0    | 0.0    | -         | MM     |
| TER Los Vientos Gas Arg     | -      | 0.0    | -         |        |
| TER Maitencillo             | 0.0    | 0.0    | -         | P      |
| TER Mantos Blancos          | 0.0    | 0.0    | -         | DF     |
| TER Masisa                  | 39.0   | 0.0    | -100.00 % | LF     |
| TER Mejillones-CTA          | 0.0    | 0.0    | -         |        |
| TER Mejillones-CTH          | 0.0    | 0.0    | -         |        |
| TER Mejillones-CTM1         | 0.0    | 0.0    | -         |        |
| TER Mejillones-CTM2         | 0.0    | 0.0    | -         | LF     |
| TER Mejillones-CTM3 Diesel  | 0.0    | 0.0    | -         |        |
| TER Mejillones-CTM3 GNL     | 0.0    | 0.0    | -         | MM     |
| TER Mejillones-CTM3 Gas Arg | 0.0    | 0.0    | -         |        |
| TER Nehuenco 9B Diésel      | 0.0    | 0.0    | -         |        |
| TER Nehuenco 9B GNL         | 0.0    | 0.0    | -         |        |
| TER Nehuenco 9B Gas Arg     | 0.0    | 0.0    | -         |        |
| TER Nehuenco I Diésel       | 0.0    | 0.0    | -         |        |
| TER Nehuenco I GNL          | 0.0    | 0.0    | -         | MM     |
| TER Nehuenco I Gas Arg      | 0.0    | 0.0    | -         |        |
| TER Nehuenco II Diésel      | 0.0    | 0.0    | -         |        |

| Centrales                  | Prog.  | Real   | Desv %        | Estado | Centrales                 | Prog.  | Real   | Desv %    | Estado |
|----------------------------|--------|--------|---------------|--------|---------------------------|--------|--------|-----------|--------|
| PFV Coya                   | 518.6  | 807.9  | +55.78 %      |        | TER Nehuenco II GNL       | 0.0    | 0.0    | -         |        |
| PFV Diego de Almagro       | 1.3    | 145.3  | +10909.09 %   |        | TER Nehuenco II Gas Arg   | 6412.0 | 6630.0 | +3.40 %   |        |
| PFV Diego de Almagro Sur   | 48.0   | 1032.5 | +2051.04 %    |        | TER Newen Diésel          | 0.0    | 0.0    | -         |        |
| PFV Domeyko                | 2086.7 | 920.1  | (*) -55.91 %  |        | TER Newen GNL             | 0.0    | 0.0    | -         |        |
| PFV Don Oscar              | -      | 0.0    | -             | PMG    | TER Newen Gas Arg         | 0.0    | 0.0    | -         |        |
| PFV Doña Antonia           | -      | 0.0    | -             |        | TER Newen Otros           | 0.0    | 0.0    | -         |        |
| PFV Doña Carmen            | 120.7  | 159.0  | +31.70 %      |        | TER Norgener-NT01         | 0.0    | 0.0    | -         | RO     |
| PFV El Aguila              | 0.1    | 14.9   | +14800.00 %   |        | TER Norgener-NT02         | 2256.9 | 2382.8 | +5.58 %   | RO     |
| PFV El Manzano             | -      | 109.3  | GNP           | P      | TER Nueva Aldea           | 658.0  | 939.9  | +42.84 %  |        |
| PFV El Pelicano            | 433.4  | 574.6  | +32.59 %      |        | TER Nueva Aldea I         | 0.0    | -      | -         |        |
| PFV El Romero              | 1036.7 | 858.9  | -17.15 %      |        | TER Nueva Aldea II        | 0.0    | 0.0    | -         |        |
| PFV Elena                  | 34.5   | 20.3   | -41.28 %      | P      | TER Nueva Aldea III       | 0.0    | -      | -         |        |
| PFV Finis Terrae           | 687.7  | 1304.4 | +89.67 %      |        | TER Nueva Renca Diésel    | 0.0    | 0.0    | -         |        |
| PFV Granja Solar           | 398.0  | 739.6  | +85.82 %      |        | TER Nueva Renca GNL       | 0.0    | 1695.0 | (*)GNP    |        |
| PFV Guanchoi               | 360.1  | 2205.8 | (*) +512.53 % |        | TER Nueva Renca Gas Arg   | 0.0    | 0.0    | -         |        |
| PFV Huatacondo             | 275.2  | 408.2  | +48.34 %      |        | TER Nueva Ventanas        | 0.0    | 0.0    | -         | LF     |
| PFV Jama                   | 214.5  | 459.4  | +114.15 %     |        | TER Olivos                | 0.0    | 0.0    | -         |        |
| PFV Javiera                | 13.2   | 383.7  | +2807.98 %    |        | TER PAS Mejillones        | 408.0  | 524.1  | +28.46 %  |        |
| PFV La Cruz Solar          | 193.6  | 328.3  | +69.60 %      |        | TER Pajonales             | 0.0    | 0.0    | -         |        |
| PFV La Huayca II           | 79.5   | 155.2  | +95.35 %      |        | TER Punta Colorada Diésel | 0.0    | 0.0    | -         |        |
| PFV La Huella              | 559.3  | 371.4  | -33.60 %      |        | TER Punta Colorada IFO    | 0.0    | 0.0    | -         |        |
| PFV La Silla               | 9.9    | 13.3   | +34.75 %      |        | TER Quintero 1A Diésel    | 0.0    | 0.0    | -         |        |
| PFV Lalackama              | 10.5   | 271.6  | +2486.67 %    |        | TER Quintero 1A GNL       | 0.0    | 0.0    | -         |        |
| PFV Lalackama II           | 2.0    | 80.9   | +3946.50 %    |        | TER Quintero 1A Gas Arg   | 0.0    | 0.0    | -         |        |
| PFV Las Salinas            | 120.6  | 0.0    | -100.00 %     | P      | TER Quintero 1B Diésel    | 0.0    | 0.0    | -         |        |
| PFV Llano de Llampos       | 504.7  | 577.6  | +14.45 %      |        | TER Quintero 1B GNL       | 0.0    | 0.0    | -         |        |
| PFV Los Loros              | 301.1  | 203.0  | -32.57 %      |        | TER Quintero 1B Gas Arg   | 0.0    | 0.0    | -         |        |
| PFV Los Tilos              | 30.8   | 17.6   | -43.01 %      |        | TER Renca                 | 0.0    | 0.0    | -         | DF     |
| PFV Luz del Norte          | 508.1  | 836.0  | +64.54 %      |        | TER San Isidro I Diésel   | 0.0    | 0.0    | -         |        |
| PFV Malgarida              | 1809.5 | 1058.1 | -41.52 %      |        | TER San Isidro I GNL      | 0.0    | 0.0    | -         |        |
| PFV María Elena            | 134.7  | 336.0  | +149.42 %     |        | TER San Isidro I Gas Arg  | 0.0    | 330.0  | GNP       |        |
| PFV Meseta de los Andes    | 821.9  | 0.0    | -100.00 %     | P      | TER San Isidro II Diésel  | 0.0    | 0.0    | -         |        |
| PFV Nuevo Quillagua        | 204.4  | 505.8  | +147.47 %     |        | TER San Isidro II GNL     | 0.0    | 0.0    | -         |        |
| PFV Pampa Camarones        | 0.8    | 57.4   | +7075.00 %    |        | TER San Isidro II Gas Arg | 0.0    | 3707.4 | (*)GNP    |        |
| PFV Pampa Solar Norte      | 10.8   | 339.0  | +3038.98 %    |        | TER San Javier 1          | 0.0    | 0.0    | -         |        |
| PFV Pampa Tigre            | 1049.4 | 591.8  | -43.60 %      |        | TER San Javier 2          | 0.0    | 0.0    | -         |        |
| PFV Pozo Almonte Solar II  | 29.2   | 69.4   | +137.31 %     |        | TER San Lorenzo 1         | 0.0    | 0.0    | -         |        |
| PFV Pozo Almonte Solar III | 59.7   | 147.6  | +147.10 %     |        | TER San Lorenzo 2         | 0.0    | 0.0    | -         |        |
| PFV Quilapilun             | 405.9  | 280.4  | -30.92 %      |        | TER San Lorenzo 3         | 0.0    | 0.0    | -         |        |
| PFV Rio Escondido          | 1385.8 | 761.8  | -45.02 %      |        | TER Santa Fe              | 706.6  | 787.4  | +11.44 %  |        |
| PFV Salvador               | 65.5   | 204.0  | +211.39 %     |        | TER Santa Lidia           | 0.0    | 0.0    | -         |        |
| PFV San Andres             | 60.1   | 227.8  | +278.96 %     | LF     | TER Santa Marta           | 204.3  | 114.9  | -43.76 %  |        |
| PFV San Pedro              | 712.7  | 680.4  | -4.54 %       |        | TER Santa María           | 0.0    | 0.0    | -         | MM     |
| PFV Santa Isabel           | 806.5  | 910.4  | +12.88 %      | LF     | TER Taltal 1 Diesel       | 0.0    | 0.0    | -         |        |
| PFV Santiago               | 382.9  | 519.8  | +35.75 %      |        | TER Taltal 1 GNL          | 74.4   | 325.0  | +337.12 % |        |
| PFV Sol de Lila            | 1580.7 | 781.2  | -50.58 %      |        | TER Taltal 1 Gas Arg      | 0.0    | 0.0    | -         |        |
| PFV Sol de los Andes       | 19.6   | 493.1  | +2417.97 %    |        | TER Taltal 2 Diesel       | 0.0    | 0.0    | -         |        |
| PFV Sol del Desierto       | 709.8  | 1210.0 | +70.48 %      |        | TER Taltal 2 GNL          | 0.0    | 318.0  | GNP       |        |
| PFV Tamaya Solar           | 1180.5 | 566.0  | -52.05 %      |        | TER Taltal 2 Gas Arg      | 0.0    | 0.0    | -         |        |
| PFV Uribe Solar            | 424.1  | 321.5  | -24.21 %      | LF     | TER Tarapacá-TGTAR        | 0.0    | 0.0    | -         |        |

| Centrales               | Prog. | Real  | Desv %    | Estado  |
|-------------------------|-------|-------|-----------|---------|
| PFV Usya                | 329.4 | 253.6 | -23.02 %  |         |
| PFV Valle Escondido     | 705.3 | 458.8 | -34.95 %  |         |
| PFV Valle del Sol       | 354.5 | 872.2 | +146.03 % |         |
| PFV Willka              | 916.7 | 955.7 | +4.25 %   | P       |
| PMG HP Aillin           | 125.8 | 19.1  | -84.84 %  | PMG     |
| PMG HP Alto Renaico     | 26.5  | 26.6  | +0.26 %   | PMG     |
| PMG HP Callao           | 23.4  | 60.2  | +156.80 % | PMG     |
| PMG HP Carena           | 58.6  | 167.1 | +185.25 % | PMG, MM |
| PMG HP Chiburgo         | 192.0 | 0.0   | -100.00 % | PMG     |
| PMG HP Cipresillos      | 52.0  | 29.6  | -43.08 %  | PMG     |
| PMG HP Corrales         | 59.3  | 43.1  | -27.28 %  | PMG     |
| PMG HP Correntoso       | 86.4  | 115.9 | +34.19 %  | PMG     |
| PMG HP Dos Valles       | 0.0   | 0.0   | -         | PMG, P  |
| PMG HP El Rincón        | 6.2   | 6.2   | -         | PMG     |
| PMG HP Florida          | 0.0   | 0.0   | -         | PMG     |
| PMG HP Florida III      | 52.8  | 52.8  | -         | PMG     |
| PMG HP Juncalito        | 12.6  | 14.4  | +14.29 %  | PMG     |
| PMG HP La Confianza     | -     | 0.0   | -         | PMG     |
| PMG HP Llauquereo       | 39.6  | 7.2   | -81.96 %  | PMG     |
| PMG HP MC1              | 70.0  | 152.4 | +117.89 % | PMG     |
| PMG HP MC2              | 19.9  | 35.1  | +76.86 %  | PMG     |
| PMG HP MC3              | 57.6  | 51.2  | -11.16 %  | PMG     |
| PMG HP Mariposas        | 48.0  | 77.0  | +60.42 %  | PMG     |
| PMG HP Nalcas           | 75.6  | 124.8 | +65.16 %  | PMG     |
| PMG HP Ojos de Agua     | 169.2 | 170.5 | +0.76 %   | PMG     |
| PMG HP Palacios         | 0.0   | 0.0   | -         | PMG     |
| PMG HP Piedras Negras   | 58.6  | 0.0   | -100.00 % | PMG     |
| PMG HP Pulelfu          | 220.0 | 219.0 | -0.45 %   | PMG     |
| PMG HP Punta del Viento | 70.8  | 0.0   | -100.00 % | PMG     |

| Centrales                 | Prog.           | Real            | Desv %         | Estado |
|---------------------------|-----------------|-----------------|----------------|--------|
| TER Teno                  | 0.0             | 0.0             | -              |        |
| TER Teno Gas GLP          | 0.0             | 0.0             | -              |        |
| TER Termopacifico         | 0.0             | 0.0             | -              |        |
| TER Tocopilla-TG1         | 0.0             | 0.0             | -              |        |
| TER Tocopilla-TG2         | 0.0             | 0.0             | -              |        |
| TER Tocopilla-TG3 Diesel  | 0.0             | 0.0             | -              | RO     |
| TER Tocopilla-TG3 GNL     | 0.0             | 0.0             | -              | RO     |
| TER Tocopilla-TG3 Gas Arg | 0.0             | 0.0             | -              | RO     |
| TER Tocopilla-U16 Diesel  | 0.0             | 0.0             | -              | RO     |
| TER Tocopilla-U16 GNL     | 0.0             | 0.0             | -              | RO     |
| TER Tocopilla-U16 Gas Arg | 0.0             | 0.0             | -              | RO     |
| TER Trapen                | 4.1             | 0.0             | -100.00 %      |        |
| TER Trincao               | 8.3             | 0.0             | -100.00 %      | LF     |
| TER Ujina Diésel          | 0.0             | 0.0             | -              |        |
| TER Ujina HFO             | 0.0             | 0.0             | -              |        |
| TER Valdivia              | 404.8           | 445.1           | +9.95 %        |        |
| TER Ventanas II           | 0.0             | 0.0             | -              |        |
| TER Viñales               | 264.5           | 449.8           | +70.06 %       |        |
| TER Yungay U1 Diesel      | 0.0             | 0.0             | -              | RO     |
| TER Yungay U1 GNL         | 0.0             | 0.0             | -              | LF     |
| TER Yungay U1 Gas Arg     | 0.0             | 0.0             | -              | LF     |
| TER Yungay U2 Diesel      | 0.0             | 0.0             | -              |        |
| TER Yungay U2 GNL         | 0.0             | 0.0             | -              |        |
| TER Yungay U2 Gas Arg     | 0.0             | 0.0             | -              |        |
| TER Yungay U3 Diesel      | 0.0             | 0.0             | -              |        |
| TER Yungay U3 GNL         | 0.0             | 0.0             | -              |        |
| TER Yungay U3 Gas Arg     | 0.0             | 0.0             | -              |        |
| TER Yungay U4             | 0.0             | 0.0             | -              |        |
| <b>Total</b>              | <b>196804.7</b> | <b>204126.2</b> | <b>+3.72 %</b> |        |

## 1.2. PMGD

| Centrales                    | Prog. | Real  | Desv %    |
|------------------------------|-------|-------|-----------|
| PMGD HP Allipén              | 60.5  | 59.0  | -2.50 %   |
| PMGD HP Alto Hospicio        | 21.8  | 19.8  | -9.30 %   |
| PMGD HP Arrayán              | -     | 0.0   | -         |
| PMGD HP Auxiliar del Maipo   | 83.4  | 74.8  | -10.36 %  |
| PMGD HP Boquiamargo          | 0.0   | 0.0   | -         |
| PMGD HP Bureo                | 20.3  | 17.3  | -14.77 %  |
| PMGD HP Caliboro             | 23.7  | 13.5  | -42.76 %  |
| PMGD HP Cavancho             | 0.0   | 0.0   | -         |
| PMGD HP Chanleufu II         | 0.0   | 0.0   | -         |
| PMGD HP Collil               | 58.0  | 124.9 | +115.48 % |
| PMGD HP Contra               | -     | 0.0   | -         |
| PMGD HP Cosapilla            | 2.7   | 0.0   | -100.00 % |
| PMGD HP Cumpeo               | 0.0   | 44.5  | -         |
| PMGD HP Curileufu            | -     | 0.0   | -         |
| PMGD HP Don Walterio         | 0.0   | 65.7  | -         |
| PMGD HP Dongo                | 0.0   | 0.0   | -100.00 % |
| PMGD HP Donguil              | 0.0   | 3.8   | -         |
| PMGD HP Dosal                | -     | 0.0   | -         |
| PMGD HP Doña Hilda           | 0.0   | 2.6   | -         |
| PMGD HP El Agrio             | 53.5  | 43.8  | -18.28 %  |
| PMGD HP El Arrayán           | -     | 0.0   | -         |
| PMGD HP El Atajo             | 16.1  | 0.1   | -99.69 %  |
| PMGD HP El Brinco            | 1.4   | 1.1   | -23.60 %  |
| PMGD HP El Canelo            | 69.1  | 0.0   | -100.00 % |
| PMGD HP El Colorado          | 15.1  | 27.5  | +82.29 %  |
| PMGD HP El Diuto             | 70.0  | 14.2  | -79.77 %  |
| PMGD HP El Galpón            | 30.2  | 13.5  | -55.48 %  |
| PMGD HP El Llano             | 0.0   | 0.0   | -         |
| PMGD HP El Manzano           | 22.3  | 48.0  | +115.43 % |
| PMGD HP El Mirador           | 0.0   | 0.0   | -         |
| PMGD HP El Toro N°2          | 22.1  | 20.4  | -7.67 %   |
| PMGD HP El Tártaro           | 0.0   | 0.0   | -         |
| PMGD HP Ensenada             | 24.9  | 12.4  | -50.22 %  |
| PMGD HP Eyzaguirre           | 0.0   | 0.0   | -         |
| PMGD HP La Arena             | 14.9  | 129.2 | +767.39 % |
| PMGD HP La Bifurcada         | 2.9   | 1.9   | -35.15 %  |
| PMGD HP La Compañía II       | 45.5  | 0.6   | -98.64 %  |
| PMGD HP La Montaña           | 0.0   | 0.0   | -         |
| PMGD HP La Montaña II        | 0.0   | 0.0   | -         |
| PMGD HP La Paloma            | 0.0   | 0.0   | -         |
| PMGD HP La Viña-Alto La Viña | 6.9   | 0.3   | -96.21 %  |
| PMGD HP Las Flores           | 0.0   | 0.0   | -         |
| PMGD HP Las Vertientes       | 34.6  | 31.6  | -8.91 %   |
| PMGD HP Los Bajos            | 127.3 | 107.9 | -15.26 %  |
| PMGD HP Los Colonos          | -     | 0.0   | -         |
| PMGD HP Los Corrales         | 0.0   | 0.0   | -         |
| PMGD HP Los Corrales II      | 1.4   | 9.1   | +557.59 % |
| PMGD HP Los Morros           | 37.2  | 33.5  | -9.93 %   |
| PMGD HP Los Padres           | 8.7   | 41.7  | +380.94 % |

| Centrales                 | Prog. | Real | Desv %    |
|---------------------------|-------|------|-----------|
| PMGD PFV Loreto           | 4.1   | 3.8  | -7.94 %   |
| PMGD PFV Los Cisnes       | 55.0  | 12.8 | -76.70 %  |
| PMGD PFV Los Gorriónes    | 14.3  | 9.8  | -31.51 %  |
| PMGD PFV Los Jotes        | 10.7  | 16.8 | +56.68 %  |
| PMGD PFV Los Lagos        | 3.7   | 4.3  | +14.08 %  |
| PMGD PFV Los Libertadores | 9.2   | 20.3 | +120.65 % |
| PMGD PFV Los Lirios       | -     | 0.0  | -         |
| PMGD PFV Los Magnolios    | 9.1   | 11.1 | +22.50 %  |
| PMGD PFV Los Molinos      | 19.0  | 28.7 | +51.16 %  |
| PMGD PFV Los Nogales      | 18.6  | 6.6  | -64.68 %  |
| PMGD PFV Los Paltos       | 10.2  | 11.8 | +15.98 %  |
| PMGD PFV Los Patos        | 12.1  | 9.3  | -23.06 %  |
| PMGD PFV Los Perales      | 7.4   | 7.6  | +2.74 %   |
| PMGD PFV Los Puquios      | 0.0   | 0.0  | -         |
| PMGD PFV Los Tauretes     | 25.4  | 0.0  | -100.00 % |
| PMGD PFV Los Tordos       | 17.2  | 13.2 | -23.73 %  |
| PMGD PFV Luce Solar       | 5.3   | 4.1  | -22.08 %  |
| PMGD PFV Luders           | 7.4   | 6.5  | -12.70 %  |
| PMGD PFV Lumbreras        | 10.9  | 8.8  | -19.22 %  |
| PMGD PFV Luna             | 4.2   | 4.7  | +12.86 %  |
| PMGD PFV Luna del Norte   | 18.8  | 15.9 | -15.26 %  |
| PMGD PFV Maikono          | 9.9   | 7.2  | -26.86 %  |
| PMGD PFV Maimalicán       | -     | 0.9  | -         |
| PMGD PFV Maitenlahue      | -     | 4.6  | -         |
| PMGD PFV Malaquita II     | 73.9  | 77.7 | +5.15 %   |
| PMGD PFV Malinke          | 6.6   | 7.2  | +8.40 %   |
| PMGD PFV Malloco          | 8.7   | 9.6  | +9.26 %   |
| PMGD PFV Manao            | 14.7  | 10.2 | -30.16 %  |
| PMGD PFV Mandinga         | 23.4  | 20.0 | -14.45 %  |
| PMGD PFV Marambio         | 6.9   | 4.9  | -30.06 %  |
| PMGD PFV Marañón          | 0.0   | 0.0  | -         |
| PMGD PFV Marchigue II     | 35.3  | 0.0  | -100.00 % |
| PMGD PFV Marchigue VII    | 18.8  | 5.7  | -69.85 %  |
| PMGD PFV Marin            | 22.3  | 12.1 | -45.73 %  |
| PMGD PFV María Pinto      | 7.2   | 9.5  | +32.47 %  |
| PMGD PFV Meco Chillan     | 18.5  | 26.3 | +42.08 %  |
| PMGD PFV Meli             | 22.7  | 45.1 | +99.04 %  |
| PMGD PFV Membrillo        | 2.6   | 3.3  | +23.57 %  |
| PMGD PFV Mercurio Sur     | 6.1   | 4.3  | -30.42 %  |
| PMGD PFV Milán A          | 0.8   | 0.0  | -100.00 % |
| PMGD PFV Mitchi           | 0.0   | 0.0  | -         |
| PMGD PFV Montt            | 12.6  | 19.8 | +56.75 %  |
| PMGD PFV Mostazal         | 14.6  | 14.6 | -0.07 %   |
| PMGD PFV Moya             | 33.1  | 33.8 | +2.11 %   |
| PMGD PFV Mutupín          | 25.1  | 29.2 | +16.24 %  |
| PMGD PFV Nahuén           | 17.8  | 19.6 | +10.34 %  |
| PMGD PFV Nan              | 23.4  | 0.0  | -100.00 % |
| PMGD PFV Nazarino Verano  | 12.7  | 8.9  | -29.91 %  |
| PMGD PFV Newentun         | 14.1  | 16.4 | +15.73 %  |

| Centrales                   | Prog. | Real | Desv %    |
|-----------------------------|-------|------|-----------|
| PMGD HP Los Portones        | 33.6  | 36.5 | +8.48 %   |
| PMGD HP MSA-I               | 0.0   | 49.8 | -         |
| PMGD HP Maisán              | 7.6   | 7.2  | -5.60 %   |
| PMGD HP Mallarauco          | 0.0   | 61.6 | -         |
| PMGD HP Maria Elena         | 0.0   | 1.1  | -         |
| PMGD HP Melo                | 46.4  | 27.3 | -41.30 %  |
| PMGD HP Molinera Villarrica | 7.5   | 0.0  | -100.00 % |
| PMGD HP Muchi               | 2.7   | 2.9  | +8.05 %   |
| PMGD HP Munilque            | 0.0   | 6.2  | -         |
| PMGD HP Munilque II         | 7.0   | 6.9  | -2.44 %   |
| PMGD HP Palmar              | 64.8  | 80.2 | +23.72 %  |
| PMGD HP Panguipulli         | -     | 0.0  | -         |
| PMGD HP Pehui               | 0.0   | 0.0  | -         |
| PMGD HP Pichilonco          | 8.9   | 22.4 | +151.77 % |
| PMGD HP Picoltué            | -     | 0.0  | -         |
| PMGD HP Puclaro             | 3.6   | 0.0  | -100.00 % |
| PMGD HP Purísima            | 8.7   | 3.1  | -64.58 %  |
| PMGD HP Quillaileo          | 0.0   | 0.0  | -         |
| PMGD HP Reca                | 12.6  | 0.0  | -100.00 % |
| PMGD HP Roblería            | 56.5  | 0.0  | -100.00 % |
| PMGD HP Río Mulchén         | 22.3  | 30.3 | +36.11 %  |
| PMGD HP Río Trueno          | 44.2  | 86.1 | +94.76 %  |
| PMGD HP Santa Elena         | 0.0   | 0.0  | -         |
| PMGD HP Santa Isabel        | 13.8  | 0.0  | -100.00 % |
| PMGD HP Santa Rosa          | 11.8  | 10.3 | -13.03 %  |
| PMGD HP Sauce Andes         | 13.0  | 10.1 | -22.66 %  |
| PMGD HP Trailelfú           | 11.1  | 43.4 | +290.21 % |
| PMGD HP Tranquil            | 38.7  | 0.2  | -99.46 %  |
| PMGD HP Truful Truful       | 3.1   | 0.0  | -100.00 % |
| PMGD PE El Arrebol          | 0.0   | 0.0  | -         |
| PMGD PE El Nogal            | 20.0  | 19.6 | -2.05 %   |
| PMGD PE Huajache            | 57.6  | 66.5 | +15.45 %  |
| PMGD PE Las Peñas           | 51.1  | 78.0 | +52.81 %  |
| PMGD PE Lebu III            | 42.8  | 0.0  | -100.00 % |
| PMGD PE Raki                | 79.0  | 72.0 | -8.91 %   |
| PMGD PE Ucuquer             | 19.5  | 0.0  | -100.00 % |
| PMGD PFV Abastible Concon   | 0.0   | 0.0  | -         |
| PMGD PFV Albor Solar        | 13.1  | 9.0  | -31.61 %  |
| PMGD PFV Alcaldesa          | 19.4  | 32.9 | +69.42 %  |
| PMGD PFV Alcon Solar        | 23.3  | 38.9 | +66.55 %  |
| PMGD PFV Alhué              | 8.7   | 9.2  | +5.90 %   |
| PMGD PFV Alicahue           | 14.3  | 16.5 | +15.66 %  |
| PMGD PFV Alto Solar         | 5.9   | 0.7  | -87.46 %  |
| PMGD PFV Altos de Til Til   | 6.1   | 11.6 | +89.51 %  |
| PMGD PFV Altos del Paico    | 0.0   | -    | -         |
| PMGD PFV Alturas de Ovalle  | 30.1  | 25.6 | -14.93 %  |
| PMGD PFV Amparo del Sol     | 24.7  | 23.7 | -4.09 %   |
| PMGD PFV Anakena            | 41.9  | 52.3 | +24.89 %  |
| PMGD PFV Antonia            | 4.5   | 5.0  | +10.40 %  |
| PMGD PFV Argomedo           | 0.0   | 0.0  | -         |
| PMGD PFV Arica              | -     | 23.5 | -         |

| Centrales                    | Prog. | Real | Desv %    |
|------------------------------|-------|------|-----------|
| PMGD PFV Nihue               | 6.9   | 5.9  | -13.49 %  |
| PMGD PFV Norte Chico         | 10.8  | 0.1  | -99.35 %  |
| PMGD PFV Ocoa                | 16.9  | 15.1 | -10.41 %  |
| PMGD PFV Olivia              | 22.5  | 0.0  | -100.00 % |
| PMGD PFV Olivier             | 16.7  | 4.5  | -73.15 %  |
| PMGD PFV Olivillo            | 21.6  | 35.1 | +62.35 %  |
| PMGD PFV Orion               | 9.0   | 2.2  | -75.63 %  |
| PMGD PFV Ovalle Norte        | 38.0  | 0.0  | -100.00 % |
| PMGD PFV Ovejería            | 42.0  | 38.5 | -8.31 %   |
| PMGD PFV PAS1                | 67.2  | 90.9 | +35.28 %  |
| PMGD PFV PSF El Peral        | 0.0   | 0.0  | -         |
| PMGD PFV PSF Horizonte       | 9.5   | 8.1  | -13.87 %  |
| PMGD PFV Pachira             | 34.2  | 9.4  | -72.46 %  |
| PMGD PFV Paine               | 83.4  | 96.7 | +15.96 %  |
| PMGD PFV Palto Sunlight      | 31.8  | 26.4 | -16.91 %  |
| PMGD PFV Pama                | 0.0   | 0.0  | -         |
| PMGD PFV Panguilemo Aerop.   | 17.9  | 16.6 | -7.46 %   |
| PMGD PFV Panquehue II        | 26.5  | 25.5 | -3.93 %   |
| PMGD PFV Paraguay            | 14.5  | 47.3 | +225.86 % |
| PMGD PFV Paranal             | 0.0   | 0.0  | -         |
| PMGD PFV Parque Bicentenario | 9.3   | 8.8  | -4.73 %   |
| PMGD PFV Parque Curicura     | 12.6  | 16.2 | +28.11 %  |
| PMGD PFV Parque El Olivar    | 23.2  | 7.3  | -68.41 %  |
| PMGD PFV Parque Jotabeche    | 30.1  | 35.4 | +17.79 %  |
| PMGD PFV Parque La Colonia   | 36.2  | 27.8 | -23.14 %  |
| PMGD PFV Parque La Travesía  | 9.6   | 11.3 | +17.70 %  |
| PMGD PFV Parque Nancagua     | 15.0  | 7.0  | -53.61 %  |
| PMGD PFV Parque PVP Itihue   | 34.6  | 33.8 | -2.56 %   |
| PMGD PFV Parque San Javier   | 22.4  | 22.6 | +1.21 %   |
| PMGD PFV Parque Santa Fe     | 30.7  | 27.3 | -11.14 %  |
| PMGD PFV Parque Valparaiso   | 34.2  | 23.6 | -30.97 %  |
| PMGD PFV Pastrán             | 42.2  | 44.8 | +6.09 %   |
| PMGD PFV Patricia Del Verano | 41.6  | 25.8 | -38.06 %  |
| PMGD PFV Pedreros            | 12.0  | 15.2 | +26.83 %  |
| PMGD PFV Pegasus             | 8.9   | 5.3  | -40.12 %  |
| PMGD PFV Pellin              | -     | 0.0  | -         |
| PMGD PFV Pelumpen            | 7.0   | 0.0  | -100.00 % |
| PMGD PFV Penaflor            | 29.7  | 19.2 | -35.47 %  |
| PMGD PFV Pencahue Este       | 9.8   | 8.4  | -14.31 %  |
| PMGD PFV Pepa                | 24.3  | 36.5 | +50.25 %  |
| PMGD PFV Pequen              | 2.7   | 4.3  | +58.45 %  |
| PMGD PFV Peralillo           | 7.1   | 5.6  | -21.69 %  |
| PMGD PFV Pica                | 2.4   | 2.4  | +2.77 %   |
| PMGD PFV Pichon              | -     | 6.7  | -         |
| PMGD PFV Picunche            | 30.3  | 25.8 | -14.90 %  |
| PMGD PFV Piduco              | 11.9  | 10.8 | -9.09 %   |
| PMGD PFV Pilipilen           | 7.8   | 8.1  | +3.46 %   |
| PMGD PFV Piquero             | 26.9  | 46.7 | +73.51 %  |
| PMGD PFV Pirque              | 6.3   | 5.2  | -17.46 %  |
| PMGD PFV Pitotoy             | 4.7   | 4.7  | -0.86 %   |
| PMGD PFV Pitra               | 7.8   | 7.4  | -5.99 %   |

| Centrales                  | Prog. | Real | Desv %    |
|----------------------------|-------|------|-----------|
| PMGD PFV Ariztía           | 8.7   | 8.6  | -0.86 %   |
| PMGD PFV Armazones         | 0.7   | 0.0  | -100.00 % |
| PMGD PFV Aromo del Verano  | 4.7   | 8.0  | +70.58 %  |
| PMGD PFV Astillas          | 48.6  | 85.5 | +75.70 %  |
| PMGD PFV Avel Solar        | 22.3  | 33.8 | +51.76 %  |
| PMGD PFV Aviles            | 13.1  | 17.1 | +30.54 %  |
| PMGD PFV Ayla              | 32.3  | 24.1 | -25.45 %  |
| PMGD PFV Bellavista        | 18.5  | 18.5 | -0.09 %   |
| PMGD PFV Bellavista        | 48.7  | 55.8 | +14.49 %  |
| PMGD PFV Berrueco          | 27.7  | 32.3 | +16.60 %  |
| PMGD PFV Bulnes Barones    | 8.2   | 10.2 | +24.76 %  |
| PMGD PFV Bér gamo          | 3.9   | 6.0  | +53.54 %  |
| PMGD PFV Cabildo Sunlight  | 35.6  | 53.7 | +50.81 %  |
| PMGD PFV Cabilsol          | 7.4   | 12.1 | +63.11 %  |
| PMGD PFV Cabrero           | 23.4  | 42.0 | +79.51 %  |
| PMGD PFV Cachiyuyo II      | 64.3  | 76.8 | +19.46 %  |
| PMGD PFV Caimi             | 0.9   | 0.6  | -38.15 %  |
| PMGD PFV Calama            | 97.5  | 99.6 | +2.19 %   |
| PMGD PFV Calle Larga       | 10.7  | 13.5 | +26.26 %  |
| PMGD PFV Candelaria Solar  | 8.8   | 5.7  | -35.04 %  |
| PMGD PFV Canelillo         | 8.8   | 17.9 | +103.67 % |
| PMGD PFV Canesa            | 16.7  | 0.0  | -100.00 % |
| PMGD PFV Cantera           | 7.8   | 5.8  | -25.87 %  |
| PMGD PFV Cantillana        | 47.1  | 0.0  | -100.00 % |
| PMGD PFV Caracoles         | 0.0   | 5.8  | -         |
| PMGD PFV Casabermeja       | 13.0  | 25.1 | +92.94 %  |
| PMGD PFV Casuto            | 10.6  | 13.9 | +31.42 %  |
| PMGD PFV Catemu            | 7.7   | 9.0  | +16.36 %  |
| PMGD PFV Catán             | 14.7  | 12.2 | -16.80 %  |
| PMGD PFV Cauquenes         | 13.3  | 0.0  | -100.00 % |
| PMGD PFV Chacabuco         | 41.9  | 47.3 | +12.91 %  |
| PMGD PFV Chalinga          | 11.6  | 21.8 | +88.52 %  |
| PMGD PFV Champa            | 53.8  | 0.0  | -100.00 % |
| PMGD PFV Chancon           | 5.5   | 6.1  | +10.91 %  |
| PMGD PFV Chilener          | -     | 0.1  | -         |
| PMGD PFV Chimbarongo       | 11.8  | 2.7  | -77.29 %  |
| PMGD PFV Chuchifí          | 14.5  | 18.6 | +28.94 %  |
| PMGD PFV Cipres            | 20.4  | 22.0 | +8.06 %   |
| PMGD PFV Citrino           | 6.7   | 3.1  | -53.13 %  |
| PMGD PFV Ckilir            | 82.3  | 96.0 | +16.66 %  |
| PMGD PFV Clementina        | 39.2  | 34.7 | -11.38 %  |
| PMGD PFV Cocharcas         | 9.2   | 9.3  | +0.62 %   |
| PMGD PFV Cocinillas        | 24.5  | 0.0  | -100.00 % |
| PMGD PFV Coinco            | -     | 0.3  | -         |
| PMGD PFV Colchagua         | 6.5   | 9.0  | +38.19 %  |
| PMGD PFV Colina            | 69.7  | 36.3 | -47.87 %  |
| PMGD PFV Coltauco Almendro | 4.4   | 7.9  | +78.94 %  |
| PMGD PFV Condor Chepica    | 0.0   | 0.0  | -         |
| PMGD PFV Condor Pelvin     | 14.5  | 0.0  | -100.00 % |
| PMGD PFV Condor Petorca    | 9.1   | 0.0  | -100.00 % |

| Centrales                  | Prog. | Real | Desv %    |
|----------------------------|-------|------|-----------|
| PMGD PFV Placilla          | 19.3  | 12.5 | -35.28 %  |
| PMGD PFV Playerito         | 11.8  | 4.4  | -62.80 %  |
| PMGD PFV Playero           | 11.8  | 11.8 | -0.17 %   |
| PMGD PFV Playeron          | 13.1  | 8.4  | -35.85 %  |
| PMGD PFV Plomo Verano      | 7.6   | 6.6  | -12.38 %  |
| PMGD PFV Población         | 5.4   | 5.6  | +3.15 %   |
| PMGD PFV Portezuelo        | 11.8  | 8.5  | -27.72 %  |
| PMGD PFV Pretty Field      | 9.7   | 15.3 | +57.66 %  |
| PMGD PFV Puangue           | 14.2  | 11.5 | -18.50 %  |
| PMGD PFV Pueblo Seco       | -     | 11.7 | -         |
| PMGD PFV Puelche           | 6.8   | 4.1  | -39.26 %  |
| PMGD PFV Puente Solar      | 8.2   | 8.9  | +9.36 %   |
| PMGD PFV Pullalli          | 12.4  | 13.5 | +8.55 %   |
| PMGD PFV Punta Baja        | 14.3  | 15.1 | +5.31 %   |
| PMGD PFV Queltehue         | 4.6   | 5.3  | +16.82 %  |
| PMGD PFV Quemados          | 19.6  | 16.2 | -17.21 %  |
| PMGD PFV Quetena           | 90.1  | 46.1 | -48.83 %  |
| PMGD PFV Quillay           | 9.1   | 4.3  | -53.02 %  |
| PMGD PFV Quinantu          | 24.0  | 24.2 | +0.67 %   |
| PMGD PFV Quinta            | 9.3   | 11.8 | +26.11 %  |
| PMGD PFV RDCL SAN          | 31.6  | 19.7 | -37.64 %  |
| PMGD PFV REN               | 0.0   | 6.2  | -         |
| PMGD PFV RLA               | 4.0   | 5.8  | +44.25 %  |
| PMGD PFV Ranguil           | 7.8   | 8.9  | +14.72 %  |
| PMGD PFV Ratulemus         | 18.8  | 0.0  | -100.00 % |
| PMGD PFV Rauquen           | 11.7  | 13.3 | +13.26 %  |
| PMGD PFV Recoleta          | 59.9  | 0.0  | -100.00 % |
| PMGD PFV Rengo             | -     | 0.0  | -         |
| PMGD PFV Rexner            | 23.8  | 11.7 | -50.77 %  |
| PMGD PFV Rimini            | 0.0   | 0.0  | -         |
| PMGD PFV Rinconada         | 11.6  | 9.9  | -14.66 %  |
| PMGD PFV Rinconada Alcones | 25.9  | 35.3 | +36.43 %  |
| PMGD PFV Rinconada Norte   | 25.6  | 12.1 | -52.69 %  |
| PMGD PFV Rodeo             | 13.1  | 7.7  | -41.03 %  |
| PMGD PFV Romeria           | 11.2  | 10.6 | -5.52 %   |
| PMGD PFV Rosario           | 8.7   | 0.0  | -100.00 % |
| PMGD PFV Rovián            | 9.7   | 7.1  | -27.01 %  |
| PMGD PFV Río Peuco         | 8.1   | 6.8  | -15.28 %  |
| PMGD PFV SDSI              | 6.1   | 8.6  | +40.88 %  |
| PMGD PFV SLK CB Nueve      | 21.6  | 10.9 | -49.57 %  |
| PMGD PFV Salerno Solar     | 6.0   | 7.1  | +19.56 %  |
| PMGD PFV Samo Bajo         | 12.7  | 13.6 | +7.45 %   |
| PMGD PFV San Antonio       | 24.5  | 23.4 | -4.52 %   |
| PMGD PFV San Camilo        | 6.8   | 14.0 | +106.14 % |
| PMGD PFV San Carlos        | 8.0   | 10.6 | +32.31 %  |
| PMGD PFV San Emilio I      | 4.1   | 4.6  | +11.78 %  |
| PMGD PFV San Francisco     | 15.2  | 10.8 | -28.75 %  |
| PMGD PFV San Isidro        | 3.8   | 5.6  | +46.05 %  |
| PMGD PFV San José II       | 12.1  | 3.7  | -69.40 %  |
| PMGD PFV San Pedro         | 7.4   | 6.8  | -8.65 %   |

| Centrales                  | Prog. | Real | Desv %    |
|----------------------------|-------|------|-----------|
| PMGD PFV Cordillerilla     | 5.6   | 0.0  | -100.00 % |
| PMGD PFV Cortijo           | 28.0  | 36.6 | +30.59 %  |
| PMGD PFV Covadonga         | 62.8  | 89.8 | +43.02 %  |
| PMGD PFV Coyunche          | 6.4   | 7.0  | +10.30 %  |
| PMGD PFV Crucero           | 5.6   | 5.6  | -0.89 %   |
| PMGD PFV Cruz              | 13.8  | 20.2 | +45.88 %  |
| PMGD PFV Curacavi          | 10.5  | 6.2  | -40.79 %  |
| PMGD PFV Cuz Cuz           | 15.1  | 14.9 | -0.79 %   |
| PMGD PFV Dadinco           | 11.2  | 9.6  | -14.41 %  |
| PMGD PFV Darlin            | 19.2  | 3.0  | -84.53 %  |
| PMGD PFV Diego de Almagro  | 47.7  | 88.8 | +86.15 %  |
| PMGD PFV Don Andrónico     | 3.4   | 5.5  | +62.26 %  |
| PMGD PFV Don Enrique       | 54.8  | 16.0 | -70.82 %  |
| PMGD PFV Don Eugenio       | 9.3   | 3.1  | -66.94 %  |
| PMGD PFV Don Jorge         | 7.2   | 0.7  | -90.71 %  |
| PMGD PFV Don Mariano       | 2.6   | 4.3  | +64.04 %  |
| PMGD PFV Don Martín        | 6.0   | 4.4  | -27.92 %  |
| PMGD PFV Don Matías        | -     | 0.0  | -         |
| PMGD PFV Don Rodrigo       | 12.9  | 13.2 | +2.10 %   |
| PMGD PFV Doña Igna         | 20.7  | 4.5  | -78.37 %  |
| PMGD PFV Doñihue           | 9.3   | 11.3 | +21.51 %  |
| PMGD PFV Duquenco Solar    | 24.9  | 0.0  | -100.00 % |
| PMGD PFV Eclipse           | 16.3  | 23.0 | +41.10 %  |
| PMGD PFV El Boco           | 15.0  | 30.9 | +106.20 % |
| PMGD PFV El Castaño        | 12.8  | 18.0 | +40.75 %  |
| PMGD PFV El Cernicalo      | 7.1   | 9.6  | +34.88 %  |
| PMGD PFV El Cernicalo II   | 7.1   | 9.0  | +25.61 %  |
| PMGD PFV El Chercan        | 1.4   | 12.3 | +789.16 % |
| PMGD PFV El Chincol        | 10.9  | 0.0  | -100.00 % |
| PMGD PFV El Chucao         | 10.5  | 8.2  | -21.73 %  |
| PMGD PFV El Cóndor         | 1.0   | 1.6  | +53.36 %  |
| PMGD PFV El Divisadero     | 18.5  | 7.6  | -58.84 %  |
| PMGD PFV El Estero         | 4.8   | 4.1  | -14.46 %  |
| PMGD PFV El Flamenco       | 81.0  | 19.8 | -75.60 %  |
| PMGD PFV El Gaviotin       | 64.9  | 83.1 | +27.90 %  |
| PMGD PFV El Huaso          | 11.1  | 13.0 | +16.50 %  |
| PMGD PFV El Ingenio        | 15.7  | 8.4  | -46.95 %  |
| PMGD PFV El Laurel         | 23.1  | 21.0 | -9.40 %   |
| PMGD PFV El Litre          | 63.3  | 36.9 | -41.60 %  |
| PMGD PFV El Monte          | 9.4   | 5.2  | -44.78 %  |
| PMGD PFV El Palqui         | -     | 0.0  | -         |
| PMGD PFV El Picurio        | 4.9   | 5.3  | +8.78 %   |
| PMGD PFV El Pilpen         | 8.5   | 8.7  | +2.59 %   |
| PMGD PFV El Pitio          | 12.0  | 8.4  | -29.67 %  |
| PMGD PFV El Piuquen        | 9.0   | 0.0  | -100.00 % |
| PMGD PFV El Queltehue      | 6.6   | 9.1  | +38.33 %  |
| PMGD PFV El Quemado        | 13.6  | 7.6  | -43.97 %  |
| PMGD PFV El Queule         | 10.0  | 6.8  | -32.10 %  |
| PMGD PFV El Rayador        | 20.9  | 40.1 | +91.75 %  |
| PMGD PFV El Reconquistador | 0.0   | 0.0  | -         |

| Centrales                    | Prog. | Real | Desv %    |
|------------------------------|-------|------|-----------|
| PMGD PFV San Ramiro          | 16.5  | 16.9 | +2.36 %   |
| PMGD PFV Santa Adriana       | 5.4   | 4.7  | -13.89 %  |
| PMGD PFV Santa Amelia        | 5.8   | 8.7  | +50.48 %  |
| PMGD PFV Santa Carolina      | 2.6   | 4.1  | +59.45 %  |
| PMGD PFV Santa Cecilia       | 14.7  | 0.0  | -100.00 % |
| PMGD PFV Santa Clara         | 15.2  | 21.2 | +39.39 %  |
| PMGD PFV Santa Cruz          | 16.1  | 20.6 | +27.96 %  |
| PMGD PFV Santa Elizabeth     | 16.4  | 23.1 | +40.84 %  |
| PMGD PFV Santa Emilia        | 0.0   | 0.0  | -         |
| PMGD PFV Santa Ester         | 10.6  | 11.1 | +4.60 %   |
| PMGD PFV Santa Francisca     | 40.0  | 33.6 | -16.00 %  |
| PMGD PFV Santa Inés          | 16.5  | 16.3 | -1.52 %   |
| PMGD PFV Santa Julia         | 7.4   | 2.2  | -69.73 %  |
| PMGD PFV Santa Laura         | 12.6  | 9.7  | -23.17 %  |
| PMGD PFV Santa Lucía         | 50.1  | 20.0 | -60.00 %  |
| PMGD PFV Santa Luisa         | 10.2  | 10.7 | +4.35 %   |
| PMGD PFV Santa Margarita     | 5.6   | 6.3  | +13.87 %  |
| PMGD PFV Santa Rita          | 9.1   | 8.9  | -2.32 %   |
| PMGD PFV Santuario           | 15.6  | 11.9 | -23.53 %  |
| PMGD PFV Saturno Norte       | 9.2   | 8.1  | -12.13 %  |
| PMGD PFV Siete Colores       | 29.7  | 13.6 | -54.28 %  |
| PMGD PFV Sol de Septiembre   | 26.9  | 30.8 | +14.52 %  |
| PMGD PFV Sol del Norte       | 18.8  | 15.8 | -15.79 %  |
| PMGD PFV SolarPark V. A.     | 0.0   | 0.0  | -         |
| PMGD PFV Sunhunter           | 53.4  | 68.3 | +27.84 %  |
| PMGD PFV Talca               | 27.1  | 7.1  | -73.95 %  |
| PMGD PFV Talhuén             | 19.6  | 22.7 | +15.77 %  |
| PMGD PFV Tallado             | 66.7  | 82.5 | +23.77 %  |
| PMGD PFV Tamarugo            | 23.7  | 27.1 | +13.94 %  |
| PMGD PFV Tambo Real          | 18.6  | 13.2 | -29.20 %  |
| PMGD PFV Taranto             | 31.4  | 30.8 | -1.69 %   |
| PMGD PFV Techos de Altamira  | 0.5   | 0.0  | -100.00 % |
| PMGD PFV Tierra              | 36.3  | 0.0  | -100.00 % |
| PMGD PFV Tijeral             | -     | 8.4  | -         |
| PMGD PFV Til Til             | 13.3  | 13.0 | -2.31 %   |
| PMGD PFV Torino              | 6.2   | 5.7  | -7.93 %   |
| PMGD PFV Tortolas del Verano | 25.3  | 12.2 | -51.78 %  |
| PMGD PFV Trebal              | 6.8   | 7.1  | +4.29 %   |
| PMGD PFV Trebo               | 10.1  | 6.0  | -40.35 %  |
| PMGD PFV Trica-Dos           | 6.1   | 5.2  | -14.75 %  |
| PMGD PFV Tricahue II         | 14.3  | 8.7  | -38.95 %  |
| PMGD PFV Trinidad            | 6.2   | 7.4  | +19.74 %  |
| PMGD PFV Tucuguere           | 11.9  | 15.0 | +26.13 %  |
| PMGD PFV UTFSM V. Valdés     | 0.6   | 0.0  | -100.00 % |
| PMGD PFV UTFSM Vitacura      | 0.0   | 0.0  | -         |
| PMGD PFV UTFSM Viña          | 1.2   | 0.7  | -41.16 %  |
| PMGD PFV Valle Este II       | 63.8  | 76.5 | +19.96 %  |
| PMGD PFV Valle Oeste II      | 52.6  | 72.3 | +37.56 %  |
| PMGD PFV Valle de la Luna II | 9.5   | 3.6  | -62.11 %  |
| PMGD PFV Ventisquero         | -     | 1.0  | -         |

| Centrales                     | Prog. | Real | Desv %    |
|-------------------------------|-------|------|-----------|
| PMGD PFV El Resplandor        | 6.7   | 13.0 | +94.75 %  |
| PMGD PFV El Roble             | 63.4  | 16.3 | -74.24 %  |
| PMGD PFV El Romeral           | 8.9   | 15.3 | +72.18 %  |
| PMGD PFV El Salitral          | 29.8  | 24.3 | -18.33 %  |
| PMGD PFV El Sauce             | 20.6  | 6.4  | -69.13 %  |
| PMGD PFV El Sharon            | 7.4   | 4.4  | -41.44 %  |
| PMGD PFV El Tiuke             | 4.4   | 4.3  | -2.05 %   |
| PMGD PFV El Trigal            | 78.4  | 10.9 | -86.15 %  |
| PMGD PFV El Zorzal            | 9.8   | 4.4  | -55.08 %  |
| PMGD PFV Encino               | 3.5   | 0.0  | -100.00 % |
| PMGD PFV Encon                | 35.5  | 16.8 | -52.62 %  |
| PMGD PFV Erinome              | 10.0  | 9.7  | -3.28 %   |
| PMGD PFV Escorial del Verano  | 19.0  | 15.7 | -17.16 %  |
| PMGD PFV Esfena               | 0.0   | 0.0  | -         |
| PMGD PFV Esperanza            | 0.2   | 0.0  | -100.00 % |
| PMGD PFV Faramalla            | 7.1   | 6.5  | -8.46 %   |
| PMGD PFV Fardela Negra        | 9.8   | 7.3  | -25.80 %  |
| PMGD PFV Filomena             | 21.6  | 4.8  | -77.89 %  |
| PMGD PFV Florencia Solar      | 51.3  | 30.6 | -40.39 %  |
| PMGD PFV Foster               | 11.8  | 10.2 | -13.32 %  |
| PMGD PFV Fotovolt             | 0.0   | 0.0  | -         |
| PMGD PFV Francisco            | 6.0   | 5.9  | -1.83 %   |
| PMGD PFV Fulgor               | 9.2   | 6.9  | -24.80 %  |
| PMGD PFV GR Lemu              | 15.2  | 12.8 | -15.92 %  |
| PMGD PFV GR Peumo             | 16.0  | 14.7 | -7.65 %   |
| PMGD PFV GR Pitao             | 15.0  | 17.8 | +18.33 %  |
| PMGD PFV GR Rauli             | 19.8  | 24.2 | +21.85 %  |
| PMGD PFV GR Santa Rosa        | 18.9  | 13.1 | -30.89 %  |
| PMGD PFV Gabardo del Verano   | 5.8   | 6.4  | +10.19 %  |
| PMGD PFV Gabriela             | 79.3  | 79.6 | +0.31 %   |
| PMGD PFV Girasoles            | 9.2   | 9.7  | +5.98 %   |
| PMGD PFV Granada              | 26.2  | 0.0  | -100.00 % |
| PMGD PFV Granate              | 52.5  | 69.6 | +32.43 %  |
| PMGD PFV Guadalaio            | 6.1   | 11.0 | +80.98 %  |
| PMGD PFV Guadalupe            | 55.2  | 26.0 | -52.96 %  |
| PMGD PFV Guanaco Solar        | 32.3  | 10.5 | -67.58 %  |
| PMGD PFV Guarana              | 7.0   | 6.0  | -15.22 %  |
| PMGD PFV Helios               | 14.9  | 10.6 | -28.51 %  |
| PMGD PFV Homero               | 5.4   | 6.6  | +22.59 %  |
| PMGD PFV Hormiga              | 9.3   | 7.0  | -24.90 %  |
| PMGD PFV Hornitos             | 1.3   | 0.5  | -62.53 %  |
| PMGD PFV Huape                | 8.0   | 11.9 | +48.94 %  |
| PMGD PFV Huaquelon            | 39.9  | 0.0  | -100.00 % |
| PMGD PFV ICB                  | 0.0   | 0.0  | -         |
| PMGD PFV Idahue del Verano    | 3.4   | 6.5  | +94.60 %  |
| PMGD PFV Illapel 5X           | 21.1  | 11.4 | -45.83 %  |
| PMGD PFV Independencia        | 20.8  | 4.9  | -76.62 %  |
| PMGD PFV Itahue Solar         | 11.3  | 17.9 | +57.36 %  |
| PMGD PFV Jahuel               | 46.0  | 23.3 | -49.36 %  |
| PMGD PFV Jardin Solar Petorca | 0.0   | 0.0  | -         |

| Centrales              | Prog. | Real | Desv %    |
|------------------------|-------|------|-----------|
| PMGD PFV Venturada     | 26.0  | 34.0 | +30.39 %  |
| PMGD PFV Vicente       | 7.4   | 5.2  | -29.67 %  |
| PMGD PFV Victoria      | 83.6  | 96.2 | +15.02 %  |
| PMGD PFV Villa Alegre  | 23.2  | 4.4  | -81.08 %  |
| PMGD PFV Villa Cruz    | 9.7   | 14.3 | +47.32 %  |
| PMGD PFV Villa Moscoso | 8.9   | 7.1  | -21.09 %  |
| PMGD PFV Villa Prat    | 3.7   | 3.2  | -11.34 %  |
| PMGD PFV Villa Seca    | 8.8   | 0.0  | -100.00 % |
| PMGD PFV Villa Solar   | 7.4   | 6.6  | -11.45 %  |
| PMGD PFV Violeta       | 11.8  | 0.0  | -100.00 % |
| PMGD PFV Vituco 2B     | 6.7   | 7.6  | +12.37 %  |
| PMGD PFV Yahutela      | 50.0  | 14.7 | -70.63 %  |
| PMGD PFV Ñihue         | 4.0   | 2.7  | -33.17 %  |
| PMGD PFV Ñiquén        | 9.9   | 8.1  | -17.98 %  |
| PMGD TER Aggreko 01    | -     | 0.0  | -         |
| PMGD TER Agni          | -     | 0.0  | -         |
| PMGD TER Alerce        | -     | 0.0  | -         |
| PMGD TER Almendrado    | -     | 0.0  | -         |
| PMGD TER Ancalí        | -     | 0.0  | -         |
| PMGD TER Aromos        | -     | 0.0  | -         |
| PMGD TER Berlioz       | -     | 0.0  | -         |
| PMGD TER Bio Cruz      | -     | 0.0  | -         |
| PMGD TER Bluegate      | -     | 0.0  | -         |
| PMGD TER Boldos        | -     | 0.0  | -         |
| PMGD TER Calafate      | -     | 0.0  | -         |
| PMGD TER Calfuco       | -     | 0.0  | -         |
| PMGD TER Camping       | -     | 0.0  | -         |
| PMGD TER Casablanca    | -     | 0.0  | -         |
| PMGD TER Casablanca II | -     | 0.0  | -         |
| PMGD TER Cañete        | -     | 0.0  | -         |
| PMGD TER Chile         | -     | 0.0  | -         |
| PMGD TER Chillan       | -     | 0.0  | -         |
| PMGD TER Chorrillos    | -     | 0.0  | -         |
| PMGD TER Chufkén       | -     | 0.0  | -         |
| PMGD TER Ciruelillo    | -     | 0.0  | -         |
| PMGD TER Coelemu       | -     | 28.9 | -         |
| PMGD TER Conchalí      | -     | 0.0  | -         |
| PMGD TER Contulmo      | -     | 0.0  | -         |
| PMGD TER Copiulemu     | -     | 0.0  | -         |
| PMGD TER Cortés        | -     | 0.0  | -         |
| PMGD TER Curacautín    | -     | 0.0  | -         |
| PMGD TER Curauma       | -     | 0.0  | -         |
| PMGD TER Dagoberto     | -     | 0.0  | -         |
| PMGD TER Deuco         | -     | 0.0  | -         |
| PMGD TER Diesel Cerezo | -     | 0.0  | -         |
| PMGD TER Diesel Coya   | -     | 0.0  | -         |
| PMGD TER Don Pedro     | -     | 0.0  | -         |
| PMGD TER Doña Javiera  | -     | 0.5  | -         |
| PMGD TER Egido         | -     | 0.0  | -         |
| PMGD TER El Campesino  | -     | 0.7  | -         |

| Centrales                    | Prog. | Real | Desv %    |
|------------------------------|-------|------|-----------|
| PMGD PFV Jaururo             | 11.2  | 14.1 | +26.07 %  |
| PMGD PFV Javiera Carrera     | 31.3  | 28.4 | -9.40 %   |
| PMGD PFV José Soler Mallafré | 1.3   | 1.9  | +47.06 %  |
| PMGD PFV Kaufmann            | 0.0   | 0.0  | -         |
| PMGD PFV Konda               | 11.8  | 11.4 | -3.73 %   |
| PMGD PFV La Acacia           | 10.7  | 0.1  | -99.53 %  |
| PMGD PFV La Blanquina        | 29.7  | 25.0 | -15.89 %  |
| PMGD PFV La Chapeana         | 14.1  | 0.0  | -100.00 % |
| PMGD PFV La Chimba Bis       | 9.0   | 15.8 | +75.70 %  |
| PMGD PFV La Esperanza II     | 35.3  | 0.0  | -100.00 % |
| PMGD PFV La Estancia         | 6.5   | 2.8  | -57.90 %  |
| PMGD PFV La Foresta          | 8.2   | 7.4  | -9.44 %   |
| PMGD PFV La Frontera         | 18.8  | 12.4 | -34.28 %  |
| PMGD PFV La Gamboina         | 15.4  | 7.0  | -54.49 %  |
| PMGD PFV La Lajuela          | 10.6  | 7.8  | -26.04 %  |
| PMGD PFV La Ligua            | 12.2  | 13.3 | +9.34 %   |
| PMGD PFV La Manga            | 13.7  | 4.3  | -68.55 %  |
| PMGD PFV La Muralla          | 3.9   | 3.8  | -2.61 %   |
| PMGD PFV La Palma Solar      | 35.2  | 42.9 | +21.86 %  |
| PMGD PFV La Victoria         | 25.3  | 30.8 | +21.79 %  |
| PMGD PFV Lagunilla           | 14.9  | 13.9 | -6.52 %   |
| PMGD PFV Las Arboledas       | -     | 0.0  | -         |
| PMGD PFV Las Cabras          | 3.7   | 2.7  | -26.57 %  |
| PMGD PFV Las Cachañas        | 12.5  | 18.3 | +46.56 %  |
| PMGD PFV Las Catitas         | 24.8  | 25.6 | +2.93 %   |
| PMGD PFV Las Chacras         | 12.3  | 6.0  | -50.89 %  |
| PMGD PFV Las Codornices      | 9.0   | 12.5 | +38.67 %  |
| PMGD PFV Las Lechuzas        | 9.4   | 10.1 | +7.02 %   |
| PMGD PFV Las Majadas         | 18.3  | 54.2 | +195.58 % |
| PMGD PFV Las Mercedes        | 4.7   | 3.1  | -34.64 %  |
| PMGD PFV Las Mollacas        | 14.1  | 8.5  | -39.45 %  |
| PMGD PFV Las Palmas Verano   | 7.5   | 6.3  | -16.17 %  |
| PMGD PFV Las Palomas         | 12.4  | 14.3 | +15.16 %  |
| PMGD PFV Las Perdices        | 6.8   | 6.8  | +0.29 %   |
| PMGD PFV Las Rojas           | 22.9  | 12.2 | -46.90 %  |
| PMGD PFV Las Taguas          | 0.0   | 0.0  | -         |
| PMGD PFV Las Tencas          | 14.8  | 15.9 | +7.77 %   |
| PMGD PFV Las Terrazas        | 24.1  | 0.0  | -100.00 % |
| PMGD PFV Las Torcazas        | 6.7   | 6.2  | -8.00 %   |
| PMGD PFV Las Tortolas        | 6.2   | 8.2  | +33.45 %  |
| PMGD PFV Las Turcas          | 4.4   | 6.7  | +52.73 %  |
| PMGD PFV Lima                | 0.0   | 0.0  | -         |
| PMGD PFV Linares             | 19.5  | 21.2 | +8.70 %   |
| PMGD PFV Lingue              | 7.1   | 7.5  | +6.48 %   |
| PMGD PFV Lipangue            | 9.2   | 14.3 | +55.00 %  |
| PMGD PFV Liquidambar         | 74.3  | 32.0 | -56.96 %  |
| PMGD PFV Lirio del Campo     | 9.4   | 7.8  | -17.89 %  |
| PMGD PFV Litoral Sunlight    | 14.4  | 17.9 | +24.14 %  |
| PMGD PFV Llanos de Potroso   | 29.2  | 25.3 | -13.54 %  |
| PMGD PFV Llay Llay           | 43.5  | 42.0 | -3.52 %   |

| Centrales                     | Prog. | Real | Desv % |
|-------------------------------|-------|------|--------|
| PMGD TER El Canelo            | -     | 0.0  | -      |
| PMGD TER El Faro              | -     | 0.0  | -      |
| PMGD TER El Jardín            | -     | 0.0  | -      |
| PMGD TER El Molle             | -     | 55.5 | -      |
| PMGD TER El Nogal             | -     | 0.0  | -      |
| PMGD TER Ermitaño             | -     | 0.0  | -      |
| PMGD TER Estancilla           | -     | 0.0  | -      |
| PMGD TER Estandartes          | -     | 0.0  | -      |
| PMGD TER Etersol              | -     | 0.0  | -      |
| PMGD TER Gami                 | -     | 0.0  | -      |
| PMGD TER HBS                  | -     | 0.0  | -      |
| PMGD TER HBS GNL              | -     | 0.0  | -      |
| PMGD TER La Gloria-21         | -     | 0.0  | -      |
| PMGD TER Lagunitas            | -     | 0.0  | -      |
| PMGD TER Las Dalias           | -     | 0.0  | -      |
| PMGD TER Las Pampas           | -     | 0.0  | -      |
| PMGD TER Lebu                 | -     | 0.0  | -      |
| PMGD TER Lepanto              | -     | 0.0  | -      |
| PMGD TER Lipigas Concón       | -     | 0.0  | -      |
| PMGD TER Lomas Coloradas      | -     | 3.1  | -      |
| PMGD TER Lonquimay            | -     | 0.0  | -      |
| PMGD TER Los Pinos            | -     | 45.7 | -      |
| PMGD TER Los Sauces           | -     | 0.0  | -      |
| PMGD TER Los Álamos           | -     | 0.0  | -      |
| PMGD TER Louisiana Pacific    | -     | 0.0  | -      |
| PMGD TER Louisiana Pacific II | -     | 0.0  | -      |
| PMGD TER Mimbre               | -     | 0.0  | -      |
| PMGD TER Monte Patria         | -     | 0.0  | -      |
| PMGD TER Multiexport          | -     | 0.0  | -      |
| PMGD TER Multiexport II       | -     | 0.0  | -      |
| PMGD TER Orafti               | -     | 0.0  | -      |
| PMGD TER PRP Campesina        | -     | 0.0  | -      |
| PMGD TER PRP Chifin           | -     | 0.0  | -      |
| PMGD TER PRP Las Quemadas     | -     | 0.0  | -      |
| PMGD TER PRP Los Negros       | -     | 0.0  | -      |
| PMGD TER PRP Tambores         | -     | 0.0  | -      |
| PMGD TER Pinares              | -     | 0.0  | -      |
| PMGD TER Punitaqui            | -     | 0.0  | -      |
| PMGD TER Quitralman           | -     | 0.0  | -      |
| PMGD TER Ramadilla            | -     | 0.0  | -      |
| PMGD TER Rapaco               | -     | 0.0  | -      |
| PMGD TER Raso Power           | -     | 0.0  | -      |
| PMGD TER Rey                  | -     | 0.0  | -      |
| PMGD TER Río Azul             | -     | 0.0  | -      |
| PMGD TER Salmofood            | -     | 0.0  | -      |
| PMGD TER Santa Irene          | -     | 0.0  | -      |
| PMGD TER Sepultura            | -     | 0.0  | -      |
| PMGD TER Tamm                 | -     | 0.0  | -      |
| PMGD TER Tapihue              | -     | 0.0  | -      |
| PMGD TER Tigre                | -     | 0.0  | -      |

| Centrales                | Prog. | Real | Desv %    |
|--------------------------|-------|------|-----------|
| PMGD PFV Lo Boza         | 1.5   | 1.8  | +16.44 %  |
| PMGD PFV Lo Chacón       | 7.1   | 6.5  | -7.69 %   |
| PMGD PFV Lo Miguel       | -     | 3.3  | -         |
| PMGD PFV Lo Miranda      | 7.9   | 15.6 | +96.96 %  |
| PMGD PFV Lo Sierra       | 18.2  | 6.0  | -66.89 %  |
| PMGD PFV Lockma          | 81.0  | 94.2 | +16.22 %  |
| PMGD PFV Loica           | 12.1  | 11.3 | -6.92 %   |
| PMGD PFV Lomas Coloradas | 12.3  | 0.0  | -100.00 % |

| Centrales                   | Prog.         | Real          | Desv %         |
|-----------------------------|---------------|---------------|----------------|
| PMGD TER Tirúa              | -             | 8.1           | -              |
| PMGD TER Tomaval            | -             | 0.0           | -              |
| PMGD TER Trebal Mapocho     | -             | 10.1          | -              |
| PMGD TER TrongolCuranilahue | -             | 0.0           | -              |
| PMGD TER Yumbel             | -             | 0.0           | -              |
| PMGD TER Zapallar           | -             | 0.0           | -              |
| PMGD TER Zofri              | -             | 0.0           | -              |
| <b>Total</b>                | <b>9005.9</b> | <b>8248.2</b> | <b>-8.41 %</b> |

Abreviaturas:

**CSE:**Conectada a Sistema Externo  
**DF:**Desconexión Forzada  
**ERE:**Estado de Reserva Estratégica  
**FE:**Falla Externa

**LF:**Limitación Forzada  
**MM:**Mantenimiento Mayor  
**P:**Prueba de Puesta en Servicio  
**RO:**Restricción Operativa  
**SI:**Sin información

## JUSTIFICACIÓN DE PRINCIPALES DESVIACIONES (\*)

|                           |                                                            |
|---------------------------|------------------------------------------------------------|
| HE Angostura              | Menor generación real por control Cota.                    |
| HE Colbún                 | Menor generación real por costo marginal.                  |
| PE San Juan               | Menor generación real por menor carga Eólica.              |
| PFV Domeyko               | Menor generación real por costo marginal.                  |
| PFV Guanchoi              | Mayor generación real por mayor radiación Solar.           |
| TER Nueva Renca GNL       | Mayor generación real por disponibilidad de GNL.           |
| TER San Isidro II Gas Arg | Mayor generación real por disponibilidad de gas Argentino. |

$$(*) \text{ si } \left\{ \begin{array}{l} |E_{real} - E_{programada}| > 12.5\% E_{programada} \\ y \\ |E_{real} - E_{programada}| > 0.5\% E_{total \text{ real}} \end{array} \right\}$$

## ESTADO DE LAS CENTRALES

## 3.1. Desconexión Forzada

| CENTRALES (≥100 MW) | Disponibilidad (%) | Observaciones                                                                                                                                                     |
|---------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSP Cerro Dominador | 0.0                | Indisponible. Causa informada: Inspección y reparación de rotura de tubería correspondiente al generador de vapor. Condiciones requeridas, según SDCF 2023045296. |
| HP La Confluencia   | 0.0                | Indisponible. Causa informada: Recuperación de servicios auxiliares dañados por fenómeno atmosférico, según SDCF 2023058589.                                      |
| HP La Higuera       | 0.0                | Indisponible. Causa informada: Desconexión por proceso de recuperación conexión obra hidráulica producto del fenómeno atmosférico, según SDCF 2023058588          |
| HP Las Lajas        | 0.0                | U-1 y U-2 Indisponibles. Causa informada: Realizar monitoreos de condición túnel por variaciones anormales de presión, según SDCF 2023012242 - 2023012244.        |
| TER Kelar GNL       | 70.0               | C. Kelar TV indisponible. Causa informada: Sobrecorriente en generador de la turvina de vapor.                                                                    |

## 3.2. Limitación Forzada

| CENTRALES (≥100 MW)  | Disponibilidad (%) | Observaciones                                                                                                                                  |
|----------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| PE Los Olmos         | 81.4               | Limitada a 89.84 MW según IL 2023001193.                                                                                                       |
| PE Sierra Gorda Este | 97.0               | Limitada a 110 MW, según IL 2023001273.                                                                                                        |
| PFV Atacama Solar II | 77.0               | Limitada a 131 MW. Causa informada: Desconexión forzada del interruptor 52E13 afectando el circuito 7, según IL 2023001605.                    |
| PFV Santa Isabel     | 71.0               | Limitada a 120 MW. Causa informada: En proceso de normalización, posterior a evento de falla en transformador principal, según IL 2023001581.  |
| TER Atacama 1 Diésel | 0.0                | TG1A limitada, disponible para generar solamente con gas, según IL 2023001495.                                                                 |
| TER Atacama 2 GNL    | 80.0               | TG2B limitada en 65 MW. Causa informada: Fuga de gases calientes, máxima generación del ciclo 273 MW. Según IL 2023001662.                     |
| TER Guacolda 1       | 95.0               | Limitada a 146 MW. Causa informada: Máxima apertura de válvula de turbina, según IL 2023001631                                                 |
| TER Guacolda 2       | 94.0               | Limitada en 146 MW, según IL 2023000905.                                                                                                       |
| TER Mejillones-CTM2  | 85.0               | Limitada en 136 MW. Causa informada: Evaluación del comportamiento de la caldera, según IL 2023000357.                                         |
| TER Nueva Ventanas   | 77.0               | Limitada a mínimo técnico. Causa informada: Reparación falla en válvula de atemperación de control recalentado turbina, según SICF 2023095569. |

## 3.3. Mantenimiento Mayor

| CENTRALES (≥100 MW)     | Disponibilidad (%) | Observaciones        |
|-------------------------|--------------------|----------------------|
| TER Los Vientos GNL     | 0.0                | Mantenimiento mayor. |
| TER Mejillones-CTM3 GNL | 0.0                | Mantenimiento mayor. |
| TER Nehuenco I GNL      | 0.0                | Mantenimiento mayor. |
| TER Santa María         | 0.0                | Mantenimiento mayor. |

## 3.4. Prueba de Puesta en Servicio

| CENTRALES (≥100 MW)     | Disponibilidad (%) | Observaciones                     |
|-------------------------|--------------------|-----------------------------------|
| PE La Cabaña            | 0.0                | En período de puesta en servicio. |
| PFV El Manzano          | 0.0                | En periodo de puesta en servicio. |
| PFV Las Salinas         | 0.0                | En período de puesta en servicio. |
| PFV Meseta de los Andes | 0.0                | En período de puesta en servicio. |

| CENTRALES (≥100 MW) | Disponibilidad (%) | Observaciones                     |
|---------------------|--------------------|-----------------------------------|
| PFV Willka          | 0.0                | En período de puesta en servicio. |
| TER Arauco MAPA     | 0.0                | En periodo de puesta en servicio. |

### 3.5. Restricción Operativa

| CENTRALES (≥100 MW)       | Disponibilidad (%) | Observaciones                                                                                                                                                                                                                               |
|---------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TER Norgener-NT01         | 100.0              | Limitada. Causa informada: Por recomendación del fabricante la unidad en condición de partida muy fría necesita 30 horas para sincronizar y 6 horas para llegar a mínimo técnico, según IL 2023001480.                                      |
| TER Norgener-NT02         | 100.0              | Limitada. Causa informada: Por recomendación del fabricante post mantenimiento mayor para partidas frías la puesta en servicio es de 30 horas, según IL 2023001479.                                                                         |
| TER Tocopilla-U16 Diesel  | 100.0              | Limitada: Causa informada: Ciclaje diario que ha enfrentado durante los últimos años y para evitar un incremento en el deterioro en los álabes, se debe limitar los ciclajes de la central a una partida cada 72 horas. según IL 2023001632 |
| TER Tocopilla-U16 Gas Arg | 100.0              | Limitada: Causa informada: Ciclaje diario que ha enfrentado durante los últimos años y para evitar un incremento en el deterioro en los álabes, se debe limitar los ciclajes de la central a una partida cada 72 horas. según IL 2023001632 |
| TER Tocopilla-U16 GNL     | 100.0              | Limitada: Causa informada: Ciclaje diario que ha enfrentado durante los últimos años y para evitar un incremento en el deterioro en los álabes, se debe limitar los ciclajes de la central a una partida cada 72 horas. según IL 2023001632 |

## ANTECEDENTES DE LA OPERACIÓN DIARIA SEN

### 4.1. Observaciones

| Hora  | Centro de Control | Observación                                                                                                                                                                                                                                                                               |
|-------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00:00 | CDC               | Cs. PFV El Manzano, PFV Las Salinas, PFV Loma Los Colorados, PE Lebu (ampliación de 6,5 a 10 MW), Maitencillo, Dos Valles, El Pinar U-1, Cogeneradora Mapa, PFV Meseta de los Andes, PFV Elena, PFV Willka, PE La Cabaña y PFV El Manzano continúan en período de puesta en servicio.     |
| 00:02 | STS               | S/E Montenegro paños A1 y A2 con solicitud de intervención de curso forzoso. Causa informada: Bloqueo de elemento SOTF vía display del relé de los sistemas 1 y 2 de los interruptores A1 y A2, según SICF 2023098611.                                                                    |
| 00:09 | CGE               | Línea de 66 kV Loncoche - Villarrica 2 cerrada. Se cancela IF 2023004199.                                                                                                                                                                                                                 |
| 00:16 | CGE               | Línea 154 kV Santa Luisa - PE Cuel interrupción forzada por protecciones con reconexión automática con éxito, según IF 2023004265.                                                                                                                                                        |
| 00:25 | STS               | C. Masisa con solicitud de desconexión de curso forzoso. Causa informada: Reparar eslabón en parrilla de caldera por pérdida de combustión, según SDCF 2023098612.                                                                                                                        |
| 00:45 | CGE               | S/E Mandinga interruptor 52CT1 cerrado, se recuperan 100% los consumos. Cancelado IF 2023004254.                                                                                                                                                                                          |
| 01:07 | Transec           | Línea 220 kV Ciruelos - Valdivia 1 y 2 interrupción forzada por protecciones con reconexión automática con éxito. según IF 2023004259 y 2023004260.                                                                                                                                       |
| 01:33 | STS               | S/E Montenegro paños A1 y A2 cancelada solicitud de intervención de curso forzoso, según SICF 2023098611.                                                                                                                                                                                 |
| 01:38 | Enel Green Power  | C. PE Los Buenos Aires disponible y en servicio, cancelado IF 2023004245.                                                                                                                                                                                                                 |
| 02:00 | AES Andes         | C. PE Mesamávida disponible y en servicio, cancelado IF 2023004249.                                                                                                                                                                                                                       |
| 03:21 | STS               | Línea de 66 kV Remehue - Los Tambores - La Unión interrupción forzada por protecciones con reconexión automática con éxito, según IF 2023004257.                                                                                                                                          |
| 04:16 | LAP               | Línea de 110 kV Río Toltén - Cunco interrupción forzada por protecciones, se pierden 4 MW de consumos de S/E Cunco. Según IF 2023004261.                                                                                                                                                  |
| 04:16 | LAP               | C. Carilafuén sale de servicio en forma intempestiva con 11 MW. Causa informada: Falla de la línea 110 kV Río Toltén - Cunco, según IF 2023004263.                                                                                                                                        |
| 04:16 | LAP               | C. Malacahuello sale de servicio en forma intempestiva con 6 MW. Causa informada: Falla en línea 110 kV Río Toltén - Cunco, según IF 2023004264.                                                                                                                                          |
| 04:16 | STS               | S/E Cunco Interruptor 52H1 interrupción forzada por protecciones, se pierden 4 MW de consumos de S/E Cunco, según IF 2023004258.                                                                                                                                                          |
| 05:11 | AES Andes         | C. PE Mesamávida sale del servicio en forma intempestiva con 3 MW. Causa informada: Falla en interruptor AT1 del transformador de 154/33 kV y 80 MVA, según IF 2023004275.                                                                                                                |
| 06:08 | Energía Llaime    | C. Mampil con solicitud de desconexión de curso forzoso. Causa informada: Se requiere realizar rechazo de carga con unidades de la Central Mampil por obstrucción de Cámara de Carga Mampil, debido a gran cantidad de desechos acumulados en la reja de aducción, según SDCF 2023098613. |
| 06:29 | Energía Llaime    | C. Mampil disponible y en servicio cancelada solicitud de desconexión de curso forzoso, cancelada SDCF 2023098613.                                                                                                                                                                        |
| 07:04 | Transec           | Línea de 500 kV Changos - Kimal 1 abierta para regular tensión.                                                                                                                                                                                                                           |
| 07:35 | CGE               | Línea de 66 kV Cauquenes - La Vega interrupción forzada por protecciones, se pierden 1.8 MW de consumos de S/E La Vega , según IF 2023004268.                                                                                                                                             |
| 07:35 | STS               | Línea de 66 kV Remehue - La Unión 1 interrupción forzada por protecciones, se pierden 6.1 MW de consumos de S/E Los Tambores, según IF 2023004266 - 2023004267.                                                                                                                           |
| 07:45 | Transec           | Línea de 220 KV Canutillar - Puerto Montt 1 abierta para regular tensión.                                                                                                                                                                                                                 |
| 07:46 | STS               | Línea de 66 kV Remehue - La Unión 1 tramo de línea La Unión - Los Tambores cerrada, se recuperan todos los consumos de S/E Los Tambores, queda indisponible tramo Remehue - Los Tambores. Cancelado IF 2023004267.                                                                        |
| 07:53 | Transec           | Línea de 220 kV Nueva Pichirropulli - Tineo 2 abierta para regular tensión.                                                                                                                                                                                                               |
| 08:08 | Minera Escondida  | Línea de 220 kV Nueva Zaldívar - OGP1 con solicitud de intervención de curso forzoso. Causa informada: Lavado de aisladores por alta contaminación en la zona, según SICF 2023098614.                                                                                                     |
| 08:41 | Transec           | Línea de 220 kV Ralco - Los Notros 1 con solicitud de intervención de curso forzoso. Causa informada: Inspección visual con trepado de estructuras en la Línea 220 kV Ralco Los Notros N°1, para encontrar causa de falla, según SICF 2023098609.                                         |
| 08:51 | Transec           | Línea de 500 kV Entre Ríos - Ancoa 2 abierta para regular tensión.                                                                                                                                                                                                                        |
| 08:57 | Transec           | Línea de 500 kV Ancoa - Alto Jahuel 2 abierta para regular tensión.                                                                                                                                                                                                                       |
| 09:12 | CGE               | S/E La Vega recuperado el 80 % de los consumos por redes de MT.                                                                                                                                                                                                                           |
| 09:57 | STS               | S/E Negrete interruptor B1 disponible, cancelado IF 2023004269.                                                                                                                                                                                                                           |
| 10:30 | Siemens           | C. PE Alena disponible y en servicio, cancelado IF 2023004270.                                                                                                                                                                                                                            |
| 10:42 | LAP               | Línea de 110 kV Río Toltén - Cunco cerrado, cancelado IF 2023004261.                                                                                                                                                                                                                      |
| 10:43 | STS               | S/E Cunco Interruptor 52H1 cerrado y normalizado el 100% de los consumos de S/E Cunco, cancelado IF 2023004258.                                                                                                                                                                           |

| Hora  | Centro de Control | Observación                                                                                                                                                                                                                                                           |
|-------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:44 | STS               | S/E Duquenco 52ET1 interrupción forzada por protecciones, se pierden 2.4 MW de consumos. Causa informada: Falla en red de MT de S/E Duquenco, según IF 2023004304.                                                                                                    |
| 10:55 | STS               | S/E Duquenco 52ET1 cerrado y normalizado el 100% de los consumos, cancelado IF 2023004304.                                                                                                                                                                            |
| 11:09 | STS               | Línea de 66 kV Remehue - Los Tambores cerrada. cancelado IF 2023004266.                                                                                                                                                                                               |
| 11:20 | CGE               | Línea de 154 kV Los Ángeles - Santa Luisa reconexión automática con éxito, según IF 2023004289.                                                                                                                                                                       |
| 11:20 | CGE               | Línea de 66 kV Victoria - Traiguén con solicitud de intervención de curso forzoso. Causa informada: Retiro de elementos extraños a causa del viento, según SICF 2023098615.                                                                                           |
| 11:20 | CGE               | S/E Los Ángeles interruptor AT4 interrupción forzada de protecciones, se pierden 22.4 MW de consumos de SS/EE Manso de Velasco y El Avellano, según IF 2023004290.                                                                                                    |
| 11:20 | Enel Green Power  | S/E Los Buenos Aires interruptor B2 interrupción forzada por protecciones, se pierden 3 MW los consumos de S/E Negrete, según IF 2023004272.                                                                                                                          |
| 11:20 | Enel Green Power  | C. PE Buenos Aires sale del servicio en forma intempestiva con 20 MW. Causa informada: Coincidente con la interrupción forzada por protecciones del interruptor AT4 de S/E Los Ángeles, según IF 2023004271.                                                          |
| 11:20 | RNE               | C. PE Negrete sale del servicio en forma intempestiva con 15 MW. Causa informada: Coincidente con la interrupción forzada por protecciones del interruptor AT4 de S/E Los Ángeles, según IF 2023004295.                                                               |
| 11:20 | Ucuquer2          | C. PE Esperanza sale del servicio en forma intempestiva con 6 MW. Causa informada: Coincidente con la interrupción forzada por protecciones del interruptor AT4 de S/E Los Ángeles, según IF 2023004277.                                                              |
| 11:20 | Siemens           | C. PE Alena sale del servicio en forma intempestiva con 14 MW. Causa informada: Coincidente con la interrupción forzada por protecciones del interruptor AT4 de S/E Los Ángeles, según IF 2023004305.                                                                 |
| 11:23 | CGE               | S/E Los Ángeles interruptor AT4 cerrado, se recuperan todos los consumos de SS/EE Manso de Velasco y El Avellano, cancelado IF 2023004290.                                                                                                                            |
| 11:26 | Enel Green Power  | C. PE Buenos Aires disponible y en servicio, cancelado IF 2023004271.                                                                                                                                                                                                 |
| 11:26 | Enel Green Power  | S/E Los Buenos Aires 52B2 cerrado y normalizados el 100% de los consumos de Negrete, cancelado IF 2023004272.                                                                                                                                                         |
| 11:32 | CGE               | Línea de 66 kV Cauquenes - La Vega cerrado y normalizado el 100% de consumos de S/E La Vega, cancelado IF 2023004268.                                                                                                                                                 |
| 11:34 | RNE               | C. PE Negrete disponible y en servicio, cancelado IF 2023004295.                                                                                                                                                                                                      |
| 12:00 | Ucuquer2          | C. PE Esperanza disponible y en servicio, cancelado IF 2023004277.                                                                                                                                                                                                    |
| 12:06 | Transec           | Línea de 220 kV Canutillar - Puerto Montt 2 interrupción forzada por protecciones, según IF 2023004301.                                                                                                                                                               |
| 12:19 | CGE               | Línea de 154 kV Charrúa - Los Ángeles interrupción forzada por protecciones con reconexión automática con éxito, según IF 2023004280.                                                                                                                                 |
| 12:19 | Ucuquer2          | C. PE Esperanza sale del servicio en forma intempestiva con 4 MW. Causa informada: Falla en línea de 154 kV Charrúa - Los Ángeles, según IF 2023004283.                                                                                                               |
| 12:19 | RNE               | C. PE Negrete sale del servicio en forma intempestiva con 19 MW. Causa informada: Falla en línea de 154 kV Charrúa - Los Ángeles, según IF 2023004297.                                                                                                                |
| 12:19 | Enel Green Power  | C. PE Buenos Aires sale del servicio en forma intempestiva con 18 MW. Causa informada: Falla en línea de 154 kV Charrúa - Los Ángeles, según IF 2023004279.                                                                                                           |
| 12:19 | Enel Green Power  | S/E Los Buenos Aires interruptor B2 interrupción forzada por protecciones, se pierden 3 MW los consumos de S/E Negrete, según IF 2023004294.                                                                                                                          |
| 12:20 | Enel Green Power  | S/E Los Buenos Aires interruptor B2 cerrado y normalizados el 100% de los consumos de Negrete, cancelado IF 2023004294.                                                                                                                                               |
| 12:22 | Ucuquer2          | C. PE Esperanza disponible y en servicio, cancelado IF 2023004283.                                                                                                                                                                                                    |
| 12:25 | LAP               | C. Carilafquén disponible y en servicio, cancelado IF 2023004263.                                                                                                                                                                                                     |
| 12:27 | RNE               | C. PE Negrete disponible y en servicio, cancelado IF 2023004297.                                                                                                                                                                                                      |
| 12:28 | LAP               | C. Malalcahuello disponible y en servicio, cancelado IF 2023004264.                                                                                                                                                                                                   |
| 12:32 | Transec           | Línea de 220 kV Canutillar - Puerto Montt 2 prueba de cierre sin éxito.                                                                                                                                                                                               |
| 12:33 | CDC               | Línea de 220 kV Canutillar - Puerto Montt 1 cerrada y energizada barra 220 kV de S/E Canutillar.                                                                                                                                                                      |
| 12:48 | Transec           | Línea de 66 kV Charrúa - Laja interrupción forzada por protecciones, se pierden 6 MW de consumos de S/E Laja y EFE Laja. Causa informada: Árbol sobre la línea entre estructuras 112 y 113, según IF 2023004310.                                                      |
| 12:48 | RNE               | C. PE El Maitén sale del servicio en forma intempestiva con 2.8 MW. Causa informada: Falla en línea de 66 kV Charrúa - Laja, según IF XXX.                                                                                                                            |
| 12:51 | Transec           | Línea de 66 kV Charrúa - Laja prueba de cierre sin éxito.                                                                                                                                                                                                             |
| 12:56 | CGE               | Línea de 66 kV Victoria - Traiguén cancelada solicitud de intervención de curso forzoso, según SICF 2023098615.                                                                                                                                                       |
| 13:12 | CGE               | S/E Angol línea de 66 kV Victoria - Angol interrupción forzada por protecciones y en S/E Victoria interruptor B1 con reconexión automática con éxito, se pierden 8.8 MW de consumos de SS/EE Angol, Deuco, Los Sauces y Nahuelbuta, según IF 2023004298 y 2023004299. |
| 13:12 | Ucuquer2          | C. PE La Flor sale del servicio en forma intempestiva con 13 MW. Causa informada: Falla en línea de 66 kV Victoria - Angol, según IF 2023004293.                                                                                                                      |
| 13:12 | Scotta            | C. Picoquén sale del servicio en forma intempestiva con 19 MW. Causa informada: Falla en línea de 66 kV Victoria - Angol, según IF 2023004292.                                                                                                                        |

| Hora  | Centro de Control  | Observación                                                                                                                                                                                                                                                                            |
|-------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13:12 | Potencia           | Cs. Renaico y Alto Renaico salen del servicio en forma intempestiva con 5.5 MW y 1.1 MW respectivamente. Causa informada: Falla en línea de 66 kV Victoria - Angol, según IF 2023004302 y 2023004303.                                                                                  |
| 13:15 | Transelec          | Línea de 220 kV Nueva Pichirropulli - Tineo 2 cerrada.                                                                                                                                                                                                                                 |
| 13:15 | CGE                | S/E Angol línea de 66 kV Victoria - Angol cerrado, se recuperan todos los consumos de SS/EE Angol, Deuco, Los Sauces y Nahuelbuta, cancelado IF 2023004299.                                                                                                                            |
| 13:19 | Ucuquer2           | C. PE La Flor disponible y en servicio, según IF 2023004293.                                                                                                                                                                                                                           |
| 13:28 | Potencia           | C. Alto Renaico disponible y en servicio, cancelado IF 2023004303.                                                                                                                                                                                                                     |
| 13:32 | Transelec          | Línea de 500 kV Entre Ríos - Ancoa 2 cerrada.                                                                                                                                                                                                                                          |
| 13:36 | Transelec          | Línea de 500 kV Ancoa - Alto Jahuel 2 cerrada.                                                                                                                                                                                                                                         |
| 13:38 | Minera Escondida   | Línea de 220 kV Nueva Zaldívar - OGP1 cancelada solicitud de intervención de curso forzoso, según SICF 2023098614.                                                                                                                                                                     |
| 13:45 | Scotta             | C. Picoquén disponible y en servicio, cancelado IF 2023004292.                                                                                                                                                                                                                         |
| 14:16 | Potencia           | C. Renaico disponible y en servicio, cancelado IF 2023004302.                                                                                                                                                                                                                          |
| 15:30 | Celeoredes         | Línea de 500 kV Ancoa - Alto Jahuel 3 abierta para regular tensión.                                                                                                                                                                                                                    |
| 15:35 | Innergex           | C. Peuchén cancelada solicitud de desconexión de curso forzoso, según SDCF 2023098608.                                                                                                                                                                                                 |
| 15:36 | Scotta             | S/E Las Juntas Interruptor E1 interrupción forzada por protecciones. C. Llauquereo sale del servicio en forma intempestiva con 1.8 MW y C. Aillín con 6 MW, según los IF 2023004215, IL 2023004217 e IF 2023004216 respectivamente.                                                    |
| 16:00 | Transelec          | S/E Laja recuperado el 50% de los consumos con generación local.                                                                                                                                                                                                                       |
| 17:05 | Innergex           | C. Mampil con solicitud de desconexión de curso forzoso. Causa informada: Requiere realizar rechazo de carga con unidades de la Central Mampil por obstrucción de Cámara de Carga Mampil, debido a gran cantidad de desechos acumulados en la reja de aducción, según SDCF 2023098625. |
| 17:37 | Innergex           | C. Mampil cancelada solicitud de desconexión de curso forzoso, según SDCF 2023098625.                                                                                                                                                                                                  |
| 18:10 | Transelec          | Línea de 220 kV Canutillar - Puerto Montt 2 cerrada, cancelado IF 2023004301.                                                                                                                                                                                                          |
| 18:57 | Transelec          | Línea de 66 kV Charrúa - Laja cerrada, recuperado el 100% de los consumos, cancelado IF 2023004310.                                                                                                                                                                                    |
| 19:01 | RNE                | C. PE El Maitén disponible y en servicio.                                                                                                                                                                                                                                              |
| 19:12 | Transelec          | Línea de 220 kV Nueva Pichirropulli - Tineo 2 abierta para regular tensión.                                                                                                                                                                                                            |
| 19:34 | Gen. Metropolitana | C. Nueva Renca limitada a conectar fuegos adicionales. Causa informada: Fuegos Adicionales indisponibles, según, IL 2023001670.                                                                                                                                                        |
| 20:05 | Transelec          | Línea de 220 kV Nueva Pichirropulli - Tineo 1 cerrada.                                                                                                                                                                                                                                 |
| 20:07 | Celeoredes         | Línea de 500 kV Ancoa - Alto Jahuel 3 cerrada.                                                                                                                                                                                                                                         |
| 20:30 | Scotta             | S/E Las Juntas interruptor E1 cerrado. Cancelado IF 2023004215.                                                                                                                                                                                                                        |
| 20:57 | Scotta             | C. Aillín disponible y en servicio. Cancelado IF 2023004216.                                                                                                                                                                                                                           |
| 21:12 | CGE                | Línea 154 kV Los Ángeles - Santa Luisa con desconexión de curso forzoso. Causa informada: Revisión, verificación y pruebas en interruptor 52A2 de SE Santa Luisa. Según SDCF 2023098638.                                                                                               |
| 21:13 | Scotta             | C. Llauquereo disponible y en servicio. Cancelado IF 2023004217.                                                                                                                                                                                                                       |
| 22:02 | Transelec          | Línea 500 kV Changos - Kimal 2 cerrada.                                                                                                                                                                                                                                                |
| 22:58 | Arauco             | C. Nueva Aldea III sale del servicio en forma intempestiva con 37 MW. Causa informada: Trip General de Planta, según IF 2023004311.                                                                                                                                                    |

4.2. Otras Observaciones

| Hora  | Centro de Control | Observación                                                                                     |
|-------|-------------------|-------------------------------------------------------------------------------------------------|
| 00:00 | CDC               | La mayor disminución de generación Bruta horaria fue de -504.5 [MW]                             |
| 00:45 | Colbún            | C. Rucue inicia vertimiento.                                                                    |
| 08:55 | CDC               | La mayor tasa de aumento de generación Bruta, calculada cada 5 minutos, fue de 25 [MW/m]        |
| 11:20 | Colbún            | C. Rucue finaliza vertimiento.                                                                  |
| 14:00 | CDC               | La mayor tasa de disminución de generación Bruta, calculada cada 5 minutos, fue de -51.2 [MW/m] |
| 16:58 | Colbún            | C. Quilleco finaliza vertimiento.                                                               |
| 20:00 | CDC               | El mayor aumento de generación Bruta horaria fue de 671 [MW]                                    |

4.3. Primera Energización de Instalaciones

| Hora                              | Centrol de Control | Empresa | Instalación |
|-----------------------------------|--------------------|---------|-------------|
| No hay registros para esta fecha. |                    |         |             |

## INDISPONIBILIDAD SCADA SEN

| Centro de Control | Instalación                                                            | Fecha F/S  | Hora F/S | Fecha E/S | Hora E/S |
|-------------------|------------------------------------------------------------------------|------------|----------|-----------|----------|
| Cenizas           | S/E Cenizas sin datos SCADA.                                           | 06/02/2017 | 18:50    |           |          |
| Elektragen        | Cs. Constitución y Maule datos SCADA.                                  | 07/11/2017 | 08:00    |           |          |
| Enel Generación   | S/E Pilmaiquén interruptores B1 Osorno1 y B2 Osorno 2 datos SCADA F/S. | 06/12/2018 | 11:59    |           |          |
| Energía Pacífico  | C. Energía Pacífico datos SCADA F/S.                                   | 23/06/2020 | 21:30    |           |          |
| Enel Generación   | C. Ralco sin datos cota y temperatura.                                 | 04/06/2021 | 14:00    |           |          |
| Prime Energía     | C. Emelda sin cambio de estado en SCADA.                               | 05/08/2021 | 07:30    |           |          |
| Prime Energía     | Cs. Degañ 1 y 2 datos scada.                                           | 31/05/2022 | 00:00    |           |          |
| Celeoredes        | S/E Minero datos scada.                                                | 12/07/2022 | 21:20    |           |          |
| Energía Llaima    | Cs. Peuchén y Mampil.                                                  | 28/07/2022 | 00:00    |           |          |
| Colbún            | C. Carena datos scada.                                                 | 25/10/2022 | 06:50    |           |          |
| CGE               | S/E Traiguén 52CT sin data y telecontrol, IL 2022002155.               | 30/11/2022 | 02:56    |           |          |
| CGE               | S/E Curanilahue datos scada.                                           | 08/05/2023 | 00:00    |           |          |
| Enel Generación   | C. Pehuenche datos de cota del embalse, no corresponde al valor real.  | 04/07/2023 | 21:30    |           |          |
| Cardones          | C. Colmito datos scada.                                                | 08/07/2023 | 19:30    |           |          |
| Colbún            | C. Santa María paño J1 Charrúa 1 datos scada.                          | 24/07/2023 | 06:23    |           |          |
| Celeoredes        | S/E Charrúa paño J13 datos scada.                                      | 28/07/2023 | 00:00    |           |          |
| Scotta            | C. Picoiquén datos scada.                                              | 21/08/2023 | 00:00    |           |          |
| SUN Power         | C. PFV Luz del Norte datos scada.                                      | 26/09/2023 | 00:00    |           |          |
| Siemens           | PFV Rio Escondido datos SCADA y telecontrol, según IL xxx.             | 02/10/2023 | 11:30    |           |          |
| TEN               | S/E Parinacota paño J2 sin data ni telcontrol, según IL 2023001572.    | 08/10/2023 | 09:30    |           |          |
| Besalco           | S/E Convento Viejo data scada.                                         | 20/10/2023 | 23:24    |           |          |
| Chilquinta        | S/E San Rafael 110 kV datos SCADA F/S.                                 | 23/10/2023 | 11:59    |           |          |
| Transelec         | S/E Pan de Azúcar datos scada intermitentes.                           | 26/10/2023 | 14:30    |           |          |

## COMUNICACIONES SEN

| Centro de Control | Instalación                                        | Fecha F/S  | Hora F/S | Fecha E/S | Hora E/S |
|-------------------|----------------------------------------------------|------------|----------|-----------|----------|
| Cenizas           | No contestan el teléfono fijo.                     | 06/08/2021 | 17:09    |           |          |
| Imelsa -Crell     | Hot line.                                          | 22/12/2022 | 14:30    |           |          |
| Siemens           | Hot line.                                          | 28/09/2023 | 14:30    |           |          |
| Statkraft         | Hot line F/S principal y respaldo Cel:+56950114651 | 08/10/2023 | 00:00    |           |          |
| Escuadrón         | Hot line Principal y Respaldo F/S.                 | 25/10/2023 | 07:30    |           |          |

ANEXO N°4  
Detalle de mantenimientos programados y forzados correspondientes al día 29 de  
octubre de 2023

| Nombres    | Tipos       | Estado            | Empresa                                 | M Coordinado | Tipo Substición | Origen         | Tipo Programación | ID(s) | Substación                                  | ID(s) | Elemento(s)                                                                                                                                                                                                                                                                                                  | Tipo Trabajo             | Potencia         | Trabajos a Realizar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Descripción Nivel Rango                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comentarios Adicional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Consumo                   | Empresas Afiliadas     | Trabajo Region | Estado Operativo | Estado Operativo Efectivo | Fecha Inicio   | Fecha Fin      | Fecha Efectiva Inicio | Fecha Efectiva Fin |
|------------|-------------|-------------------|-----------------------------------------|--------------|-----------------|----------------|-------------------|-------|---------------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|----------------|------------------|---------------------------|----------------|----------------|-----------------------|--------------------|
| 2023087318 | Subestación | Ejecución Exitosa | SOCIEDAD TRANSMISORA METROPOLITANA S.A. | 1855         | Intervención    | Origen Interno | Programada        | 695   | S/E LAS ACACIAS                             | 781   | BA S/E LAS ACACIAS 23KV BP1<br>BA S/E LAS ACACIAS 23KV BA2                                                                                                                                                                                                                                                   | Mantenimiento preventivo | Sin limitaciones | Se realizará mantenimiento preventivo a desconectores 23 kV con perfitaje Lado Barra Principal y Lado Barra de Transferencia del Tº N°1.                                                                                                                                                                                                                                                                                                                                                                                                                | Trabajo en riegos asociados.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Trabajo enmarcado en el plan de mantenimiento de SASEA. Relacionado con SD 2023097317.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No tiene consumo afectado | ninguno                |                |                  |                           | 29-10-23 23:00 | 30-10-23 12:00 | 29-10-23 23:01        | 30-10-23 04:29     |
| 2023087317 | Subestación | Ejecución Exitosa | SOCIEDAD TRANSMISORA METROPOLITANA S.A. | 1855         | Desconexión     | Origen Interno | Programada        | 695   | S/E LAS ACACIAS                             | 3668  | S/E LAS ACACIAS DI                                                                                                                                                                                                                                                                                           | Mantenimiento preventivo | Sin limitaciones | Se realizará el mantenimiento preventivo a interruptor 23 kV Transformador N°1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Trabajo en riegos asociados.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Trabajo enmarcado en el plan de mantenimiento anual de SASEA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No tiene consumo afectado | ninguno                |                |                  |                           | 29-10-23 23:00 | 30-10-23 12:00 | 29-10-23 23:01        | 30-10-23 04:29     |
| 2023084265 | Subestación | Ejecución Exitosa | PV SALVADOR S.A.                        | 278          | Intervención    | Origen Interno | Programada        | 1735  | S/E CENTRAL PV SALVADOR                     |       | batería otros: batería                                                                                                                                                                                                                                                                                       | Otro Tipo de Trabajo     | Sin limitaciones | Se realizarán durante el día cíclico de 5 horas de carga con 48 MW y de 5 horas de descarga con 46 MW. En bloques horarios de 1 h 50 y 17 a 2 h.                                                                                                                                                                                                                                                                                                                                                                                                        | La realización de pruebas de comisionamiento del Proyecto NUP 3567 RDS, en las cuales se realizarán durante el día cíclico de 5 horas de carga y 5 horas de descarga, será supervisado por la empresa especializada con todos los estándares de seguridad que se requieran.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Las pruebas de carga se realizarán principalmente durante el día en horario con recurso.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 10:00            | 30-10-23 23:00 | 29-10-23 12:23 | 30-10-23 01:47        |                    |
| 2023086284 | Subestación | Ejecución Exitosa | TRANSMISORA BAQUIANO S.A.               | 401          | Intervención    | Origen Interno | Programada        | 1873  | S/E ESTACION DE BOMBEO SIERRA GORDA N°1 JT1 | 23522 | S/E ESTACION DE BOMBEO SIERRA GORDA N°1 JT1<br>17698 S/E ESTACION DE BOMBEO SG N°1 220 KV                                                                                                                                                                                                                    | Otro Tipo de Trabajo     | Sin limitaciones | Instalación de mufas FO en estructura 27 T 220 KV Argemiro - Estación de bombeo Sierra Gorda N°1 y pátio de mufas 220/210 KV. Condiciones requeridas: No reconectar S22T1 en S/E Estación de Bombeo Sierra Gorda N°1.                                                                                                                                                                                                                                                                                                                                   | El riesgo del trabajo en bajo considerando los medidas de seguridad correspondientes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Instalación de mufas FO en estructura 27 T 220 KV Argemiro - Estación de bombeo Sierra Gorda N°1 y pátio de mufas 220/210 KV. Condiciones requeridas: No reconectar S22T1 en S/E Estación de Bombeo Sierra Gorda N°1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 09:00            | 29-10-23 19:00 | 29-10-23 08:16 | 29-10-23 11:49        |                    |
| 2023084751 | Subestación | Ejecución Exitosa | SOCIEDAD QUÍMICA Y MINERA DE CHILE S.A. | 396          | Intervención    | Origen Interno | Programada        | 1873  | S/E TAP OFF NUEVA VICTORIA                  | 17749 | S/E TAP OFF NUEVA VICTORIA 220 KV<br>17741 S/E TAP OFF NUEVA VICTORIA 88 KV                                                                                                                                                                                                                                  | Lavado de Aislación      | Sin limitaciones | Lavado de aislación de equipos primarios de S/E Tap Off Nueva Victoria 220/66/23 KV SQM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                | El riesgo en bajo, ya que se tomarán todas las medidas de mitigación necesarias.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Condición requerida: S/E Laguna: Sulfatar y NH 5212 y en S/E San Simón: Sulfatar y NH 5214 y 5225.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 18:00 | 29-10-23 09:25 | 29-10-23 14:54        |                    |
| 2023085488 | Subestación | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                    | 2003         | Desconexión     | Origen Externo | Programada        | 375   | S/E CHILLAN                                 | 85    | CHILLAN 154/66/96V 75MVA N°3                                                                                                                                                                                                                                                                                 | Otro Tipo de Trabajo     | Sin limitaciones | A solicitud de TRANSELEC, según S029 243, por desconexión de Línea 154 kV Charúa-Chillán. Trabajos asociados al NUP 4337 por reemplazo de desconectores pafos A, se requiere desconectar transformador N°3 de S/E Chillán. Los consumos serán regulados vía redes 66KV hasta otras instalaciones del sector.                                                                                                                                                                                                                                            | Trabajo a cargo de Transelac.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 18:00 | 29-10-23 07:51 | 29-10-23 16:37        |                    |
| 2023085944 | Subestación | Ejecución Exitosa | TRANSELEC S.A.                          | 82           | Desconexión     | Origen Interno | Programada        | 1820  | S/E ATACAMA                                 | 21210 | S/E ATACAMA 17                                                                                                                                                                                                                                                                                               | Otro Tipo de Trabajo     | Sin limitaciones | S/E Atacama: Obra ultionada de aisladores equipos primarios asociados al pafio 17, Limpieza de aislación manual a posteriori ultionada de B017-2, 371/CC 37, 5237.                                                                                                                                                                                                                                                                                                                                                                                      | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Restricciones:<br>Pafio Transformación L07-Atacama, independiente.<br>Instalaciones en Riego:<br>Pafio Transformación L07-Atacama o Barra 220 kV, Sección 2-Atacama.<br>Temperalidad de los Riegos:<br>Al inicio, Al término, Durante los trabajos.<br>Nivel de Riego:<br>Bajo.<br>Bloques del jefe de fuente:<br>Subestación Atacama, Puentes a tierra instalados En total se instalarán 08 pefitajes monopotenciales, primer detección de ascenso de terreno, se instalarán 0 PAT entre el S217 y el B017-2, 03 PAT entre B017-2 y el B017-3 y 03 PAT en STEC 17 Salda de Central (Pafio al caso del ultionado de cables aéreos y pefitajes se ultionará tierra personal).<br>Nota: Trabajos coordinados con INEL Generación por unidad de Central Atacama. | No tiene consumo afectado | ninguno                |                | 29-10-23 08:00   | 29-10-23 16:00            | 29-10-23 07:40 | 29-10-23 23:31 |                       |                    |
| 2023085845 | Subestación | Ejecución Exitosa | TRANSELEC S.A.                          | 82           | Desconexión     | Origen Interno | Programada        | 566   | S/E CHARRUA                                 | 1654  | BA S/E CHARRUA 154KV BT                                                                                                                                                                                                                                                                                      | Otro Tipo de Trabajo     | Sin limitaciones | - S/E Charúa: Desconexión primaria del desconector B0A2-3.<br>Proyecto MMR Reemplazo desconectores B0A2-3, B0A2-2, B0A2-3 y B0A2-2T de SE Charúa. NUP 4337.                                                                                                                                                                                                                                                                                                                                                                                             | El riesgo en bajo, ya que se tomarán todas las medidas de mitigación correspondientes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Actividades:<br>Línea 154 kV Pueblo Seco - Charúa, C1 y Barra Transferencia 154 kV Charúa, independientes.<br>+S/E Charúa y S/E Pueblo Seco, alimentadas por redes de 66 kV, coordinadas con CSE y FROHTEL.<br>Instalaciones en Riego: Línea 154 kV Pueblo Seco - Charúa, C1 o Barra Transferencia 154 kV Charúa.<br>Temperalidad de los Riegos: Al término de los trabajos.<br>Nivel de Riego: Bajo.<br>Bloques del jefe de fuente: Subestación Charúa, se instalarán tierras provisionales de bloques entre T0A2 y T0A2, en B0A2-3 lado línea y entre B0A2-3 y Barra Transferencia 154 kV.                                                                                                                                                                  | No tiene consumo afectado | ninguno                |                | 29-10-23 08:00   | 29-10-23 18:00            | 29-10-23 08:22 | 29-10-23 15:45 |                       |                    |
| 2023084756 | Subestación | Ejecución Exitosa | AUTOTRANSFORMER CHILE CUARTO SPA        | 1824         | Intervención    | Origen Externo | Programada        | 2098  | S/E SAN SIMON                               | 23992 | S/E SAN SIMON JA<br>23993 S/E SAN SIMON D                                                                                                                                                                                                                                                                    | Lavado de Aislación      | Sin limitaciones | Trabajos de SQM JV Victoria: Lavado de Aislación S/E Tap Off Nueva Victoria 220/66/23 KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                | El riesgo en bajo, ya que se tomarán todas las medidas de mitigación correspondientes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | S/E San Simón: No reconectar interruptores 524 y 525.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 18:00 | 29-10-23 08:28 | 29-10-23 15:54        |                    |
| 2023084477 | Subestación | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                    | 82           | Desconexión     | Origen Externo | Programada        | 566   | S/E CHARRUA                                 | 7687  | S/E CHARRUA 40                                                                                                                                                                                                                                                                                               | Otro Tipo de Trabajo     | Sin limitaciones | A solicitud de Transelac, según N°5216 se mantendrá en condición abierta y bloqueado desconector B0A3-3 lado barra de transferencia en S/E Charúa. Lo anterior por temas de Transelac: en barra de transferencia 154 kV de SE Charúa.                                                                                                                                                                                                                                                                                                                   | Riesgo no inherente a CSE Transmisión: trabajos solicitados por terceros por trabajos en sus instalaciones.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Desconector B0A3-3 está normalmente abierto y bloqueado.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 13:00 | 29-10-23 08:21 | 29-10-23 06:11        |                    |
| 2023084938 | Subestación | Ejecución Exitosa | MINERA ESCONDIDA LTDA.                  | 378          | Intervención    | Origen Interno | Programada        | 1936  | S/E SUFFIROS                                | 23023 | S/E SUFFIROS JT1<br>23024 S/E SUFFIROS JT2<br>23025 S/E SUFFIROS J1<br>23026 S/E SUFFIROS J2<br>23027 S/E SUFFIROS B1<br>23028 S/E SUFFIROS B2<br>23029 S/E SUFFIROS B3<br>23030 S/E SUFFIROS B4<br>23031 S/E SUFFIROS JT3<br>23032 S/E SUFFIROS B5<br>23047 S/E SUFFIROS B6<br>23726 S/E SUFFIROS 13 B0V BP | Lavado de Aislación      | Sin limitaciones | Lavado de aislación en la subestación                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Riesgo bajo, trabajo programado realizado con procedimientos respectivos                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Se requiere orden de no reconectar en los siguientes equipos:<br>S/E Suffiro: S211, S212, S217, S2172, S2173, S2187, S21872, S21873<br>S/E LavaciónS2071, S2072<br>S/E CLAPSAB1<br>S/E Transmisión S218<br>S/E Nova ZaldívarS2051.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No tiene consumo afectado | ninguno                |                | 29-10-23 08:00   | 29-10-23 18:00            | 29-10-23 08:56 | 29-10-23 13:38 |                       |                    |
| 2023084133 | Subestación | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                    | 2003         | Intervención    | Origen Externo | Programada        | 375   | S/E LAS COMPAÑAS                            | 981   | S/E LAS COMPAÑAS H2                                                                                                                                                                                                                                                                                          | Otro Tipo de Trabajo     | Sin limitaciones | A solicitud de TRANSELEC, según S041 5151, se solicita bloquear a la reconexión inmovilizada interruptor S272 de S/E Las Compañías por trabajos en sus instalaciones.                                                                                                                                                                                                                                                                                                                                                                                   | Riesgo controlado por TRANSELEC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Actividades:<br>A solicitud de CC RNE (Sede 524/2023) Lavado de aislación S/E Tap Off Nueva Victoria 220/66/23 kV SQM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 18:00 | 29-10-23 09:41 | 29-10-23 16:18        |                    |
| 2023084790 | Subestación | Ejecución Exitosa | TRANSELEC S.A.                          | 82           | Intervención    | Origen Externo | Programada        | 1893  | S/E LAGUNAS                                 | 22694 | S/E LAGUNAS J2                                                                                                                                                                                                                                                                                               | Otro Tipo de Trabajo     | Sin limitaciones | A solicitud de CC RNE (Sede 524/2023) Lavado de aislación S/E Tap Off Nueva Victoria 220/66/23 kV SQM                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Instalaciones en Riego: Línea 220 kV San Simón-Lagunas. Temperalidad de los Riegos: Al inicio, Al término de los trabajos Nivel de Riego: Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Instalaciones en Riego: Línea 220 kV San Simón-Lagunas. Temperalidad de los Riegos: Al inicio, Al término de los trabajos Nivel de Riego: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 18:00 | 29-10-23 09:28 | 29-10-23 15:03        |                    |
| 2023087808 | Subestación | Ejecución Exitosa | PANQUE QUILLAGUA                        | 1969         | Intervención    | Origen Externo | Programada        | 1877  | TAP OFF QUILLAGUA                           | 23144 | S/E TAP OFF QUILLAGUA J1                                                                                                                                                                                                                                                                                     | Otro Tipo de Trabajo     | Sin limitaciones | Conexión de ascuasitos, obra civil y cables T 220 KV Lagunas - Tap Quillagua - Frontone. Asociadas a proyecto C20 Minera Collahuasi. Trabajos solicitados por Transelac. Condiciones requeridas: No reconectar S211 en Tap Off Quillagua.                                                                                                                                                                                                                                                                                                               | El riesgo del trabajo en bajo ya que se ejecuta en instalaciones de terceros.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Conexión de ascuasitos, obra civil y cables T 220 KV Lagunas - Tap Quillagua - Frontone. Asociadas a proyecto C20 Minera Collahuasi. Trabajos solicitados por Transelac. Condiciones requeridas: No reconectar S211 en Tap Off Quillagua.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 18:00 | 29-10-23 07:26 | 29-10-23 19:29        |                    |
| 2023087316 | Subestación | Ejecución Exitosa | SOCIEDAD TRANSMISORA METROPOLITANA S.A. | 1855         | Desconexión     | Origen Interno | Programada        | 697   | S/E LO BOZA                                 | 907   | LO BOZA 110/72.5KV 50MVA 4                                                                                                                                                                                                                                                                                   | Otro Tipo de Trabajo     | Sin limitaciones | Se realizará el mantenimiento correctivo por filtración T8 y reemplazo monitor T 8afado                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Trabajo en riegos asociados.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Trabajo por parte de SASEA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 02:00            | 29-10-23 22:00 | 29-10-23 10:57 | 29-10-23 01:31        |                    |
| 2023087081 | Subestación | Ejecución Exitosa | TRANSELEC S.A.                          | 82           | Desconexión     | Origen Interno | Programada        | 566   | S/E CHARRUA                                 | 1656  | BA S/E CHARRUA 220KV BT-2                                                                                                                                                                                                                                                                                    | Otro Tipo de Trabajo     | Sin limitaciones | S/E Charúa: Desconexión primaria del desconector B017-3 y reemplazo de conector del neutro de transformador de potencial T015 (F1, F2 y F3).                                                                                                                                                                                                                                                                                                                                                                                                            | Actividades: S/E Charúa: Desconexión primaria del desconector B017-3, por trabajos asociados a "Proyecto MMR Reemplazo de desconectores B017-2, B017-3 y B017-3 de S/E Charúa 220 kV", NUP 4333.<br>Nota:<br>Por seguridad a personas por riesgo de acortamiento de distancia con Pafios 125 y 131 durante los trabajos de desconexión primaria del desconector B017-3, se requiere además de la desconexión de la Línea 220 kV Charúa Huapi.<br>"Con desconexión de la Línea 220 kV Charúa Huapi, se realizará el reemplazo de conector del neutro de transformador de potencial T015 (F1, F2 y F3).<br>Condiciones: Línea 220 kV Antuco-Charrúa, C2, Barra Transferencia 220 kV Charúa y Línea 220 kV Charúa-Huapi, C1 independientes.<br>Instalaciones en Riego: Línea 220 kV Charúa-Huapi, C1 o Línea 220 kV Antuco-Charrúa, C2.<br>Temperalidad de los Riegos: Al término de los trabajos.<br>Nivel de Riego: Bajo.<br>Bloques del jefe de fuente: Subestación Charúa, se instalarán tierras provisionales de bloques en conector de poder de T015, entre B017-2 y B017-3, entre B018-2 y Barra Trans. 220 kV Sec.2, entre B018-3 y barra Trans. 220 kV Sec.2 y en cable de poder de T017. | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ninguno                   |                        | 29-10-23 01:00 | 29-10-23 06:00   | 29-10-23 01:28            | 29-10-23 06:08 |                |                       |                    |
| 2023083738 | Subestación | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                    | 2003         | Desconexión     | Origen Interno | Programada        | 396   | S/E COMBARBALA                              | 2955  | COMBARBALA 66/13.2KV 5MVA T3                                                                                                                                                                                                                                                                                 | Otro Tipo de Trabajo     | Sin limitaciones | Se requiere la desconexión de los pafios B73 y C73 asociado al transformador N°3 de S/E Combarbalá por auditoría de protección, según carta DE 05042-18 del CEN CSE. Los consumos en su totalidad serán transferidos hacia el transformador N°1 y N°2 de S/E Combarbalá, vía barra 13.2 kV y de ser necesario también vía redes de distribución hacia otras instalaciones del sector. Además, se requiere Bloques de reconexión automática del S201 S/E Riquel, solo durante las maniobras de apertura y cierre del desconector B0B73-3 S/E Combarbalá. | Riesgo bajo aplicando procedimientos de seguridad internos de CSE Transmisión.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Se requiere la desconexión de los pafios B73 y C73 asociado al transformador N°3 de S/E Combarbalá por auditoría de protección, según carta DE 05042-18 del CEN CSE. Los consumos en su totalidad serán transferidos hacia el transformador N°1 y N°2 de S/E Combarbalá, vía barra 13.2 kV y de ser necesario también vía redes de distribución hacia otras instalaciones del sector. Además, se requiere Bloques de reconexión automática del S201 S/E Riquel, solo durante las maniobras de apertura y cierre del desconector B0B73-3 S/E Combarbalá.                                                                                                                                                                                                       | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 08:00            | 29-10-23 08:00 | 29-10-23 23:59 | 29-10-23 08:29        |                    |
| 2023084266 | Subestación | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                    | 2003         | Desconexión     | Origen Interno | Programada        | 475   | S/E QUERO                                   | 1431  | S/E QUERO E3                                                                                                                                                                                                                                                                                                 | Otro Tipo de Trabajo     | Sin limitaciones | Se programan y prueba nuevos ajustes de protección en pafio E3 con motivo de conexión de PMGDS 9 MW Marmalecal                                                                                                                                                                                                                                                                                                                                                                                                                                          | Riesgo bajo y controlado. Se trabaja en desconexión                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Trabajos se ejecutan sobre pafio E3, programando nuevos ajustes en control F5 y haciendo pruebas de verificación de curva tiempo corriente                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No tiene consumo afectado | modificacion_protectio |                |                  | 29-10-23 00:00            | 29-10-23 19:00 | 29-10-23 10:16 | 29-10-23 12:26        |                    |
| 2023088611 | Subestación | Ejecución Exitosa | SISTEMA DE TRANSMISIÓN DEL SUR S.A.     | 83           | Intervención    | Origen Interno | Corre Ponerse     | 2349  | S/E MONTENEGRO [EN_REVISION]                | 30786 | S/E MONTENEGRO A1<br>30787 S/E MONTENEGRO A2                                                                                                                                                                                                                                                                 | Otro Tipo de Trabajo     | Sin limitaciones | Se requiere intervención de curso forsoo para realizar bloqueo de elemento S077 vía display relé de sistema 2 de los pafios S241 y S242, debido a interrupción de los recursos A1a 16.5 C, Tr. del 28.12.21. N° 2023064261. Con posterior reanudo.                                                                                                                                                                                                                                                                                                      | No hay riesgo asociado.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No hay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No tiene consumo afectado | ninguno                |                |                  | 29-10-23 00:00            | 29-10-23 09:00 | 29-10-23 00:02 | 29-10-23 01:33        |                    |

Reporte Desconexión/Intervención Central Generadora

Fecha generación reporte: 15-11-2023 16:43:47

Estados: Ejecución Exitosa, Ejecución Exitosa

Total registros Central: 58

Total registros Central Generadora: 5

| Número     | Tipos              | Estado            | Empresa                     | M Coordinado | Tipo Substancia | Origen         | Tipo Programación | ID(s) | Central        | ID(s) | Unidades(s)        | Tipo Trabajo         | Previsión      | Trabajos a Realizar                                                                                                                                                                                                                                                                    | Descripción Nivel Riesgo                                                                                                                                                                                                                                                    | Comentarios Adicional                                                                                                                                                                       | Consumo                   | Empresas Afectadas | Trabajo Requiere            | Estado Operativo | Estado Operativo Efectivo | Fecha Inicio   | Fecha Fin      | Fecha Efectiva Inicio | Fecha Efectiva Fin |
|------------|--------------------|-------------------|-----------------------------|--------------|-----------------|----------------|-------------------|-------|----------------|-------|--------------------|----------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------|-----------------------------|------------------|---------------------------|----------------|----------------|-----------------------|--------------------|
| 2023091634 | Central Generadora | Ejecución Exitosa | ENEL GREEN POWER CHILE S.A. | 250          | Intervención    | Origen Interno | Programada        | 1742  | PIV SOL DE ULA |       | CENTRAL COMPLETA   | Otro Tipo de Trabajo | Sin Limitación | Mantenimiento de interruptor principal de cabina 05. Por seguridad se desconectara el bus 3 (3273).                                                                                                                                                                                    | Riesgo Bajo. Se realiza en equipo desconectado y controlado por personal del area.                                                                                                                                                                                          | El parque no se limitará dado que se realiza en horario donde no hay generación por falta de recursos                                                                                       | No tiene consumo afectado | ninguno            | N (Conectada Normal)        |                  |                           | 29-10-23 19:30 | 29-10-23 21:30 | 29-10-23 19:38        | 29-10-23 21:34     |
| 2023098623 | Central Generadora | Ejecución Exitosa | DUQUISCO SPA                | 14           | Desconexión     | Origen Interno | Curso Forzoso     | 364   | HP MAMPI       |       | CENTRAL COMPLETA   | Otro Tipo de Trabajo | Sin Limitación | Se requiere realizar rechazo de carga con unidades de la Central Mampí por obstrucción de Cámara de Carga Mampí, debido a gran cantidad de desechos acumulados en la riega de aducción. Esta situación puede provocar disparo mecánico por baja presión en tubería.                    | Se requiere realizar rechazo de carga con unidades de la Central Mampí por obstrucción de Cámara de Carga Mampí, debido a gran cantidad de desechos acumulados en la riega de aducción. Esta situación puede provocar disparo mecánico por baja presión en tubería forzada. | La obstrucción en Cámara de Carga, puede provocar disparo mecánico en las instalaciones generadoras por baja presión en tubería forzada, lo que puede afectar a las instalaciones.          | No tiene consumo afectado | ninguno            | DP (Desconexión Forzada)    |                  |                           | 29-10-23 17:05 | 29-10-23 18:00 | 29-10-23 17:05        | 29-10-23 17:37     |
| 2023097293 | Central Generadora | Ejecución Exitosa | ENEL GENERACIÓN CHILE S.A.  | 20           | Desconexión     | Origen Externo | Programada        | 393   | TER ATACAMA    | 2401  | TER ATACAMA CC2-TV | Otro Tipo de Trabajo | Sin Limitación | Unidad PV02 indisponible por los trabajos en la S/E Atacama. Otros silos de unidades equipos primarios asociados al paflo 17, según el siguiente detalle: Limpieza de aducción manual y posterior silos de del B01P-2, B10CL17, S217, Cabina de estación M5, Central y salida Central. | Riesgo Bajo, trabajos supervisados en Terreno, indisponible unidad PV02.                                                                                                                                                                                                    | Sin comentarios                                                                                                                                                                             | No tiene consumo afectado | ninguno            | DP (Desconexión Programada) |                  |                           | 29-10-23 08:00 | 29-10-23 16:00 | 29-10-23 07:46        | 29-10-23 15:31     |
| 2023098613 | Central Generadora | Ejecución Exitosa | DUQUISCO SPA                | 14           | Desconexión     | Origen Interno | Curso Forzoso     | 364   | HP MAMPI       |       | CENTRAL COMPLETA   | Otro Tipo de Trabajo | Sin Limitación | Se requiere realizar rechazo de carga con unidades de la Central Mampí por obstrucción de Cámara de Carga Mampí, debido a gran cantidad de desechos acumulados en la riega de aducción. Esta situación puede provocar disparo mecánico por baja presión en tubería.                    | Se requiere realizar rechazo de carga con Unidades de CH Mampí por obstrucción de riega en Cámara de Carga Mampí, debido a gran cantidad de material acumulado. Esta situación puede provocar disparo mecánico por baja presión en tubería forzada.                         | La obstrucción de riega en Cámara de Carga, puede provocar disparo mecánico en las instalaciones generadoras por baja presión en tubería forzada, lo que puede afectar a las instalaciones. | No tiene consumo afectado | ninguno            | DP (Desconexión Forzada)    |                  |                           | 29-10-23 05:45 | 29-10-23 07:59 | 29-10-23 06:08        | 29-10-23 08:29     |
| 2023098612 | Central Generadora | Ejecución Exitosa | NIOMAS SPA                  | 514          | Desconexión     | Origen Interno | Curso Forzoso     | 368   | TER MAUSA      |       | CENTRAL COMPLETA   | Otro Tipo de Trabajo | Sin Limitación | reparación de elación en parrilla de caldera                                                                                                                                                                                                                                           | desconexión de curso forzoso para reparación de elación en parrilla                                                                                                                                                                                                         | Desconexión de curso forzoso                                                                                                                                                                | No tiene consumo afectado | ninguno            | DP (Desconexión Forzada)    |                  |                           | 29-10-23 00:25 | 29-10-23 00:48 | 29-10-23 00:25        | 30-10-23 02:09     |

Reporte Desconexión/Intervención Línea

Fecha generación reporte: 15-11-2023 16:43:47  
Estado: Ejecución Exitosa, Ejecución Exitosa  
Total registros General: 38  
Total registros Línea: 34

| Nº        | Estado | Empresa           | M Coordinado                           | Tipo Substancia | Origen       | Tipo Programación | ID(s)         | Línea | ID(s)                                              | Tramo(s)       | Tipo Trabajo                                                                                                                                | Potencia             | Trabajos a Realizar | Descripción Nivel Rango                                                                                                                                                                                                                                                                                                                                                    | Comentarios Adicional                                                                                                                                                                                                                                                                           | Consumo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Empresas Afiliadas        | Trabajo Region | Estado Operativo | Estado Operativo Efectivo | Fecha Inicio   | Fecha Fin      | Fecha Efectiva Inicio | Fecha Efectiva Fin |
|-----------|--------|-------------------|----------------------------------------|-----------------|--------------|-------------------|---------------|-------|----------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------|------------------|---------------------------|----------------|----------------|-----------------------|--------------------|
| 202308662 | Línea  | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                   | 2003            | Intervención | Origen Interno    | Curso Fomento | 900   | CURANILHUE - TRES PINOS 66KV                       | 489            | CURANILHUE - TRES PINOS 66KV C1                                                                                                             | Otro Tipo de Trabajo | Sin limitación      | A solicitud de FRONTEL, según su SOO N°92/2023 de curso forzoso, se requiere el bloqueo de la reconexión automática del interruptor 5281 de S/E Curanilahue, asociado a la LT 66 kV Curanilahue-Tres Pinos, por reemplazo de emergencia de posta MT Chibulón por redes MT de FRONTEL, y que está asociada a las líneas AT ya mencionadas.                                  | Trabajos a cargo de terceros.                                                                                                                                                                                                                                                                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No tiene consumo afectado | ninguno        |                  |                           | 20-10-23 22:50 | 30-10-23 02:00 | 20-10-23 22:50        | 30-10-23 03:10     |
| 202308638 | Línea  | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                   | 2003            | Desconexión  | Origen Externo    | Curso Fomento | 1376  | LOS ANGELES (CAG) - SANTA LUISA 134KV              | 3363 3728      | LOS ANGELES - EST. N°1 254KV C1<br>EST. N°1 - SANTA LUISA 254KV C1                                                                          | Otro Tipo de Trabajo | Sin limitación      | Desconexión de curso forzoso LT 134KV Los Angeles - Santa Luis y SE Santa Luis, para realizar verificación y pruebas en interruptor 52A2 de SE Santa Luis, interruptor de Reagente. Alertar interruptor 52A2 de SE Los Angeles. Alertar interruptores 52A1, 52A2, 52A3, 52A4 y 52A6 de S/E Santa Luis. Alertar y bloquear en SCADA DOCC 89A2-1 y 89A2-2 de S/E Santa Luis. | Controlado de acuerdo a procedimientos internos.                                                                                                                                                                                                                                                | Verificación de contactos interruptor 52A2, diferencias de tensión en barras de SE Santa Luis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No tiene consumo afectado | ninguno        |                  | 20-10-23 21:00            | 30-10-23 03:00 | 20-10-23 21:12 | 30-10-23 03:33        |                    |
| 202308621 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Desconexión  | Origen Interno    | Curso Fomento | 355   | CHARRUA - LAJA 66KV                                | 3416 3417      | CHARRUA - TAP PARQUE EDUO EL MATEN 66KV C1<br>TAP PARQUE EDUO EL MATEN - LAJA 66KV C1                                                       | Otro Tipo de Trabajo | Sin limitación      | Retiro de árbol posicionado sobre conductor en vano 112 a 113.                                                                                                                                                                                                                                                                                                             | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Retiro de árbol posicionado sobre conductor en vano 112 a 113.<br>Condiciones: Línea 66 KV Charra Laja, indistinguible.<br>Instalaciones en Rango: Línea 66 KV Charra Laja.<br>Temperatura de los Rangos: Al término de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: Tierra de bloqueo a ambos lados del vano 112 a 113.                                                                                                                                                                                                                                                                                                                                                                | No tiene consumo afectado | ninguno        |                  | 20-10-23 16:00            | 20-10-23 18:00 | 20-10-23 15:35 | 20-10-23 18:57        |                    |
| 202308617 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Desconexión  | Origen Interno    | Curso Fomento | 355   | CHARRUA - LAJA 66KV                                | 3416 3417      | CHARRUA - TAP PARQUE EDUO EL MATEN 66KV C1<br>TAP PARQUE EDUO EL MATEN - LAJA 66KV C1                                                       | Otro Tipo de Trabajo | Sin limitación      | Inspección y atención de falla en la Línea 66 KV Charra Laja.                                                                                                                                                                                                                                                                                                              | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Inspección y atención de falla en la Línea 66 KV Charra Laja.<br>Condiciones: Línea 66 KV Charra Laja, indistinguible.<br>Instalaciones en Rango: Línea 66 KV Charra Laja.<br>Temperatura de los Rangos: Al término de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: Se instalará tierra de bloqueo en caso de ser necesario a ambos lados del tramo a intervenir.                                                                                                                                                                                                                                                                                                                       | No tiene consumo afectado | ninguno        |                  | 20-10-23 13:30            | 20-10-23 20:00 | 20-10-23 16:27 | 20-10-23 18:57        |                    |
| 202308615 | Línea  | Ejecución Exitosa | CSE TRANSMISIÓN S.A.                   | 2003            | Intervención | Origen Externo    | Curso Fomento | 434   | VICTORIA - TRAGUEN 66KV                            | 511 512        | TAP VICTORIA FICC - TRAGUEN 66KV C1<br>VICTORIA - TAP VICTORIA FICC 66KV C1                                                                 | Otro Tipo de Trabajo | Sin limitación      | Se requiere el bloqueo de la reconexión automática del interruptor 5284 de S/E Victoria, asociado a la LT 66 kV Victoria Traguén, por retiro de elementos extraños, que fueron llevados por el viento, y que están sobre las líneas AT. Hay temporal de viento y lluvia en la zona. Rango alto.                                                                            | Se requiere el bloqueo de la reconexión automática del interruptor 5284 de S/E Victoria, asociado a la LT 66 kV Victoria Traguén, por retiro de elementos extraños, que fueron llevados por el viento, y que están sobre las líneas AT. Hay temporal de viento y lluvia en la zona. Rango alto. | Se requiere el bloqueo de la reconexión automática del interruptor 5284 de S/E Victoria, asociado a la LT 66 kV Victoria Traguén, por retiro de elementos extraños, que fueron llevados por el viento, y que están sobre las líneas AT. Hay temporal de viento y lluvia en la zona. Rango alto.                                                                                                                                                                                                                                                                                                                                                                                                                               | No tiene consumo afectado | ninguno        |                  | 20-10-23 11:15            | 20-10-23 15:00 | 20-10-23 11:20 | 20-10-23 12:56        |                    |
| 202309263 | Línea  | Ejecución Exitosa | TRANSAMORA SQUADADO S.A.               | 401             | Intervención | Origen Interno    | Programada    | 1042  | ANGAMOS - ESTACION DE BOMBEO SERRA GORDA N°1 220KV | 1916 1917 1918 | ANGAMOS - PATIO MUÑAS ANGAMOS 220KV C1<br>PATIO MUÑAS EST. DE BOMBEO SERRA GORDA N°1 220KV C1 - ESTACION DE BOMBEO SERRA GORDA N°1 220KV C1 | Otro Tipo de Trabajo | Sin limitación      | Instalación de mullas FO en estructura 27 L 220 KV Angamos - Estación de bombeo Sierra Gorda N°1 y patio de mullas 220/110 KV. Condiciones requeridas: No reconectar 52771 en S/E Estación de bombeo Sierra Gorda N°1. No reconectar 524 en S/E Angamos.                                                                                                                   | El riesgo del trabajo es bajo considerando las medidas de seguridad correspondientes.                                                                                                                                                                                                           | Instalación de mullas FO en estructura 27 L 220 KV Angamos - Estación de bombeo Sierra Gorda N°1 y patio de mullas 220/110 KV. Condiciones requeridas: No reconectar 52771 en S/E Estación de bombeo Sierra Gorda N°1. No reconectar 524 en S/E Angamos.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No tiene consumo afectado | ninguno        |                  | 20-10-23 09:00            | 20-10-23 19:00 | 20-10-23 09:16 | 20-10-23 11:52        |                    |
| 202308614 | Línea  | Ejecución Exitosa | MINERA ESCONDIDA LTSA.                 | 378             | Intervención | Origen Interno    | Curso Fomento | 1100  | NUOVA ZALDIVAR - GUPU 120KV                        | 2062 2063 2064 | NUOVA ZALDIVAR - TORRE 2114 220KV C1<br>TORRE 2114 N - TORRE 2114 S 220KV C1                                                                | Lavado de Adición    | Sin limitación      | Lavado adalones Línea 220 KV Nuova Zaldívar - GUPU.                                                                                                                                                                                                                                                                                                                        | Rango bajo, requiere lavado por alta contaminación en la zona.                                                                                                                                                                                                                                  | Se requieren las siguientes acciones de no reconexión:<br>Subestación Pao: Zaldívar 52073.<br>Subestación GUPU: 5241.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:06            | 20-10-23 15:00 | 20-10-23 08:08 | 20-10-23 11:38        |                    |
| 202308609 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Intervención | Origen Interno    | Curso Fomento | 1780  | LOS NOTROS - RALCO 220KV C1                        | 4389           | LOS NOTROS - RALCO 220KV C1 (En Revisión)                                                                                                   | Otro Tipo de Trabajo | Sin limitación      | Inspección visual con trepado de estructuras en la Línea 220 KV Ralco Los Notros N°1.                                                                                                                                                                                                                                                                                      | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Inspección visual con trepado de estructuras en la Línea 220 KV Ralco Los Notros N°1.<br>Condiciones: Con bloqueo a la reconexión, inmovilizado.<br>No reconectar las interrupciones asociadas a las instalaciones en rangos.<br>Instalaciones en Rango: Línea 220 KV Ralco Los Notros, C1 o L 220 KV Ralco Los Notros, C2.<br>Temperatura de los Rangos: Durante los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: No hay.                                                                                                                                                                                                                                                                  | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:41 | 20-10-23 21:49        |                    |
| 202309564 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Desconexión  | Origen Interno    | Programada    | 1638  | PUEBLO SECO - CHARRUA 154 KV                       | 3895           | EST. 607N - CHARRUA 154KV C1                                                                                                                | Otro Tipo de Trabajo | Sin limitación      | - S/E Charra: Desconexión primaria del desconector 89A2-3.<br>Proyecto MPR Reemplazo desconectores 89A2-1, 89A2-2, 89A2-3 y 89A2-27 de SE Charra. NUP 4337.                                                                                                                                                                                                                | No tiene consumo afectado                                                                                                                                                                                                                                                                       | ninguno                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                           | 20-10-23 08:00 | 20-10-23 13:00   | 20-10-23 08:21            | 20-10-23 15:45 |                |                       |                    |
| 202309564 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Desconexión  | Origen Interno    | Programada    | 1638  | PUEBLO SECO - CHARRUA 154 KV                       | 3895           | EST. 607N - CHARRUA 154KV C1                                                                                                                | Otro Tipo de Trabajo | Sin limitación      | - S/E Charra: Vinculación primaria del desconector 89A2-2. Pruebas funcionales y Pruebas en servicio de desconectores 89A2-2.<br>Proyecto MPR Reemplazo desconectores 89A2-1, 89A2-2, 89A2-3 y 89A2-27 de SE Charra. NUP 4337.                                                                                                                                             | Bajo                                                                                                                                                                                                                                                                                            | Actividades: S/E Charra: Vinculación primaria del desconector 89A2-2. Pruebas funcionales y Pruebas en servicio de desconectores 89A2-2.<br>Condiciones: Línea 154 KV Pueblo Seco - Charra, CL indistinguible.<br>L 154 KV Pueblo Seco - Charra, CL, indistinguible.<br>S/E Charra y S/E Pueblo Seco, alimentados por redes de 66 KV, coordinado con CSE y FRONTEL.<br>Instalaciones en Rango: Línea 154 KV Pueblo Seco - Charra, C1 o Barra Transferrida 154 KV Charra.<br>Temperatura de los Rangos: Al término de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: Subestación Charra, se instalará tierra provisional de bloques entre TCA y TBA, entre 89A2-3 y 89A2-3 y Barra Transferrida 154 KV. | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:14 | 20-10-23 15:45        |                    |
| 202307282 | Línea  | Ejecución Exitosa | SOCIEDAD TRANSAMORA METROPOLITANA S.A. | 1855            | Intervención | Origen Interno    | Programada    | 468   | LO ESPEJO - BURN 220KV                             | 1015 1016 1018 | LO ESPEJO - TAP LAS ACACIAS 110KV C2<br>TAP LAS ACACIAS - TAP SERNABAND 110KV C2<br>TAP SAN BERNARDO - BURN 220KV C1                        | Otro Tipo de Trabajo | Sin limitación      | Restricción de reconexión del circuito N°2 por trabajos en el circuito N°1.                                                                                                                                                                                                                                                                                                | Trabajos en el circuito N°1 en cercanía al Circuito N°2 energizado                                                                                                                                                                                                                              | Restricción de reconexión                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:30 | 20-10-23 22:10        |                    |
| 202307373 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Intervención | Origen Interno    | Programada    | 1396  | CONDONES - PARMARICOTA 220KV                       | 3199           | CONDONES - PARMARICOTA 220KV C1                                                                                                             | Otro Tipo de Trabajo | Sin limitación      | L 220KV Córdones Parmaricota, C1, Lavado de aislación, en instalación energizada Doble Circuito. Interrupción 521 - 5279, Total: 846 CAD, fecha de ejecución: 30/10-05/11/2023, Fase Ingreso Informe: 7 días término, COMMO: 8257151                                                                                                                                       | Bajo                                                                                                                                                                                                                                                                                            | Actividades: L 220KV Córdones Parmaricota, C1, Lavado de aislación, en instalación energizada Doble Circuito. Interrupción 521 - 5279, Total: 846 CAD, fecha de ejecución: 30/10-05/11/2023, Fase Ingreso Informe: 7 días término, COMMO: 8257151.<br>Restricciones: Parmaricota, 5211 No reconectar Córdones, 5212 No reconectar Instalaciones en Rango: L 220KV Córdones Parmaricota, C1<br>Temperatura de los Rangos: Durante de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: No hay.                                                                                                                                                                                                             | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 17:12        |                    |
| 202307282 | Línea  | Ejecución Exitosa | SOCIEDAD TRANSAMORA METROPOLITANA S.A. | 1855            | Intervención | Origen Interno    | Programada    | 470   | LO ESPEJO - GONHAYRA 110KV                         | 1012           | TAP LA COSTERA - LO ESPEJO FICC 110KV C2                                                                                                    | Otro Tipo de Trabajo | Sin limitación      | Restricción de reconexión del circuito N°2 por trabajos en el circuito N°1.                                                                                                                                                                                                                                                                                                | Trabajos en el circuito N°1 en cercanía al Circuito N°2 energizado                                                                                                                                                                                                                              | Restricción de reconexión                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:30 | 20-10-23 22:10        |                    |
| 202306930 | Línea  | Ejecución Exitosa | SOCIEDAD TRANSAMORA METROPOLITANA S.A. | 1855            | Intervención | Origen Interno    | Programada    | 469   | CHENA - LO ESPEJO 120KV                            | 935            | CHENA - TAP LO ESPEJO 120KV C2                                                                                                              | Otro Tipo de Trabajo | Sin limitación      | Restricción de reconexión del circuito N°2 por trabajos en el circuito N°1.                                                                                                                                                                                                                                                                                                | Trabajos en el circuito N°1 en cercanía al Circuito N°2 energizado                                                                                                                                                                                                                              | Restricción de reconexión                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:30 | 20-10-23 22:10        |                    |
| 202306207 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Intervención | Origen Interno    | Programada    | 1814  | RICHAUAS - LAS COMPAÑIAS 110KV                     | 1254 1257      | LAS COMPAÑIAS - TAP ROMERAL 110KV C1<br>TAP ROMERAL - RICHAUAS 110KV C1                                                                     | Otro Tipo de Trabajo | Sin limitación      | Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102.                                                                                                                                                                                                                                                                                      | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Instalación de Línea Auxiliar, Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102. Nota: Trabajos previos a reemplazo de conductores. Tramo Las Compañías - Romeral.<br>Restricciones: Subestación Compañías, 52H2 con bloqueo a la reconexión inmovilizado Subestación Matelmillo, 52H1 con bloqueo a la reconexión inmovilizado Instalaciones en Rango: L 110KV Matelmillo Las Compañías, C1<br>Temperatura de los Rangos: Durante de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: No hay.                                                                                                                                                          | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:35 | 20-10-23 17:12        |                    |
| 202306206 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Intervención | Origen Interno    | Programada    | 1812  | DOS AMIGOS - ALGARROBO 110KV                       | 1252           | DOS AMIGOS - ALGARROBO 110KV C1                                                                                                             | Otro Tipo de Trabajo | Sin limitación      | Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102.                                                                                                                                                                                                                                                                                      | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Instalación de Línea Auxiliar, Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102. Nota: Trabajos previos a reemplazo de conductores. Tramo Las Compañías - Romeral.<br>Restricciones: Subestación Compañías, 52H2 con bloqueo a la reconexión inmovilizado Subestación Matelmillo, 52H1 con bloqueo a la reconexión inmovilizado Instalaciones en Rango: L 110KV Matelmillo Las Compañías, C1<br>Temperatura de los Rangos: Durante de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: No hay.                                                                                                                                                          | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:35 | 20-10-23 17:12        |                    |
| 202306205 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Intervención | Origen Interno    | Programada    | 1811  | RICHAUAS - DOS AMIGOS 110KV                        | 1253           | RICHAUAS - TAP PAONALES 110KV C1<br>TAP PAONALES - DOS AMIGOS 110KV C1                                                                      | Otro Tipo de Trabajo | Sin limitación      | Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102.                                                                                                                                                                                                                                                                                      | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Instalación de Línea Auxiliar, Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102. Nota: Trabajos previos a reemplazo de conductores. Tramo Las Compañías - Romeral.<br>Restricciones: Subestación Compañías, 52H2 con bloqueo a la reconexión inmovilizado Subestación Matelmillo, 52H1 con bloqueo a la reconexión inmovilizado Instalaciones en Rango: L 110KV Matelmillo Las Compañías, C1<br>Temperatura de los Rangos: Durante de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: No hay.                                                                                                                                                          | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:35 | 20-10-23 17:13        |                    |
| 202306204 | Línea  | Ejecución Exitosa | TRANSELEC S.A.                         | 82              | Intervención | Origen Interno    | Programada    | 1811  | MANTENCILLO - ALGARROBO 110KV                      | 3479           | MANTENCILLO - ALGARROBO 110KV C1                                                                                                            | Otro Tipo de Trabajo | Sin limitación      | Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102.                                                                                                                                                                                                                                                                                      | Bajo                                                                                                                                                                                                                                                                                            | Actividades: Instalación de Línea Auxiliar, Instalación de postes auxiliares en tramo de línea entre las estructuras N°32A a 102. Nota: Trabajos previos a reemplazo de conductores. Tramo Las Compañías - Romeral.<br>Restricciones: Subestación Compañías, 52H2 con bloqueo a la reconexión inmovilizado Subestación Matelmillo, 52H1 con bloqueo a la reconexión inmovilizado Instalaciones en Rango: L 110KV Matelmillo Las Compañías, C1<br>Temperatura de los Rangos: Durante de los trabajos.<br>Nivel de Rango: Bajo.<br>Bloques del jefe de fuente: No hay.                                                                                                                                                          | No tiene consumo afectado | ninguno        |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 08:35 | 20-10-23 17:13        |                    |

Reporte Desconexión/Intervención Línea

Fecha generación reporte: 15-11-2023 16:43:47  
Estado: Ejecución Externa, Ejecución Externa  
Total registros General: 34  
Total registros Línea: 34

| Número    | Tipos             | Estado                                     | Empresa          | M Coordinado | Tipo Substancia | Origen         | Tipo Programación | ID(a)                     | Línea                                  | ID(s)                                    | Tramo(s)                                                                   | Tipo Trabajo         | Potencia         | Trabajos a Realizar                                                                                                                                           | Descripción Nivel Riesgo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Comentarios Adicional                                                                                                                                                                                                                                                                                                                                                                                                                    | Consumo                   | Empresas Afiliadas | Trabajo Requiere | Estado Operativo | Estado Operativo Efectivo | Fecha Inicio   | Fecha Fin      | Fecha Efectiva Inicio | Fecha Efectiva Fin |
|-----------|-------------------|--------------------------------------------|------------------|--------------|-----------------|----------------|-------------------|---------------------------|----------------------------------------|------------------------------------------|----------------------------------------------------------------------------|----------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------|------------------|------------------|---------------------------|----------------|----------------|-----------------------|--------------------|
| 202093282 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Interno | Programada        | 1500                      | CAUTIN – SECCIONADORA RIO TOLTEN 220KV | 3482                                     | CAUTIN – EST. 100 220KV C2                                                 | Otro Tipo de Trabajo | Sin Limitaciones | Roca de vegetación en franja de servidumbre                                                                                                                   | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Restricciones: Restricción a la reconexión.<br>Instalaciones en Riegos: Línea 220KV Cautin-Rio Toltén C1 o Línea 220KV Cautin-Rio Toltén C2<br>Temperalidad de los Riegos: Durante de los trabajos<br>Nivel de Riesgo: Bajo<br>Bloques del jefe de faena: No hay.<br>Observación: No recomendar los interruptores asociados a las líneas, trabajos coordinado con SES.                                                                   | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 08:00 | 20-10-23 18:00 | 20-10-23 09:35        | 20-10-23 18:20     |
| 202093281 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Interno | Programada        | 1500                      | CAUTIN – SECCIONADORA RIO TOLTEN 220KV | 3486                                     | CAUTIN – EST. 100 220KV C1                                                 | Otro Tipo de Trabajo | Sin Limitaciones | Roca de vegetación en franja de servidumbre                                                                                                                   | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Restricciones: Restricción a la reconexión.<br>Instalaciones en Riegos: Línea 220KV Cautin-Rio Toltén C1 o Línea 220KV Cautin-Rio Toltén C2<br>Temperalidad de los Riegos: Durante de los trabajos<br>Nivel de Riesgo: Bajo<br>Bloques del jefe de faena: No hay.<br>Observación: No recomendar los interruptores asociados a las líneas, trabajos coordinado con SES.                                                                   | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 08:00 | 20-10-23 18:00 | 20-10-23 09:35        | 20-10-23 18:20     |
| 202093261 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Interno | Programada        | 915                       | CIRUELOS – VALDIVIA 220KV              | 2835                                     | CIRUELOS – VALDIVIA 220KV C2                                               | Otro Tipo de Trabajo | Sin Limitaciones | Roca de vegetación en franja de servidumbre                                                                                                                   | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Restricciones: Restricción a la reconexión.<br>Instalaciones en Riegos: Línea 220KV Cruales-Valdivia, C1 o Línea 220KV Cruales-Valdivia, C2<br>Temperalidad de los Riegos: Durante de los trabajos<br>Nivel de Riesgo: Bajo<br>Bloques del jefe de faena: No hay.<br>Observación: No recomendar las interrupciones asociadas a las líneas.                                                                                               | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 08:00 | 20-10-23 18:00 | 20-10-23 09:51        | 20-10-23 21:20     |
| 202093260 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Interno | Programada        | 915                       | CIRUELOS – VALDIVIA 220KV              | 1406                                     | CIRUELOS – VALDIVIA 220KV C1                                               | Otro Tipo de Trabajo | Sin Limitaciones | Roca de vegetación en franja de servidumbre                                                                                                                   | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Restricciones: Restricción a la reconexión.<br>Instalaciones en Riegos: Línea 220KV Cruales-Valdivia, C1 o Línea 220KV Cruales-Valdivia, C2<br>Temperalidad de los Riegos: Durante de los trabajos<br>Nivel de Riesgo: Bajo<br>Bloques del jefe de faena: No hay.<br>Observación: No recomendar las interrupciones asociadas a las líneas.                                                                                               | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 08:00 | 20-10-23 18:00 | 20-10-23 09:51        | 20-10-23 21:20     |
| 202089993 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Interno | Programada        | 1272                      | PEHUENCHE – ANCOA 220KV                | 1382                                     | PEHUENCHE – ANCOA 220KV C2                                                 | Otro Tipo de Trabajo | Sin Limitaciones | Programa de mantenimiento de Líneas.                                                                                                                          | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Actividades: Roca de vegetación en franja de servidumbre.<br>Instalaciones en Riegos: Línea 220 KV Pehuénche-Canal Malado-Ancoas 1 o Pehuénche-Ancoas 2.<br>Temperalidad de los Riegos: Durante los trabajos, por acortamiento de distancia con línea energizada.<br>Nivel de Riesgo: Bajo.<br>Bloques del jefe de faena: No recomendar interruptores que sirven a la Línea 220 KV Pehuénche-Canal Malado-Ancoas 1 a Pehuénche-Ancoas 2. | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 08:00 | 20-10-23 18:00 | 20-10-23 08:27        | 20-10-23 18:20     |
| 202089992 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Interno | Programada        | 201                       | TAP CANAL MELADO – CANAL MELADO 220KV  | 1590                                     | TAP CANAL MELADO – CANAL MELADO 220KV C1                                   | Otro Tipo de Trabajo | Sin Limitaciones | Programa de mantenimiento de Líneas.                                                                                                                          | Bajo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Actividades: Roca de vegetación en franja de servidumbre.<br>Instalaciones en Riegos: Línea 220 KV Pehuénche-Canal Malado-Ancoas 1 o Pehuénche-Ancoas 2.<br>Temperalidad de los Riegos: Durante los trabajos, por acortamiento de distancia con línea energizada.<br>Nivel de Riesgo: Bajo.<br>Bloques del jefe de faena: No recomendar interruptores que sirven a la Línea 220 KV Pehuénche-Canal Malado-Ancoas 1 a Pehuénche-Ancoas 2. | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 08:00 | 20-10-23 18:00 | 20-10-23 08:27        | 20-10-23 18:20     |
| 202087722 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Externo | Programada        | 1548                      | GEOSOLPOS – LAGUNAS 220KV              | 3602                                     | GEOSOLPOS – LAGUNAS 220KV C1                                               | Otro Tipo de Trabajo | Sin Limitaciones | A solicitud de Colihuaui, proyecto C20, bloque a la reconexión de la 1.220 KV Geogilfos-Lagunas C1 y C2 en apoyo a los trabajos de construcción de acueducto. | Instalaciones en Riegos: L. 220 KV Geogilfos-Lagunas C1.<br>Temperalidad de los Riegos: Durante de los trabajos. Nivel de Riesgo: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 21:20        |                    |
| 202087690 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Externo | Programada        | 1548                      | GEOSOLPOS – LAGUNAS 220KV              | 3603                                     | GEOSOLPOS – LAGUNAS 220KV C2                                               | Otro Tipo de Trabajo | Sin Limitaciones | A solicitud de Colihuaui, proyecto C20, bloque a la reconexión de la 1.220 KV Geogilfos-Lagunas C1 y C2 en apoyo a los trabajos de construcción de acueducto. | Instalaciones en Riegos: L. 220 KV Geogilfos-Lagunas C2.<br>Temperalidad de los Riegos: Durante de los trabajos. Nivel de Riesgo: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 21:20        |                    |
| 202087621 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Externo | Programada        | 1547                      | TARAPACA – GEOSOLPOS 220KV             | 3601                                     | TARAPACA – GEOSOLPOS 220KV C2                                              | Otro Tipo de Trabajo | Sin Limitaciones | A solicitud de Colihuaui, proyecto C20, bloque reconexión de la 1.220 KV Tarapacá-Geogilfos C1 y C2 en apoyo a los trabajos de construcción de acueducto.     | Instalaciones en Riegos: L. 220 KV Tarapacá-Geogilfos C2.<br>Temperalidad de los Riegos: Durante de los trabajos. Nivel de Riesgo: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 21:20        |                    |
| 202087590 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Externo | Programada        | 1547                      | TARAPACA – GEOSOLPOS 220KV             | 3600                                     | TARAPACA – GEOSOLPOS 220KV C1                                              | Otro Tipo de Trabajo | Sin Limitaciones | A solicitud de Colihuaui, proyecto C20, bloque reconexión de la 1.220 KV Tarapacá-Geogilfos C1 y C2 en apoyo a los trabajos de construcción de acueducto.     | Instalaciones en Riegos: L. 220 KV Tarapacá-Geogilfos C1.<br>Temperalidad de los Riegos: Durante de los trabajos. Nivel de Riesgo: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 21:20        |                    |
| 202087448 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Externo | Programada        | 1454                      | SAN SIMON – LAGUNAS 220KV              | 3044                                     | SAN SIMON – TAP NUEVA VICTORIA 220 KV C1                                   | Otro Tipo de Trabajo | Sin Limitaciones | A solicitud de Colihuaui, proyecto C20, restricción a la reconexión en apoyo a los trabajos de construcción de acueducto.                                     | Instalaciones en Riegos: L. 220 KV San Simón- Lagunas<br>Temperalidad de los Riegos: Durante de los trabajos. Nivel de Riesgo: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 21:20        |                    |
| 202087379 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Intervención    | Origen Externo | Programada        | 1610                      | FRONTERA – LAGUNAS 220KV               | 3228                                     | TAP OFF OLLAGUILA – FRONTERA C1 220KV LAGUNAS – TAP OFF OLLAGUILA C1 220KV | Otro Tipo de Trabajo | Sin Limitaciones | A solicitud de Colihuaui, proyecto C20, en apoyo a los trabajos de construcción de acueducto.                                                                 | Instalaciones en Riegos: L. 220 KV Frontera-Lagunas C2.<br>Temperalidad de los Riegos: Durante de los trabajos. Nivel de Riesgo: Bajo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 08:00            | 20-10-23 18:00 | 20-10-23 07:15 | 20-10-23 21:20        |                    |
| 202090664 | Línea             | Ejecución Externa                          | MINERA ESCONDIRA | 378          | Intervención    | Origen Interno | Programada        | 1122                      | ZALDIVAR – ESCONDIRA 220KV             | 2103                                     | ZALDIVAR – ESCONDIRA 220KV C1                                              | Lavado de Adición    | Sin Limitaciones | Lavado de adición Línea 220 KV Zaldivar – Escondida                                                                                                           | Riesgo bajo. Trabajos según procedimientos internos de lavado de adición.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Se requiere orden de no recomendar en S/E Escondida 5203<br>S/E Zaldivar 5211.                                                                                                                                                                                                                                                                                                                                                           | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 07:30 | 20-10-23 18:00 | 20-10-23 08:08        | 20-10-23 13:38     |
| 202097306 | Ejecución Externa | SOCIEDAD TRANSACCIONERA METROPOLITANA S.A. | 1855             | Desconexión  | Origen Interno  | Programada     | 408               | TAP LO ESPEJO – BUN 120KV | 789                                    | TAP LO ESPEJO – TAP LAS ACACIAS 110KV C1 | TAP LAS ACACIAS – TAP SAN BERNARDO 110KV C1                                | Otro Tipo de Trabajo | Sin Limitaciones | Desconexión del circuito entre S/E Espiga y puentes abiertos en torre N°45 por retiro de cable guarda y tendido de OPGW entre las torres 758 y 767            | Trabajo con riegos controlados                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Desconexión complementaria trabajos de Mantenimiento Mayor                                                                                                                                                                                                                                                                                                                                                                               | No tiene consumo afectado | ninguno            |                  |                  |                           | 20-10-23 07:00 | 20-10-23 19:00 | 20-10-23 09:30        | 20-10-23 22:10     |
| 202097090 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Desconexión     | Origen Interno | Programada        | 1632                      | MUALQUI – CHAMBUA 220KV                | 3881                                     | ESTRUCTURA 166 – CHAMBUA 220KV C1                                          | Otro Tipo de Trabajo | Sin Limitaciones | S/E Charúa: Desvinculación primaria del desconector 8917-3 y reemplazo de conector del neutro de transformador de potencial TP15 (P1, P2 y P3).               | Actividades: S/E Charúa: Desvinculación primaria del desconector 8917-3, por trabajos asociados a "Proyecto MMR Reemplazo de desconectores 8917-1, 8917-2 y 8917-3 de S/E Charúa 220 KV", NUP 4333.<br>Nota: «Por seguridad a personas por riesgo de acortamiento de distancia con Pafos 125 y 131 durante los trabajos de desvinculación primaria del desconector 8917-3, se requiere además de la desconexión de la Línea 220 KV Charúa-Hualqui.»<br>«Con desconexión de la Línea 220 KV Charúa-Hualqui, se realizará el reemplazo de conector del neutro de transformador de potencial TP15 (P1, P2 y P3).»<br>Condiciones: Línea 220 KV Antuco-Charúa, CL, Barra Transversal 2 220 KV Charúa y Línea 220 KV Charúa-Hualqui, CL, indispónibles.<br>Instalaciones en Riegos: Línea 220 KV Charúa-Hualqui, C1 o Línea 220 KV Antuco-Charúa, C2.<br>Temperalidad de los Riegos: Al término de los trabajos.<br>Nivel de Riesgo: Bajo.<br>Bloques del jefe de faena: Subestación Charúa, se instalarán tierras provisionales de bloques en conductor de poder de TP151, entre 8917-2 y 8917-3, entre 8918-2 y barra Trans. 220 KV Sac.2, entre 8918-3 y barra Trans. 220 KV Sac.2 y en cable de poder de TP97. | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 01:00            | 20-10-23 06:00 | 20-10-23 01:28 | 20-10-23 06:08        |                    |
| 202097089 | Línea             | Ejecución Externa                          | TRANSELEC S.A.   | 82           | Desconexión     | Origen Interno | Programada        | 138                       | ANTUCO (TRANSELEC) – CHAMBUA 220KV     | 1389                                     | ANTUCO (TRANSELEC) – CHAMBUA 220KV C2                                      | Otro Tipo de Trabajo | Sin Limitaciones | S/E Charúa: Desvinculación primaria del desconector 8917-3 y reemplazo de conector del neutro de transformador de potencial TP15 (P1, P2 y P3).               | Actividades: S/E Charúa: Desvinculación primaria del desconector 8917-3, por trabajos asociados a "Proyecto MMR Reemplazo de desconectores 8917-1, 8917-2 y 8917-3 de S/E Charúa 220 KV", NUP 4333.<br>Nota: «Por seguridad a personas por riesgo de acortamiento de distancia con Pafos 125 y 131 durante los trabajos de desvinculación primaria del desconector 8917-3, se requiere además de la desconexión de la Línea 220 KV Charúa-Hualqui.»<br>«Con desconexión de la Línea 220 KV Charúa-Hualqui, se realizará el reemplazo de conector del neutro de transformador de potencial TP15 (P1, P2 y P3).»<br>Condiciones: Línea 220 KV Antuco-Charúa, CL, Barra Transversal 2 220 KV Charúa y Línea 220 KV Charúa-Hualqui, CL, indispónibles.<br>Instalaciones en Riegos: Línea 220 KV Charúa-Hualqui, C1 o Línea 220 KV Antuco-Charúa, C2.<br>Temperalidad de los Riegos: Al término de los trabajos.<br>Nivel de Riesgo: Bajo.<br>Bloques del jefe de faena: Subestación Charúa, se instalarán tierras provisionales de bloques en conductor de poder de TP151, entre 8917-2 y 8917-3, entre 8918-2 y barra Trans. 220 KV Sac.2, entre 8918-3 y barra Trans. 220 KV Sac.2 y en cable de poder de TP97. | No tiene consumo afectado                                                                                                                                                                                                                                                                                                                                                                                                                | ninguno                   |                    |                  |                  | 20-10-23 01:00            | 20-10-23 06:00 | 20-10-23 01:28 | 20-10-23 06:08        |                    |

#### ANEXO N°5

Informes de trabajos y fallas de instalaciones ingresados en el Sistema Neomante del Coordinador Eléctrico Nacional por CGE Transmisión S.A., Sistema de Transmisión del Sur S.A., AR Alena SpA, Enel Green Power Chile S.A., Eólica La Esperanza S.A., WPD Negrete SpA, Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda. y Empresa Eléctrica de la Frontera S.A.

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 13:13

Finalizado

**Número:**

2023004289

**Solicitante:**

Roberto Francisco Matus Aravena

**Empresa:**

CGE TRANSMISIÓN S.A.

**Tipo de Origen:**

Externo

**Línea:**

LOS ANGELES (CGE) - SANTA LUISA 154KV

**Tramo:**

Tipo: secciones\_tramos - LOS ANGELES – EST. N°5 154KV C1

Nombre : LOS ANGELES – EST. N°5 154KV C1

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:19

Protección : .

Interruptor : 52A2 de S/E Los Ángeles.

Consumo : 0

Comentario : Reconexión automática exitosa.

Tipo: secciones\_tramos - EST. N°5 – SANTA LUISA 154KV C1

Nombre : EST. N°5 – SANTA LUISA 154KV C1

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:19

Protección : .

Interruptor : 52A2 de S/E los Ángeles.

Consumo : 0

Comentario : Reconexión automática exitosa.

**Zona Afectada**

Biobío

Araucanía

**Comuna**

Los Angeles

Negrete

**Tipo Causa**

Causa Presunta

Causa Principal

**Comentarios Tipo Causa:**

se investiga.

Causas

-Fenómeno Físico: Origen no determinado.

-Elemento: Conductores

-Fenómeno Eléctrico: Distancia (admitancia, impedancia o reactancia)

-Operación de los interruptores: Opera según lo esperado

Comentarios Causas:

-Fenómeno Físico: Perturbación por reconexión automática exitosa del interruptor 52A2 de S/E Los Ángeles, asociado a la LT 154 kV Los Ángeles-Santa Fe, sin consumos afectados, hay temporal de viento y lluvia en la zona.

-Elemento: .

-Fenómeno Eléctrico: .

-Operación de los interruptores: .

Observaciones:

-Observaciones: Perturbación por reconexión automática exitosa del interruptor 52A2 de S/E Los Ángeles, asociado a la LT 154 kV Los Ángeles-Santa Fe, sin consumos afectados, hay temporal de viento y lluvia en la zona.

-Acciones Inmediatas: Revisión de protecciones y recorrido pedestre de la línea AT. Informado el Despacho del CEN.

-Hechos Sucedidos: Perturbación por reconexión automática exitosa del interruptor 52A2 de S/E Los Ángeles, asociado a la LT 154 kV Los Ángeles-Santa Fe, sin consumos afectados, hay temporal de viento y lluvia en la zona.

-Acciones Correctivas a Corto Plazo: .

-Acciones Correctivas a Largo Plazo: .

Afecta SSCC:

Afecta Medidores:

No

Afecta Protecciones:

No

Consumo:

No tiene consumo afectado

Retorno Automatico:

Tiene Retorno Automático

Fecha / Hora Perturbación de la Solicitud:

29-10-2023 11:19

Fecha / Hora Estimada Retorno:

29-10-2023 11:19

Fecha / Hora Efectiva Retorno:

29-10-2023 11:20

Archivos Subidos

| Archivo | Fecha Subida |
|---------|--------------|
|---------|--------------|



 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 13:28

Finalizado

**Número:**

2023004290

**Solicitante:**

Roberto Francisco Matus Aravena

**Empresa:**

CGE TRANSMISIÓN S.A.

**Tipo de Origen:**

Externo

**SubEstación:**

S/E LOS ANGELES (CGE)

**Falla Sobre:**

transformador

**Elementos**

Tipo: transformadores3d - LOS ANGELES (CGE) 230-154/66/14.8KV 75MVA N°4

Nombre : LOS ANGELES (CGE) 230-154/66/14.8KV 75MVA N°4

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:23

Protección : .

Interruptor : 52AT4 de S/E Los Ángeles.

Consumo : 22.4

Comentario : Desconexión forzada.

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

Araucanía

**Comuna**

Los Angeles

Negrete

**Tipo Causa**

Causa Presunta

Causa Principal

Evento climático ( viento, lluvia, temporal, etc. )

**Comentarios Tipo Causa:**

Se investiga.

**Causas**

- Fenómeno Físico:** Origen no determinado.
- Elemento:** Conductores
- Fenómeno Eléctrico:** Distancia (admitancia, impedancia o reactancia)
- Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

- Fenómeno Físico:** Desconexión forzada del interruptor 52AT4 de S/E Los Ángeles, asociado al general de 66 kV del T4 de la misma S/E, afectó a los consumos de las SS/EE El Avellano y Manso de Velasco (ambas de CGET), con una potencia interrumpida de 13,7 MW y 29511 clientes afectados de CGED; S/E Negrete (de STS) con una potencia interrumpida de 8,7 MW y 16213 clientes afectados de FRONTEL, además, en la S/E Negrete estaban generando la centrales conectadas 27,5 MW en total; y en S/E Tap Off Los Buenos Aires (de ENEL GREEN POWER) la Central Buenos Aires estaba generando de 20 MW, hay temporal de viento y lluvia en la zona (asociada a la RAE del 52A2 de S/E Los Ángeles, según IF N°2023004289).
- Elemento:** .
- Fenómeno Eléctrico:** .
- Operación de los interruptores:** .

**Observaciones:**

- Observaciones:** Desconexión forzada del interruptor 52AT4 de S/E Los Ángeles, asociado al general de 66 kV del T4 de la misma S/E, afectó a los consumos de las SS/EE El Avellano y Manso de Velasco (ambas de CGET), con una potencia interrumpida de 13,7 MW y 29511 clientes afectados de CGED; S/E Negrete (de STS) con una potencia interrumpida de 8,7 MW y 16213 clientes afectados de FRONTEL, además, en la S/E Negrete estaban generando la centrales conectadas 27,5 MW en total; y en S/E Tap Off Los Buenos Aires (de ENEL GREEN POWER) la Central Buenos Aires estaba generando de 20 MW, hay temporal de viento y lluvia en la zona (asociada a la RAE del 52A2 de S/E Los Ángeles, según IF N°2023004289).
- Acciones Inmediatas:** Revisión de protecciones, y cierre del interruptor para recuperar los consumos, según procedimientos de CGET, y en coordinación con los Despachos del CEN, STS, ENEL GREEN POWER y CGED.
- Hechos Sucridos:** Desconexión forzada del interruptor 52AT4 de S/E Los Ángeles, asociado al general de 66 kV del T4 de la misma S/E, afectó a los consumos de las SS/EE El Avellano y Manso de Velasco (ambas de CGET), con una potencia interrumpida de 13,7 MW y 29511 clientes afectados de CGED; S/E Negrete (de STS) con una potencia interrumpida de 8,7 MW y 16213 clientes afectados de FRONTEL, además, en la S/E Negrete estaban generando la centrales conectadas 27,5 MW en total; y en S/E Tap Off Los Buenos Aires (de ENEL GREEN POWER) la Central Buenos Aires estaba generando de 20 MW, hay temporal de viento y lluvia en la zona (asociada a la RAE del 52A2 de S/E Los Ángeles, según IF N°2023004289).
- Acciones Correctivas a Corto Plazo:** .
- Acciones Correctivas a Largo Plazo:** .

**Afecta SSCC:****Afecta Medidores:**

No

**Afecta Protecciones:**

No

**Consumo:**

Consumo Regulado

**Distribuidoras Afectadas**

CGE DISTRIBUCIÓN S.A. / Perd. Estm. de Potencia: 13.7 / Región : Araucanía / Clientes Afectados: 29511  
EMPRESA ELÉCTRICA DE LA FRONTERA S.A. / Perd. Estm. de Potencia: 8.7 / Región : Araucanía / Clientes Afectados:

16213

**Retorno Automatico:**

No Tiene Retorno Automático

**Fecha / Hora Perturbación de la Solicitud:**

29-10-2023 11:19

**Fecha / Hora Estimada Retorno:**

29-10-2023 11:23

**Fecha / Hora Efectiva Retorno:**

29-10-2023 11:23

Archivos Subidos

| Archivo                                                                                                                                                                                                                                                        | Fecha Subida        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <div><div> IF 2023004290 29.10.2023 SE Los Angeles VF.pdf (/informe_fallas/download_file/653e861bad651f2e591c9332/IF 2023004290 29.10.2023 SE Los Angeles VF.pdf)</div></div> | 13/11/2023 17:21:26 |
| <div><div> Eventos.zip (/informe_fallas/download_file/653e861bad651f2e591c9332/Eventos.zip)</div></div>                                                                      | 13/11/2023 17:21:45 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 17:07

Finalizado

**Número:**

2023004300

**Solicitante:**

Luis Alonso Gutierrez Araya

**Empresa:**

CGE TRANSMISIÓN S.A.

**Tipo de Origen:**

Externo

**Línea:**

CENTRAL PARQUE EOLICO LOS BUENOS AIRES - NEGRETE 66KV

**Tramo:**

Tipo: secciones\_tramos - EST. 129 - EST. 130 66KV C1

Nombre : EST. 129 - EST. 130 66KV C1

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:26

Protección : .

Interruptor : 52B1

Consumo : 7.5 MW

Comentario : .

Tipo: secciones\_tramos - CENTRAL PARQUE EOLICO LOS BUENOS AIRES - EST.129 66KV C1

Nombre : CENTRAL PARQUE EOLICO LOS BUENOS AIRES - EST.129 66KV C1

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:26

Protección : .

Interruptor : .

Consumo : .

Comentario : .

Tipo: secciones\_tramos - ESTRUCTURA 130 - ESTRUCTURA 134 66KV C1

Nombre : ESTRUCTURA 130 - ESTRUCTURA 134 66KV C1

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:26

Protección : .

Interruptor : .

Consumo : .

Comentario : .

Tipo: secciones\_tramos - EST. 130 - NEGRETE 66KV C1

Nombre : EST. 130 - NEGRETE 66KV C1

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:26

Protección : ..

Interruptor : .

Consumo : .

Comentario : .

**Zona Afectada**

Biobío

**Comuna**

Negrete

**Tipo Causa**

Causa Presunta

Causa Principal

**Comentarios Tipo Causa:**

.

**Causas**

**-Fenómeno Físico:** Origen no determinado.

**-Elemento:** Interruptores

**-Fenómeno Eléctrico:** Bajo voltaje

**-Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

**-Fenómeno Físico:** .

**-Elemento:** .

**-Fenómeno Eléctrico:** .

**-Operación de los interruptores:** .

**Observaciones:**

**-Observaciones:** Perdida de suministro Línea de 66KV Los Buenos Aires - Negrete, por apertura del 52B1 S/E Los Buenos Aires propiedad de ENEL Green Power, afectando los consumos de S/E Negrete de STS, (asociada a la RAE del 52A2 de S/E Los Ángeles, según IF N°2023004289.)

**-Acciones Inmediatas:** Cierre en coordinación con ENEL Green Power.

**-Hechos Sucridos:** .

**-Acciones Correctivas a Corto Plazo:** .

**-Acciones Correctivas a Largo Plazo:** .

**Afecta SCCC:****Afecta Medidores:**

No

**Afecta Protecciones:**

No

**Consumo:**

Consumo Regulado y Libre

**Distribuidoras Afectadas**

EMPRESA ELÉCTRICA DE LA FRONTERA S.A. / Perd. Estm. de Potencia: 7.5 / Región : Biobío / Clientes Afectados: 16213

**Retorno Automatico:**

No Tiene Retorno Automático

**Fecha / Hora Perturbación de la Solicitud:**  
29-10-2023 11:19

**Fecha / Hora Estimada Retorno:**  
29-10-2023 11:26

**Fecha / Hora Efectiva Retorno:**  
29-10-2023 11:26

Archivos Subidos

| Archivo                                                                                                                                                                                                                                             | Fecha Subida           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  IF 2023004290 29.10.2023 SE Los Angeles VF.pdf<br>(/informe_fallas/download_file/653eb470ad651f2e63c8cb2a/IF 2023004290 29.10.2023 SE Los Angeles VF.pdf)         | 14/11/2023<br>09:37:54 |
|  IF 04300 LT66kV B_Aires - Negrete 29.10.202_VF.pdf<br>(/informe_fallas/download_file/653eb470ad651f2e63c8cb2a/IF 04300 LT66kV B_Aires - Negrete 29.10.202_VF.pdf) | 14/11/2023<br>09:41:17 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 12:54

Finalizado

**Número:**

2023004286

**Solicitante:**

Felipe Mora Salcedo

**Empresa:**

SISTEMA DE TRANSMISIÓN DEL SUR S.A.

**Tipo de Origen:**

Externo

**SubEstación:**

S/E NEGRETE

**Falla Sobre:**

barra

**Elementos**

Tipo: barras - BA S/E NEGRETE 23KV B2

Nombre : BA S/E NEGRETE 23KV B2

Fecha Perturbacion : 29-10-2023 11:20

Fecha Normaliza : 29-10-2023 11:26

Protección : 27

Interruptor : 52ET2

Consumo : 0 MW

Comentario : SE Negrete queda sin energía por falla externa que afecta interruptor 52AT4 de SE Los Angeles (CGE).

Tipo: barras - BA S/E NEGRETE 66KV BP

Nombre : BA S/E NEGRETE 66KV BP

Fecha Perturbacion : 29-10-2023 11:20

Fecha Normaliza : 29-10-2023 11:26

Protección : 27

Interruptor : 52ET1

Consumo : 0 MW

Comentario : SE Negrete queda sin energía por falla externa que afecta interruptor 52AT4 de SE Los Angeles (CGE).

Tipo: barras - BA S/E NEGRETE 23KV B1

Nombre : BA S/E NEGRETE 23KV B1

Fecha Perturbacion : 29-10-2023 11:20

Fecha Normaliza : 29-10-2023 11:26

Protección : 27

Interruptor : 52ET1

Consumo : 8.7 MW

Comentario : SE Negrete queda sin energía por falla externa que afecta interruptor 52AT4 de SE Los Angeles (CGE).

**¿Produce otra indisponibilidad?**

**Zona Afectada****Comuna****Tipo Causa****Comentarios Tipo Causa:****Causas**

**-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.

**-Elemento:** Interruptores

**-Fenómeno Eléctrico:** Bajo voltaje

**-Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

**-Fenómeno Físico:** Falla 52AT4 en SE Los Angeles, afectando SE Negrete quedando sin energía.

**-Elemento:** 52B1

**-Fenómeno Eléctrico:** SE Negrete queda sin tensión por falla externa.

**-Operación de los interruptores:** SE Negrete queda sin tensión por falla externa.

**Observaciones:**

**-Observaciones:** Sin comentarios.

**-Acciones Inmediatas:** CEN coordina cierre del 52AT4 - SE Los Angeles con CGE.

**-Hechos Sucidos:** 11:23hrs CGE cierra 52AT4 energizando línea Los Angeles - Los Buenos Aires. 11:26hrs EnelGreenPower cierra 52B1 en SE Los Buenos Aires. 11:26hrs SE Negrete queda energizada.

**-Acciones Correctivas a Corto Plazo:** Sin comentarios.

**-Acciones Correctivas a Largo Plazo:** Sin comentarios.

**Afecta SSCC:****Afecta Medidores:****Afecta Protecciones:****Consumo:****Distribuidoras Afectadas****Retorno Automatico:****Fecha / Hora Perturbación de la Solicitud:**

Fecha / Hora Estimada Retorno:

29-10-2023 11:26

Fecha / Hora Efectiva Retorno:

29-10-2023 11:26

 Archivos Subidos

| Archivo                                                                                                                                                                                       | Fecha Subida           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  2023004286_Negrete2.pdf<br>(/informe_fallas/download_file/653e7781ad651f2e591c932c/2023004286_Negrete2.pdf) | 04/11/2023<br>23:40:45 |
|  Data.zip (/informe_fallas/download_file/653e7781ad651f2e591c932c/Data.zip)                                  | 04/11/2023<br>23:40:45 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 19:21

Finalizado

**Número:**

2023004305

**Solicitante:**

AR ALENA SPA

**Empresa:**

AR ALENA SPA

**Tipo de Origen:**

Externo

**SubEstación:**

S/E CENTRAL EOLICA ALENA

**Falla Sobre:**

pañó

**Elementos**

Tipo: panos - S/E CENTRAL EOLICA ALENA AT1

Nombre : S/E CENTRAL EOLICA ALENA AT1

Fecha Perturbacion : 29-10-2023 11:20

Fecha Normaliza : 29-10-2023 20:00

Protección : Ausencia de tension

Interruptor : 52AT1

Consumo : 0

Comentario : sin comentarios

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

**Comuna**

Los Angeles

**Tipo Causa**

Causa Presunta

Causa Principal

Baja tensión en subestación

**Comentarios Tipo Causa:**

Ausencia de fase

**Causas****-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.**-Elemento:** Interruptores

- Fenómeno Eléctrico:** Desbalance de tensión
- Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

- Fenómeno Físico:** ausencia de tension en una fase de la linea
- Elemento:** Apertura espontanea del interruptor de linea 52AT1
- Fenómeno Eléctrico:** una de las fases se encontró con tension por debajo de los limites operacionales
- Operación de los interruptores:** Interruptor opera segun lo esperado

**Observaciones:**

- Observaciones:** Se mantiene energizada la línea a pesar del desbalance en las fases
- Acciones Inmediatas:** se mantiene desconectada la SE Alena a la espera de la investigacion por parte de CGE
- Hechos Sucedidos:** Se abre SE Alena a las 11:20 por ausencia de tension en una fase, al momento de inyectaban 14MW
- Acciones Correctivas a Corto Plazo:** desconexion hasta estabilizar las tensiones de linea
- Acciones Correctivas a Largo Plazo:** revision del interruptor por si fue afectado debido a la desconexión

**Afecta SSCC:****Afecta Medidores:**

No

**Afecta Protecciones:**

Si

**Comentario :** Opera protección por desbalance de tension**Consumo:**

No tiene consumo afectado

**Retorno Automatico:**

No Tiene Retorno Automático

**Fecha / Hora Perturbación de la Solicitud:**

29-10-2023 11:20

**Fecha / Hora Estimada Retorno:**

29-10-2023 20:00

**Fecha / Hora Efectiva Retorno:**

30-10-2023 02:00

 Archivos Subidos

| Archivo                                                                                                                                                                                                                 | Fecha Subida           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  IFA-CL17-2023-004 Disparo 52AT1.pdf<br>(/informe_fallas/download_file/653ed268ad651f2e63c8cb31/IFA-CL17-2023-004 Disparo 52AT1.pdf) | 10/11/2023<br>15:26:28 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 11:52

Finalizado

**Número:**

2023004271

**Solicitante:**

ENEL GREEN POWER CHILE S.A.

**Empresa:**

ENEL GREEN POWER CHILE S.A.

**Tipo de Origen:**

Externo

**Central:**

PE LOS BUENOS AIRES

**Afecta a todas las unidades**

**Potencia:**

Desconexión de la unidad(es)

**Unidades:**

**Zona Afectada**

Biobío

**Comuna**

Los Angeles

**Tipo Causa**

Causa Definitiva

Causa Principal

Desconexión debido a falla en instalaciones de terceros.

**Comentarios Tipo Causa:**

Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE

**Causas**

**-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.

**-Elemento:** Interruptores

**-Fenómeno Eléctrico:** Bajo voltaje

**-Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

**-Fenómeno Físico:** Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE

**-Elemento:** Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE

**-Fenómeno Eléctrico:** Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE

**-Operación de los interruptores:** Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE

**Observaciones:**

**-Observaciones:** Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE  
**-Acciones Inmediatas:** Normalizar de acuerdo a instrucciones del Coordinador  
**-Hechos Sucedidos:** Falla en Transformador N° 4 S/E Los Angeles propiedad de CGE  
**-Acciones Correctivas a Corto Plazo:** Normalizar en coordinacion con Coordinador y CGE  
**-Acciones Correctivas a Largo Plazo:** No hay

**Afecta SSCC:**

**Afecta Medidores:**

No

**Afecta Protecciones:**

No

**Consumo:**

No tiene consumo afectado

**Retorno Automatico:**

No Tiene Retorno Automático

**Estado Operativo:**

FE (Falla Externa)

**Estado Operativo Efectivo:**

FE (Falla Externa)

**Fecha / Hora Perturbación de la Solicitud:**

29-10-2023 11:20

**Fecha / Hora Estimada Retorno:**

29-10-2023 11:26

**Fecha / Hora Efectiva Retorno:**

29-10-2023 11:26

 Archivos Subidos

**Fecha  
Subida**

**Archivo**

|                                                                                                                                                                                                                                                                                              |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|  GRE_CHL_OEM_IF_5123_LBA_Desconexión ATR4_LA_154 kV_29102023_1120_VF.pdf (/informe_fallas/download_file/653e6f1cad651f2e63c8cb21/GRE_CHL_OEM_IF_5123_LBA_Desconexión ATR4_LA_154 kV_29102023_1120_VF.pdf) | 13/11/2023 18:39:30 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 12:01

Finalizado

**Número:**

2023004272

**Solicitante:**

ENEL GREEN POWER CHILE S.A.

**Empresa:**

ENEL GREEN POWER CHILE S.A.

**Tipo de Origen:**

Externo

**SubEstación:**

S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES

**Falla Sobre:**

pañó

**Elementos**

Tipo: panos - S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES B1  
Nombre : S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES B1  
Fecha Perturbacion : 29-10-2023 11:20  
Fecha Normaliza : 29-10-2023 11:26  
Protección : Trip 52B1  
Interruptor : 52B1  
Consumo : 19  
Comentario : Falla Transformador 4 de CGE

Tipo: panos - S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES BT1  
Nombre : S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES BT1  
Fecha Perturbacion : 29-10-2023 11:20  
Fecha Normaliza : 29-10-2023 11:26  
Protección : Trip 52BT1  
Interruptor : 52BT1  
Consumo : 19  
Comentario : Falla Transformador 4 de CGE

Tipo: panos - S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES FT1  
Nombre : S/E CENTRAL PARQUE EOLICO LOS BUENOS AIRES FT1  
Fecha Perturbacion : 29-10-2023 11:20  
Fecha Normaliza : 29-10-2023 11:26  
Protección : Trip 52FT1  
Interruptor : 52FT1  
Consumo : 19  
Comentario : Falla Transformador 4 de CGE

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

**Comuna**

Los Angeles

**Tipo Causa**

Causa Definitiva

Causa Principal

Desconexión debido a falla en instalaciones de terceros.

**Comentarios Tipo Causa:**

Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**Causas**

**-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.

**-Elemento:** Interruptores

**-Fenómeno Eléctrico:** Bajo voltaje

**-Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

**-Fenómeno Físico:** Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**-Elemento:** Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**-Fenómeno Eléctrico:** Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**-Operación de los interruptores:** Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**Observaciones:**

**-Observaciones:** Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**-Acciones Inmediatas:** Normalizacion de instalaciunbes en coordinacion con Coordinador

**-Hechos Sucidos:** Falla Transformador N° 4 S/E Los Angeles de Propiedad de CGE

**-Acciones Correctivas a Corto Plazo:** Normalizar instalaciones en coordinacion con Coordinador Electrico

**-Acciones Correctivas a Largo Plazo:** No hay

**Afecta SSCC:**

No

**Afecta Medidores:****Afecta Protecciones:**

No

**Consumo:**

No tiene consumo afectado

**Retorno Automatico:**

No Tiene Retorno Automático

**Fecha / Hora Perturbación de la Solicitud:**

29-10-2023 11:20

**Fecha / Hora Estimada Retorno:**

29-10-2023 11:26

**Fecha / Hora Efectiva Retorno:**

29-10-2023 11:26

 Archivos Subidos

| Archivo                                                                                                                                                                                                                                                                                    | Fecha Subida        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|  GRE_CHL_OEM_IF_5123_LBA_Desconexión ATR4_LA_154 kV_29102023_1120_VF.pdf (/informe_fallas/download_file/653e71e9ad651f2e71e8feb7/GRE_CHL_OEM_IF_5123_LBA_Desconexión ATR4_LA_154 kV_29102023_1120_VF.pdf) | 13/11/2023 18:39:14 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 12:34

Finalizado

**Número:**

2023004277

**Solicitante:**

Gonzalo Cartagena

**Empresa:**

EÓLICA LA ESPERANZA S.A.

**Tipo de Origen:**

Externo

**Central:**

PE LA ESPERANZA

**Afecta a todas las unidades****Potencia:**

Desconexión de la unidad(es)

**Unidades:****Zona Afectada**

Biobío

**Comuna**

Negrete

**Tipo Causa**

Causa Presunta

Causa Secundaria

Baja tensión en subestación

**Comentarios Tipo Causa:**

Sin comentarios

**Causas****-Fenómeno Físico:** Origen no determinado.**-Elemento:** Interruptores**-Fenómeno Eléctrico:** Bajo voltaje**-Operación de los interruptores:** Abre sin haber recibido la orden de abrir**Comentarios Causas:****-Fenómeno Físico:** Sin Comentarios**-Elemento:** Sin comentarios**-Fenómeno Eléctrico:** Sin comentarios**-Operación de los interruptores:** Sin comentarios**Observaciones:**

**-Observaciones:** Sin comentarios  
**-Acciones Inmediatas:** No hay  
**-Hechos Sucedidos:** No determinados  
**-Acciones Correctivas a Corto Plazo:** No hay  
**-Acciones Correctivas a Largo Plazo:** No hay

**Afecta SSCC:**

**Afecta Medidores:**

No

**Afecta Protecciones:**

No

**Consumo:**

No tiene consumo afectado

**Retorno Automatico:**

No Tiene Retorno Automático

**Estado Operativo:**

FE (Falla Externa)

**Estado Operativo Efectivo:**

FE (Falla Externa)

**Fecha / Hora Perturbación de la Solicitud:**

29-10-2023 11:26

**Fecha / Hora Estimada Retorno:**

29-10-2023 12:00

**Fecha / Hora Efectiva Retorno:**

29-10-2023 12:00

 Archivos Subidos

| Archivo                                                                                                                                                                                                                                                                     | Fecha Subida        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|  P.E. La Esperanza - Informe de Falla 29 octubre 2023 REV0.pdf<br>(/informe_fallas/download_file/653e78d4ad651f2e591c932e/P.E. La Esperanza - Informe de Falla 29 octubre 2023 REV0.pdf) | 16/11/2023 14:00:47 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 14:36

Finalizado

**Número:**

2023004295

**Solicitante:**

WPD NEGRETE SPA

**Empresa:**

WPD NEGRETE SPA

**Tipo de Origen:**

Externo

**Central:**

PE NEGRETE

**Afecta a todas las unidades****Potencia:**

Generación en Isla

**Unidades:****Zona Afectada**

Biobío

**Comuna**

Negrete

**Tipo Causa**

Causa Presunta

Causa Principal

Se investiga

**Comentarios Tipo Causa:**

PE Negrete queda indisponible por pérdida de tensión en SE Negrete falla en instalación de terceros

**Causas****-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.**-Elemento:** Equipo generador**-Fenómeno Eléctrico:** Bajo voltaje**-Operación de los interruptores:** Varios**Comentarios Causas:****-Fenómeno Físico:** No opera ningún interruptor de PE Negrete.**-Elemento:** PE Negrete queda indisponible por pérdida de tensión en SE Negrete falla en instalación de terceros**-Fenómeno Eléctrico:** PE Negrete queda indisponible por pérdida de tensión en SE Negrete falla en instalación de terceros**-Operación de los interruptores:** No opera ningún interruptor de PE Negrete.**Observaciones:**

**-Observaciones:** PE Negrete queda indisponible por ausencia de tensión en instalaciones de terceros. Hubo pérdida de generación de 15 MW

**-Acciones Inmediatas:** A las 11:20 hrs se llama a SAESA para verificar si la ausencia de tensión es real.

**-Hechos Sucidos:** SAESA informa a las 11:20 hrs, se registra la Apertura del 52B2 de SE Buenas Aires dejando sin tensión la zona de Negrete. Se normaliza 52B2 de SE Buenas Aires a las 11:26 hrs.

**-Acciones Correctivas a Corto Plazo:** En Análisis

**-Acciones Correctivas a Largo Plazo:** En Análisis

**Afecta SSCC:**

**Afecta Medidores:**

No

**Afecta Protecciones:**

No

**Consumo:**

No tiene consumo afectado

**Retorno Automatico:**

No Tiene Retorno Automático

**Estado Operativo:**

FE (Falla Externa)

**Estado Operativo Efectivo:**

FE (Falla Externa)

**Fecha / Hora Perturbación de la Solicitud:**

29-10-2023 11:19

**Fecha / Hora Estimada Retorno:**

29-10-2023 11:34

**Fecha / Hora Efectiva Retorno:**

29-10-2023 11:34

 Archivos Subidos

| Archivo                                                                                                                                                                          | Fecha Subida        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|  IF 2023004295.pdf (/informe_fallas/download_file/653e8173ad651f2e71e8febd/IF 2023004295.pdf) | 02/11/2023 18:46:00 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 31-10-2023 13:11

Finalizado

**Número:**

2023004347

**Solicitante:**

DANIEL DURAN TORRES

**Empresa:**

COMPAÑÍA GENERAL DE ELECTRICIDAD S.A.

**Tipo de Origen:**

Externo

**SubEstación:**

S/E MANSO DE VELASCO

**Falla Sobre:**

otro

**Elementos**

Tipo: otros - tendido cable

Nombre :

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:23

Protección : .

Interruptor : 52AT4 de S/E Los Ángeles.

Consumo : Consumo Regulado y Libre

Comentario : Desconexión forzada del interruptor 52AT4 de S/E Los Ángeles, asociado al general de 66 kV del T4 de la misma S/E, afectó a los consumos de las SS/EE El Avellano y Manso de Velasco

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

**Comuna**

Los Angeles

**Tipo Causa**

Causa Presunta

Causa Principal

Desconexión debido a falla en instalaciones de terceros.

**Comentarios Tipo Causa:**

Falla aguas arriba del sistema de distribución

**Causas**

- Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.
- Elemento:** Conductores
- Fenómeno Eléctrico:** Sobrecorriente instantánea de fase
- Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

- Fenómeno Físico:**
- Elemento:** CGE no se pronuncia en fallas externas
- Fenómeno Eléctrico:**
- Operación de los interruptores:**

**Observaciones:**

- Observaciones:** CGE no se pronuncia en fallas externas
- Acciones Inmediatas:** CGE no se pronuncia en fallas externas
- Hechos Sucidos:** CGE no se pronuncia en fallas externas
- Acciones Correctivas a Corto Plazo:** CGE no se pronuncia en fallas externas
- Acciones Correctivas a Largo Plazo:** CGE no se pronuncia en fallas externas

**Afecta SCCC:****Afecta Medidores:****Afecta Protecciones:****Consumo:****Distribuidoras Afectadas****Retorno Automatico:****Fecha / Hora Perturbación de la Solicitud:****Fecha / Hora Estimada Retorno:****Fecha / Hora Efectiva Retorno:**

 Archivos Subidos

| Archivo                                                                                                                                                                                                                                                                                                                 | Fecha Subida           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  Anexo_informe_falla-cge-Manso de Velasco-Coordinador.xlsx<br>(/informe_fallas/download_file/654125a3ad651f6c5de7aa8d/Anexo_informe_falla-cge-Manso de Velasco-Coordinador.xlsx)                                                       | 03/11/2023<br>12:16:12 |
|  Bloques Dx falla 52AT3 SE Los Angeles IF2023004290_ 29-10-2023-Manso de Velasco.xlsx<br>(/informe_fallas/download_file/654125a3ad651f6c5de7aa8d/Bloques Dx falla 52AT3 SE Los Angeles IF2023004290_ 29-10-2023-Manso de Velasco.xlsx) | 03/11/2023<br>12:16:12 |
|  IF 5to Dia_2023004347_SE_Manso de Velasco_Coordinador.docx<br>(/informe_fallas/download_file/654125a3ad651f6c5de7aa8d/IF 5to Dia_2023004347_SE_Manso de Velasco_Coordinador.docx)                                                     | 03/11/2023<br>12:16:12 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 31-10-2023 13:16

Finalizado

**Número:**

2023004348

**Solicitante:**

DANIEL DURAN TORRES

**Empresa:**

COMPAÑÍA GENERAL DE ELECTRICIDAD S.A.

**Tipo de Origen:**

Externo

**SubEstación:**

S/E EL AVELLANO

**Falla Sobre:**

otro

**Elementos**

Tipo: otros - tendido cable

Nombre :

Fecha Perturbacion : 29-10-2023 11:19

Fecha Normaliza : 29-10-2023 11:23

Protección : .

Interruptor : 52AT4 de S/E Los Ángeles.

Consumo : Consumo Regulado y Libre

Comentario : Desconexión forzada del interruptor 52AT4 de S/E Los Ángeles, asociado al general de 66 kV del T4 de la misma S/E, afectó a los consumos de las SS/EE El Avellano y Manso de Velasco

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

**Comuna**

Los Angeles

**Tipo Causa**

Causa Presunta

Causa Principal

Desconexión debido a falla en instalaciones de terceros.

**Comentarios Tipo Causa:**

Falla aguas arriba del sistema de distribución

**Causas**

- Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.
- Elemento:** Conductores
- Fenómeno Eléctrico:** Sobrecorriente instantánea de fase
- Operación de los interruptores:** Opera según lo esperado

**Comentarios Causas:**

- Fenómeno Físico:**
- Elemento:** CGE no se pronuncia en fallas externas
- Fenómeno Eléctrico:**
- Operación de los interruptores:**

**Observaciones:**

- Observaciones:** CGE no se pronuncia en fallas externas
- Acciones Inmediatas:** CGE no se pronuncia en fallas externas
- Hechos Sucidos:** CGE no se pronuncia en fallas externas
- Acciones Correctivas a Corto Plazo:** CGE no se pronuncia en fallas externas
- Acciones Correctivas a Largo Plazo:** CGE no se pronuncia en fallas externas

**Afecta SSCC:****Afecta Medidores:****Afecta Protecciones:****Consumo:****Distribuidoras Afectadas****Retorno Automatico:****Fecha / Hora Perturbación de la Solicitud:****Fecha / Hora Estimada Retorno:****Fecha / Hora Efectiva Retorno:**

 Archivos Subidos

| Archivo                                                                                                                                                                                                                                                 | Fecha Subida           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  Anexo_informe_falla-cge-El Avellano.xlsx<br>(/informe_fallas/download_file/6541276bad651f6c56eab51b/Anexo_informe_falla-cge-El Avellano.xlsx)                         | 03/11/2023<br>12:40:45 |
|  Anexo_informe_falla-cge-El Avellano-Coordinador.xlsx<br>(/informe_fallas/download_file/6541276bad651f6c56eab51b/Anexo_informe_falla-cge-El Avellano-Coordinador.xlsx) | 03/11/2023<br>12:40:45 |
|  IF 5to Dia_2023004348_SE_El Avellano.docx<br>(/informe_fallas/download_file/6541276bad651f6c56eab51b/IF 5to Dia_2023004348_SE_El Avellano.docx)                       | 03/11/2023<br>12:40:45 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 12:54

Finalizado

**Número:**

2023004285

**Solicitante:**

Gonzalo Héctor Martínez Sepúlveda

**Empresa:**

COOPERATIVA ELÉCTRICA LOS ANGELES LTDA

**Tipo de Origen:**

Externo

**SubEstación:**

S/E EL AVELLANO

**Falla Sobre:**

pañó

**Elementos**

Tipo: panos - S/E EL AVELLANO E4

Nombre : S/E EL AVELLANO E4

Fecha Perturbacion : 29-10-2023 11:23

Fecha Normaliza : 29-10-2023 11:24

Protección : .

Interruptor : .

Consumo : 45.37 MW

Comentario : Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarinco (52E4) asociados a SE El Avellano.

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

**Comuna**

Los Angeles

Laja

**Tipo Causa**

Causa Presunta

Causa Principal

Desconexión debido a falla en instalaciones de terceros.

**Comentarios Tipo Causa:**

Falla "aguas arriba" del sistema de distribución de Coopelan Ltda afectando los consumos del alimentador Rarinco (52E4).

**Causas**

**-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.

**-Elemento:** Interruptores

**-Fenómeno Eléctrico:** Distancia (admitancia, impedancia o reactancia)

**-Operación de los interruptores:** Opera según lo esperado

#### Comentarios Causas:

**-Fenómeno Físico:** Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarincó (52E4) asociados a SE El Avellano.

**-Elemento:** Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarincó (52E4) asociados a SE El Avellano.

**-Fenómeno Eléctrico:** Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarincó (52E4) asociados a SE El Avellano.

**-Operación de los interruptores:** .

#### Observaciones:

**-Observaciones:** Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarincó (52E4) asociados a SE El Avellano.

**-Acciones Inmediatas:** .

**-Hechos Sucridos:** Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarincó (52E4) asociados a SE El Avellano.

**-Acciones Correctivas a Corto Plazo:** .

**-Acciones Correctivas a Largo Plazo:** .

#### Afecta SCCC:

#### Afecta Medidores:

No

#### Afecta Protecciones:

No

#### Consumo:

Consumo Regulado

#### Distribuidoras Afectadas

COOPERATIVA ELÉCTRICA LOS ANGELES LTDA / Perd. Estm. de Potencia: 45.37 / Región : Biobío / Clientes Afectados: 7021

#### Retorno Automatico:

No Tiene Retorno Automático

#### Fecha / Hora Perturbación de la Solicitud:

29-10-2023 11:23

#### Fecha / Hora Estimada Retorno:

29-10-2023 11:24

#### Fecha / Hora Efectiva Retorno:

29-10-2023 11:24

 Archivos Subidos

| Archivo                                                                                                                                                                                                                                                                                 | Fecha Subida           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  Cooperativa eléctrica Los Ángeles Ltda_SE El Avellano_29.10.2023.pdf<br>(/informe_fallas/download_file/653e7e00ad651f2e71e8febb/Cooperativa eléctrica Los Ángeles Ltda_SE El Avellano_29.10.2023.pdf) | 16/11/2023<br>12:59:25 |
|  Anexo 1_IF 2023004285_SE El Avellano.XLSX<br>(/informe_fallas/download_file/653e7e00ad651f2e71e8febb/Anexo 1_IF 2023004285_SE El Avellano.XLSX)                                                       | 16/11/2023<br>14:18:46 |

 **Resumen**

Fecha de envío al Coordinador Eléctrico : 29-10-2023 21:00

Finalizado

**Número:**

2023004308

**Solicitante:**

Fernando Riquelme

**Empresa:**

EMPRESA ELÉCTRICA DE LA FRONTERA S.A.

**Tipo de Origen:**

Externo

**SubEstación:**

S/E NEGRETE

**Falla Sobre:**

otro

**Elementos**

Tipo: otros - tendido cable

Nombre :

Fecha Perturbacion : 29-10-2023 11:20

Fecha Normaliza : 29-10-2023 11:26

Protección : S/E Negrete (52E1 - 52E2 - 52E3)

Interruptor : 52E1 - 52E2 - 52E3

Consumo : 0

Comentario : Operación de S/E Negrete

**¿Produce otra indisponibilidad?**

No

**Zona Afectada**

Biobío

**Comuna**

Negrete

**Tipo Causa**

Causa Definitiva

Causa Principal

Falta de alimentación a instalaciones

**Comentarios Tipo Causa:**

Falla en línea de transmisión

**Causas****-Fenómeno Físico:** Fallas en instalaciones de terceros u en otro segmento.**-Elemento:** Sistema protecciones

- Fenómeno Eléctrico: Bajo voltaje
- Operación de los interruptores: Opera según lo esperado

**Comentarios Causas:**

- Fenómeno Físico:
- Elemento:
- Fenómeno Eléctrico:
- Operación de los interruptores:

**Observaciones:**

- Observaciones: Afectan a 17533 clientes
- Acciones Inmediatas: Se toma contacto con CCT
- Hechos Sucedidos: de 11:20 Hrs a 11:26 Hrs Operación de LTx 52AT4 Charrúa los Ángeles afectando los servicios asociado a S/E Negrete
- Acciones Correctivas a Corto Plazo: No hay
- Acciones Correctivas a Largo Plazo: No hay

**Afecta SSCC:****Afecta Medidores:****Afecta Protecciones:****Consumo:****Distribuidoras Afectadas****Retorno Automatico:****Fecha / Hora Perturbación de la Solicitud:****Fecha / Hora Estimada Retorno:****Fecha / Hora Efectiva Retorno:** Archivos Subidos

| Archivo                                                                                                                                                                       | Fecha Subida           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  2023004308.zip<br>(/informe_fallas/download_file/653eefe4ad651f2e63c8cb3a/2023004308.zip) | 02/11/2023<br>17:49:48 |

#### ANEXO N°6

Otros antecedentes aportados por CGE Transmisión S.A., Sistema de Transmisión del Sur S.A., AR Alena SpA, Enel Green Power Chile S.A., Eólica La Esperanza S.A., WPD Negrete SpA, Compañía General de Electricidad S.A., Cooperativa Eléctrica Los Ángeles Ltda. y Empresa Eléctrica de la Frontera S.A.

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

**1. CAUSA U ORIGEN DE LA FALLA:**

**1.1. Fecha y hora de la Falla:**

|              |                              |
|--------------|------------------------------|
| <b>Fecha</b> | <b>29 de octubre de 2023</b> |
| Hora         | 11:19                        |

**1.2. Localización de la falla:**

- 1.2.1. Nombre de Instalación donde se produjo de falla.**  
426 – S/E Los Ángeles.
- 1.2.2. Segmento al cual pertenece el equipo o elemento fallado.**  
Tz - Transmisión Zonal.
- 1.2.3. Elemento o equipo fallado.**  
Función 51NT protección SEL 387T4.

**1.3. Causa origen de la falla:**

Desconexión forzada del interruptor 52AT4 a raíz de la operación de la protección SEL-387 por elementos de sobrecorriente residual, esto durante frente de mal tiempo imperante en la zona.

**1.4. Proposición de origen de la falla.**

I.- Interna

**INFORME DE FALLA**  
REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

**1.5. Código de falla.**

| Causas de Falla                | Código | Definición                                     |
|--------------------------------|--------|------------------------------------------------|
| Fenómeno Físico                | OPE26  | Falla en sistema de protección o control.      |
| Elemento del Sistema Eléctrico | PR12   | Sistemas de protección                         |
| Fenómeno Eléctrico             | PR51N  | Protección Sobrecorriente temporizada residual |
| Modo                           | 13     | Opera de acuerdo a lo esperado                 |

**1.6. Comuna donde se originó la falla.**

| Código | Comuna      |
|--------|-------------|
| 8301   | Los Ángeles |

**1.7. Comunas afectadas por la falla.**

| Código | Comuna      |
|--------|-------------|
| 8301   | Los Ángeles |
| 8307   | Negrete     |
| 8306   | Nacimiento  |
| 9209   | Renaico     |

**1.8. Reiteración.**

**1.8.1. N° de Fallas en Instalación. (Últimos 24 meses móviles).**

Una falla en la instalación, en los últimos 24 meses.

**1.8.2. N° de Fallas en Instalación con mismo Fenómeno Físico. (Últimos 24 meses móviles).**

Una falla con el mismo fenómeno físico, en los últimos 24 meses.

**1.8.3. Identificación de Evento de Falla que afecta a instalación en los últimos 24 meses móviles.**

| IF N°      | Fecha falla | Hora Falla | Código Fenómeno Físico. |
|------------|-------------|------------|-------------------------|
| 2023004248 | 28-10-2023  | 23:28      | OPE26                   |

**INFORME DE FALLA**  
REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

**1.9. REPRESENTANTE LEGAL DE LA EMPRESA**

**Razón Social** : CGE TRANSMISION S.A.  
**Rut** : 77.465.741-K  
**Representante Legal** : Iván Arístides Quezada Escobar  
**Dirección** : Av. presidente Riesco 5561, piso 17. Las Condes. Santiago

**2. INSTALACIONES AFECTADAS.**

| Subestación<br>Primaria | Instalación<br>(Barra Primaria) | Hora desconexión | Hora Normalización |
|-------------------------|---------------------------------|------------------|--------------------|
| Los Ángeles             | Barra N° 2 66kV                 | 11:19            | 11:23              |
| Manso de Velasco        | Barra 66kV                      | 11:19            | 11:23              |
| El Avellano             | Barra 66kV                      | 11:19            | 11:23              |
| Los Buenos Aires        | Barra 66kV                      | 11:19            | 11:23              |
| Negrete                 | Barra 66kV                      | 11:19            | 11:23              |

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

### 3. DIAGRAMAS SIMPLIFICADOS.

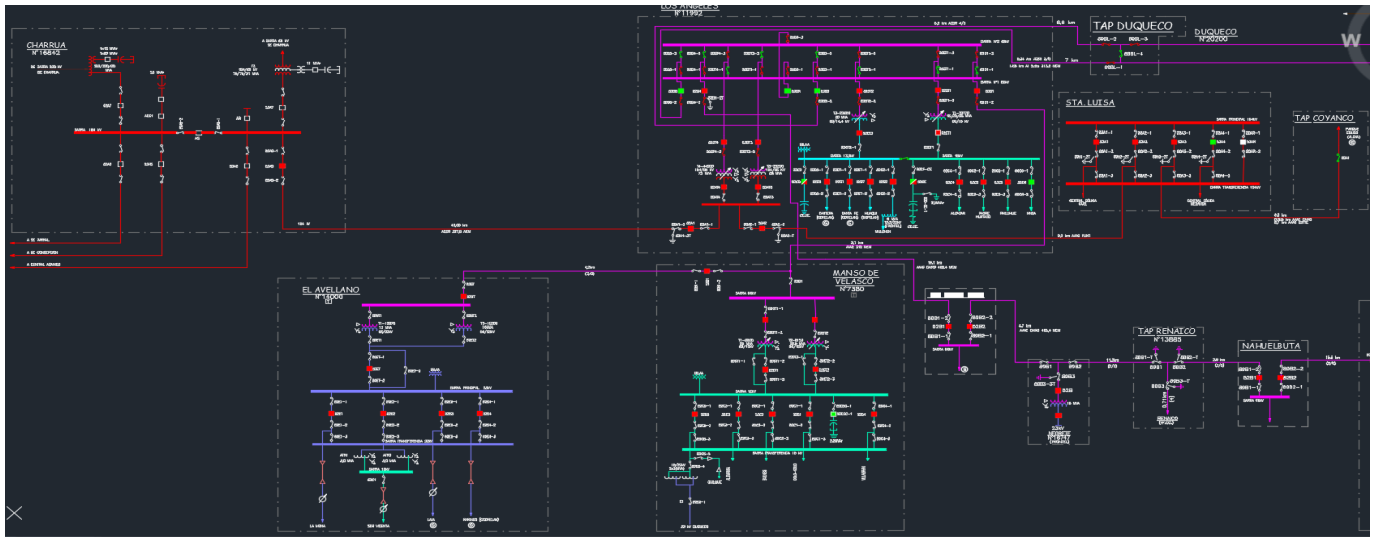


Figura 1; Diagrama Unilineal Simplificado de Zona Afectada.

### 4. PERDIDAS DE GENERACIÓN.

No hay generación de propiedad de CGE TRANSMISIÓN S.A., involucrada en la falla.

## INFORME DE FALLA

### REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

#### 5. PÉRDIDAS DE CONSUMOS.

| Subestación      | Transformador<br>(Primario) | Alimentador |      | MW   | Horario     |               | Distribuidora | Observación         |
|------------------|-----------------------------|-------------|------|------|-------------|---------------|---------------|---------------------|
|                  |                             | Nombre      | Nema |      | Desconexión | Normalización |               |                     |
| Manso de Velasco | T1/T2                       | Colo Colo   | 52C1 | 2,7  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Bulnes      | 52C2 | 3,2  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Alemania    | 52C3 | 4,9  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Villagran   | 52C4 | 5,2  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Quilque     | 52C5 | 1,1  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
| El Avellano      | T1/T2                       | La Mona     | 52E1 | 5,0  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Sor Vicenta | 52E2 | 1,5  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Laja        | 52E3 | 0,8  | 11:19       | 11:23         | CGE           | Consumos de CGE     |
|                  |                             | Rarinco     | 52E4 | 3,5  | 11:19       | 11:23         | COPELAN       | Consumos de Copelan |
| Negrete          | T1/T2                       | -           | -    | 8,7  | 11:19       | 11:23         | FRONTEL       | Consumos de Frontel |
| <b>Total</b>     |                             |             |      | 36,6 |             |               |               |                     |

**Nota:** Las pérdidas de consumo informadas corresponden a magnitudes de potencia medidas en sistemas de CGE Transmisión S.A. (Cabecera de alimentadores), en consecuencia, estos valores consideran el aporte de los PMGD conectados en red de MT y no representan los consumos efectivamente desprendidos.

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

#### 6. CRONOLOGÍA DE EVENTOS Y DESCRIPCIÓN DE CAUSAS.

| SUBESTACIÓN | EVENTO                                                                                                                      | HORARIO |
|-------------|-----------------------------------------------------------------------------------------------------------------------------|---------|
| Los Ángeles | Apertura por protecciones de interruptor 52T4 S/E Los Ángeles.                                                              | 11:19   |
| Los Ángeles | Cerrado interruptor 52AT4 (general 154 kV del T4), se recupera 100% de los consumos de SS/EE Manso de Velasco y El Avellano | 11:23   |

#### 7. ESQUEMAS DE PROTECCIÓN Y CONTROL INVOLUCRADOS EN LA FALLA.

| Hora Relé    | S/E         | Instalación (Paño) | Protección Operada | Tiempo [s].  | Observaciones     |
|--------------|-------------|--------------------|--------------------|--------------|-------------------|
| 14:12:09.696 | Los Ángeles | Paño AT4           | 51NT               | 14:12:09.696 | Sistema 1/SEL-387 |

#### 8. ANÁLISIS ACTUACIÓN DE ESQUEMA DE PROTECCIÓN.

Del análisis realizado se aprecia la operación de la protección de sobrecorriente residual de tiempo inverso 51N1T de acuerdo a ajustes asociado al paño AT4 en S/E Los Ángeles, a raíz de perturbaciones en subsistema Los Ángeles-Santa Luisa esto debido a temporal de viento y lluvia ocurrido en la zona.

Al respecto se plantean acciones de corto y largo plazo en el presente informe, en primera instancia se revisara los ajustes de la sobrecorriente residual debido a que no es posible su direccionalidad en el rele SEL 387, por el momento se desactivará este elemento por medio de la SD N°2023103207, dejando la función de sobrecorriente residual de la protección SEL 311C operativa, hasta que se verifique su correcta coordinación.

En los registros se aprecia que el horario no esta sincronizado, lo anterior se debe a que está indisponible el reloj satelital lo cual será normalizado según lo indicado en las acciones correctivas.

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

**Paño AT4 de S/E Los Ángeles Protección Sistema 1, SEL-387**

**Reporte de Evento:** 52AT4 S/E Ángeles. Apertura por protecciones

PROT DIFERENCIAL TRANSFORMADOR 4      Date: 10/31/23    Time: 19:45:17.423  
SUBESTACION LOS ANGELES

#    DATE    TIME    EVENT GRP    TARGETS

```

1 10/29/23 14:14:55.838 CLS1 1
2 10/29/23 14:12:09.696 TRIP4 1 TRIP 51 B N W1
3 10/29/23 02:22:15.509 CLS1 1
4 10/29/23 02:19:27.683 TRIP4 1 TRIP 51 B N W1
5 10/28/23 23:53:48.819 CLS1 1
6 10/28/23 23:45:59.351 TRIP4 1 TRIP 51 B N W1
7 10/28/23 20:49:22.817 CLS1 1
8 10/28/23 20:32:16.260 TRIP4 1 TRIP 51 B N W1
9 10/28/23 20:02:21.054 CLS1 1
10 10/28/23 19:39:18.380 TRIP3 1 TRIP
11 07/17/22 12:42:49.391 TRIP3 1 TRIP
=>

```

**Evento N.º 1.- Protección operada, 52AT4 S/E Los Ángeles**

=>EVE 2

Processing event report.....Complete

PROT DIFERENCIAL TRANSFORMADOR 4      Date: 10/29/23    Time: 14:12:09.696  
SUBESTACION LOS ANGELES

FID=SEL-387-R104-V-D981222

| Winding 1 | Winding 2 | Winding 3 | Winding 4 | OUT  | IN   |
|-----------|-----------|-----------|-----------|------|------|
| Amps Sec  | Amps Sec  | Amps Sec  | Amps Sec  | 1357 | 135  |
| I1AT      | I2AT      | I3AT      | I1MT      | I2MT | I3MT |
| IAW3      | IBW3      | ICW3      | IAW4      | IBW4 | ICW4 |
| 246A      | 246A      | 246       |           |      |      |

```

[1]
-0.68 -0.88 1.02 0.60 0.85 -1.41 0.00 0.00 -0.50 0.00 0.00 0.00 ..6. b3.
1.17 -0.96 0.08 -1.29 1.24 0.02 0.00 0.00 0.26 0.00 0.00 0.00 ..6. b3.
0.68 0.88 -1.02 -0.60 -0.85 1.40 0.00 0.00 0.50 0.00 0.00 0.00 ..6. b3.
-1.17 0.96 -0.09 1.28 -1.24 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 ..6. b3.
[2]
-0.68 -0.88 1.02 0.60 0.85 -1.40 0.00 0.00 -0.51 0.00 0.00 0.00 ..6. b3.
1.17 -0.96 0.09 -1.28 1.24 0.01 0.00 0.00 0.26 0.00 0.00 0.00 ..6. b3.
0.68 0.88 -1.02 -0.60 -0.85 1.41 0.00 0.00 0.50 0.00 0.00 0.00 ..6. b3.
-1.17 0.96 -0.08 1.28 -1.24 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 ..6. b3.
[3]
-0.68 -0.89 1.02 0.60 0.85 -1.41 0.00 0.00 -0.50 0.00 0.00 0.00 ..6. b3.
1.17 -0.96 0.08 -1.28 1.24 0.01 0.00 0.00 0.26 0.00 0.00 0.00 ..6. b3.
0.68 0.88 -1.02 -0.60 -0.85 1.40 0.00 0.00 0.50 0.00 0.00 0.00 ..6. b3.
-1.17 0.96 -0.09 1.28 -1.24 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 ..6. b3.
[4]
-0.68 -0.88 1.01 0.60 0.85 -1.41 0.00 0.00 -0.50 0.00 0.00 0.00 ..6. b3.
1.17 -0.96 0.09 -1.28 1.24 0.01 0.00 0.00 0.26 0.00 0.00 0.00 ..6. b3.

```

# **INFORME DE FALLA** **REQUERIMIENTO NORMA TÉCNICA DE SyCS**

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

0.68 0.88 -1.02 -0.60 -0.85 1.41 0.00 0.00 0.51 0.00 0.00 0.00 ..6. b3.  
-1.17 0.96 -0.08 1.28 -1.24 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 ..6. b3.  
[5]  
-0.68 -0.89 1.02 0.60 0.85 -1.41 0.00 0.00 -0.51 0.00 0.00 0.00 ..6. b3.  
1.17 -0.96 0.08 -1.28 1.24 0.01 0.00 0.00 0.26 0.00 0.00 0.00 ..6. b3.  
0.68 0.89 -1.02 -0.60 -0.85 1.41 0.00 0.00 0.50 0.00 0.00 0.00 ..6. b3.  
-1.17 0.96 -0.09 1.28 -1.24 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 ..6. b3.  
[6]  
-0.68 -0.88 1.02 0.60 0.85 -1.41 0.00 0.00 -0.50 0.00 0.00 0.00>.46. b3.  
1.18 -0.96 0.08 -1.29 1.24 0.01 0.00 0.00 0.26 0.00 0.00 0.00 .46. b3.  
0.68 0.89 -1.02 -0.60 -0.86 1.41 0.00 0.00 0.50 0.00 0.00 0.00 .46. b3.  
-1.18 0.96 -0.08 1.29 -1.25 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 .46. b3.  
[7]  
-0.68 -0.89 1.02 0.60 0.86 -1.41 0.00 0.00 -0.51 0.00 0.00 0.00 .46. b3.  
1.18 -0.96 0.08 -1.29 1.24 0.01 0.00 0.00 0.26 0.00 0.00 0.00\*.46. b3.  
0.68 0.89 -1.02 -0.60 -0.85 1.41 0.00 0.00 0.51 0.00 0.00 0.00 .46. b3.  
-1.18 0.96 -0.09 1.29 -1.24 -0.01 0.00 0.00 -0.26 0.00 0.00 0.00 .46. b3.  
[8]  
-0.69 -0.89 1.02 0.61 0.85 -1.41 0.00 0.00 -0.50 0.00 0.00 0.00 .46. b3.  
1.18 -0.97 0.08 -1.29 1.25 0.01 0.00 0.00 0.26 0.00 0.00 0.00 .46. 23.  
0.70 0.79 -0.78 -0.57 -0.68 1.18 0.00 0.00 0.65 0.00 0.00 0.00 .46. 23.  
-1.02 0.61 -0.04 1.03 -0.88 -0.10 0.00 0.00 -0.40 0.00 0.00 0.00 .46. 23.  
[9]  
-0.40 -0.34 0.27 0.31 0.22 -0.50 0.00 0.00 -0.44 0.00 0.00 0.00 .46. 23.  
0.43 -0.12 0.00 -0.38 0.25 0.10 0.00 0.00 0.28 0.00 0.00 0.00 .46. 23.  
0.04 0.00 0.00 -0.03 0.02 0.02 0.00 0.00 0.05 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 -0.00 -0.00 -0.00 0.00 0.00 -0.01 0.00 0.00 0.00 .46. 23.  
[10]  
0.00 0.00 0.00 -0.00 -0.00 -0.01 0.00 0.00 -0.01 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 -0.00 -0.01 -0.01 0.00 0.00 -0.01 0.00 0.00 0.00 .46. 23.  
[11]  
0.00 0.00 0.00 -0.00 0.00 -0.00 0.00 0.00 -0.00 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.02 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 -0.01 -0.01 -0.01 0.00 0.00 -0.03 0.00 0.00 0.00 .46. 23.  
[12]  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.03 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 -0.00 -0.00 -0.00 0.00 0.00 -0.01 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 -0.00 -0.00 -0.01 0.00 0.00 -0.02 0.00 0.00 0.00 .46. 23.  
[13]  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.01 0.01 0.01 0.00 0.00 0.02 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 -0.00 -0.00 0.00 0.00 -0.01 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 -0.00 -0.00 -0.00 0.00 0.00 -0.01 0.00 0.00 0.00 .46. 23.  
[14]  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 .46. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 .46. 23.  
[15]

## INFORME DE FALLA

### REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA Nº: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

[illegible]

[16]

[illegible]

[17]

[illegible]

[18]

[illegible]

[19]

[illegible]

[20]

[illegible]

[21]

[illegible]

[22]

[illegible]

[23]

[illegible]

[24]

[illegible]

[25]

[illegible]



[illegible]



```
[57]
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.
```

# **INFORME DE FALLA** **REQUERIMIENTO NORMA TÉCNICA DE SyCS**

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
[58]  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
[59]  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 -0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
[60]  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.  
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 ..6. 23.

Event: TRIP4

Targets: TRIP 51 B N W1

Winding 1 Currents (A Sec), ABC: 1.4 1.3 1.0

Winding 2 Currents (A Sec), ABC: 1.4 1.5 1.4

Winding 3 Currents (A Sec), ABC: 0.0 0.0 0.6

Winding 4 Currents (A Sec), ABC: 0.0 0.0 0.0

## **REGISTRO SER: 52AT4 S/E Los Ángeles**

PROT DIFERENCIAL TRANSFORMADOR 4      Date: 10/31/23      Time: 19:45:35.773  
SUBESTACION LOS ANGELES

FID=SEL-387-R104-V-D981222

| # | DATE | TIME | ELEMENT | STATE |
|---|------|------|---------|-------|
|---|------|------|---------|-------|

|   |          |              |              |            |
|---|----------|--------------|--------------|------------|
| 6 | 10/29/23 | 14:12:09.696 | TRIP6252BT4  | Asserted   |
| 5 | 10/29/23 | 14:12:09.739 | CERRADO52AT4 | Deasserted |
| 4 | 10/29/23 | 14:12:10.096 | TRIP6252BT4  | Deasserted |

Se observa en el registro secuencial de eventos (SER), en el registro N° 6, se observa la activación del TRIP6252BT4, el cual según la configuración del “ALIAS9 =TRIP4 TRIP6252BT4”, esta asociado al TRIP4 que tiene la siguiente configuración TR4=51P1T + 51N1T.

En el registro N°5, tenemos la activación del CERRADO52AT4, el cual según la configuración del ALIAS3 =IN101 CERRADO52AT4, esta asociado al IN101 que es la psoción del interruptor 52AT4.

En tiempo de aperertura del interruptor 52AT4 fue de (registro N°6 – N°5) 43ms.

## INFORME DE FALLA REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

### 9. ACCIONES CORRECTIVAS.

#### 9.1. Acciones Correctivas de Corto Plazo.

- Se realizará la revisión del ajuste de sobrecorriente residual de la protección SEL-387 del Transformador T4.
- Bajo la SD N° 2023103207 se desactivara la función de sobrecorriente residual, hasta que se verifique su coordinación, manteniendo operativa la función de sobrecorriente residual en la protección SEL 311C del sistema 2.

| Número     | Estado    | Tipo Programación | Tipo        | Tipo/Trabajo/Objetivo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Fecha Inicio     | Fecha Fin        |
|------------|-----------|-------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| 2023103207 | Pendiente | Programada        | Subestación | <b>SubEstación</b><br>➤ S/E LOS ANGELES (CGE)<br>➤ Tipo: otros - tendido cable<br>➤ <b>Intervención</b> / Origen Interno / Programada<br>➤ No tiene consumo afectado<br>➤ SSCC Afectados:<br>➤ <b>Trabajos a Realizar:</b> S/E Los Ángeles: mejora en protección SEL 387 del Transformador T4, se retira el elemento residual (a direccional) de la ecuación de trip para revisar su coordinación. Esta función esta replicada en protección SEL 311C T4 la cual continuara operativa, pero esta ultima tiene dirección al transformador T4, lo anterior esta indicado como mejora de corto plazo en los IF-2023004248 y IF-2023004248.<br>➤ <b>Desc. Nivel Riesgo:</b> Riesgo medio trabajos en instalaciones en servicio. | 14-11-2023 00:00 | 14-11-2023 02:00 |

#### 9.2. Acciones correctivas de Largo Plazo

- El 30 de noviembre del 2023, se enviará al CEN una solicitud de modificación no relevante SMNR, junto al estudio de homologación de ajustes por el proyecto de reemplazo de las protecciones del transformador T4 en S/E Los Ángeles. El reemplazo será por protecciones de la misma marca y modelo, pero de última generación esto con el fin de habilitar su comunicación remota y conexión a un nuevo reloj satelital, que también se colocara en la caseta del transformador T4 para regularizar la estampa de tiempo.
- La puesta en servicio del reemplazo de protecciones del Transformador T4 en S/E Los Angeles se realizará la segunda semana del mes de marzo del 2024.

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004290</b> | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) S/E LOS ANGELES 52AT4          |                                           |

#### **10. CONCLUSIONES.**

De acuerdo con los antecedentes aportados en el presente informe, se concluye que dada la perturbación en la LT154kV Los Ángeles – Santa Luisa, se produjo la apertura del interruptor 52AT4, por medio de la función de sobrecorriente residual de tiempo inverso, la cual operó de acuerdo a ajustes, mas se evaluará este elemento ya que el rele sel 387 no tiene opción de poder ajustar direccionalidad, según lo expuesto en acciones correctivas.

#### **11. ANÁLISIS CONJUNTO.**

A las 11:19 horas del día 29 de octubre de 2023, se registró la operación por protecciones del interruptor 52AT4 de S/E Los Ángeles asociado al Transformador T-4. A raíz de temporal de viento y lluvia en la zona, esto afectó a subestaciones Manso de Velasco, El Avellano, Buenos Aires y Negrete (consumos de CGED, Frontel y Copelan). Ante este escenario y en coordinación con el CEN se inician maniobras de recuperación. A las 11:23 horas se cierra de manera exitosa el interruptor 52AT4, normalizando la topología.

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66kV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

**1. CAUSA U ORIGEN DE LA FALLA:**

**1.1. Fecha y hora de la Falla:**

|              |                              |
|--------------|------------------------------|
| <b>Fecha</b> | <b>29 de octubre de 2023</b> |
| Hora         | 11:19                        |

**1.2. Localización de la falla:**

- 1.2.1. Nombre de Instalación donde se produjo de falla.**  
1650 – LT66kV Central Parque eólico buenos aires - Negrete
- 1.2.2. Segmento al cual pertenece el equipo o elemento fallado.**  
Tz.
- 1.2.3. Elemento o equipo fallado.**  
Interruptor.

**1.3. Causa origen de la falla:**

Apertura interruptor 52B1 en S/E Central Parque Eólico Buenos aires propiedad de Enel. Lo anterior, ocurrió en el mismo instante según lo detallado en el IF N°2023004290.

**1.4. Proposición de origen de la falla.**

II.- Externa.

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66KV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

**1.5. Código de falla.**

| Causas de Falla                | Código | Definición                                             |
|--------------------------------|--------|--------------------------------------------------------|
| Fenómeno Físico                | OPE6   | Fallas en instalaciones de terceros u en otro segmento |
| Elemento del Sistema Eléctrico | (*)    |                                                        |
| Fenómeno Eléctrico             | (*)    |                                                        |
| Modo                           | (*)    |                                                        |

(\*) No hay protecciones propiedad de CGE transmisión operadas para este evento.

**1.6. Comuna donde se originó la falla.**

| Código | Comuna      |
|--------|-------------|
| 8301   | Los Ángeles |

**1.7. Comunas afectadas por la falla.**

| Código | Comuna     |
|--------|------------|
| 8307   | Negrete    |
| 8306   | Nacimiento |
| 9209   | Renaico    |

**1.8. Reiteración.**

**1.8.1. N° de Fallas en Instalación. (Últimos 24 meses móviles).**

Una falla en la instalación, en los últimos 24 meses.

**1.8.2. N° de Fallas en Instalación con mismo Fenómeno Físico. (Últimos 24 meses móviles).**

Una falla en la instalación, en los últimos 24 meses.

**1.8.3. Identificación de Evento de Falla que afecta a instalación en los últimos 24 meses móviles.**

| IF N°      | Fecha falla | Hora Falla | Código Fenómeno Físico. |
|------------|-------------|------------|-------------------------|
| 2023004255 | 28-10-2023  | 16:31      | OPE6                    |

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66kV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

### 1.9. REPRESENTANTE LEGAL DE LA EMPRESA

**Razón Social** : CGE TRANSMISION S.A.  
**Rut** : 77.465.741-K  
**Representante Legal** : Iván Arístides Quezada Escobar  
**Dirección** : Av. Presidente Riesco 5561, piso 17. Las Condes. Santiago

### 2. INSTALACIONES AFECTADAS.

| Subestación<br>Primaria | Instalación<br>(Barra Primaria) | Hora desconexión | Hora Normalización |
|-------------------------|---------------------------------|------------------|--------------------|
| Negrete                 | Barra 66kV                      | 11:19            | 11:26              |

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66KV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

### 3. DIAGRAMAS SIMPLIFICADOS.

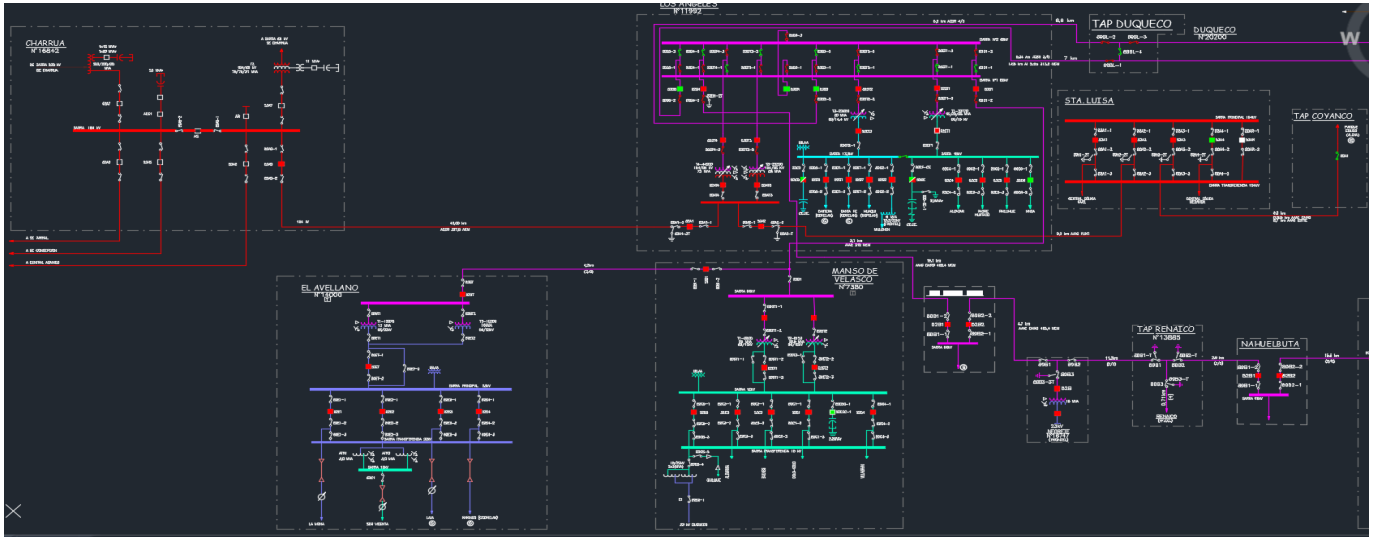


Figura 1; Diagrama Unilineal Simplificado de Zona Afectada.

### 4. PERDIDAS DE GENERACIÓN.

No hay generación de propiedad de CGE Transmisión S.A., involucrada en la falla.

**INFORME DE FALLA**  
**REQUERIMIENTO NORMA TÉCNICA DE SyCS**

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66kV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

**5. PÉRDIDAS DE CONSUMOS.**

| Subestación  | Transformador | Alimentador |      | MW  | Horario     |               | Observación         |
|--------------|---------------|-------------|------|-----|-------------|---------------|---------------------|
|              | (Primario)    | Nombre      | Nema |     | Desconexión | Normalización |                     |
| Negrete      | T1/T2         | -           | -    | 7,5 | 11:19       | 11:26         | Consumos de Frontel |
| <b>Total</b> |               |             |      | 7,5 |             |               |                     |

**ENS: 0,875 MWH.**

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66kV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

#### 6. CRONOLOGÍA DE EVENTOS Y DESCRIPCIÓN DE CAUSAS.

| SUBESTACIÓN  | EVENTO                                                                                                             | HORARIO |
|--------------|--------------------------------------------------------------------------------------------------------------------|---------|
| Buenos Aires | Apertura por protecciones de interruptor 52B1, según información entregada por Enel propietario de la instalación. | 11:19   |
| Buenos Aires | Cerrado 52B1 S/E Los Buenos Aires (ENEL),<br>Energizada S/E Negrete.                                               | 11:26   |

#### 7. ESQUEMAS DE PROTECCIÓN Y CONTROL INVOLUCRADOS EN LA FALLA.

No existen esquemas de proteccion propiedad de CGE Transmisión operados.

#### 8. ANÁLISIS ACTUACIÓN DE ESQUEMA DE PROTECCIÓN.

No corresponde, dado que no existen esquemas de proteccion propiedad de CGE Transmisión operados.

#### 9. ACCIONES CORRECTIVAS.

**9.1.** Acciones Correctivas de Corto Plazo.  
No aplica.

**9.2.** Acciones correctivas de Largo Plazo  
No aplica.

#### 10. CONCLUSIONES.

En función de los antecedentes expuestos en el presente informe, CGE transmisión no puede pronunciarse por la operación por protecciones de interruptor 52B1 de S/E Central Parque Eólico Buenos Aires.

|                                                                  |                                           |
|------------------------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004300</b>                  | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT66kV CENTRAL P. E. LOS BUENOS AIRES - NEGRETE |                                           |

## **11. ANALISIS CONJUNTO.**

A las 11:19 horas del día 29 de octubre de 2023, se registró la apertura de interruptor 52B1 de S/E Buenos Aires, según lo detallado en el IFN°2023004290.

El cierre del interruptor en coordinación con Enel se produce a las 11:26 Horas de 29 de octubre del 2023, mientras se desarrollaba un temporal de viento y lluvia en la zona.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**1. CAUSA U ORIGEN DE LA FALLA:**

**1.1. Fecha y hora de la Falla:**

|              |                              |
|--------------|------------------------------|
| <b>Fecha</b> | <b>29 de octubre de 2023</b> |
| Hora         | 11:19                        |

**1.2. Localización de la falla:**

**1.2.1. Nombre de Instalación donde se produjo de falla.**

3583 – LT154kV Los Ángeles – Santa Luisa

**1.2.2. Segmento al cual pertenece el equipo o elemento fallado.**

Tz.

**1.2.3. Elemento o equipo fallado.**

No hay.

**1.3. Causa origen de la falla:**

Producto de frente de mal tiempo imperante en la zona, confirmado por alerta temprana informada, se produce la reconexión automática exitosa de la línea 154kV Los Ángeles – Santa Luisa, por medio del interruptor 52A2 de S/E Los Ángeles.

**1.4. Proposición de origen de la falla.**

III.- Fuerza mayor o caso fortuito.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**1.5. Código de falla.**

| Causas de Falla                | Código | Definición                                     |
|--------------------------------|--------|------------------------------------------------|
| Fenómeno Físico                | OTR2   | Origen no determinado                          |
| Elemento del Sistema Eléctrico | TX2    | Conductores.                                   |
| Fenómeno Eléctrico             | PR51N  | Protección Sobrecorriente temporizada residual |
| Modo                           | 13     | Opera de acuerdo a lo esperado                 |

**1.6. Comuna donde se originó la falla.**

| Código | Comuna      |
|--------|-------------|
| 8301   | Los Ángeles |

**1.7. Comunas afectadas por la falla.**

No aplica.

**1.8. Reiteración.**

**1.8.1. N° de Fallas en Instalación. (Últimos 24meses móviles).**

Cero fallas en los últimos 24 meses.

**1.8.2. N° de Fallas en Instalación con mismo Fenómeno Físico. (Últimos 24meses móviles).**

Cero fallas en los últimos 24 meses.

**1.8.3. Identificación de Evento de Falla que afecta a instalación en los últimos 24 meses móviles.**

No aplica.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

### 1.9. REPRESENTANTE LEGAL DE LA EMPRESA

**Razón Social** : CGE TRANSMISION S.A.  
**Rut** : 77.465.741-K  
**Representante Legal** : Iván Aristides Quezada Escobar  
**Dirección** : Av. Presidente Riesco 5561, piso 17. Las Condes. Santiago

### 2. INSTALACIONES AFECTADAS.

No hay instalaciones afectadas.

### 3. DIAGRAMAS SIMPLIFICADOS.

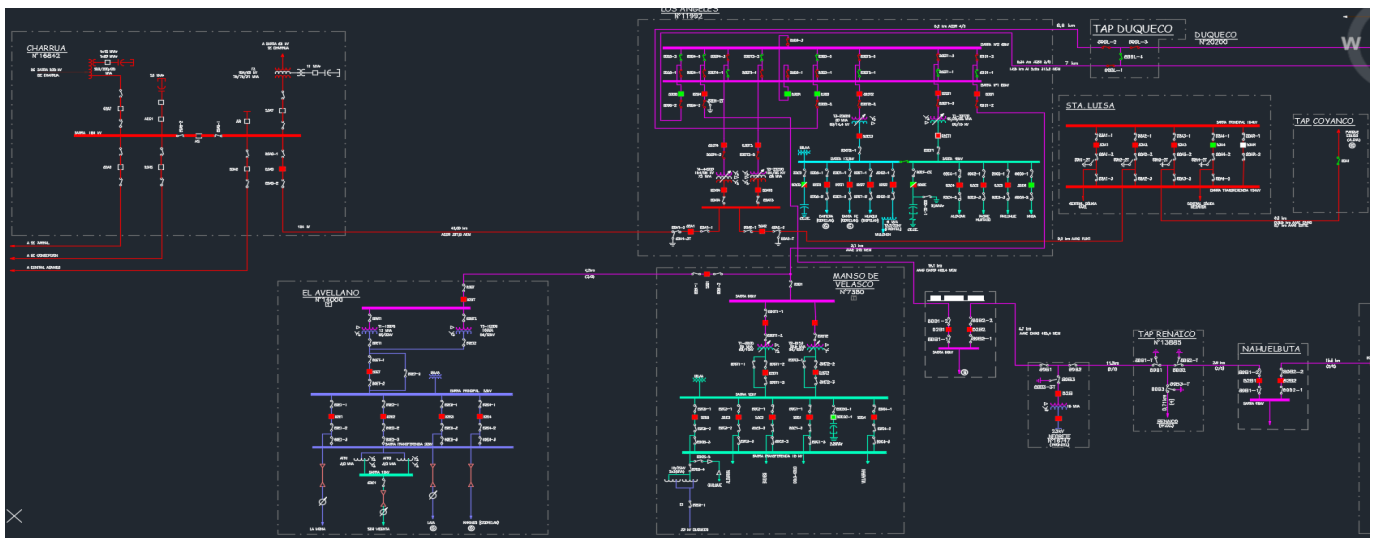


Figura 1; Diagrama Unilineal Simplificado de Zona Afectada.

### 4. PERDIDAS DE GENERACIÓN.

No hay generación de propiedad de CGE TRANSMISIÓN S.A., involucrada en la falla.

### 5. PÉRDIDAS DE CONSUMOS.

No hay pérdida de consumos.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

#### 6. CRONOLOGÍA DE EVENTOS Y DESCRIPCIÓN DE CAUSAS.

| SUBESTACIÓN | EVENTO                                                                             | HORARIO |
|-------------|------------------------------------------------------------------------------------|---------|
| Los Ángeles | Reconexión automática exitosa interruptor 52A2, LT154kV Los Ángeles – Santa Luisa. | 11:19   |

#### 7. ESQUEMAS DE PROTECCIÓN Y CONTROL INVOLUCRADOS EN LA FALLA.

| Hora Relé    | S/E         | Instalación (Paño) | Protección Operada | Tiempo [s]. | Observaciones                    |
|--------------|-------------|--------------------|--------------------|-------------|----------------------------------|
| 14:16:19.976 | Los Ángeles | Paño A2            | 51N, 79            | Instantáneo | Sistema 1.<br>Operación correcta |

#### 8. ANÁLISIS ACTUACIÓN DE ESQUEMA DE PROTECCIÓN.

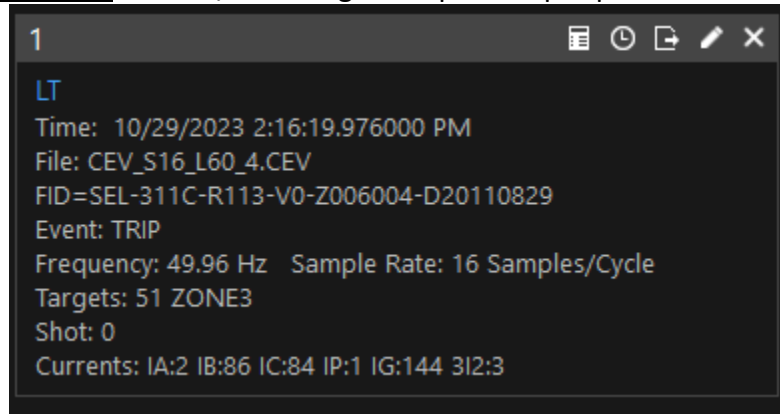
Del análisis realizado se aprecia la correcta operación de las protecciones del paño A2 de S/E Los Ángeles y su posterior reconexión automática exitosa, por perturbación ocurrida en la LT154kV Los Ángeles – Santa Luisa.

Cabe señalar que la estampa de tiempo en las protecciones posee una anormalidad, y destacamos que ya tenemos un proceso en curso por la compra de varios equipos como mejora para esta caseta y entre ellos esta la instalación de un nuevo reloj satelital para subsanar esta anormalidad presente, el detalle se presenta en el ítem de acción de largo plazo.

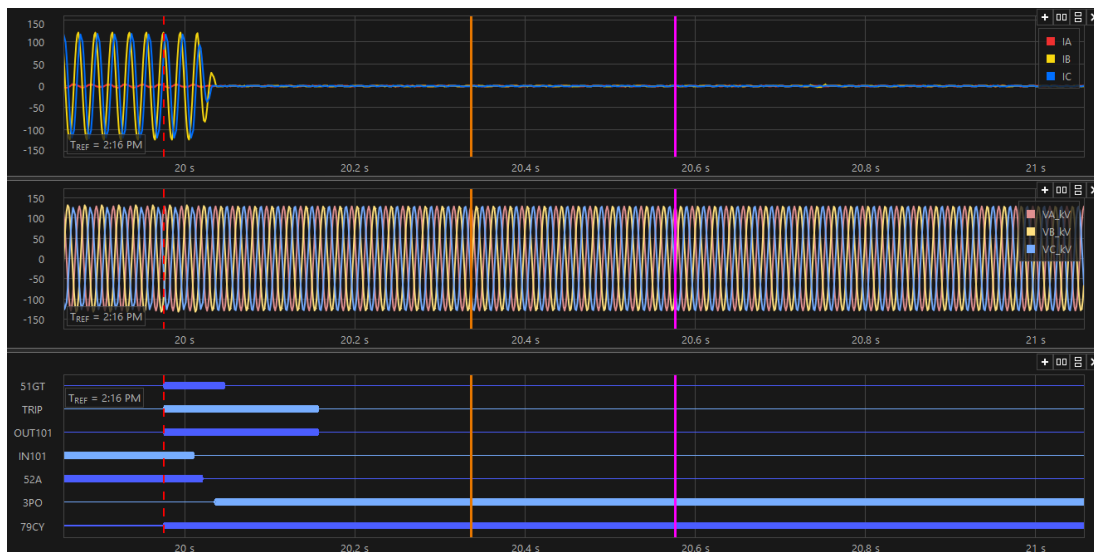
|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**Paño A2 de S/E Los Ángeles Protección Sistema 1, SEL-311C**

**Reporte de Evento N°1:** 52A2 S/E Los Ángeles. Apertura por protecciones.



**Evento N.º 1.-** Protección operada y distancia a la falla, 52A2 S/E Los Ángeles



**Evento N.º 2.-** Oscilografía variables analógicas y digitales, 52A2 S/E Los Ángeles

Del registro oscilográfico se aprecia la operación de la protección SEL-311C, frente a una falla de característica bifasica BC a tierra, por medio de su funcion de sobrecorriente residual de tiempo inverso (51GT), dando orden de trip al interruptor 52A2 de S/E Los Ángeles, el cual declara su apertura a través de las variables 3PO=1, IN101=0 y 52A=0.

Además, se activa el ciclo de reconexión automática (79CY=1), la cual tiene su ciclo ajustado en 10 [s].

# **INFORME DE FALLA** **REQUERIMIENTO NORMA TÉCNICA DE SyCS**

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

## **REGISTRO SER: 52A2 S/E Los Ángeles. Sistema 1**

LT 154KV LOS ANGELES-STA LUISA Date: 11/05/2023 Time: 15:21:46.528  
S/E LOS ANGELES 52A2  
FID=SEL-311C-R113-V0-Z006004-D20110829 CID=7388

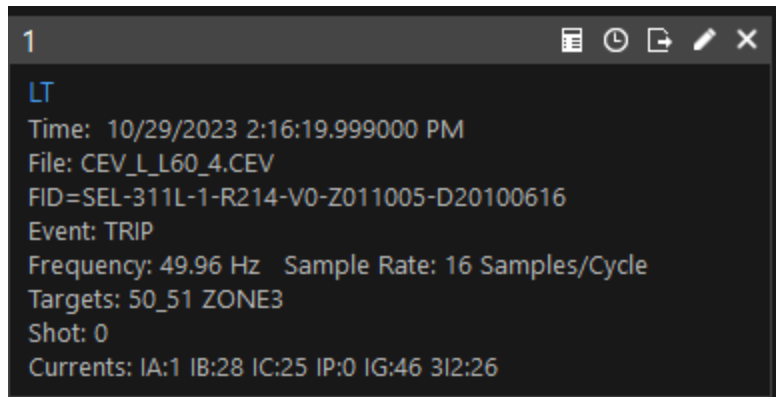
| #  | DATE       | TIME         | ELEMENT | STATE      |
|----|------------|--------------|---------|------------|
| 70 | 10/29/2023 | 14:15:39.773 | 51G     | Asserted   |
| 69 | 10/29/2023 | 14:15:39.773 | 67G3    | Asserted   |
| 68 | 10/29/2023 | 14:15:39.773 | 50G3    | Asserted   |
| 67 | 10/29/2023 | 14:15:40.773 | 67G3T   | Asserted   |
| 66 | 10/29/2023 | 14:16:19.976 | 51GT    | Asserted   |
| 65 | 10/29/2023 | 14:16:19.976 | TRIP    | Asserted   |
| 64 | 10/29/2023 | 14:16:19.976 | OUT101  | Asserted   |
| 63 | 10/29/2023 | 14:16:19.981 | OUT106  | Asserted   |
| 62 | 10/29/2023 | 14:16:20.011 | IN101   | Deasserted |
| 61 | 10/29/2023 | 14:16:20.021 | 52A     | Deasserted |
| 60 | 10/29/2023 | 14:16:20.026 | 51G     | Deasserted |
| 59 | 10/29/2023 | 14:16:20.026 | 67G3T   | Deasserted |
| 58 | 10/29/2023 | 14:16:20.026 | 67G3    | Deasserted |
| 57 | 10/29/2023 | 14:16:20.026 | 50G3    | Deasserted |
| 56 | 10/29/2023 | 14:16:20.031 | SV9     | Deasserted |
| 55 | 10/29/2023 | 14:16:20.036 | 3PO     | Asserted   |
| 54 | 10/29/2023 | 14:16:20.046 | 51GT    | Deasserted |
| 53 | 10/29/2023 | 14:16:20.156 | SV9     | Asserted   |
| 52 | 10/29/2023 | 14:16:20.156 | TRIP    | Deasserted |
| 51 | 10/29/2023 | 14:16:20.156 | OUT101  | Deasserted |
| 50 | 10/29/2023 | 14:16:30.026 | CLOSE   | Asserted   |
| 49 | 10/29/2023 | 14:16:30.026 | OUT102  | Asserted   |
| 48 | 10/29/2023 | 14:16:30.101 | 52A     | Asserted   |
| 47 | 10/29/2023 | 14:16:30.101 | CLOSE   | Deasserted |
| 46 | 10/29/2023 | 14:16:30.101 | IN101   | Asserted   |
| 45 | 10/29/2023 | 14:16:30.101 | OUT102  | Deasserted |
| 44 | 10/29/2023 | 14:16:30.111 | SV9     | Deasserted |
| 43 | 10/29/2023 | 14:16:30.111 | 3PO     | Deasserted |
| 42 | 10/29/2023 | 14:16:30.216 | SV9     | Asserted   |
| 41 | 10/29/2023 | 14:18:44.156 | SV9     | Deasserted |
| 40 | 10/29/2023 | 14:18:44.236 | SV9     | Asserted   |
| 39 | 10/29/2023 | 15:14:24.612 | LOP     | Asserted   |

Se observa en registro secuencial de eventos (SER), en el registro N°66 se produce la activación de la protección de sobrecorriente residual (51GT), la cual da orden de trip de forma instantánea, acción que se presenta en el registro N°65, abriendo el interruptor en el registro N°62 (IN101 = Deasserted). El tiempo de apertura característico del interruptor fue de 45ms (registro N°65 - N°62). Posteriormente se produce la reconexión exitosa en el registro N°50 (CLOSE = Asserted).

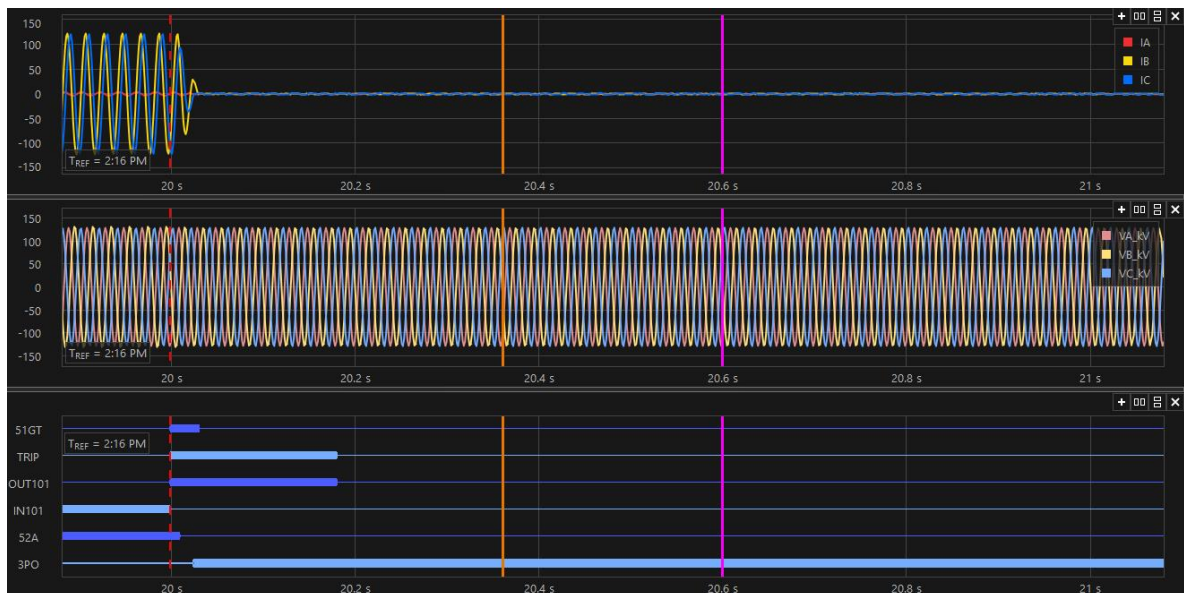
|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**Paño A2 de S/E Los Ángeles Protección Sistema 2, SEL-311L**

**Reporte de Evento N°1:** 52A2 S/E Los Ángeles. Apertura por protecciones.



**Evento N.º 1.-** Protección operada y distancia a la falla, 52A2 S/E Los Ángeles



**Evento N.º 1.-** Oscilografía variables analógicas y digitales, 52A2 S/E Los Ángeles.

Del registro oscilográfico se aprecia la operación de la protección SEL-311C, frente a una falla de característica bifasica BC a tierra, por medio de su funcion de sobrecorriente residual de tiempo inverso (51GT), dando orden de trip al interruptor 52A2 de S/E Los Ángeles, el cual declara su apertura a través de las variables 3PO=1, IN101=0 y 52A=0. No se activa de la función 79CY, debido a que no está habilitada en este sistema de protección.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**REGISTRO SER: 52A2 S/E Los Ángeles. Sistema 2**

LT 154KV LOS ANGELES-STA LUISA Date: 11/05/2023 Time: 15:46:53.559  
S/E LOS ANGELES 52A2

FID=SEL-311L-1-R214-V0-Z011005-D20100616 CID=CA02

| #  | DATE       | TIME         | ELEMENT | STATE      |
|----|------------|--------------|---------|------------|
| 27 | 10/29/2023 | 14:15:41.749 | 67G3T   | Asserted   |
| 26 | 10/29/2023 | 14:16:19.999 | 51GT    | Asserted   |
| 25 | 10/29/2023 | 14:16:19.999 | IN101   | Deasserted |
| 24 | 10/29/2023 | 14:16:19.999 | TRIP    | Asserted   |
| 23 | 10/29/2023 | 14:16:19.999 | OUT101  | Asserted   |
| 22 | 10/29/2023 | 14:16:20.001 | OUT106  | Asserted   |
| 21 | 10/29/2023 | 14:16:20.006 | 52A     | Deasserted |
| 20 | 10/29/2023 | 14:16:20.006 | 67G3T   | Deasserted |
| 19 | 10/29/2023 | 14:16:20.006 | 50G3    | Deasserted |
| 18 | 10/29/2023 | 14:16:20.029 | 3PO     | Asserted   |
| 17 | 10/29/2023 | 14:16:20.029 | 51GT    | Deasserted |
| 16 | 10/29/2023 | 14:16:20.179 | TRIP    | Deasserted |
| 15 | 10/29/2023 | 14:16:20.179 | OUT101  | Deasserted |
| 14 | 10/29/2023 | 14:16:30.100 | 52A     | Asserted   |
| 13 | 10/29/2023 | 14:16:30.100 | IN101   | Asserted   |
| 12 | 10/29/2023 | 14:16:30.104 | 3PO     | Deasserted |
| 11 | 10/29/2023 | 15:14:24.609 | LOP     | Asserted   |

=>

Se observa en registro secuencial de eventos (SER), en el registro N°26 se produce la activación de la protección de sobrecorriente residual (51GT), la cual da orden de trip de forma instantánea, acción que se presenta en el registro N°24, abriendo el interruptor en el registro N°21 (52A = Deasserted). El tiempo de apertura característico del interruptor fue de 7ms (registro N°24 - N°21). Posteriormente se produce la reconexión exitosa en el registro N°14 (52A = Asserted).

.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

## 9. ACCIONES CORRECTIVAS.

### 9.1. Acciones Correctivas de Corto Plazo.

No aplica.

### 9.2. Acciones correctivas de Largo Plazo

El 30 de noviembre del 2023, se enviará una solicitud de modificación no relevante (SMNR) al CEN, junto al estudio de homologación de ajustes por el proyecto de reemplazo de las protecciones del transformador T4 en S/E Los Ángeles.

Lo anterior además trae incluido como mejora la instalación de un nuevo reloj satelital en esta caseta de control, lo cual solucionará el inconveniente de la estampa de tiempo de las protecciones instaladas en esa caseta, en particular a las protecciones del paño A2 de S/E Los Angeles analizadas.

La instalación del reloj satelital, se espera realizar antes de las Puesta en servicio de las protecciones comprometidas para el mes de marzo del 2024 ya que no requiere autorización vía plataforma pgp, por lo que solo se espera de la llegada del equipo, la cual se estima en enero del 2024, periodo en el cual se instalará el nuevo reloj satelital.

## 10. CONCLUSIONES.

En base a los antecedentes expuestos en el presente informe y de los registros oscilográficos de las protecciones, se concluye la correcta operación de la protección de distancia en el paño A2 de S/E de S/E Los Ángeles, en el despeje rápido, oportuno y selectivo de la falla y posteriormente en su reconexión exitosa.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

#### **11. ANALISIS CONJUNTO.**

A las 11:19 horas del día 29 de octubre de 2023, se registró la operación con reconexión automática exitosa del interruptor del interruptor 52A2 en S/E Los Ángeles, asociado a la LT154kV Los Ángeles – Santa Luisa. Como antecedente, se desarrollaba fuerte temporal de viento y lluvia en la zona .

Durante la jornada brigada contratista de CGE transmisión efectuó recorrido pedestre a la totalidad de la LT154kV Los Ángeles – Santa Luisa no encontrándose novedades ni causa aparente de falla en dicha instalación.

#### **12. ANEXOS**

**Anexo I** Print out de las protecciones involucradas.

**Anexo II** Registros Scada.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**I. ANEXOS I. PRINT OUT**

**S/E LOS ANGELES**

**SEL 311C SISTEMA 1, 52A2 S/E LOS ANGELES**

Group 1  
Group Settings:  
RID =LT 154KV LOS ANGELES-STA LUISA TID =S/E LOS ANGELES 52A2  
CTR = 160  
CTRP = 160 PTR = 1400.00 PTRS = 1400.00  
APP = 311C  
Z1MAG = 0.44 Z1ANG = 77.19  
Z0MAG = 1.50 Z0ANG = 80.05 LL = 9.58  
E21P = 3 E21MG = 3 E21XG = 3  
E50P = 3 E50G = 4 E50Q = N  
E51P = N E51G = Y E51Q = N  
E32 = AUTO EOOS = N ELOAD = N ESOTF = Y  
EVOLT = Y E25 = Y E81 = N EFLOC = Y  
ELOP = Y  
EBBPT = N ECOMM = N E79 = 1 EZ1EXT = N  
ECCVT = N ESV = 10 ELAT = 10 EDP = 10  
EDEM = THM EADVS = Y  
Z1P = 0.35 Z2P = 0.53 Z3P = 4.17  
50PP1 = 5.00 50PP2 = 0.50 50PP3 = 0.50  
Z1MG = 0.35 Z2MG = 0.53 Z3MG = 4.17  
XG1 = 0.35 XG2 = 0.53 XG3 = 7.70  
RG1 = 1.08 RG2 = 1.62 RG3 = 8.10  
XGPOL = I2 TANG = -3.0  
50L1 = 5.00 50L2 = 0.50 50L3 = 0.50  
50GZ1 = 5.00 50GZ2 = 0.50 50GZ3 = 0.50  
k0M1 = 0.802 k0A1 = 4.05  
k0M = 0.802 k0A = 4.05  
Z1PD = 0.00 Z2PD = 15.00 Z3PD = 40.00  
Z1GD = 0.00 Z2GD = 15.00 Z3GD = 40.00  
Z1D = 0.00 Z2D = 15.00 Z3D = 40.00  
50P1P = 14.88 50P2P = 4.94 50P3P = 6.15  
67P1D = 0.00 67P2D = 50.00 67P3D = 65.00  
50G1P = 20.00 50G2P = OFF 50G3P = 0.75 50G4P = 4.00  
67G1D = 10.00 67G2D = 0.00 67G3D = 50.00 67G4D = 0.00  
51GP = 0.75 51GC = U3 51GTD = 3.60 51GRS = N  
DIR3 = F DIR4 = R  
ORDER = QVI  
27P = 19.05 59P = OFF 59N1P = OFF 59N2P = OFF  
59QP = OFF 59V1P = OFF 27SP = 19.05 59SP = 50.00  
27PP = OFF 59PP = OFF  
25VLO = 57.15 25VHI = 69.85 25SF = 0.100  
25ANG1 = 20.00 25ANG2 = 20.00 SYNCP = VA TCLOSD = 3.00  
79OI1 = 500.00  
79RSD = 1500.00 79RSLD = 3000.00 79CLSD = 0.00  
CLOEND = OFF 52AEND = 10.00 SOTFD = 500.00

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

DMTC = 15    PDEMP = OFF    GDEMP = OFF    QDEMP = OFF  
 TDURD = 9.00    CFD = 60.00    3POD = 0.50  
 OPO = 52    50LP = 0.25  
 SV1PU = 0.00    SV1DO = 20.00    SV2PU = 0.00    SV2DO = 20.00  
 SV3PU = 85.00    SV3DO = 0.00    SV4PU = 50.00    SV4DO = 0.00  
 SV5PU = 0.00    SV5DO = 0.00    SV6PU = 0.00    SV6DO = 0.00  
 SV7PU = 50.00    SV7DO = 0.00    SV8PU = 10.00    SV8DO = 9.00  
 SV9PU = 0.00    SV9DO = 0.00    SV10PU = 0.00    SV10DO = 0.00  
 SELogic Group 1  
 SELogic Control Equations:  
 $TR = Z1T + Z2T + Z3T + !LOP * 67P3T + !LOP * (67G1T + 51GT) + LOP * (67P2T + 67G3T)$   
 $TRSOTF = M2P + Z2G + 50P1 + 50G4$   
 $DTT = 0$   
 $ULTR = !(50L + 51G)$   
 $52A = IN101$   
 $CL = SV2T * SV9$   
 $ULCL = TRIP$   
 $79RI = TRIP$   
 $79RIS = LT2$   
 $79DTL = SOTFT + !LT2$   
 $79DLS = 0$   
 $79SKP = 0$   
 $79STL = 0$   
 $79BRS = 0$   
 $79SEQ = 0$   
 $79CLS = SV9$   
 $SET1 = 0$   
 $RST1 = 0$   
 $SET2 = RB3$   
 $RST2 = RB4$   
 $SET3 = 0$   
 $RST3 = 0$   
 $SET4 = 0$   
 $RST4 = 0$   
 $SET5 = 0$   
 $RST5 = 0$   
 $SET6 = Z1T + Z2T + Z3T + !LOP * 67P3T + !LOP * (67G1T + 51GT) + LOP * (67P2T + 67G3T)$   
 $RST6 = TRGTR$   
 $SET7 = SV7T$   
 $RST7 = TRGTR$   
 $SET8 = 0$   
 $RST8 = 0$   
 $SET9 = 0$   
 $RST9 = 0$   
 $SET10 = 0$   
 $RST10 = 0$   
 $67P1TC = 1$   
 $67P2TC = 1$   
 $67P3TC = M3P$   
 $67G1TC = 32GF$   
 $67G2TC = 32GF$

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

67G3TC=1  
 67G4TC=1  
 51GTC =32GF  
 SV1 =OC  
 SV2 =CC  
 SV3 =0  
 SV4 =0  
 SV5 =0  
 SV6 =0  
 SV7 =LOP  
 SV8 =(SV8 + TRIP) \* IN101 \* (50P3 + 50G3)  
 SV9 =(I3P27 \* 27S) + (3P27 \* !27S) + (3P27 \* 27S) + (!3P27 \* !27S \* SV10)  
 SV10 =(59VP \* 59VS \* SF \* 25A1)  
 OUT101=TRIP + SV1T  
 OUT102=CLOSE  
 OUT103=0  
 OUT104=0  
 OUT105=SV8T  
 OUT106=LT6  
 OUT107=SV7T  
 OUT201=0  
 OUT202=0  
 OUT203=0  
 OUT204=0  
 OUT205=0  
 OUT206=0  
 OUT207=0  
 OUT208=0  
 OUT209=0  
 OUT210=0  
 OUT211=0  
 OUT212=0  
 DP1 =1  
 DP2 =1  
 DP3 =IN101  
 DP4 =LT6  
 DP5 =LT7  
 DP6 =LT2  
 DP7 =0  
 DP8 =0  
 DP9 =0  
 DP10 =0  
 SS1 =1  
 SS2 =0  
 SS3 =0  
 SS4 =0  
 SS5 =0  
 SS6 =0  
 ER =/Z1T + /Z2T + /Z3T + /Z4T + /LOP + /CLOSE + /50P1 + /50P2 + /50P3  
 + /50G1 + /50G2 + /50G3 + /50G4 + /IN101  
 FAULT =TRIP  
 BSYNCH=0  
 CLMON =0

**INFORME DE FALLA**  
REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

E32IV =1

Global Settings:

TGR = 1800.00    NFREQ = 50    PHROT = ABC

DATE\_F= MDY    FP\_TO = 5.00    SCROLL= 5

LER = 60    PRE = 6    DCLOP = OFF    DCHIP = OFF

IN101D= 0.00    IN102D= 0.00    IN103D= 0.00    IN104D= 0.00

IN105D= 0.00    IN106D= 0.00

IN201D= 0.00    IN202D= 0.00    IN203D= 0.00    IN204D= 0.00

IN205D= 0.00    IN206D= 0.00    IN207D= 0.00    IN208D= 0.00

EBMON = N

EPMU = N

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**SEL 311L SISTEMA 2 52A2, S/E LOS ANGELES**

Group 1

Group Settings:

RID =LT 154KV LOS ANGELES-STA LUISA TID =S/E LOS ANGELES 52A2

CTR = 160 APP = 311L

E87L = N

CTRP = 160 PTR = 1400.00 PTRS = 1400.00

Z1MAG = 0.44 Z1ANG = 77.19

Z0MAG = 1.50 Z0ANG = 80.05 LL = 9.58

E21P = 3 E21MG = 3 E21XG = 3

E50P = 3 E50G = 4 E50Q = N

E51P = N E51G = Y E51Q = N

E32 = AUTO EOOS = N ELOAD = N ESOTF = Y

EVOLT = Y E25 = Y E81 = N EFLOC = Y

ELOP = Y

EBBPT = N ECOMM = N E79 = 1 EZ1EXT = N

ECCVT = N ESV = 10 ELAT = 10 EDP = 10

EDEM = THM EADVS = Y

Z1P = 0.35 Z2P = 0.53 Z3P = 4.17

50PP1 = 5.00 50PP2 = 0.50 50PP3 = 0.50

Z1MG = 0.35 Z2MG = 0.53 Z3MG = 4.17

XG1 = 0.35 XG2 = 0.53 XG3 = 7.70

RG1 = 1.08 RG2 = 1.62 RG3 = 8.10

XGPOL = I2 TANG = -3.0

50L1 = 5.00 50L2 = 0.50 50L3 = 0.50

50GZ1 = 5.00 50GZ2 = 0.50 50GZ3 = 0.50

k0M1 = 0.802 k0A1 = 4.05

k0M = 0.802 k0A = 4.05

Z1PD = 0.00 Z2PD = 15.00 Z3PD = 40.00

Z1GD = 0.00 Z2GD = 15.00 Z3GD = 40.00

Z1D = 0.00 Z2D = 15.00 Z3D = 40.00

50P1P = 14.88 50P2P = 4.94 50P3P = 6.15

67P1D = 0.00 67P2D = 50.00 67P3D = 65.00

50G1P = 20.00 50G2P = OFF 50G3P = 0.75 50G4P = 4.00

67G1D = 10.00 67G2D = 0.00 67G3D = 50.00 67G4D = 0.00

51GP = 0.75 51GC = U3 51GTD = 3.60 51GRS = N

DIR3 = F DIR4 = R

ORDER = QVI

27P = 19.05 59P = OFF 59N1P = OFF 59N2P = OFF

59QP = OFF 59V1P = OFF 27SP = 19.05 59SP = OFF

27PP = OFF 59PP = OFF

25VLO = 57.15 25VHI = 69.85 25SF = 0.100

25ANG1 = 20.00 25ANG2 = 20.00 SYNCP = VA TCLOSD = 3.00

79OI1 = 500.00

79RSD = 1500.00 79RSLD = 3000.00 79CLSD = 0.00

CLOEND = OFF 52AEND = 10.00 SOTFD = 500.00

DMTC = 15 PDEMP = OFF GDEMP = OFF QDEMP = OFF

TDURD = 9.00 CFD = 60.00 3POD = 0.50 OPO = 52

50LP = 0.25

SV1PU = 0.00 SV1DO = 0.00 SV2PU = 0.00 SV2DO = 0.00

SV3PU = 85.00 SV3DO = 0.00 SV4PU = 50.00 SV4DO = 0.00

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

SV5PU = 0.00    SV5DO = 0.00    SV6PU = 0.00    SV6DO = 0.00  
 SV7PU = 0.00    SV7DO = 0.00    SV8PU = 10.00    SV8DO = 9.00  
 SV9PU = 0.00    SV9DO = 0.00    SV10PU = 0.00    SV10DO = 0.00  
 SELogic Group 1  
 SELogic Control Equations:  
 $TR = Z1T + Z2T + Z3T + !LOP * 67P3T + !LOP * (67G1T + 51GT) + LOP * (67P2T + 67G3T)$   
 $TRSOTF = M2P + Z2G + 50P1 + 50G4$   
 $DTT = 0$   
 $ULTR = !(50L + 51G)$   
 $52A = IN101$   
 $CL = CC * SV9$   
 $ULCL = TRIP$   
 $79RI = TRIP$   
 $79RIS = LT2$   
 $79DTL = SOTFT + !LT2$   
 $79DLS = 0$   
 $79SKP = 0$   
 $79STL = 0$   
 $79BRS = 0$   
 $79SEQ = 0$   
 $79CLS = SV9$   
 $SET1 = 0$   
 $RST1 = 0$   
 $SET2 = RB3$   
 $RST2 = RB4$   
 $SET3 = 0$   
 $RST3 = 0$   
 $SET4 = 0$   
 $RST4 = 0$   
 $SET5 = 0$   
 $RST5 = 0$   
 $SET6 = Z1T + Z2T + Z3T + !LOP * 67P3T + !LOP * (67G1T + 51GT) + LOP * (67P2T + 67G3T + SV4T)$   
 $RST6 = TRGTR$   
 $SET7 = SV7T$   
 $RST7 = TRGTR$   
 $SET8 = 0$   
 $RST8 = 0$   
 $SET9 = 0$   
 $RST9 = 0$   
 $SET10 = 0$   
 $RST10 = 0$   
 $67P1TC = 1$   
 $67P2TC = 1$   
 $67P3TC = M3P$   
 $67G1TC = 32GF$   
 $67G2TC = 32GF$   
 $67G3TC = 1$   
 $67G4TC = 1$   
 $51GTC = 32GF$   
 $SV1 = 0$   
 $SV2 = 0$

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

SV3 =0  
 SV4 =0  
 SV5 =0  
 SV6 =0  
 SV7 =LOP  
 SV8 =(SV8 + TRIP) \* IN101 \* (50P3 + 50G3)  
 SV9 =(I3P27 \* 27S) + (3P27 \* !27S) + (3P27 \* 27S) + (!3P27 \* !27S \* SV10)  
 SV10 =(59VP \* 59VS \* SF \* 25A1)  
 OUT101=TRIP  
 OUT102=CLOSE  
 OUT103=0  
 OUT104=0  
 OUT105=SV8T  
 OUT106=LT6  
 OUT107=SV7T  
 OUT201=0  
 OUT202=0  
 OUT203=0  
 OUT204=0  
 OUT205=0  
 OUT206=0  
 DP1 =1  
 DP2 =1  
 DP3 =IN101  
 DP4 =LT6  
 DP5 =LT7  
 DP6 =LT2  
 DP7 =0  
 DP8 =0  
 DP9 =0  
 DP10 =0  
 SS1 =1  
 SS2 =0  
 SS3 =0  
 SS4 =0  
 SS5 =0  
 SS6 =0  
 ER =/Z1T + /Z2T + /Z3T + /Z4T + /LOP + /CLOSE + /50P1 + /50P2 + /50P3  
       + /50G1 + /50G2 + /50G3 + /50G4 + /IN101  
 FAULT =TRIP  
 BSYNCH=0  
 CLMON =0  
 E32IV =1  
 ESTUB =0  
 T1X =0  
 T2X =0  
 T3X =0  
 T4X =0  
 T1Y =0  
 T2Y =0  
 T3Y =0  
 T4Y =0  
 Global Settings:

**INFORME DE FALLA**  
REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

TGR = 1800.00   NFREQ = 50   PHROT = ABC  
 DATE\_F= MDY   FP\_TO = 5.00   SCROLD= 5  
 LER = 60   PRE = 6   DCLOP = OFF   DCHIP = OFF  
 IN101D= 0.00   IN102D= 0.00   IN103D= 0.00   IN104D= 0.00  
 IN105D= 0.00   IN106D= 0.00  
 EBMON = N  
 EPMU = N

**INFORME DE FALLA**  
REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004289</b>    | FECHA DE FALLA:<br>29 de octubre del 2023 |
| INSTALACIÓN (ES) LT154kV LOS ANGELES – SANTA LUISA |                                           |

**REGISTRO SCADA S/E LOS ÁNGELES**

| Día        | Hora             | Zona        | Subestación | Paño | Descripción                  | Valor   |
|------------|------------------|-------------|-------------|------|------------------------------|---------|
| 29-10-2023 | 14:20:37.9260000 | LOS ANGELES | Los Angeles | A2   | LAngelos 154 ST Cerrado 52A2 | Cerrado |
| 29-10-2023 | 14:20:37.9160000 | LOS ANGELES | Los Angeles | A2   | LAngelos 154 ST Abierto 52A2 | 0       |
| 29-10-2023 | 14:20:27.8450000 | LOS ANGELES | Los Angeles | A2   | LAngelos 154 ST Abierto 52A2 | Abierto |
| 29-10-2023 | 14:20:27.8360000 | LOS ANGELES | Los Angeles | A2   | LAngelos 154 ST Cerrado 52A2 | 0       |



**INFORME DE FALLA**  
**SIN ENERGIA S/E NEGRETE**  
**29 de octubre 2023**

|                       |                            |             |       |
|-----------------------|----------------------------|-------------|-------|
| <b>N° Informe CEN</b> | 2023004286                 |             |       |
| <b>Fecha de envío</b> | 04/11/2023                 | <b>Hora</b> | 23:50 |
| <b>Realizó:</b>       | Benjamin Urrutia Ayamante  |             |       |
| <b>Revisó:</b>        | Pablo Rodríguez Saavedra   |             |       |
| <b>Aprobó:</b>        | Juan Pablo Antriao Molina. |             |       |

### 1. Coordinado afectado

|                            |                                     |
|----------------------------|-------------------------------------|
| <b>Propietario</b>         | Sistema de Transmisión del Sur S.A. |
| <b>RUT Propietario</b>     | 77.312.201-6                        |
| <b>Representante legal</b> | Francisco Alliende.                 |
| <b>Dirección legal</b>     | Manuel Bulnes 441, Osorno.          |

### 2. Instalación afectada

|                                       |                            |                |          |
|---------------------------------------|----------------------------|----------------|----------|
| <b>Instalación afectada</b>           | S/E Negrete                |                |          |
| <b>Ubicación instalación afectada</b> | Negrete, región del Biobío |                |          |
| <b>Tipo de instalación</b>            | Subestación                | <b>Tensión</b> | 66/23 kV |
| <b>Fecha inicio falla</b>             | 29/10/2023                 | <b>Hora</b>    | 11:20    |
| <b>Fecha fin falla</b>                | 29/10/2023                 | <b>Hora</b>    | 11:26    |
| <b>Duración</b>                       | 6 minutos                  |                |          |

### 3. Información SEC

|                                                               |                                                                                                                                                                                             |               |       |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------|
| <b>Comuna</b>                                                 | Negrete                                                                                                                                                                                     | <b>ID</b>     | 08307 |
| <b>Fenómeno físico</b>                                        | Fallas en instalaciones de terceros u en otro segmento                                                                                                                                      | <b>Código</b> | OPE6  |
| <b>Elemento</b>                                               | No aplica                                                                                                                                                                                   | <b>Código</b> | NA    |
| <b>Fenómeno eléctrico</b>                                     | No aplica                                                                                                                                                                                   | <b>Código</b> | NA    |
| <b>Modo interruptores</b>                                     | No aplica                                                                                                                                                                                   | <b>Código</b> | NA    |
| <b>Causa falla</b>                                            | Interrupcion del 52AT4 en S/E Los Ángeles (Propiedad de CGE) provoca interrupcion del 52B2 de S/E Central los Buenos Aires (Propiedad de Enel Green Power) dejando sin energía S/E Negrete. |               |       |
| <b>Proposición del coordinado respecto al origen de falla</b> | Externo                                                                                                                                                                                     |               |       |

### 4. Estándar CIP – 014

Calificación de las instalaciones: Las Instalaciones afectadas por el evento tienen un impacto “BAJO”.

Riesgo: Esta falla no puso en riesgo la operación normal del SEN.

### 5. Instalaciones de Tx afectadas

| Elemento Afectado | Hora desconexión | Hora disponibilidad | Hora normalización |
|-------------------|------------------|---------------------|--------------------|
| S/E Negrete       | 11:20            | 11:20               | 11:26              |

### 6. Instalaciones de Gx afectadas:

| Central      | Subestación | Interruptor asociado | Perdida de Generación [MW] (*) | Hora indisponibilidad | Hora disponibilidad | Empresa                  |
|--------------|-------------|----------------------|--------------------------------|-----------------------|---------------------|--------------------------|
| PE Negrete   | Negrete     | 52E5 – 52E6          | 15,01                          | 11:20                 | 11:26               | WPD Negrete SpA          |
| PE Esperanza | Negrete     | 52E4                 | 6,3                            | 11:20                 | 11:26               | Eólica La Esperanza S.A. |

(\*) Montos de generación leídos en equipos de medida de paños asociados en S/E Negrete.

### 7. Protecciones operadas:

| Función activada | Subestación | Interruptor | Protección asociada |
|------------------|-------------|-------------|---------------------|
| No hay           |             |             |                     |

### 8. Consumos afectados:

| Subestación  | Alimentador             | Comunas afectadas              | Consumos [MW] | Cientes afectados | Hora desconexión | Hora normalización |
|--------------|-------------------------|--------------------------------|---------------|-------------------|------------------|--------------------|
| Negrete      | E1 Negrete - Renaico    | Negrete Renaico                | 1,40          | 1.649             | 11:20            | 11:26              |
| Negrete      | E2 Negrete - Nacimiento | Los Ángeles Nacimiento Negrete | 4,78          | 12.013            | 11:20            | 11:26              |
| Negrete      | E3 Negrete - Mulchén    | Mulchén Negrete                | 3,27          | 2.551             | 11:20            | 11:26              |
| <b>Total</b> |                         |                                | <b>9,45</b>   | <b>16.213</b>     |                  |                    |

**NOTA:** El detalle pormenorizado de la recuperación de los consumos por red MT será entregado por la distribuidora.

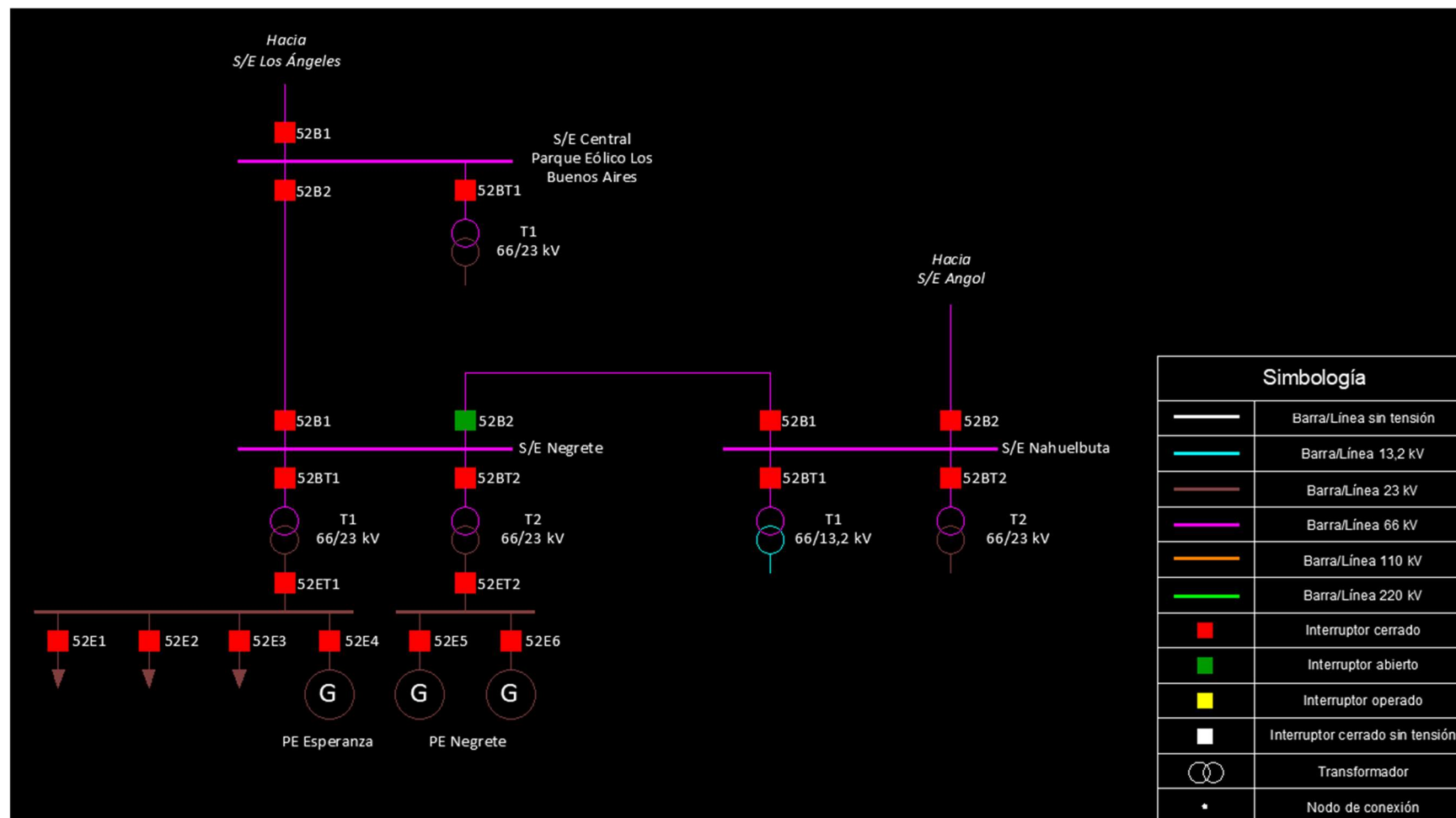
### 9. Estimación de la energía no suministrada:

| Subestación  | Alimentador             | Empresa Dx | Tipo de cliente | Pérdida de Consumo [MW] | Tiempo desconexión (h) | ENS         |
|--------------|-------------------------|------------|-----------------|-------------------------|------------------------|-------------|
| Negrete      | E1 Negrete - Renaico    | Frontel    | Regulado        | 1,40                    | 0,10                   | 0,14        |
| Negrete      | E2 Negrete - Nacimiento | Frontel    | Regulado        | 4,78                    | 0,10                   | 0,48        |
| Negrete      | E3 Negrete - Mulchén    | Frontel    | Regulado        | 3,27                    | 0,10                   | 0,33        |
| <b>Total</b> |                         |            |                 |                         |                        | <b>0,94</b> |

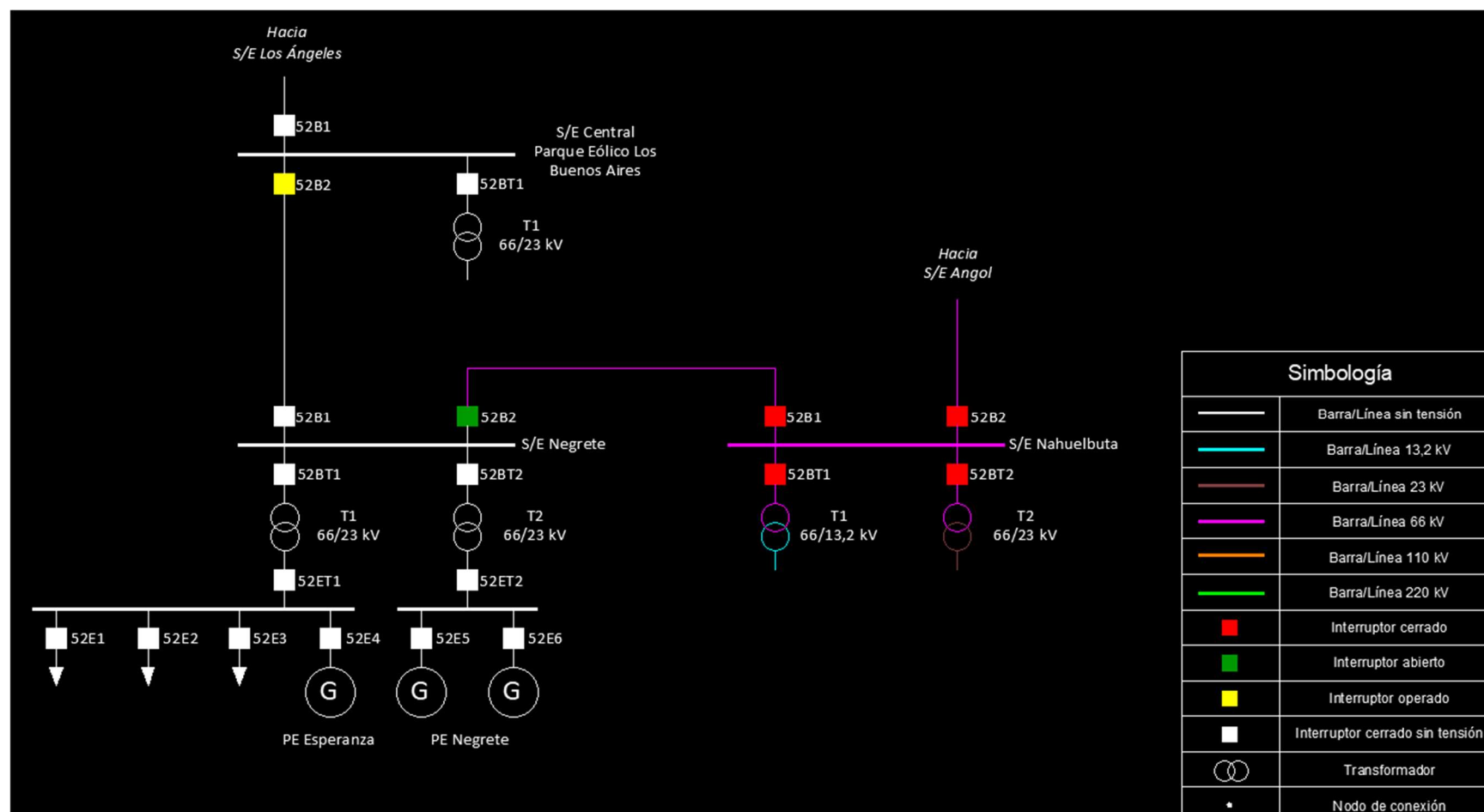
**10. Cronología de eventos y maniobras de normalización:**

| Hora  | Eventos                                                                                                                                                                                    |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:20 | Sin energía S/E Negrete.                                                                                                                                                                   |
| 11:20 | Se da aviso al CDC del Coordinador sin energía S/E Negrete.                                                                                                                                |
| 11:21 | Se da aviso a Frontel sin energía S/E Negrete.                                                                                                                                             |
| 11:22 | Se solicita autorización al CDC para tomar la carga de S/E Negrete desde S/E Nahuelbuta. CDC No autoriza pues indica que se está normalizando la topología por el lado de S/E Los Ángeles. |
| 11:24 | CGE Informa interrupcion del 52AT4 de S/E Los Ángeles y que debido a eso opero el 52B2 de S/E Central los Buenos Aires.                                                                    |
| 11:26 | Se recupera energía en S/E Negrete.                                                                                                                                                        |

11. Esquema de las instalaciones anterior a la falla:



### 11.1 Esquema de las instalaciones posterior a la falla:



**12. Listado de eventos generados y registrados en SCADA:**

| HIST_TIMESTAMP      | LOCATION | COMPID             | TEXT                                                                            |
|---------------------|----------|--------------------|---------------------------------------------------------------------------------|
| 29/10/2023 11:20:33 | NEGRETE  | NEGRETE.B_T02.T2.V | NEGRETE.B_T02.T2.V IO B VOLT 0.0 63.0<br>current value : 0.0 low limit : 63.0   |
| 29/10/2023 11:26:21 | NEGRETE  | NEGRETE.B_T02.T2.V | NEGRETE.B_T02.T2.V IO B VOLT 65.3<br>63.0 current value : 65.3 low limit : 63.0 |

**13. Análisis de la actuación de protecciones y control:**

- Durante el evento en análisis no operaron ni debieron operar elementos de protección propiedad de Sistema de Transmisión del Sur S.A.

**14. Acciones correctivas**

- No hay

**INFORME ANÁLISIS DE FALLA**  
**PE ALENA**  
**DISPARO INTERRUPTOR 52AT1**  
**VERSIÓN: 2**



**MAINSTREAM**  
RENEWABLE  
POWER

| Creado |                            | Revisado               | Aprobado           | Aprobado          |
|--------|----------------------------|------------------------|--------------------|-------------------|
| Nombre | Jorge Luis Borges          | Frank Paez             | Juan Muñoz         | Claudio Gutiérrez |
| Cargo  | P&C Maintenance Specialist | Maintenance Specialist | Operations Manager | O&M Manager       |
| Fecha  |                            |                        |                    |                   |
| Firma  |                            |                        |                    |                   |

|                                                                                                                          |                                     |                |                           |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------|---------------------------|
|  <b>MAINSTREAM</b><br>RENEWABLE<br>POWER | <b>SISTEMA DE GESTIÓN INTEGRADO</b> | <b>Código</b>  | <b>MRP-QMS-REG-329.01</b> |
|                                                                                                                          | <b>ANÁLISIS DE FALLA</b>            | <b>Versión</b> | <b>2</b>                  |
|                                                                                                                          | <b>DISPARO INTERRUPTOR 52AT1</b>    | <b>Fecha</b>   | <b>30/03/2023</b>         |
|                                                                                                                          |                                     | <b>Página</b>  | <b>2 de 9</b>             |

## TABLA DE CONTENIDO

|                                                                                             |          |
|---------------------------------------------------------------------------------------------|----------|
| <b>1. ANTECEDENTES GENERALES DE LA FALLA</b>                                                | <b>3</b> |
| 1.1. ELEMENTO(S) FALLADO(S)                                                                 | 3        |
| 1.2. INSTALACIÓN(S) AFECTADA(S)                                                             | 3        |
| 1.2.1. INSTALACIÓN(ES) GENERACIÓN                                                           | 3        |
| 1.2.2. INSTALACIÓN(ES) TRANSMISIÓN                                                          | 3        |
| 1.3. CONSUMOS                                                                               | 3        |
| <b>2. INFORMACIÓN SOLICITADA EN OF. SEC N°6485/2012 Y EN RES. EX. SEC N°4764/2014</b>       | <b>4</b> |
| <b>3. CONDICIÓN PREVIA DE LA FALLA</b>                                                      | <b>4</b> |
| <b>4. DESCRIPCIÓN DE LA FALLA</b>                                                           | <b>5</b> |
| <b>5. CAUSA DE FALLA</b>                                                                    | <b>5</b> |
| <b>6. ATENCIÓN DE LA FALLA</b>                                                              | <b>5</b> |
| <b>7. ESQUEMAS DE PROTECCIÓN Y CONTROL</b>                                                  | <b>5</b> |
| 7.1. PROTECCIONES OPERADAS                                                                  | 5        |
| 7.2. REGISTROS DE OPERACIONES                                                               | 5        |
| <b>8. ANALISIS EN CONJUTO</b>                                                               | <b>6</b> |
| <b>9. ANALISIS DE CAUSA RAIZ</b>                                                            | <b>7</b> |
| 9.1. CAUSA PRIMARIA / DIRECTA                                                               | 8        |
| 9.2. CAUSA SECUNDARIA                                                                       | 8        |
| 9.3. CAUSA RAÍZ                                                                             | 8        |
| <b>10. RECOMENDACIONES</b>                                                                  | <b>8</b> |
| <b>11. PLAN DE ACCIÓN</b>                                                                   | <b>8</b> |
| <b>12. ANEXOS.</b>                                                                          | <b>9</b> |
| 12.1. REGISTRADOR DE FALLA (SIEMENS 7KE85) – EVENTO: 29-10-2023 A LAS 14:20:27.857 (UTC-0). | 9        |

|                                                                                  |                              |         |                    |
|----------------------------------------------------------------------------------|------------------------------|---------|--------------------|
|  | SISTEMA DE GESTIÓN INTEGRADO | Código  | MRP-QMS-REG-329.01 |
|                                                                                  | ANÁLISIS DE FALLA            | Versión | 2                  |
|                                                                                  | DISPARO INTERRUPTOR 52AT1    | Fecha   | 30/03/2023         |
|                                                                                  |                              | Página  | 3 de 9             |

## 1. ANTECEDENTES GENERALES DE LA FALLA

Se registran los siguientes eventos de falla notificados por el Centro de Control Enor Chile según se indica:

### 1.1. Elemento(s) Fallado(s)

| Falla          |                    |
|----------------|--------------------|
| Centro Control | Siemens Energy     |
| Componente     | LT Alena - Coyanco |
| Equipo         | Interruptor 52AT1  |
| Fecha Falla    | 29-10-2023         |
| Hora           | 14:20 (UTC-0)      |

### 1.2. Instalación(s) Afectada(s)

#### 1.2.1. Instalación(es) Generación

| Instalación Afectada | Hora Desconexión | Potencia Interrumpida (MW) | Hora de Autorización conexión CDC | Hora de Normalización |
|----------------------|------------------|----------------------------|-----------------------------------|-----------------------|
| PE Alena             | 14:20:27.857     | 39                         | 06:18 (30-10-2023)                | 06:18 (30-10-2023)    |

#### 1.2.2. Instalación(es) Transmisión

| Instalación Afectada | Hora Desconexión | Potencia Interrumpida (MW) | Hora de Autorización conexión CDC | Hora de Normalización |
|----------------------|------------------|----------------------------|-----------------------------------|-----------------------|
| PE Alena             | 14:20:27.857     | 39                         | 06:18 (30-10-2023)                | 06:18 (30-10-2023)    |

### 1.3. CONSUMOS

Condor Energía SpA no posee información de los consumos afectados durante el evento en análisis.



|                                                                                  |                              |         |                    |
|----------------------------------------------------------------------------------|------------------------------|---------|--------------------|
|  | SISTEMA DE GESTIÓN INTEGRADO | Código  | MRP-QMS-REG-329.01 |
|                                                                                  | ANÁLISIS DE FALLA            | Versión | 2                  |
|                                                                                  | DISPARO INTERRUPTOR 52AT1    | Fecha   | 30/03/2023         |
|                                                                                  |                              | Página  | 5 de 9             |

#### 4. DESCRIPCIÓN DE LA FALLA

Se registran los eventos según se indica:

- El sábado 29-10-2023, a las 14:20:27.857 (UTC 0), se registra operación automática de los relés de protecciones SPAT1-S1 y SPTAT1-S2 ambos relés SIEMENS 7SA86 asociados a la Línea de Transmisión Alena – Tap Off Coyanco de 154 kV, por la activación de la función de baja tensión (27) ocasionando la apertura del interruptor 52AT1 en la Subestación Elevadora Alena 33/154 kV.

#### 5. CAUSA DE FALLA

- El evento de las 14:20:27.857 (UTC-0) se asocia con a la apertura del Polo A del interruptor 52A2 en la Subestación Santa Luisa, LT Los Ángeles – Santa Luisa 154 kV propiedad de la empresa CGE, según lo declarado por Centro de Control Siemens Energy en su informe diario del lunes 30-10-2023, con la apertura del Polo A, el interruptor 52A2 quedaría bloqueado e inoperante.

#### 6. ATENCIÓN DE LA FALLA

- El Centro de Control Siemens Energy notifica al personal de Operaciones MRP la apertura del Interruptor 52AT1 de la Subestación Elevadora Alena 33/154 kV.
- Se realiza inspección visual en sala de control, observando la activación de los leds de disparo en los relés de protecciones correspondientes a la LT Alena – Tap Off Coyanco de 154 kV.
- Se procede con la descarga y el análisis de los eventos y registros oscilográficos del relé registrador de fallas FR-AT1 (SIEMENS 7KE85) de la Subestación Alena 33/154 kV, para determinar el origen de la apertura del interruptor 52AT1. En los registros oscilográficos se pudo evidenciar perdida o ausencia de tensión en la LT Alena – Tap Off Coyanco de 154 kV.

#### 7. ESQUEMAS DE PROTECCIÓN Y CONTROL

##### 7.1. Protecciones Operadas

Las Protecciones Operadas fueron:

- S/E Alena (Elevadora)**
  - Relé de Protección SPAT1-S1 (SIEMENS 7SA86).
  - Relé de Protección SPAT1-S2 (SIEMENS 7SA86).

##### 7.2. Registros de Operaciones

Se adjunta registro de eventos obtenido:

- S/E Alena (Elevadora)**
  - IHM de la subestación.

SIEMENS

ACCESO USUARIOUSUARIO ACTUALREMOTO

AUTORIDAD DE CONTROL

172.16.60.203

09/11/2023 14:29:13

UNIFILAR154/33 kV

LISTA DE EVENTOS

LISTA DE ALARMAS

TENDENCIAS

COMUNICACIONES ALTA TENSIÓN

COMUNICACIONES MEDIA TENSIÓN

PQ ANALYZER

EXPLORADOR WINDOWS

CERRAR RUNTIME

LISTA DE ALARMAS

| Esta... | Fecha      | Hora         | Grupo                                                  | Mensaje                           | Valor     | Localizacion | Causa      | Estado |
|---------|------------|--------------|--------------------------------------------------------|-----------------------------------|-----------|--------------|------------|--------|
| 24      | 30/10/2023 | 01.10.22,277 | ALENA\33kV\SWITCHGEAR\CELDAS 2 - ALIMENT. 1\52F1       | Muelles no Tensados               | DESPEJADA | irrelevante  | espontaneo | valid  |
| 25      | 30/10/2023 | 01.10.22,203 | ALENA\33kV\SWITCHGEAR\CELDAS 2 - ALIMENT. 1\52F1       | Fallo Supervisión Bobina Cierre   | DESPEJADA | irrelevante  | espontaneo | valid  |
| 26      | 30/10/2023 | 01.09.57,954 | ALENA\33kV\SWITCHGEAR\CELDAS 1 - ACOM. TRAF0 1\52FT1-1 | Muelles no Tensados               | DESPEJADA | irrelevante  | espontaneo | valid  |
| 27      | 30/10/2023 | 01.09.57,881 | ALENA\33kV\SWITCHGEAR\CELDAS 1 - ACOM. TRAF0 1\52FT1-1 | Fallo Supervisión Bobina Cierre   | DESPEJADA | irrelevante  | espontaneo | valid  |
| 28      | 30/10/2023 | 01.09.38,645 | ALENA\SSAA\TDCC1                                       | Alarma Rele 27_59 A1              | DESPEJADA | irrelevante  | espontaneo | valid  |
| 29      | 30/10/2023 | 01.09.38,204 | ALENA\154kV\T1\52AT1                                   | Bloqueo Cierre Accionamiento      | DESPEJADA | irrelevante  | espontaneo | valid  |
| 30      | 30/10/2023 | 01.04.35,965 | ALENA\SSAA\TDCC1                                       | Alarma Rele 27_59 A3              | DESPEJADA | irrelevante  | espontaneo | valid  |
| 31      | 29/10/2023 | 19.45.08,976 | ALENA\33kV\SWITCHGEAR\CELDAS 7 - TRAF0 SSAA\52F6       | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 32      | 29/10/2023 | 19.44.50,884 | ALENA\33kV\SWITCHGEAR\CELDAS 5 - ALIMENT. 4\52F4       | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 33      | 29/10/2023 | 19.44.40,673 | ALENA\33kV\SWITCHGEAR\CELDAS 4 - ALIMENT. 3\52F3       | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 34      | 29/10/2023 | 19.44.33,103 | ALENA\33kV\SWITCHGEAR\CELDAS 3 - ALIMENT. 2\52F2       | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 35      | 29/10/2023 | 19.44.24,878 | ALENA\33kV\SWITCHGEAR\CELDAS 2 - ALIMENT. 1\52F1       | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 36      | 29/10/2023 | 19.44.09,777 | ALENA\33kV\SWITCHGEAR\CELDAS 1 - ACOM. TRAF0 1\52FT1-1 | Fallo Supervisión Bobina Disparo  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 37      | 29/10/2023 | 11.20.29,888 | ALENA\154kV\T1\SPT1-S2-SOBRECERR.                      | Disparo General                   | DESPEJADA | irrelevante  | espontaneo | valid  |
| 38      | 29/10/2023 | 11.20.29,888 | ALENA\154kV\T1\SPT1-S2-SOBRECERR.                      | Disparo General - Fase L1         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 39      | 29/10/2023 | 11.20.29,888 | ALENA\154kV\T1\SPT1-S2-SOBRECERR.                      | Disparo General - Fase L2         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 40      | 29/10/2023 | 11.20.29,888 | ALENA\154kV\T1\SPT1-S2-SOBRECERR.                      | Disparo General - Fase L3         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 41      | 29/10/2023 | 11.20.29,987 | ALENA\154kV\T1\SPT1-S2-SOBRECERR.                      | Disparo Subtension - 27-1         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 42      | 29/10/2023 | 11.20.29,984 | ALENA\154kV\T1\CP\AT1-CONTROLADOR                      | Disparo SPAT1-S1                  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 43      | 29/10/2023 | 11.20.29,948 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S1-PROT. DISTANCIA  | Disparo Subtension 27             | DESPEJADA | irrelevante  | espontaneo | valid  |
| 44      | 29/10/2023 | 11.20.29,948 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S1-PROT. DISTANCIA  | Disparo General                   | DESPEJADA | irrelevante  | espontaneo | valid  |
| 45      | 29/10/2023 | 11.20.29,948 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S1-PROT. DISTANCIA  | Disparo General - Fase L1         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 46      | 29/10/2023 | 11.20.29,948 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S1-PROT. DISTANCIA  | Disparo General - Fase L2         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 47      | 29/10/2023 | 11.20.29,948 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S1-PROT. DISTANCIA  | Disparo General - Fase L3         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 48      | 29/10/2023 | 11.20.29,946 | ALENA\154kV\T1\CP\AT1-CONTROLADOR                      | Disparo SPAT1-S2                  | DESPEJADA | irrelevante  | espontaneo | valid  |
| 49      | 29/10/2023 | 11.20.29,940 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S2-PROT. DISTANCIA  | Disparo Subtension 27             | DESPEJADA | irrelevante  | espontaneo | valid  |
| 50      | 29/10/2023 | 11.20.29,940 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S2-PROT. DISTANCIA  | Disparo General                   | DESPEJADA | irrelevante  | espontaneo | valid  |
| 51      | 29/10/2023 | 11.20.29,940 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S2-PROT. DISTANCIA  | Disparo General - Fase L1         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 52      | 29/10/2023 | 11.20.29,940 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S2-PROT. DISTANCIA  | Disparo General - Fase L2         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 53      | 29/10/2023 | 11.20.29,940 | ALENA\154kV\LINEA COYANCO-A1\SPAT1-S2-PROT. DISTANCIA  | Disparo General - Fase L3         | DESPEJADA | irrelevante  | espontaneo | valid  |
| 54      | 29/10/2023 | 11.20.28,010 | ALENA\SSAA\TDCA1                                       | Alarma 2 Rele 27_59 A1            | DESPEJADA | irrelevante  | espontaneo | valid  |
| 55      | 29/10/2023 | 11.20.27,896 | ALENA\SSAA\TDCA1                                       | Alarma 1 Rele 27_59 A1            | DESPEJADA | irrelevante  | espontaneo | valid  |
| 56      | 29/10/2023 | 11.20.27,870 | ALENA\SSAA\TDCA1                                       | Alarma 1 Rele 27_59 A2            | DESPEJADA | irrelevante  | espontaneo | valid  |
| 57      | 29/10/2023 | 11.20.27,870 | ALENA\SSAA\TDCA1                                       | Alarma 2 Rele 27_59 A2            | DESPEJADA | irrelevante  | espontaneo | valid  |
| 58      | 29/10/2023 | 11.20.27,870 | ALENA\SSAA\TDCA1                                       | Falla ITM QM2                     | DESPEJADA | irrelevante  | espontaneo | valid  |
| 59      | 28/10/2023 | 20.54.08,346 | ALENA\154kV\T1\SPT1-S2-SOBRECERR.                      | Disparo Sobre frecuencia - 8 3M-1 | DESPEJADA | irrelevante  | espontaneo | valid  |

Lista

Pendiente: 382 Pendiente de acuse: 322 Oculto: 0 Lista: 322 09/11/2023 14:29:13

| Estado | Fecha      | Hora         | Grupo                                                                     | Mensaje | Valor     | Localizacion | Causa             | Estado |
|--------|------------|--------------|---------------------------------------------------------------------------|---------|-----------|--------------|-------------------|--------|
| 1      | 09/11/2023 | 12.13.50,755 | ALENA\154kV\LINEA COYANCO-A1\FR\AT1-FAULT RECO ITM TP Linea Operado       |         | DESPEJADA | irrelevante  | interrog. general | valid  |
| 2      | 09/11/2023 | 12.13.50,755 | ALENA\154kV\LINEA COYANCO-A1\FR\AT1-FAULT RECO Fallo Canal Comunicacion 1 |         | DESPEJADA | irrelevante  | interrog. general | valid  |
| 3      | 09/11/2023 | 12.13.50,755 | ALENA\154kV\LINEA COYANCO-A1\FR\AT1-FAULT RECO Fallo Canal Comunicacion 2 |         | DESPEJADA | irrelevante  | interrog. general | valid  |

Figura 2. Lista de Eventos IHM – Subestación Alena 33/154 kV.

## 8. ANALISIS EN CONJUNTO

- El domingo 29-10-2023, a las 14:20:27.857 (UTC-0), se registra operación automática de los relés de protecciones SPAT1-S1 y SPTAT1-S2 ambos relés SIEMENS 7SA86 asociados a la Línea de Transmisión Alena – Tap Off Coyanco de 154 kV, por la activación de la función de baja tensión (27) ocasionando la apertura del interruptor 52AT1 en la Subestación Elevadora Alena 33/154 kV.
- Al momento de la falla la Subestación Elevadora Alena 33/154 kV propiedad de MRP se encontraba con un aporte de generación de 39 MW.
- El evento de las 14:20:27.857 (UTC-0) se asocia con a la apertura del Polo A del interruptor 52A2 en la Subestación Santa Luisa, LT Los Ángeles – Santa Luisa 154 kV propiedad de la empresa CGE, según lo declarado por Centro de Control Siemens Energy en su informe diario del lunes 30-10-2023, con la apertura del Polo A, el interruptor 52A2 quedaría bloqueado e inoperante.
- A las 22:44 se realizan maniobras de aperturas de los interruptores 52FT1, 52F1, 52F2, 52F3, 52F4, 52F5 y 52F6 asociados a las Celdas MT de 33 kV.
- El lunes 30-10-2023 a las 03:30 EL COT CGE nos informa que el interruptor de 52A2 de la Subestación Santa Luisa se encuentra con problemas en el Polo A, y que para normalizar la LT Los Ángeles – Santa Luisa 154 kV, se deberá realizar by-pass entre los contactos de potencia de dicho interruptor, extracto del informe diario (30-10-2023) del Centro de Control Siemens Energy.

|                                                                                  |                              |         |                    |
|----------------------------------------------------------------------------------|------------------------------|---------|--------------------|
|  | SISTEMA DE GESTIÓN INTEGRADO | Código  | MRP-QMS-REG-329.01 |
|                                                                                  | ANÁLISIS DE FALLA            | Versión | 2                  |
|                                                                                  | DISPARO INTERRUPTOR 52AT1    | Fecha   | 30/03/2023         |
|                                                                                  |                              | Página  | 7 de 9             |

- Debido a la característica de esta falla, se sobrescriben los eventos y los registros oscilográficos en ambos esquemas de protecciones, solo quedando disponibles los eventos en el registrados de falla de la Subestación Alena, por tal motivo, se realiza el análisis de falla con estos archivos y no con los archivos descargados de los relés de protecciones.
- Los relés de protecciones SPAT1-S1 y SPTAT1-S2 ambos relés SIEMENS 7SA86, evalúa una falla por baja tensión monofásica (fase A), arranca y opera la función 27 (Subtensión), transitorio que se mantiene durante un tiempo de mayor 2,00 segundos hasta la apertura del interruptor 52AT1, ambos relés de protecciones se comportan de manera selectiva y despejan la falla en el tiempo ajustado según el ECAP.



Figura 3. Medidas Análogas del Relé de Protecciones SPAT1-S1 LT Alena – Tap Off Coyanco de 154 kV.

- Ante posibles fallas en la LT Los Ángeles – Santa Luisa 154 kV cercanas o en la Subestación Santa Luisa, serán despejadas por los relés de protecciones del extremo de Los Ángeles.
- Para las actividades de mantenimiento en la Subestación Santa Luisa se deberá solicitar la desconexión del Interruptor 52A2 en la Subestación Los Ángeles.

## 9. ANALISIS DE CAUSA RAIZ

Este análisis de causa raíz se desarrollará empleando el diagrama de análisis de causa raíz de espina de pescado.

|                                                                                  |                              |         |                    |
|----------------------------------------------------------------------------------|------------------------------|---------|--------------------|
|  | SISTEMA DE GESTIÓN INTEGRADO | Código  | MRP-QMS-REG-329.01 |
|                                                                                  | ANÁLISIS DE FALLA            | Versión | 2                  |
|                                                                                  | DISPARO INTERRUPTOR 52AT1    | Fecha   | 30/03/2023         |
|                                                                                  |                              | Página  | 8 de 9             |

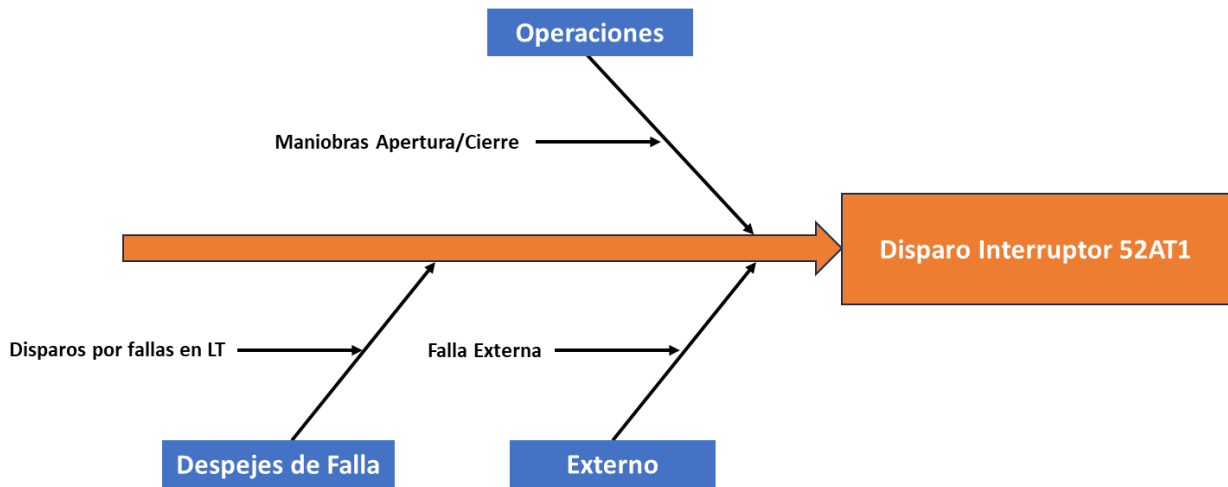


Figura 4. Diagrama de análisis de causa raíz de espina de pescado

### 9.1. Causa primaria / directa

Apertura monopolar (Fase A) del interruptor 52AT1 de la Subestación Santa Luisa 154 kV.

### 9.2. Causa secundaria

Disparo por protecciones del interruptor 52AT1, despeje selectivo por arranque y operación de la función 27 (baja tensión) en LT Santa Luisa – Alena de 154 kV.

### 9.3. Causa Raíz

Por ser evento externo, Operación y Mantenimiento de MRP no posee la injerencia para determinar la causa raíz.

## 10. RECOMENDACIONES

- No se recomiendan acciones correctivas a corto, ni a largo plazo debido a la correcta actuación de los sistemas de protecciones.
- Descargar los eventos y registros oscilográficos el mismo día de ocurrencia de la falla.

## 11. PLAN DE ACCIÓN

- Aplicar la recomendación de manera inmediata.

|                                                                                                                          |                              |         |                    |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------|---------|--------------------|
|  <b>MAINSTREAM</b><br>RENEWABLE<br>POWER | SISTEMA DE GESTIÓN INTEGRADO | Código  | MRP-QMS-REG-329.01 |
|                                                                                                                          | ANÁLISIS DE FALLA            | Versión | 2                  |
|                                                                                                                          | DISPARO INTERRUPTOR 52AT1    | Fecha   | 30/03/2023         |
|                                                                                                                          |                              | Página  | 9 de 9             |

## 12. ANEXOS.

### 12.1. Registrador de Falla (SIEMENS 7KE85) – Evento: 29-10-2023 a las 14:20:27.857 (UTC-0).





Technical & Maintenance Services  
Enel Green Power Chile

CODICE – CODE

N.A.

PAGINA - PAGE

1 di/of 27

## INFORME DE FALLA

***Desconexión Transformador N°4 de 154/66 kV S/E Los Ángeles***

***Desconexión Parque Eólico Los Buenos Aires***

***Domingo, 29 de octubre de 2023 a las 11:20 hrs.***

|      |            |             |           |             |           |
|------|------------|-------------|-----------|-------------|-----------|
|      |            |             |           |             |           |
|      |            |             |           |             |           |
|      |            |             |           |             |           |
| 00   | 07/11/2023 |             | G. CONCHA | F. RIVERA   | C. SAA    |
|      |            |             |           |             |           |
| REV. | DATA       | DESCRIZIONE | PREPARATO | CONTROLLATO | APPROVATO |
| REV. | DATE       | DESCRIPTION | PREPARED  | CHECKED     | APPROVED  |

|                                                                      |               |                     |   |                  |              |                            |   |   |   |   |                   |   |                   |   |              |   |   |
|----------------------------------------------------------------------|---------------|---------------------|---|------------------|--------------|----------------------------|---|---|---|---|-------------------|---|-------------------|---|--------------|---|---|
| PROGETTO/IMPIANTO<br>PROJECT/PLANT<br>Parque Eólico Los Buenos Aires | CODICE – CODE |                     |   |                  |              |                            |   |   |   |   |                   |   |                   |   |              |   |   |
|                                                                      | TIPO<br>TYPE  | EMITTENTE<br>ISSUER |   | PAESE<br>COUNTRY | TEC.<br>TEC. | PROGRESSIVO<br>PROGRESSIVE |   |   |   |   | SISTEMA<br>SYSTEM |   | IMPIANTO<br>PLANT |   | REV.<br>REV. |   |   |
|                                                                      | E             | G                   | P | O                | &            | M                          | 0 | 5 | 1 | 2 | 3                 | I | F                 | L | B            | A | 0 |

|                 |          |           |              |            |               |
|-----------------|----------|-----------|--------------|------------|---------------|
| CLASSIFICAZIONE | PUBBLICO | AZIENDALE | RISERVATO    | RISTRETTO  | RIF. ARCHIVIO |
| CLASSIFICATION  | PUBLIC   | COMPANY   | CONFIDENTIAL | RESTRICTED | ARCHIVE ID    |

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## INFORME DE FALLA

|                                           |                                                         |
|-------------------------------------------|---------------------------------------------------------|
| <b>EQUIPO AFECTADO</b>                    | Parque Eólico Los Buenos Aires                          |
| <b>TITULO DE LA FALLA</b>                 | Desconexión Transformador N°4 154/66 kV S/E Los Ángeles |
| <b>FECHA Y HORA DE INICIO DE LA FALLA</b> | Domingo, 29 de octubre de 2023 a las 11:20 hrs.         |

### 1. Empresa Propietaria de la instalación fallada.

- Nombre Empresa: Enel Green Power Chile S.A.
- RUT: 76.412.562-2
- Representante Legal: James Lee Stancampiano
- Dirección: Santa Rosa 76, Piso 17, Santiago, Chile.

### 2. Calificación de la ubicación de la instalación donde se produjo la falla, de acuerdo con el Decreto 327 del año 1997, Título IX, Artículo 25 del Ministerio de Minería.

De acuerdo con el Decreto 327 del año 1997, Título IX, Artículo 25 del Ministerio de Minería, la ubicación de la instalación donde se produjo la falla se califica como Rural.

### 3. Condiciones de operación de las instalaciones previas a la perturbación.

Al momento de la falla, el Parque Eólico Los Buenos Aires estaba generando un monto aproximado de 20 [MW] y no se realizaban trabajos en las instalaciones del parque.

### 4. Descripción detallada del origen de la falla.

De acuerdo con el informe de novedades del CEN, en la fecha y hora señalada, se produjo la desconexión intempestiva por protecciones del Transformador N°4 154/66 [kV] 56 [MVA] de la S/E Los Ángeles. Producto de esta contingencia se perdieron 22.4 [MW] de consumos correspondientes a SS/EE Manso de Velasco y El Avellano. Como consecuencia de este evento, se produce la desconexión forzada por protecciones del parque eólico Los Buenos Aires, debido a la desconexión forzada por protecciones de la línea de 66 [kV] Los Buenos Aires – Los Ángeles, debido a la apertura del interruptor

52B1 en S/E Los Buenos Aires 66 [kV], la que se produce por la operación de la función de distancia del sistema 2 de protecciones por detección de falla en su zona 1 de operación, y la apertura del interruptor 52BT1 de S/E Los Buenos Aires, debido a la operación de la función de sobrefrecuencia del sistema de protecciones del transformador elevador de 66/23 [kV].

**5. Proposición de su representada respecto de si la causa que provoca la falla de la referencia es calificada como Interna, Caso Fortuito o Fuerza Mayor.**

En virtud de lo señalado en el punto precedente, se propone calificar la causa de la falla como Externa.

**6. Secuencia de eventos durante la evolución de la falla.**

| <b>ANTECEDENTES DE INTERRUPCIÓN</b> |              |             |                     |                    |                                                   |
|-------------------------------------|--------------|-------------|---------------------|--------------------|---------------------------------------------------|
| <b>ITEM</b>                         | <b>FECHA</b> | <b>HORA</b> | <b>LUGAR</b>        | <b>INTERRUPTOR</b> | <b>PROTECCIONES OPERADAS</b>                      |
| 01                                  | 29-10-2023   | 11:20       | SE Los Buenos Aires | 52B1               | Operación de función de distancia (21-21N) Zona 1 |
| 02                                  | 29-10-2023   | 11:20       | SE Los Buenos Aires | 52BT1-52FT1        | Operación de protección de sobrefrecuencia (810)  |

**7. Secuencia de eventos y principales maniobras de normalización.**

| <b>ANTECEDENTES DE INTERRUPCION</b> |              |             |                     |                    |                                                          |
|-------------------------------------|--------------|-------------|---------------------|--------------------|----------------------------------------------------------|
| <b>ITEM</b>                         | <b>FECHA</b> | <b>HORA</b> | <b>LUGAR</b>        | <b>INTERRUPTOR</b> | <b>MANIOBRA</b>                                          |
| 01                                  | 29-10-2023   | 11:26       | SE Los Buenos Aires | 52B1               | Cierre Manual                                            |
| 02                                  | 29-10-2023   | 11:26       | SE Los Buenos Aires | 52BT1-52FT1        | Conexión Manual PE Los Buenos Aires. Parque normalizado. |

## **8. Impacto en el SIC y/o clientes.**

De acuerdo con el informe de novedades del CEN, producto de la desconexión del transformador N°4 154/66 [kV] de la S/E Los Ángeles, se registraron pérdidas de 22.4 [MW] de consumos correspondientes a SS/EE Manso de Velasco y El Avellano.

## **9. Otros hechos relevantes para la operación.**

No hay otros hechos relevantes.

## **10. Criterios de ajustes y ajustes de las protecciones operadas en la falla.**

### **10.1. Protección Línea 66 [kV] Los Buenos Aires – Los Ángeles – Paño 52B1**

- Sistema 1: SEL311C - Sistema 2: SEL311L

El sistema de protecciones posee los siguientes módulos habilitados:

- ✓ Funciones de distancia de fase y residual tipo MHO (21/21N).
- ✓ Funciones de distancia residual tipo cuadrilateral (21N)
- ✓ Funciones de sobrecorriente direccional residual (67N).
- ✓ Funciones de sobrecorriente direccional de fase (67).
- ✓ Función de sobrecorriente de emergencia (50E/51NE)
- ✓ Función reconexión automática (79)
- ✓ Función cierre contra falla (SOTF)
- ✓ Función de falla de interruptor (50BF).

Estas protecciones actúan sobre el interruptor 52B1 correspondientes a la S/E Los Buenos Aires 66kV.

|             |            |
|-------------|------------|
| Relación TC | 600/5A     |
| Relación TP | 66/0.110kV |

- **Función de Distancia (21/21N)**

Los módulos de distancia en el extremo Los Buenos Aires se encuentran ajustados de manera de proteger la línea Los Buenos Aires – Los Ángeles y dar respaldo a las protecciones existentes en el extremo Los Ángeles 66kV.

Las zonas de protección se ajustan en función de los parámetros de la línea a proteger de manera de proveer protección local y respaldo remoto.

Se ajustan módulos de distancia de fase y residual tipo MHO y residual tipo cuadrilateral.

En función de esto se definen los siguientes criterios para el ajuste de las zonas de protección.

- ✓ Zona 1: El alcance de la primera zona es igual al 80% de la impedancia de secuencia positiva de la línea 66kV Los Buenos Aires - Los Ángeles. Esta zona posee una actuación instantánea de manera de provocar un despeje rápido de la falla y mantener la coordinación con las protecciones de la S/E Nahuelbuta.
- ✓ Zona 2: Se considera un ajuste que permite cubrir la totalidad de la línea protegida y dar respaldo a las protecciones del transformador y de los paños hacia Duqueco en la S/E Los Ángeles. El alcance es igual al 110% de la impedancia de secuencia positiva de la línea Los Buenos Aires - Los Ángeles. El tiempo de operación de esta zona es de 400mseg.
- ✓ Zona 3: Se considera un ajuste con un mayor retardo que permite cubrir la totalidad de la línea protegida y parte del tramo adyacente más corto. Se considera un ajuste igual al 150% de la impedancia de secuencia positiva del circuito protegido con una temporización de 1seg.

## **10.2. Protección Transformador 66/23 [kV] – Paños 52BT1**

El sistema de protecciones posee los siguientes módulos habilitados:

- ✓ Función diferencial de transformador (87T)
- ✓ Funciones de sobrecorriente de fase y residual (50/51)
- ✓ Función de sobrecorriente residual (51G)
- ✓ Función sobretensión de fases (59)
- ✓ Función subtensión de fases (27)
- ✓ Función de sobre y sub frecuencia (81O/81U)
- ✓ Función de falla de interruptor (50BF)

Estas protecciones actúan sobre los interruptores 52BT1 y 52FT1 de los paños correspondientes transformador principal de la S/E Los Buenos Aires, tanto en 66kV como en 33kV.

### Función de Subfrecuencia (81U)

Se ajusta de manera cumplir con las especificaciones de la NTSyCS para parques eólicos en su artículo 3-9. Se ajusta en 47.5Hz con una temporización de 200mseg.

### Función de Sobre frecuencia (81O)

Se ajusta de manera cumplir con las especificaciones de la NTSyCS para parques eólicos en su artículo 3-9 donde se indica la condición de desconexión forzada a partir de los 51.5Hz. Se ajusta en 51.5Hz sin retardo intencional para la operación.

| Dato       | Ajuste                    | Valor  |
|------------|---------------------------|--------|
| BlkValV    | Tensión mínima (V)        | 40     |
| StrNumCyc  | Nª ciclos de arranque     | 3      |
| RepNumCyc  | Nª ciclos de reposición   | 2      |
| OFRsDITmms | T.ReposiciónsobreF (ms)   | 40     |
| UFRsDITmms | T.ReposiciónsubF (ms)     | 40     |
| PTGFEna1   | Nivel 1. Habilidad        | SI     |
| StrVal1    | Nivel 1. Arranque (Hz)    | 47,50  |
| OpDITmms1  | Nivel 1. Tiempo fijo (ms) | 200    |
| StTyp1     | Nivel 1. Tipo función     | Mínima |
| LogINBlk1  | Nivel 1. Bloqueo          | 0      |
| PTGFEna2   | Nivel 2. Habilidad        | SI     |
| StrVal2    | Nivel 2. Arranque (Hz)    | 51,50  |
| OpDITmms2  | Nivel 2. Tiempo fijo (ms) | 0      |
| StTyp2     | Nivel 2. Tipo función     | Máxima |
| LogINBlk2  | Nivel 2. Bloqueo          |        |

### Función de Subtensión de fases (27)

Se ajusta una etapa con una curva de tiempo definido en el lado 66kV. Esta debe operar cuando la tensión desciende por debajo del 80% de la tensión nominal con un retardo de 2 seg. de manera de dar respaldo a las protecciones de MT.

| Dato     | Ajuste            | Valor                |
|----------|-------------------|----------------------|
| PIOVEna  | Habilidad         | SI                   |
| OpType   | Tipo de operación | 2 (Vfase-fase FOUND) |
| StrVal   | Arranque (V)      | 88,00                |
| OpDITmms | Tiempo fijo (ms)  | 2300                 |
| LogINBlk | Bloqueo           |                      |
| GenTrip  | Disparo general   | SI                   |
| MaskEna  | Habilidad sucesos | SI                   |

## **11. Análisis del comportamiento de las protecciones operadas en la falla.**

A las 11:20 horas del 29 de octubre del 2023, se produjo una interrupción forzada por protecciones del transformador N°4 154/66 [kV] 56 [MVA] de la S/E Los Ángeles. Esta falla causó la desconexión de diversos parques y consumos en el sistema de 66 [kV] aguas debajo de la S/E Los Ángeles. En particular, en el Parque Eólico Los Buenos Aires y S/E Los Buenos Aires se verificó la desconexión del PE Los Buenos Aires producto de la operación de las protecciones del paño 52B1 de la S/E Los Buenos Aires producto de la actuación de su función de protección de distancia en su Zona 1 de operación y la actuación de la función de sobrefrecuencia del sistema de protecciones asociadas al transformador elevador de 66/33 [kV], lo que se verifica en los registros oscilográficos en donde se observa que la orden de desconexión enviada a los paños 52BT1 y 52FT1.

En cuanto a la actuación del sistema 2 de protecciones del paño B1 de la S/E los Buenos Aires, su causa se encuentra en investigación en conjunto con la empresa representante del fabricante en Chile del relé de protección, de manera de determinar la razón de la detección de la falla en análisis en su Zona 1 de protección, considerando que el sistema 1 de protección, que dispone del mismo ajuste, no actuó frente a esta falla.

De lo anterior, se puede concluir que las protecciones asociadas al Transformador de 66/33 [kV] de la S/E Los Buenos Aires, operaron de manera correcta y de acuerdo con sus ajustes.

## **12. Diagrama unilineal de las instalaciones.**

El diagrama unilineal simplificado de las instalaciones afectadas por la falla se encuentra en el Anexo N°1.

## **13. Registro oscilográfico y de eventos de las protecciones operadas en la falla.**

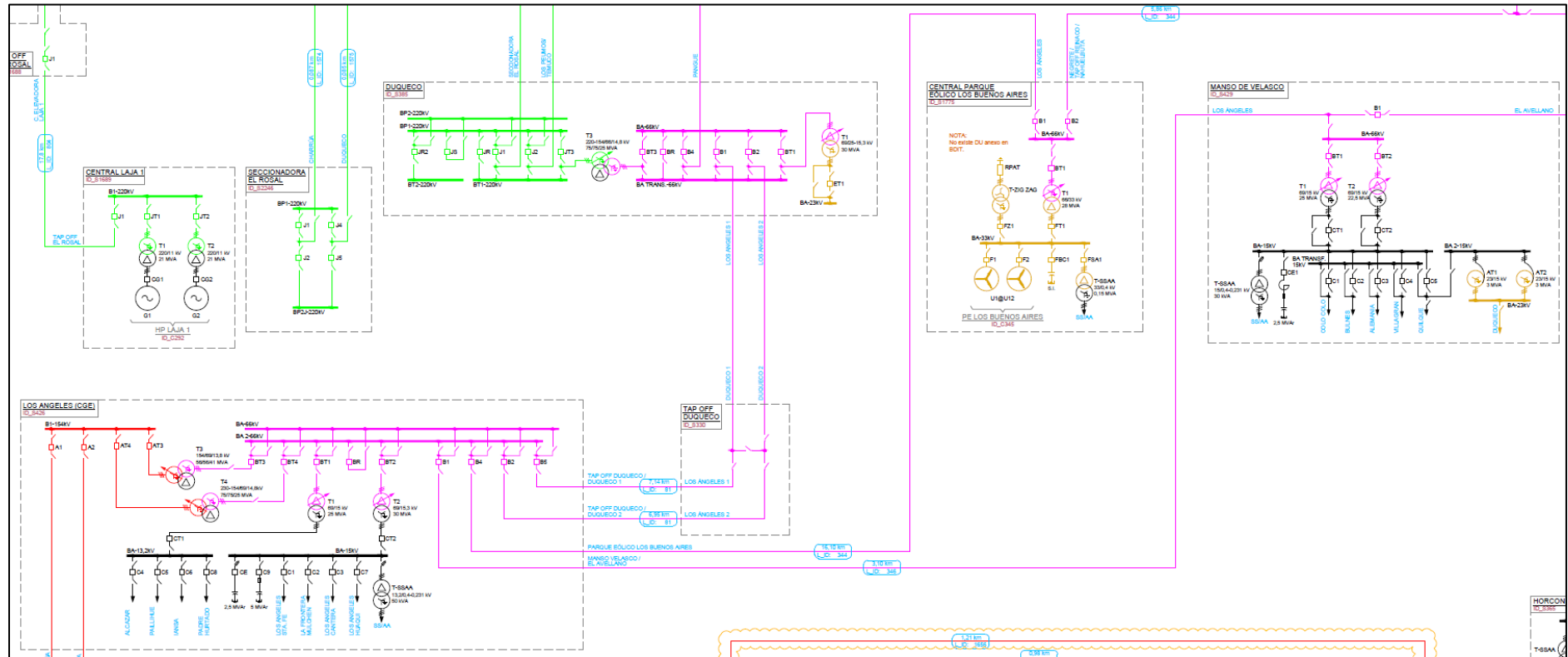
Los registros oscilográficos y de eventos extraídos de las protecciones operadas se presentan en el Anexo N°2 del presente informe.

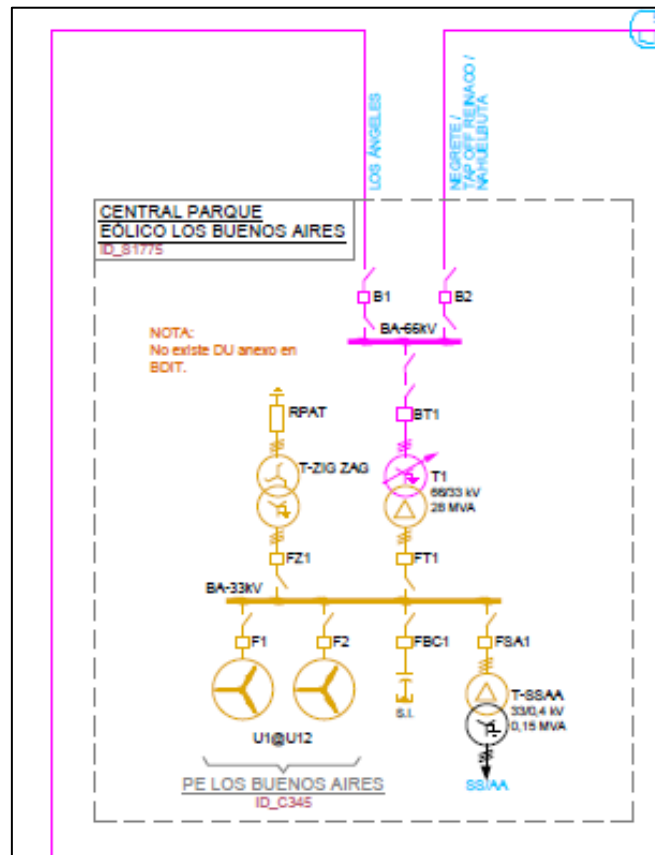
#### **14. Acciones correctivas.**

Como acciones correctivas para la falla en análisis, y en particular para la determinación de la causa de actuación del Sistema N°2 de protección, relé SEL311L del paño B1 de la S/E Los Buenos Aires, se ha iniciado un proceso de revisión del ajuste y algoritmos de la función de distancia (21/21N) de este relé con el representante en Chile del fabricante del equipo, con el objetivo de aclarar la operación de este relé de protección, teniendo en cuenta la no operación del sistema N°1 de protección, el cual corresponde a otro modelo de protección (SEL-311C). Cabe mencionar que el modelo SEL 311L es un relé cuya función principal de protección corresponde al esquema diferencial de línea, por lo que los métodos de detección de falla de la función de protección de distancia no son idénticos a los del sistema N°1 de protección del paño B1, modelo SEL 311C. Las posibles causas de operación indeseada de este relé de protección se indican en el Anexo N°3 del presente informe de falla, por lo que las recomendaciones y pruebas recomendadas por la empresa representante del fabricante se realizarán en el menor plazo posible, y los resultados se informarán al CEN.

En caso de que las pruebas recomendadas no sean satisfactorias o en caso de determinarse que el relé SEL311L requiere de funciones adicionales o complementarias, como detección de oscilación de potencia u otros que no estén disponibles en el relé, se propondrá el cambio de este equipo de protección por uno de similares características a la del relé SEL311C, de manera de evitar operaciones indeseadas.

**ANEXO N°1**  
**DIAGRAMAS UNILINEALES**





**ANEXO N°2**  
**REGISTROS OSCILOGRÁFICOS Y DE EVENTOS**

## OSCILOGRAFÍAS PAÑO 52B1 LOS BUENOS AIRES (ACTUACIÓN PROTECCIÓN DE DISTANCIA – SISTEMA 2 RELÉ SEL311L)

Summary Data

Event Report Summary

Event Report File:

C:\Users\CL158437368\OneDrive - Enel Spa\Actividades 2023\Fallas LBA\_28\_29\_OCT\OSCILOGRAFIA\_B1\eventos3\CEV\_R\_L30\_4.CEV

Relay FID:

FID=SEL-311L-1-R502-V0-Z106006-D20141106

Frequency:

50

# Cycles:

31

Samples/Cycle:

16

Event Date/Time:

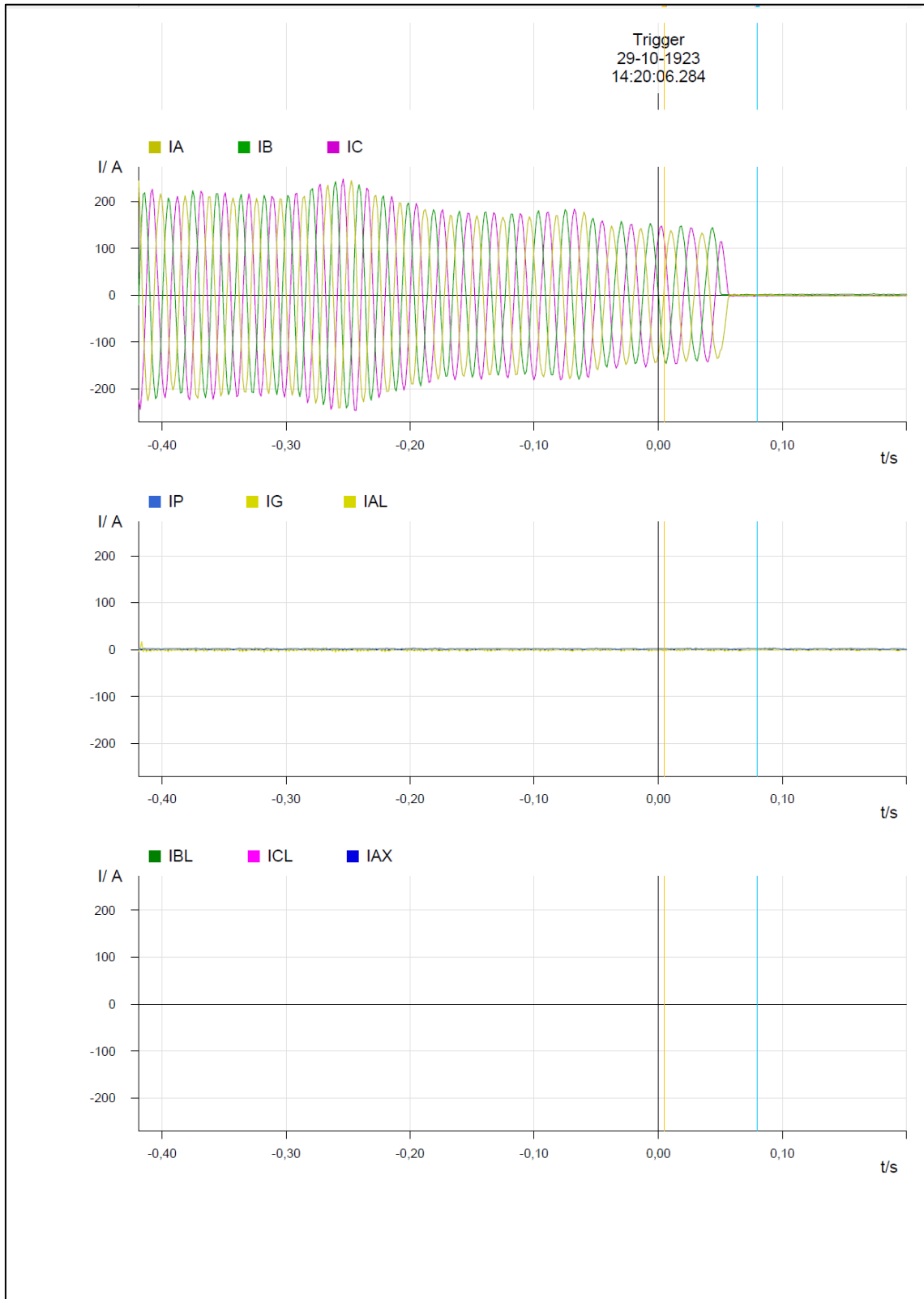
domingo, 29 de octubre de 2023 14:20:06,284

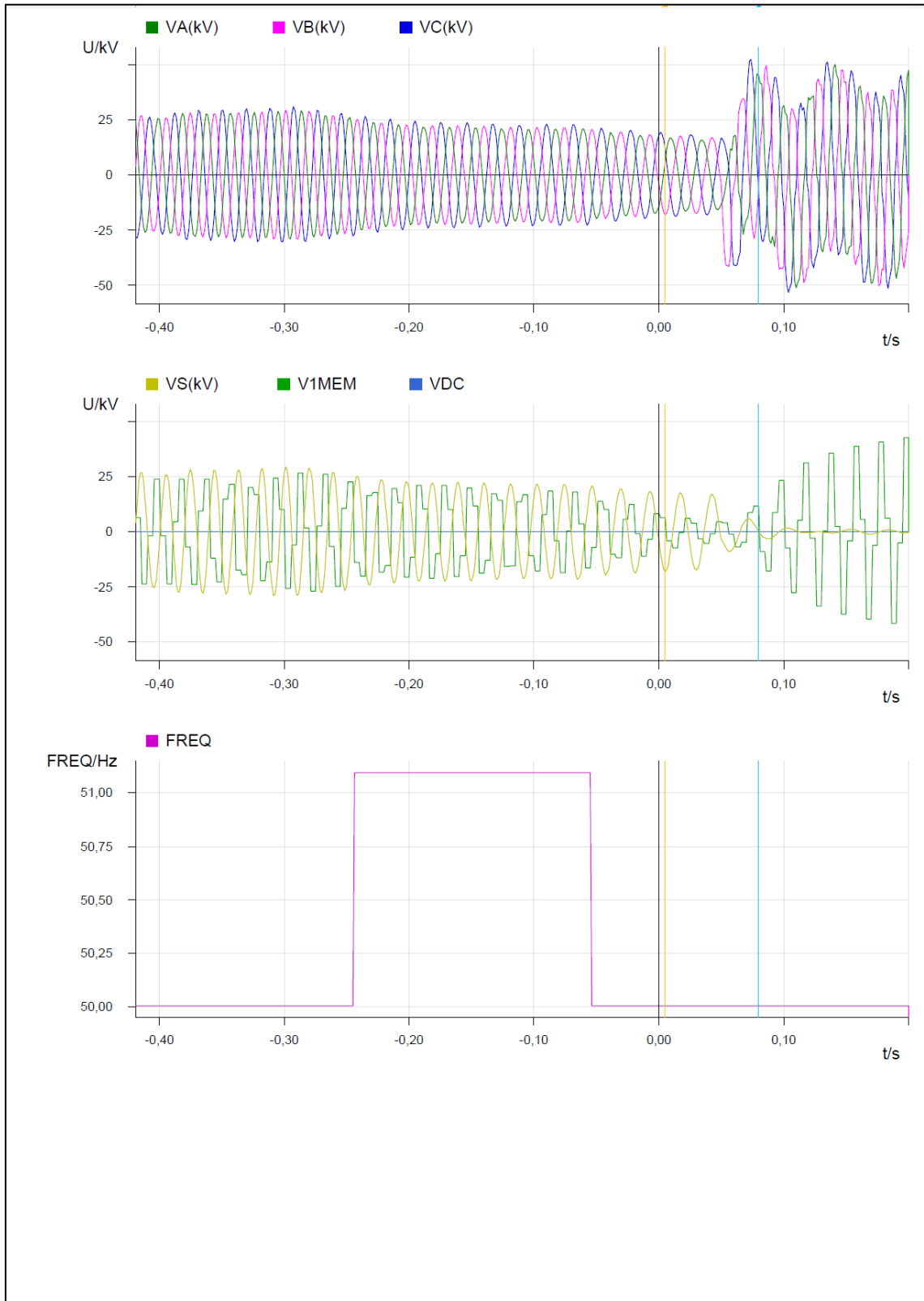
Miscellaneous:

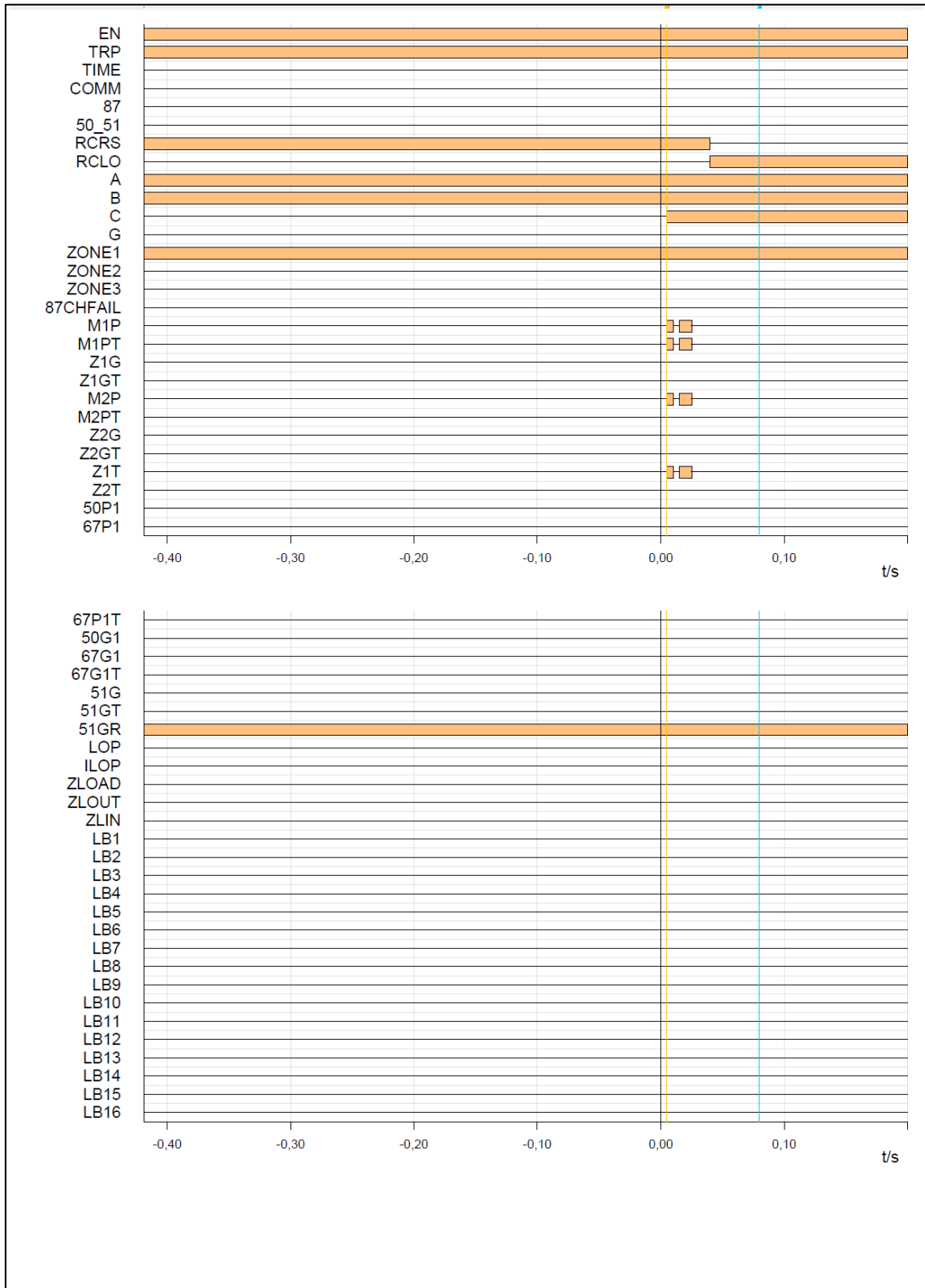
|                  |                         |
|------------------|-------------------------|
| EVENT            | ABC T                   |
| LOCATION         | 52.37                   |
| SHOT             | 0                       |
| TARGETS          | ZONE1                   |
| IA               | 146                     |
| IB               | 125                     |
| IC               | 134                     |
| IP               | 1                       |
| IG               | 1                       |
| 3I2              | 32                      |
| IAL              | 0                       |
| IBL              | 0                       |
| ICL              | 0                       |
| IAX              | 19661                   |
| IBX              | 19661                   |
| ICX              | 19661                   |
| IAY              | 19661                   |
| IBY              | 19661                   |
| ICY              | 19661                   |
| NFREQ            | 50                      |
| PRE_FAULT_CYCLES | 21.000                  |
| START_TIME       | 10-29-2023 14:20:05,865 |
| TRIG_TIME        | 10-29-2023 14:20:06,284 |

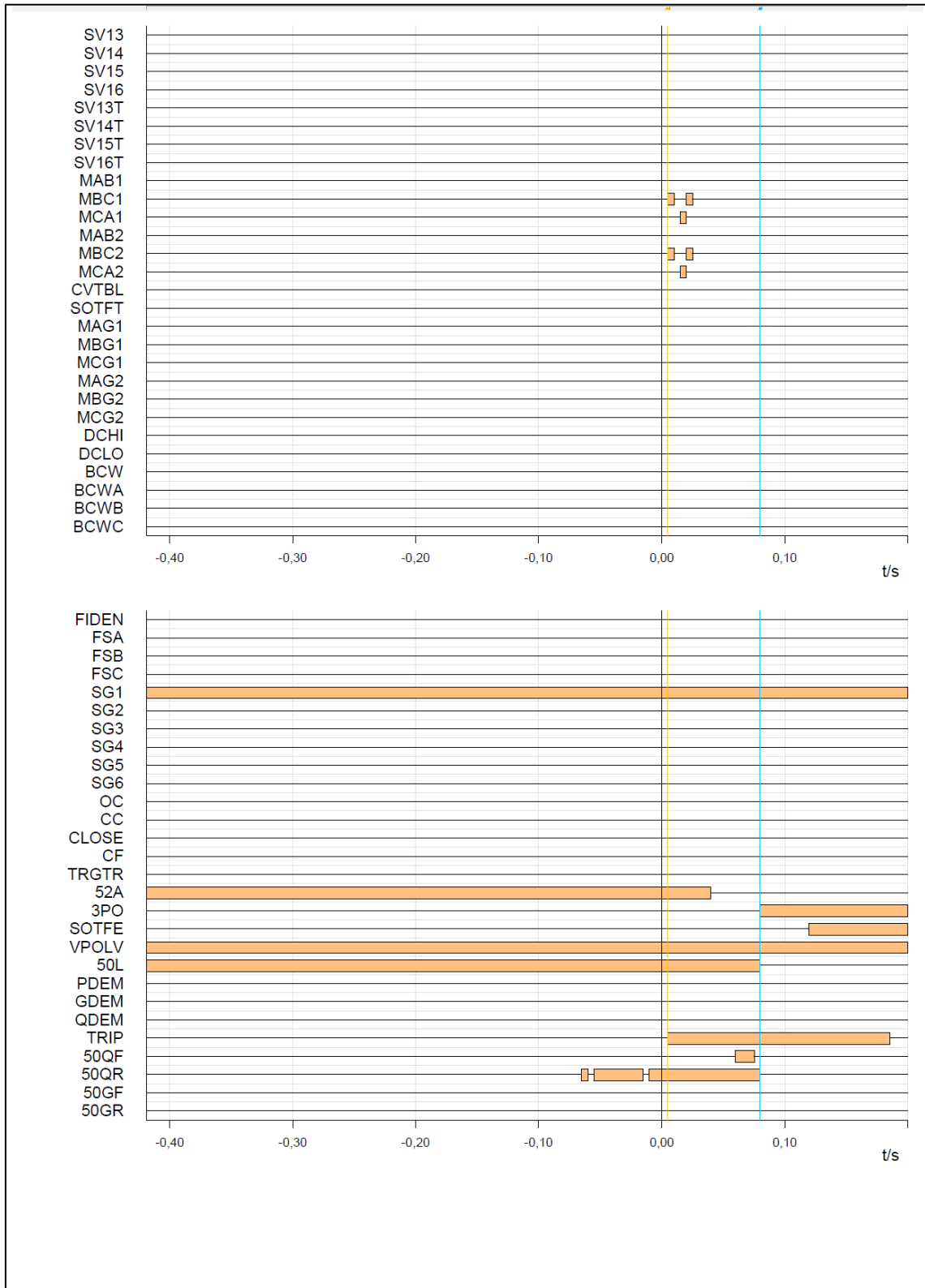
Print

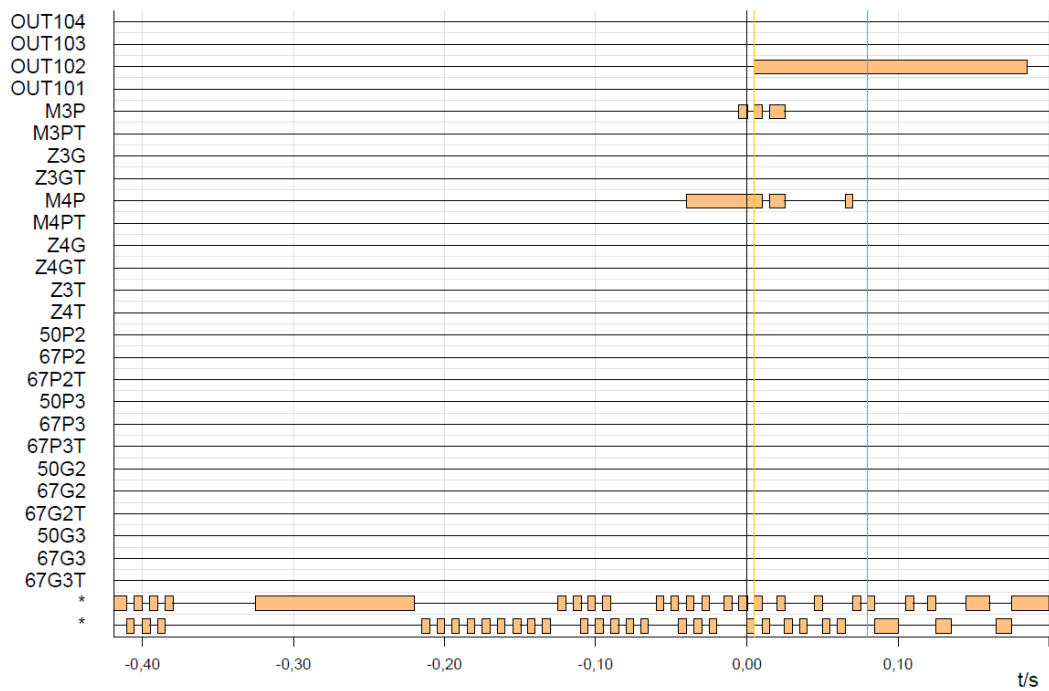
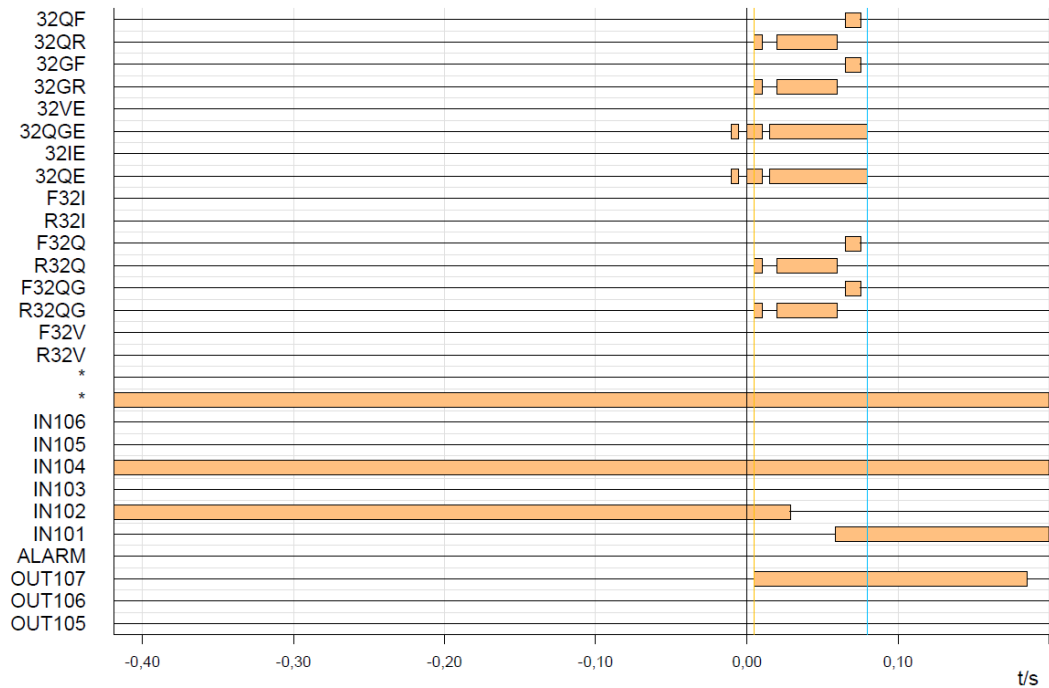
Close

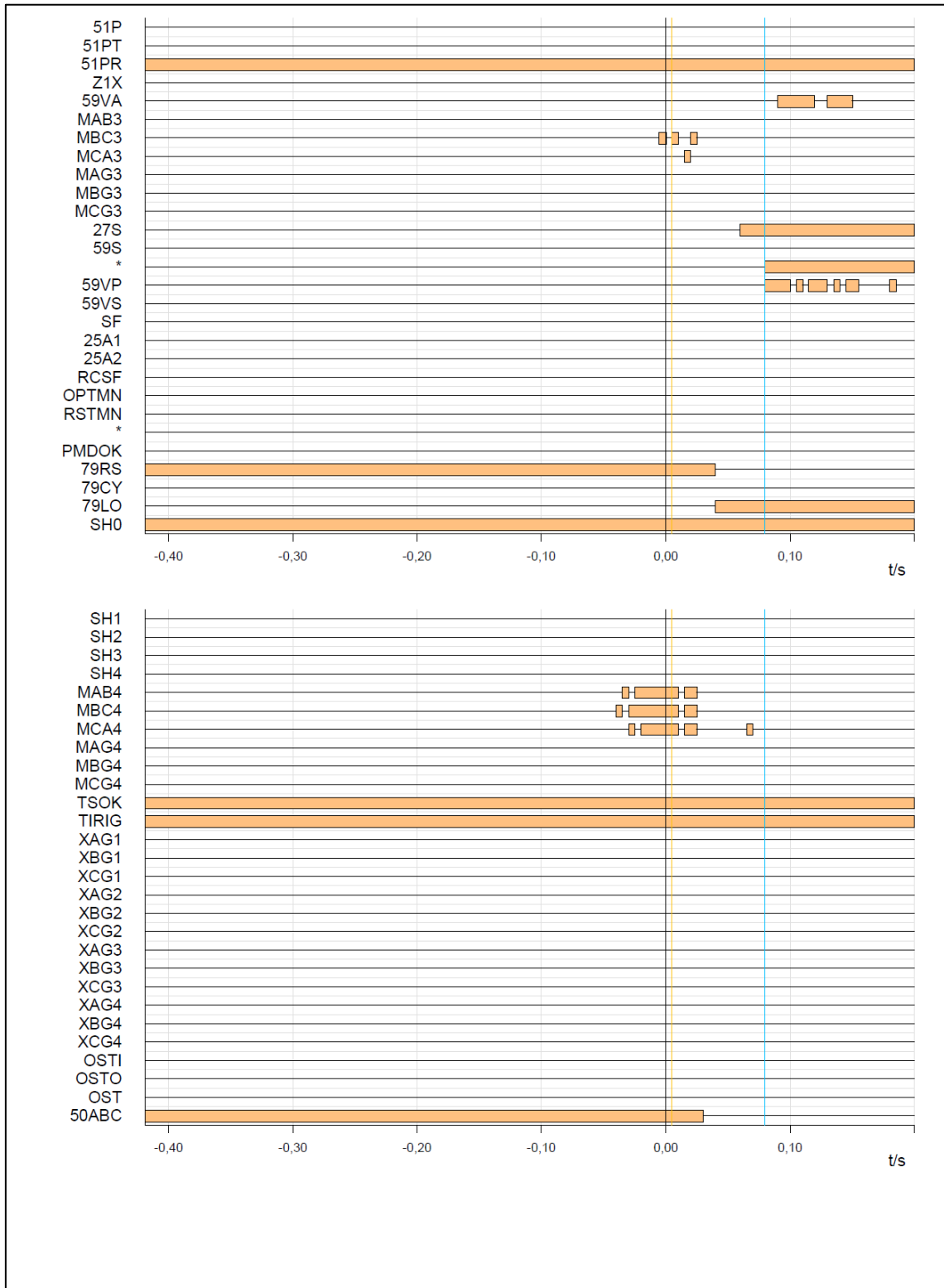




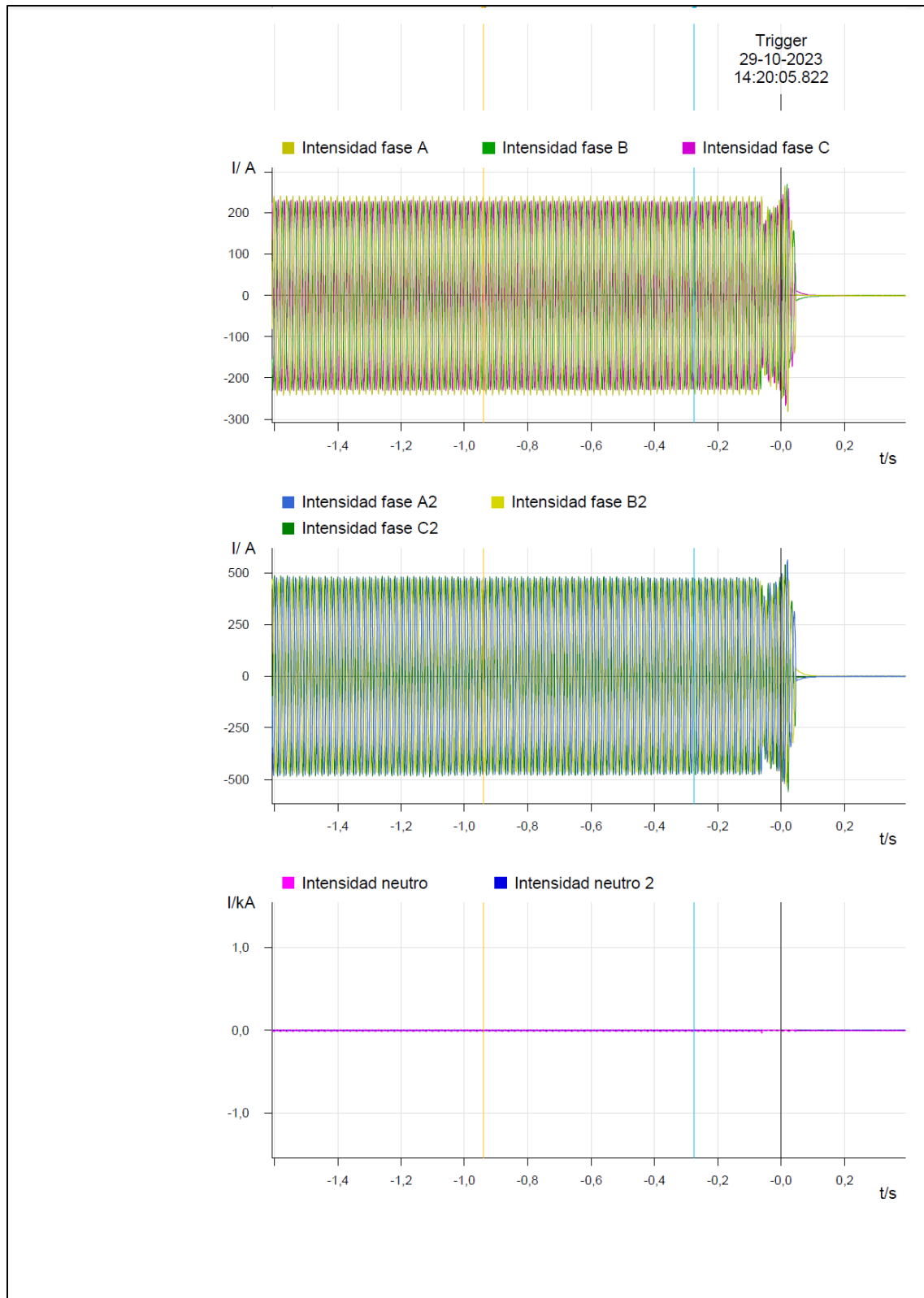


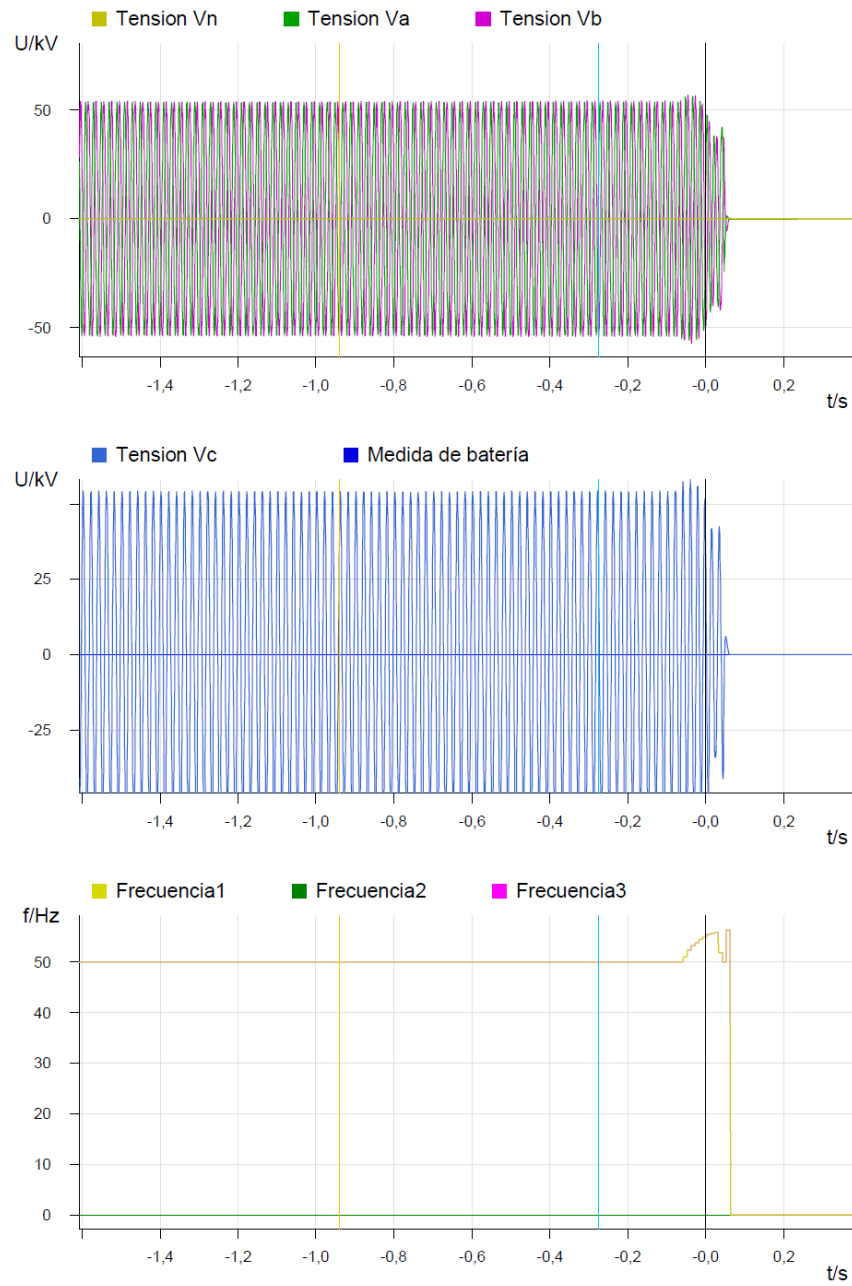


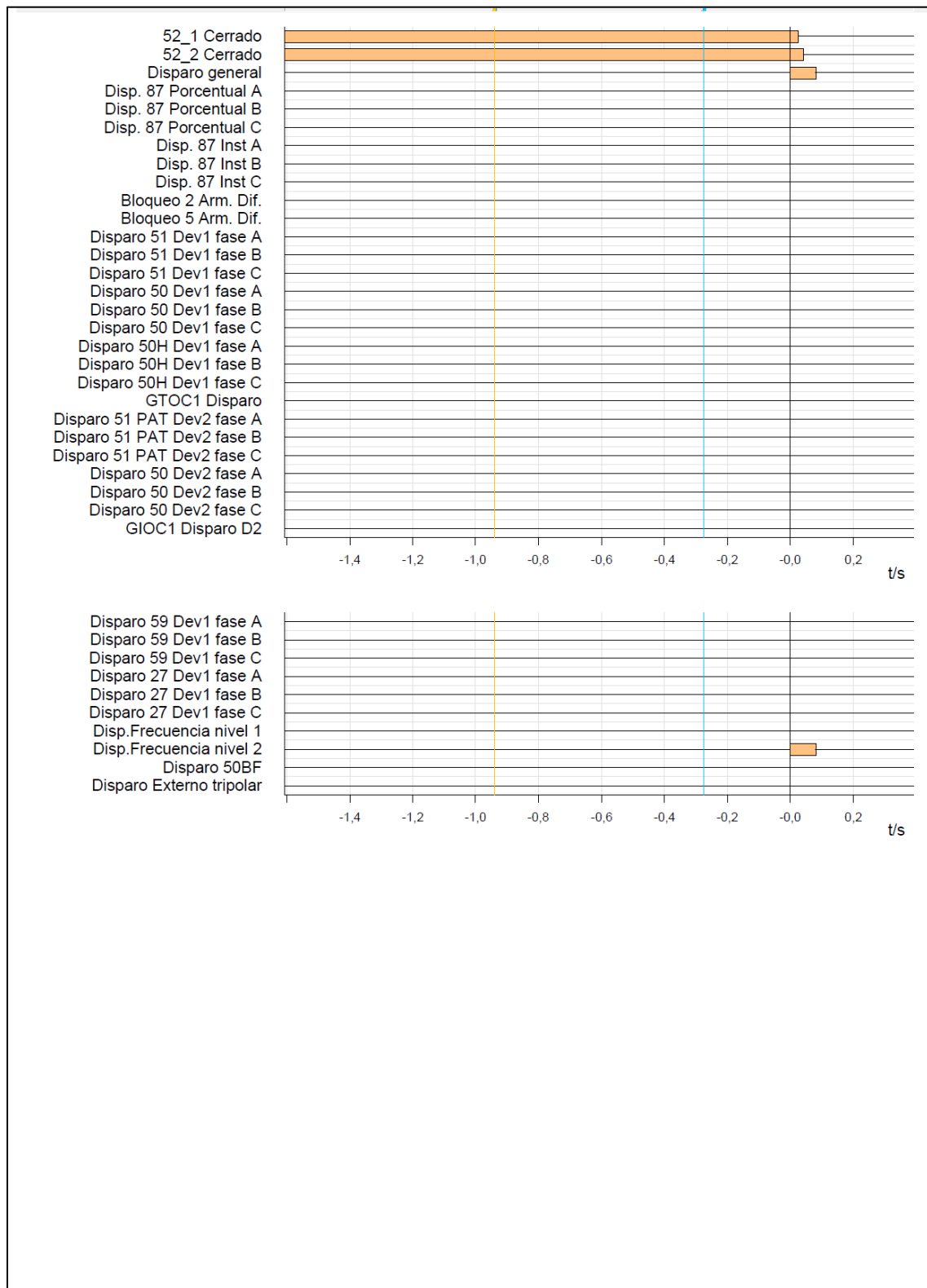




## OSCILOGRAFÍAS PAÑO 52BT1 LOS BUENOS AIRES (ACTUACIÓN PROTECCIÓN DE SOBREFRECUENCIA)







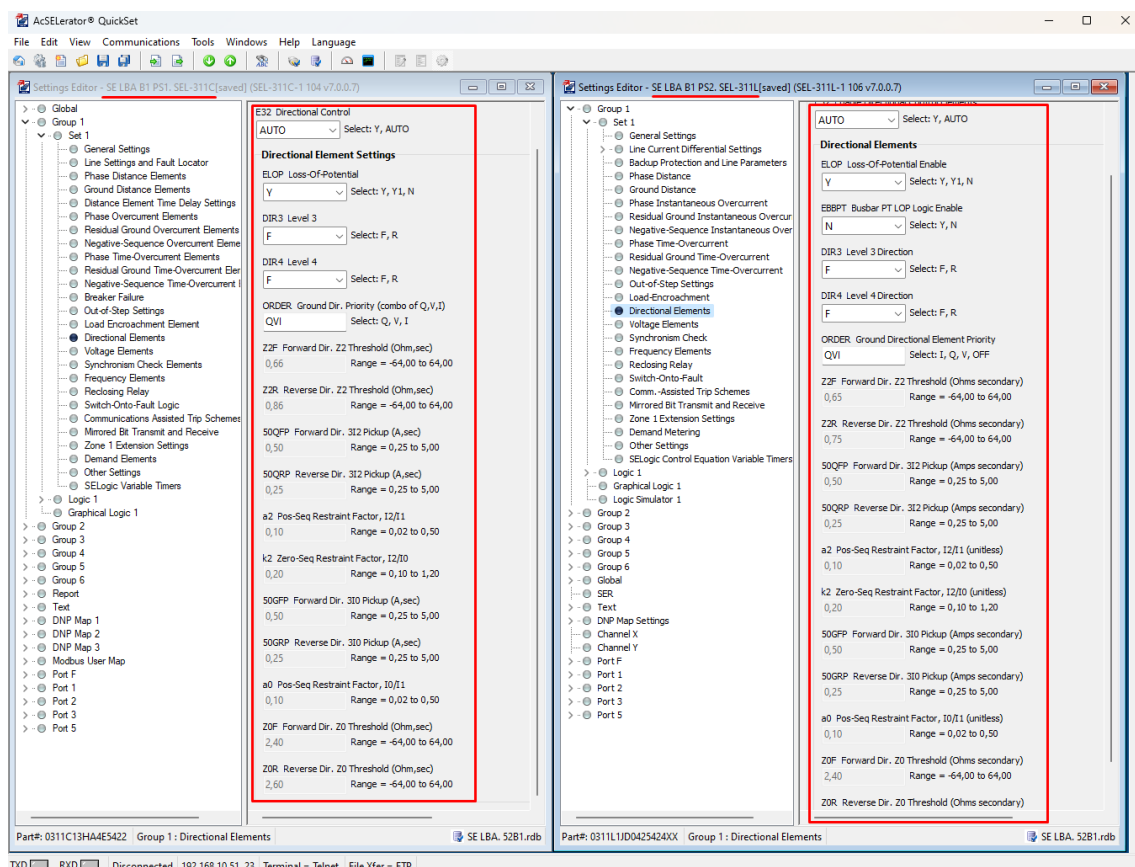
### **ANEXO N°3**

#### **RECOMENDACIONES DE PRUEBAS AL RELÉ SEL311L INDICADAS POR EL SUMINISTRADOR DEL EQUIPO**

De acuerdo con lo consultado con la empresa representante del fabricante del equipo en Chile, las recomendaciones son las siguientes:

Tomando en cuenta que el interruptor 52B1 de la S/E Los Buenos Aires cuenta con doble esquema de protección, donde en la protección primaria SEL-311C no se tienen registros de fallas para la hora del evento, y en la protección secundaria SEL-311L se tiene la operación de esta protección por la función de distancia en zona 1, como se muestra en el registro oscilográfico indicado en el presente informe de falla.

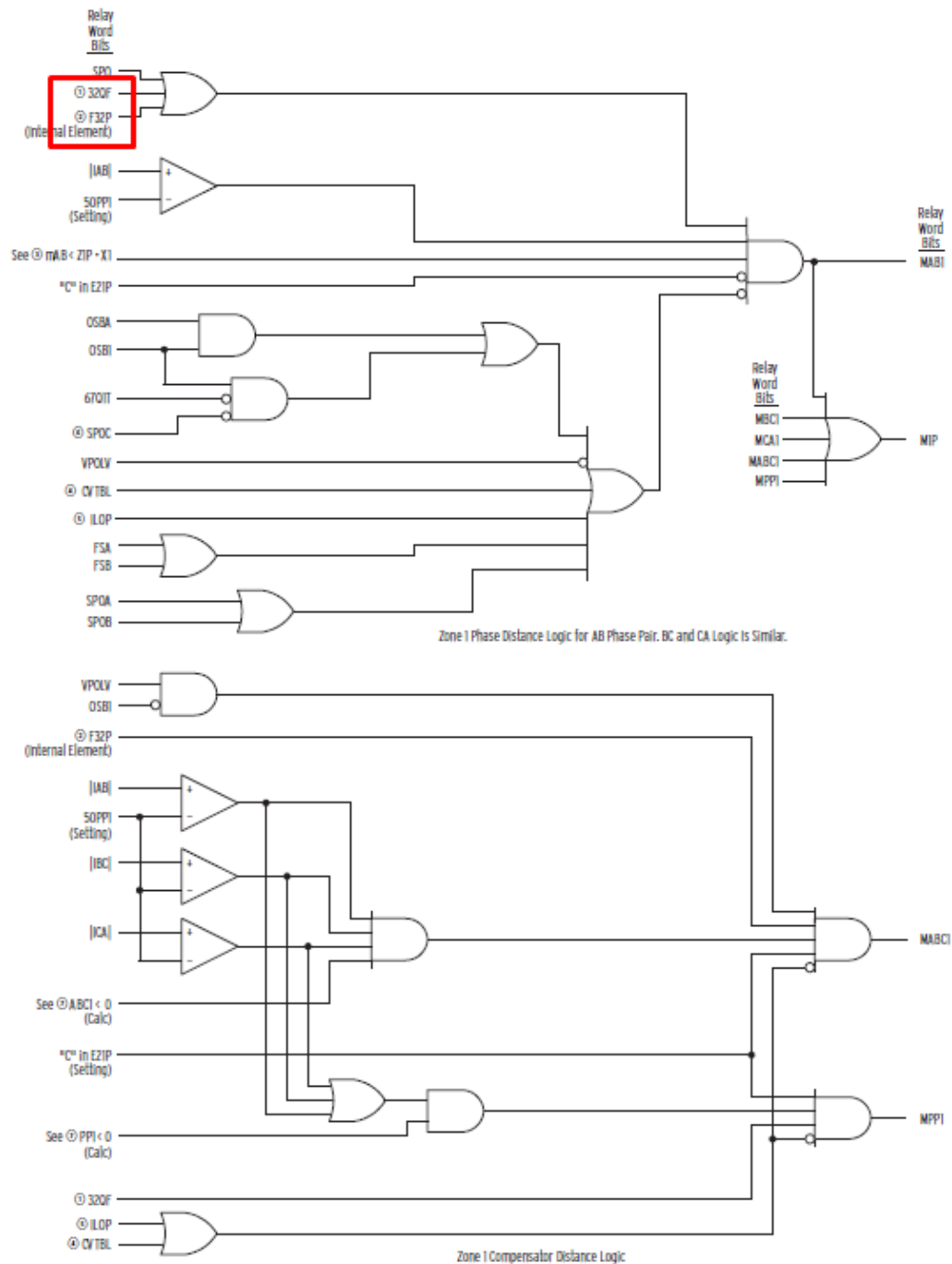
Se ha realizado una comparación de ajustes entre ambos equipos, encontrando diferencias en los elementos de distancia, como se muestran a continuación:



Dichos ajustes de direccionalidad participan en la lógica de distancia del relé, como se muestra en el siguiente extracto del Manual de Instrucciones del relé:

4.8 Protection Functions  
Distance Elements

### Mho Phase Distance Elements



① From Figure 4.49; ② from Figure 4.50; ③  $mAB$  = A-Phase to B-Phase Distance Calculation,  $Z1P$  = Zone 1 Distance Setting,  $X1$  = Zone 1 Extension from Figure 4.14; ④ from Figure 4.37; ⑤ from Figure 4.35; ⑥ from Figure 5.8; ⑦  $ABC1$  and  $PPI$  are compensator distance element calculations, Zone 1 extension, if active, is included in this calculation

**Figure 4.4 Zone 1 AB Phase Distance Logic**

Además, en el mismo Manual de Instrucciones del relé se menciona que se debe tener precaución ajustar la direccionalidad (E32) en AUTO, como se muestra en el siguiente extracto:

### Settings Made Automatically

If the directional control enable setting E32 is set:  
E32 = **AUTO**

then the following directional control settings are calculated and set automatically:

Z2F, Z2R, 50QFP, 50QRP, a2, k2, 50GFP, 50GRP, a0, Z0F, and Z0R

Once these settings are calculated automatically, they can only be modified if the user goes back and changes the directional control enable setting to E32 = Y.

Date Code 20221103
Instruction Manual
SEL-311L-I, -7 Relay

---

**4.80** | Protection Functions

**Directional Control Settings**

Use caution when you set E32 = AUTO. It is not appropriate for all applications. Systems with a strong negative-sequence source (e.g., equivalent negative-sequence impedance of less than  $2.5/I_{NOM}$  in  $\Omega$ ) can use E32 = AUTO. It is best to use the settings in Table 4.18 if any of the following apply:

- the negative-sequence impedance of the source is greater than  $2.5/I_{NOM}$  in  $\Omega$
- the line impedance is unknown
- a non-fault condition occurs, such as a switching transformer energization causing the negative-sequence voltage to be approximately zero

**Table 4.18 Ground Directional Element Preferred Settings**

| Name         | 5 A nominal | 1 A nominal |
|--------------|-------------|-------------|
| E32          | Y           | Y           |
| Z2F          | -0.30       | -1.5        |
| Z2R          | 0.30        | 1.5         |
| Z0F          | -0.30       | -1.5        |
| Z0R          | 0.30        | 1.5         |
| 50QFP /50GFP | 0.50 A      | 0.10 A      |
| 50QRP /50GRP | 0.25 A      | 0.05 A      |
| a2           | 0.10        | 0.10        |
| k2           | 0.20        | 0.20        |
| a0           | 0.10        | 0.10        |

The preferred settings in Table 4.18 will provide equal or better protection than E32 = AUTO for most systems.

Por lo anterior, se recomienda al cliente evaluar la implementación de los ajustes indicados en la tabla 4.18 del Manual de Instrucciones del relé, realizando las respectivas simulaciones mediante inyección de los archivos COMTRADE de falla, de manera de determinar el comportamiento del equipo con los ajustes actuales y propuestos.

**PARQUE EÓLICO LA ESPERANZA**

**INFORME DE FALLA**

**EVENTO 29 DE OCTUBRE DEL 2023**

**29 de octubre de 2023**

**Rev. 0**

| Rev. | Elaboró | Revisó | Comentarios | Fecha      |
|------|---------|--------|-------------|------------|
| 0    | JEH     |        |             | 29-10-2023 |

## Índice de contenido

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|                        |   |
|------------------------|---|
| Introducción .....     | 4 |
| Informe de Falla ..... | 5 |

## **Introducción**

---

El presente documento presenta el informe de falla del parque eólico La Esperanza, a causa de la Falla producida debido a la desconexión forzada del transformador N°4 154/66 kV de S/E Los Ángeles (29-10-2023 11:19 horas), durante la cual se vieron involucradas instalaciones del Parque Eólico La Esperanza.

Al respecto, y con el objeto de aclarar debidamente las causas y consecuencias del evento en cuestión, en virtud de lo establecido en el Título 6-12 y, en particular, el artículo 6-81 de la Norma Técnica de Seguridad y Calidad de Servicio, se detalla en siguiente informe.

## **Informe de Falla**

---

- Causas y consecuencias de la salida de servicio del Parque Eólico La Esperanza producto del evento de la referencia.

**Resp:** Debido a la Desconexión forzada del transformador N°4 154/66 kV de S/E Los Ángeles (29-10-2023 11:19 horas) (No teniéndose información detallada en ese momento), queda sin energía la SE Nahuelbuta de 66 kV, quedando fuera de servicio y por tal motivo la desconexión del Parque Eólico La Esperanza, esto se produce el día 29-10-2023 a las 11:20 produciendo la apertura del interruptor 52E4 de la S/E y 52E1 de la línea de MT del parque.

- Descripción detallada del equipamiento afectado.

**Resp:** Debido a la falta de tensión en la red, se produce la apertura de 52E1, que es el interruptor que une la línea de MT de 23,0 kV desde el Parque Eólico La Esperanza con la S/E Negrete, produciendo la detención de las unidades del Parque.

- Cronología de eventos y acciones orientadas a la reposición del servicio y normalización de las instalaciones de su representada.

**Resp:** Se realiza comunicación a través de Hotline con el Centro de Despacho y Control (CDC) del Coordinador Eléctrico Nacional y con el operador del STS, informando la desconexión del Parque, se solicita información de la falla para corroborar que no fue dentro de las instalaciones del parque, a continuación, STS informa el cierre del interruptor 52E4 de la SE Negrete, luego se solicita permiso al CDC para el cierre del 52E1 y la conexión del Parque Eólico.

**29-10-2023 a las 12:00 hrs. se realiza conexión del Parque Eólico sin novedad.**

- Registros oscilográficos y de eventos extraídos de las protecciones y/o de los equipos registradores de las instalaciones involucradas en la falla.

**Resp: Información obtenida del equipo de protección SEL 615R del PE La Esperanza**

|    |            |              |        |            |
|----|------------|--------------|--------|------------|
| 64 | 10/28/2023 | 19:51:22.765 | SV02   | Deasserted |
| 63 | 10/28/2023 | 19:51:22.810 | 52A3P  | Asserted   |
| 62 | 10/28/2023 | 19:51:23.166 | SV02T  | Deasserted |
| 61 | 10/28/2023 | 19:51:23.166 | RCTRIX | Deasserted |
| 60 | 10/29/2023 | 11:20:09.712 | SV07T  | Asserted   |
| 59 | 10/29/2023 | 11:20:09.717 | TRIP3P | Asserted   |
| 58 | 10/29/2023 | 11:20:09.717 | SV01T  | Asserted   |
| 57 | 10/29/2023 | 11:20:09.717 | SV01   | Asserted   |
| 56 | 10/29/2023 | 11:20:09.717 | RCTRIX | Asserted   |
| 55 | 10/29/2023 | 11:20:09.747 | 52A3P  | Deasserted |
| 54 | 10/29/2023 | 11:20:10.517 | TRIP3P | Deasserted |
| 53 | 10/29/2023 | 11:20:10.517 | SV01   | Deasserted |
| 52 | 10/29/2023 | 11:20:10.917 | SV01T  | Deasserted |
| 51 | 10/29/2023 | 11:20:10.917 | RCTRIX | Deasserted |
| 50 | 10/29/2023 | 11:20:16.707 | SV06T  | Asserted   |
| 49 | 10/29/2023 | 11:20:16.712 | TRIP3P | Asserted   |
| 48 | 10/29/2023 | 11:20:16.712 | SV01T  | Asserted   |
| 47 | 10/29/2023 | 11:20:16.712 | SV01   | Asserted   |
| 46 | 10/29/2023 | 11:20:16.712 | RCTRIX | Asserted   |
| 45 | 10/29/2023 | 11:20:17.512 | TRIP3P | Deasserted |
| 44 | 10/29/2023 | 11:20:17.512 | SV01   | Deasserted |

- Ajustes de los dispositivos de protección y control asociados a las instalaciones de su representada involucradas en el evento en cuestión.

**Resp: Debido a la caída instantánea de tensión detectada por la protección del interruptor en la red con un valor de 0 volt, se produjo la desconexión del 52E1 el cual esta ajustado según la información del equipo a 75,26 y 70,84 volt en secundario, según muestra la figura.**

**Voltage Element Pickup, Y-terminals**

27YP1P Phase Undervoltage Pickup (V, sec)  
75,26 Range = 1,00 to 300,00, OFF

27YP2P Phase Undervoltage Pickup (V, sec)  
70,84 Range = 1,00 to 300,00, OFF

- Análisis del comportamiento de los dispositivos de protección y control de las instalaciones de su representada afectadas en este evento, en función de sus ajustes y causa definitiva de su operación.

**Resp:** El dispositivo de protección del interruptor de la línea de MT (52E1) actuó según los ajustes de tiempos definidos. El interruptor después de haber recibido la orden de apertura procedió a dar Trip según el tiempo ajustado en la protección.



- Medidas correctivas orientadas a corregir un eventual comportamiento inadecuado de los sistemas de protecciones de las instalaciones de su representada.

**Resp:** No se registraron comportamiento inadecuado de los sistemas de protección, ya que la protección actuó de acuerdo con los valores de tensión y tiempos definidos.

- Otros antecedentes que PE La Esperanza considere relevantes en relación con el comportamiento de las protecciones y/o con lo solicitado.

**Resp:** No existe otros antecedentes relevantes.

# **INFORME DE FALLA DEFINITIVO**

## **Nº 2023004295**

### **PE NEGRETE**

Zona: Región Biobío – Comuna Negrete  
**Preparado por: WPD CHILE**

| Propietario                | Instalación<br>afectada | Generación<br>Afectada | Consecuencia                            | Preparado | Fecha      |
|----------------------------|-------------------------|------------------------|-----------------------------------------|-----------|------------|
| <b>WPD Negrete<br/>Spa</b> | <b>PE Negrete</b>       | 3 MW                   | PE Negrete pierde 3<br>MW de generación | WPD Chile | 29-10-2023 |

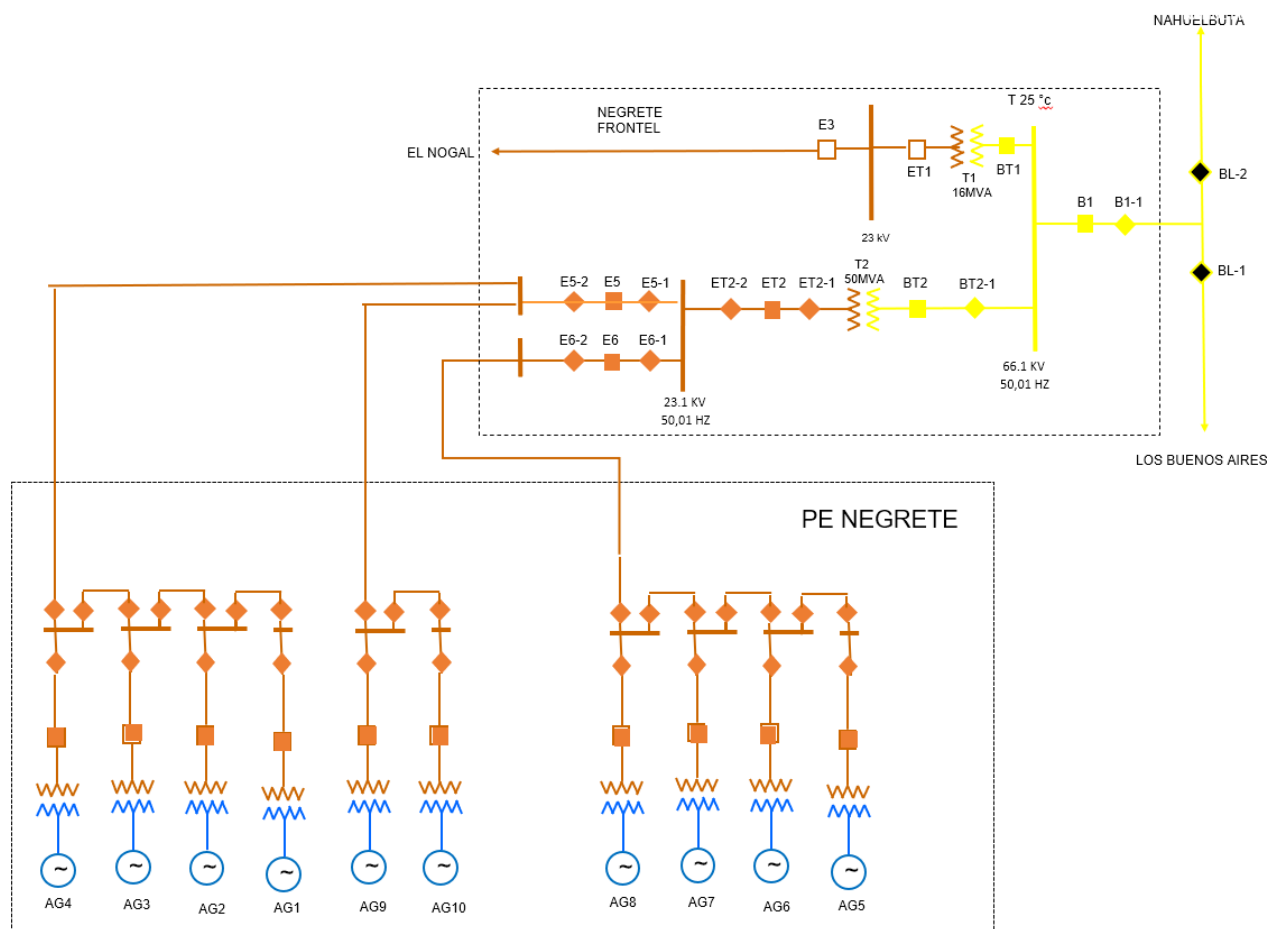
- 1 Fecha y hora del envío del IF.**  
06/11/2023, 12:00 horas.
- 2 Razón social de la empresa.**  
WPD Negrete spa
- 3 Fecha y hora del inicio de la falla.**  
29/10/2023 a las 11:19 horas.
- 4 Identificación de las instalaciones que presentan falla y/o instalaciones afectadas.**  
PE Negrete
- 5 Tiempo de duración de la falla.**  
15 minutos
- 6 Causa básica de la falla.**  
PE Negrete fuera de servicio por falla L66 kV Los Buenos Aires- Nahuelbuta de propiedad de CGE Transmisión
- 7 Listado de las subestaciones involucradas (para cada una de estas subestaciones se deberá indicar lo siguiente).**
  - 7.1 Nombre de la subestación involucrada.
  - 7.2 Cantidad de consumos desconectados en la S/E.
  - 7.3 Montos de potencia desconectada en cada caso y sus registros de medición respectivos.
  - 7.4 Causa de la interrupción de cada uno de los consumos.
  - 7.5 Instante en que el CDC autoriza la normalización de cada uno de los consumos, ya sea parcial o total, según corresponda.

| (7.1)<br>S/E | (7.2)<br>Consumos<br>desconectados | (7.3)<br>Potencia desconectada y<br>registros de medición | (7.4)<br>Causa de interrupción     | (7.5)<br>Hora normalización |
|--------------|------------------------------------|-----------------------------------------------------------|------------------------------------|-----------------------------|
| Negrete      | N/A                                | 3 MW                                                      | Falla en instalaciones de terceros | 11:34                       |

- 8 Acciones inmediatas llevadas a cabo por los CC para la normalización de suministro de los consumos y maniobras de reposición ejecutadas.**  
Retorno automático del parque.
- 9 Registros oscilógrafos de protecciones (envío de archivos extraídos directamente desde los equipos involucrados, ejemplo archivos en formato: "COMTRADE", ".BEN", ".DEX").**  
Instalaciones de transmisión para la conexión de PE Negrete en la subestación Negrete son de propiedad de STS SAESA.
- 10 Registros de comportamiento dinámico de las unidades generadoras (potencia activa, reactiva, frecuencia y tensión en terminales).**  
El PE Negrete se encontraba generando 3 MW.

- 11 Cronología de eventos, sincronizados vía GPS con la hora GMT.**  
A las 11:19 PE Negrete pierde generación por falla en instalaciones de terceros  
A las 11:34 horas, PE Negrete recupera automáticamente la generación.
- 12 Antecedentes específicos que la DO hubiera solicitado informar.**  
No hay
- 13 Acciones Correctivas a Corto Plazo**  
No hay
- 14 Acciones Correctivas a Largo Plazo**  
No hay.
- 15 Otros antecedentes que el Coordinado respectivo estime necesario informar.**  
En anexo 1 se adjunta el diagrama unilineal de las instalaciones del PE Negrete.  
En anexo 2 se adjunta el comportamiento del parque al inicio del evento.

## Anexo 1: Diagrama unilineal.



**Anexo 2: Comportamiento de la central.**

|                                                 |                                       |
|-------------------------------------------------|---------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004348</b> | FECHA DE FALLA:<br>29 de octubre 2023 |
| INSTALACIÓN (ES) SE El Avellano                 |                                       |

**1. CAUSA U ORIGEN DE LA FALLA:****1.1. Fecha y hora de la Falla:**

|       |                    |
|-------|--------------------|
| Fecha | 29 de octubre 2023 |
| Hora  | 11:19              |

**1.2. Localización de la falla en Instalaciones de Transmisión.****1.2.1. Nombre de subestación con pérdida de suministro.**  
SE El Avellano**1.3. Datos de la Empresa.**

**Nombre Empresa:** Compañía General de Electricidad S.A  
**RUT:** 76.411.321-7  
**Representante Legal:** (Gerente General vigente a la fecha de envío).  
**Dirección:** Av. Presidente Riesco N° 5561 P14, las Condes, Santiago, Chile.

## INFORME DE FALLA REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                       |
|-------------------------------------------------|---------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004348</b> | FECHA DE FALLA:<br>29 de octubre 2023 |
| INSTALACIÓN (ES) SE El Avellano                 |                                       |

### 2. POTENCIA INTERRUPTIDA DE CLIENTES FINALES.

| Subestación | Transformador | Alimentador |      | MW  | Horario     |               | Bloque | Clientes Afectados | kVa afectados           | Distribuidora | Comunas     | Urbano / Rural | N° Incidencia Centrality |
|-------------|---------------|-------------|------|-----|-------------|---------------|--------|--------------------|-------------------------|---------------|-------------|----------------|--------------------------|
|             | (Primario)    | Nombre      | Nema |     | Desconexión | Normalización |        |                    | (potencia instalada Dx) |               |             |                |                          |
| El Avellano | T1-T2         | La Mona     | E1   | 5   | 11:19       | 11:23         | 1      | 553                | 19805                   | CGE           | Los Angeles | Urbano         | 3023779270               |
|             |               | Sorvicenta  | E2   | 1,5 | 11:19       | 11:23         | 1      | 1334               | 8759                    | CGE           | Los Angeles | Urbano         | 3023779270               |
|             |               | Laja        | E3   | 0,8 | 11:19       | 11:23         | 1      | 523                | 15007.2                 | CGE           | Los Angeles | Urbano / Rural | 3023779270               |
| Total       |               |             |      | 7,3 |             |               |        | 2410               |                         |               |             |                |                          |

ENS: 0,0565 MWH.

N° de clientes afectados CGE: 2410

## INFORME DE FALLA REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                       |
|-------------------------------------------------|---------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004348</b> | FECHA DE FALLA:<br>29 de octubre 2023 |
| INSTALACIÓN (ES) SE El Avellano                 |                                       |

Se adjunta tabla con Detalle de los PMGD conectados en redes de MT en los circuitos afectados.

| PMGDs<br>Conectados en redes de MT |             |             |      |                              |
|------------------------------------|-------------|-------------|------|------------------------------|
| PMGD                               | Subestación | Alimentador |      | Potencia Desprendida<br>(MW) |
|                                    |             | Nombre      | Nema |                              |
| PMGD PFV AVEL SOLAR                | El Avellano | La Mona     | 52E1 | 3                            |
| PMGD PFV PSF<br>COYUNCHE           | El Avellano | Sorvicenta  | 52E2 | 1                            |

|                                          |                                       |
|------------------------------------------|---------------------------------------|
| INFORME (s) QUINTO DÍA N°: IF 2023004347 | FECHA DE FALLA:<br>29 de octubre 2023 |
| INSTALACIÓN (ES) SE Manso de Velasco     |                                       |

**1. CAUSA U ORIGEN DE LA FALLA:****1.1. Fecha y hora de la Falla:**

|       |                    |
|-------|--------------------|
| Fecha | 29 de octubre 2023 |
| Hora  | 11:19              |

**1.2. Localización de la falla en Instalaciones de Transmisión.****1.2.1. Nombre de subestación con pérdida de suministro.**  
SE Manso de Velasco**1.3. Datos de la Empresa.**

**Nombre Empresa:** Compañía General de Electricidad S.A  
**RUT:** 76.411.321-7  
**Representante Legal:** (Gerente General vigente a la fecha de envío).  
**Dirección:** Av. Presidente Riesco N° 5561 P14, las Condes,  
Santiago, Chile.

## INFORME DE FALLA REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                       |
|-------------------------------------------------|---------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004347</b> | FECHA DE FALLA:<br>29 de octubre 2023 |
| INSTALACIÓN (ES) SE Manso de Velasco            |                                       |

### 2. POTENCIA INTERRUPTIDA DE CLIENTES FINALES.

| Subestación      | Transformador | Alimentador |      | MW   | Horario     |               | Bloque | Clientes Afectados | kVa afectados           | Distribuidora | Comunas     | Urbano / Rural | N° Incidencia Centrality |
|------------------|---------------|-------------|------|------|-------------|---------------|--------|--------------------|-------------------------|---------------|-------------|----------------|--------------------------|
|                  | (Primario)    | Nombre      | Nema |      | Desconexión | Normalización |        |                    | (potencia instalada Dx) |               |             |                |                          |
| Manso de Velasco | T1-T2         | Colo Colo   | C1   | 2,7  | 11:19       | 11:23         | 1      | 2903               | 18320                   | CGE           | Los Angeles | Urbano         | 3023779260               |
|                  |               | Bulnes      | C2   | 3,2  | 11:19       | 11:23         | 1      | 4583               | 14977.5                 | CGE           | Los Angeles | Urbano         | 3023779260               |
|                  |               | Alemania    | C3   | 4,9  | 11:19       | 11:23         | 1      | 6703               | 21413                   | CGE           | Los Angeles | Urbano         | 3023779260               |
|                  |               | Villagrán   | C4   | 5,2  | 11:19       | 11:23         | 1      | 12449              | 20277.5                 | CGE           | Los Angeles | Urbano         | 3023779260               |
|                  |               | Quilque     | C5   | 1,1  | 11:19       | 11:23         | 1      | 1                  | 5000                    | CGE           | Los Angeles | Urbano         | 3023779260               |
| Total            |               |             |      | 17,1 |             |               |        | 26639              |                         |               |             |                |                          |

ENS: 0,388 MWH.  
N° de clientes afectados CGE: 26639

## INFORME DE FALLA REQUERIMIENTO NORMA TÉCNICA DE SyCS

|                                                 |                                       |
|-------------------------------------------------|---------------------------------------|
| INFORME (s) QUINTO DÍA N°: <b>IF 2023004347</b> | FECHA DE FALLA:<br>29 de octubre 2023 |
| INSTALACIÓN (ES) SE Manso de Velasco            |                                       |

Se adjunta tabla con Detalle de los PMGD conectados en redes de MT en los circuitos afectados.

| PMGDs<br>Conectados en redes de MT |             |             |      |                              |
|------------------------------------|-------------|-------------|------|------------------------------|
| PMGD                               | Subestación | Alimentador |      | Potencia Desprendida<br>(MW) |
|                                    |             | Nombre      | Nema |                              |
|                                    |             |             |      |                              |



## **INFORME DE FALLA**

### **SIN ENERGÍA SE LOS ANGELES**

**29 de octubre de 2023**

## 1. Antecedentes generales:

|                                           |                                                                             |
|-------------------------------------------|-----------------------------------------------------------------------------|
| <b>Evento registrado (48 hrs)</b>         | 2023004285 (SE El Avellano)                                                 |
| <b>Evento – Inst. Afectada</b>            | Sin energía SE El Avellano<br>Alimentador afectado:<br>• 52E4 Alim. Rarincó |
| <b>Propietario</b>                        | COOPERATIVA ELÉCTRICA LOS ANGELES LTDA                                      |
| <b>RUT Propietario</b>                    | 81.585.900-6                                                                |
| <b>Representante legal</b>                | José Luis Neira Veloso                                                      |
| <b>Ubicación</b>                          | Avenida Las industrias 4670, Los Ángeles, Región Bio Bio.                   |
| <b>Fecha – Hora Inicio</b>                | 29 octubre de 2023, 11:23 horas.                                            |
| <b>Fecha – Hora Término</b>               | 29 octubre de 2023, 11:24 horas.                                            |
| <b>Duración</b>                           | 0 hora y 1 minutos                                                          |
| <b>Equipo asociado a la operación</b>     | SE El Avellano E4                                                           |
| <b>Proposición del origen de la falla</b> | Externa.                                                                    |
| <b>Ruralidad del alimentador</b>          | Densidad “Muy Baja”                                                         |

## 2. Información falla:

|                              |                                                                                                                                                     |                                                         |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>Comuna ID</b>             | 8301, 8304                                                                                                                                          | Los Ángeles y Laja                                      |
| <b>Fenómeno Físico</b>       | No aplica                                                                                                                                           | Fallas en instalaciones de terceros u en otro segmento. |
| <b>Elemento</b>              | No aplica                                                                                                                                           | Interruptor                                             |
| <b>Fenómeno Eléctrico</b>    | No aplica                                                                                                                                           | Distancia (admitancia, impedancia o reactancia)         |
| <b>Modo</b>                  | No aplica                                                                                                                                           | -                                                       |
| <b>Causa de Falla</b>        | Falla en línea de transmisión provoca indisponibilidad en red 23 kV de Coopelan afectando el alimentador Rarincó (52E4) asociados a SE El Avellano. |                                                         |
| <b>Evidencia fotográfica</b> | No aplica.                                                                                                                                          |                                                         |

## 3. Consumos afectados:

### 3.1.

| Subestación | Pérdida de Consumo [MW] | H. Desc. | H. Norm. | Comunas afectadas  | Clientes Afectados | Empresa  |
|-------------|-------------------------|----------|----------|--------------------|--------------------|----------|
| Los Angeles | 1,59                    | 11:23    | 11:24    | Los Ángeles y Laja | 7.021              | Coopelan |

### 3.2.

| Subestación | Potencia instalada de la distribuidora [MW] | H. Desc. | H. Norm. | Empresa  |
|-------------|---------------------------------------------|----------|----------|----------|
| Los Angeles | 34.41                                       | 11:23    | 11:24    | Coopelan |

### 4. Sistema de Transmisión:

| Elemento Afectado | Tramo        | Hora Desc. | Hora Norm. |
|-------------------|--------------|------------|------------|
| Se desconoce      | Se desconoce | 11:23      | 11:24      |

### 5. Generación afectada:

| Centra I | SSEE | Alimentador | Pérdida de Generación [MW] | H. Desc. | H. Norm. | Empresa |
|----------|------|-------------|----------------------------|----------|----------|---------|
| N/A      |      |             |                            |          |          |         |
| Total    |      |             |                            |          |          |         |

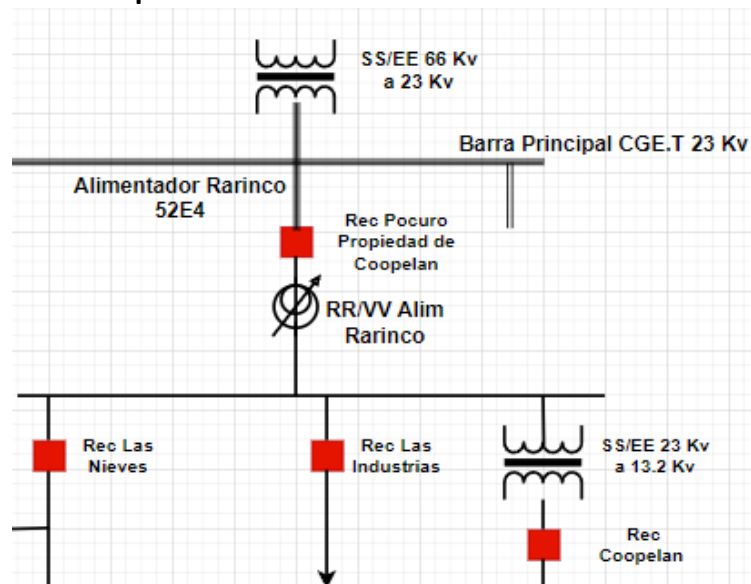
### 6. Protecciones operadas:

| Función activada | SSEE        | Interruptor | Protección asociada |
|------------------|-------------|-------------|---------------------|
| Se desconocen    | El Avellano | -           | -                   |

### 7. Cronología de eventos y maniobras de normalización:

| Hora  | Evento                                                                                                                                                                             |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:23 | Perdida de tensión en cabecera alimentador Rarincó 52E4 desde barra 23 KV de SE El Avellano.                                                                                       |
| 11:24 | Personal de Coopelan confirma vía SCADA tensión en barra 23 KV de SE El Avellano, por lo cual se restablece el suministro eléctrico en alimentador Rarincó 52E4 de SE El Avellano. |

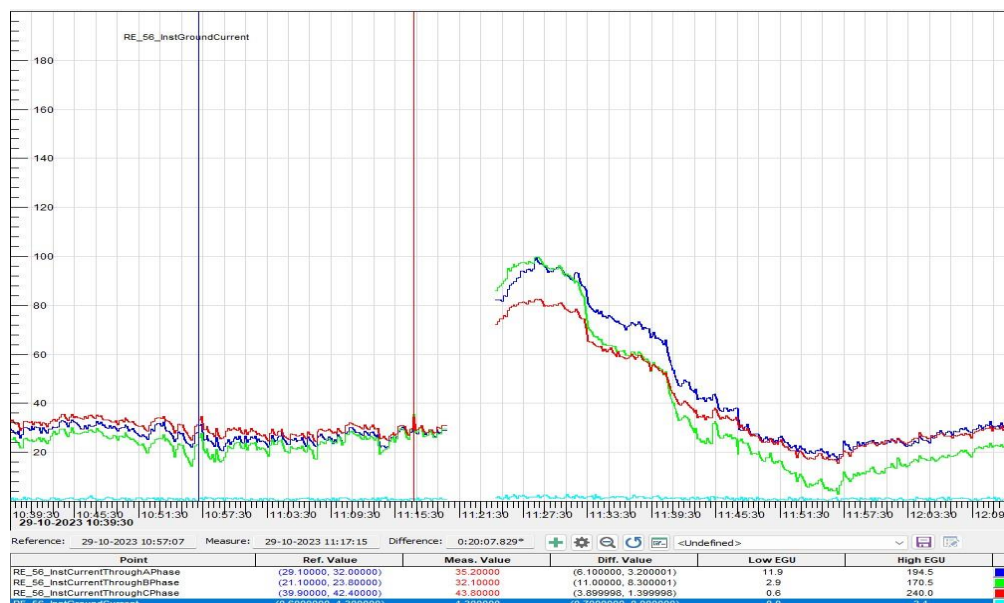
## 8. Esquema de las instalaciones previo a la falla:



## 9. Análisis de la actuación de protecciones y control.

**NOTA:** Se evidencia pérdida de tensión y consumo desde la cabecera del reconectador principal de la distribuidora, de origen SE El Avellano

- Alimentador 52E4 Rarincó.



## 10. Medidas inmediatas:

- No aplica

| ID barra | Barra                   | ID Palo | Palo            | Alimentador         | Pérdida de consumo (MW) | Hora de Desconexión (yyyy-mm-dd hh:mm) | Tiempo de interrupción equivalente T <sub>0</sub> (horas) | Hora de Normalización equivalente (yyyy-mm-dd hh:mm) | Comunas Afectadas | Sistema de Tx Zona | Energía Interrumpida según Artículo 5.12 NT (MWh) | N° Clientes Afectados sin considerar demoras en la recuperación de servicio | Energía Interrumpida según Artículo 2.5 NT (MWh) | N° Clientes Afectados considerando demoras en la recuperación de servicio | ID Coordinado | Coordinado | Tipo de cliente | ID Cliente Libre DX | Cliente Libre DX | CapX equivalente (MW) |
|----------|-------------------------|---------|-----------------|---------------------|-------------------------|----------------------------------------|-----------------------------------------------------------|------------------------------------------------------|-------------------|--------------------|---------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------|---------------|------------|-----------------|---------------------|------------------|-----------------------|
| 1028     | BA 36-102800010-230V-E2 | 14095   | SE-102800010-E2 | Maguayo-Desconexión | 0.4795                  | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Los Baños         | E                  | 0.006472189                                       | 63                                                                          | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.0064721894          |
| 1029     | BA 36-102800010-230V-E2 | 14095   | SE-102800010-E2 | Maguayo-Desconexión | 0.4795                  | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Maguayo           | E                  | 0.256483753                                       | 9510                                                                        | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 2.564837534           |
| 1029     | BA 36-102800010-230V-E2 | 14095   | SE-102800010-E2 | Maguayo-Desconexión | 1.106                   | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Maguayo           | E                  | 0.465908963                                       | 840                                                                         | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.4659089634          |
| 1029     | BA 36-102800010-230V-E3 | 14095   | SE-102800010-E3 | Maguayo-Desconexión | 1.0017                  | 2023-10-29 11:26:00                    | 0.145343284                                               | 2023-10-29 11:28:43                                  | Maguayo           | E                  | 0.062754634                                       | 1370                                                                        | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.431788366           |
| 1029     | BA 36-102800010-230V-E3 | 14095   | SE-102800010-E3 | Maguayo-Desconexión | 1.3904                  | 2023-10-29 11:26:00                    | 0.148333333                                               | 2023-10-29 11:28:04                                  | Maguayo           | E                  | 0.131381533                                       | 2741                                                                        | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.885383499           |
| 1029     | BA 36-102800010-230V-E3 | 14095   | SE-102800010-E3 | Maguayo-Machuay     | 0.4095                  | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Maguayo           | E                  | 0.022385905                                       | 419                                                                         | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.223859053           |
| 1029     | BA 36-102800010-230V-E3 | 14095   | SE-102800010-E3 | Maguayo-Machuay     | 0.4095                  | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Maguayo           | E                  | 0.045716123                                       | 1755                                                                        | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.457161127           |
| 1029     | BA 36-102800010-230V-E3 | 14095   | SE-102800010-E3 | Maguayo-Machuay     | 0.006                   | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Maguayo           | E                  | 0.000385799                                       | 4                                                                           | No Aplica                                        | No Aplica                                                                 | 144           | 102800010  | SE              | No Aplica           | No Aplica        | 0.0003857991          |

| ID Barra | Barra                       | ID Palo | Palo          | Nombre Alimentador de Subestación | Pérdida de consumo (MW) | Hora de Desconexión (yyyy-mm-dd hh:mm) | Tiempo de interrupción equivalente T <sub>0</sub> [horas] | Hora de Normalización equivalente (yyyy-mm-dd hh:mm) | Comunas Afectadas | Sistema de T <sub>0</sub> Zona | Energía Interrumpida según Artículo 5.12 NT [MWh] | N° Clientes Afectados sin considerar demoras en la recuperación del servicio | Energía Interrumpida según Artículo 2.5 NT [MWh] | N° Clientes Afectados considerando demoras en la recuperación del servicio | ID Coordinado | Coordinado | Tipo de cliente | ID Cliente Libre DX | Cliente Libre DX | CapX equivalente (MW) |
|----------|-----------------------------|---------|---------------|-----------------------------------|-------------------------|----------------------------------------|-----------------------------------------------------------|------------------------------------------------------|-------------------|--------------------------------|---------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------|---------------|------------|-----------------|---------------------|------------------|-----------------------|
| 2023     | Barra de intersección 14393 | 14393   | SE Negrete E2 | Negrete-Nacimiento                | 0.035409326             | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Los Angeles       | E                              | No Aplica                                         | 1                                                                            | No Aplica                                        | No Aplica                                                                  | 143           | PRONETA    | LD              | 96677140            | OSORCIO MADERERA | 0.035409326           |
| 2023     | Barra de intersección 14393 | 14393   | SE Negrete E2 | Negrete-Nacimiento                | 0.015334857             | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Nacimiento        | E                              | No Aplica                                         | 1                                                                            | No Aplica                                        | No Aplica                                                                  | 143           | PRONETA    | LD              | 75833300            | ESBIO S.A        | 0.015334857           |
| 2023     | Barra de intersección 14393 | 14393   | SE Negrete E2 | Negrete-Nacimiento                | 0.004620148             | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Negrete           | E                              | No Aplica                                         | 1                                                                            | No Aplica                                        | No Aplica                                                                  | 143           | PRONETA    | LD              | 77964650            | ADORA DE MADERA  | 0.004620148           |
| 2023     | Barra de intersección 14393 | 14393   | SE Negrete E2 | Negrete-Nacimiento                | 0.005187192             | 2023-10-29 11:26:00                    | 0.1                                                       | 2023-10-29 11:26:00                                  | Negrete           | E                              | No Aplica                                         | 1                                                                            | No Aplica                                        | No Aplica                                                                  | 143           | PRONETA    | LD              | 96651180            | OLIMPIA PESQUERA | 0.005187192           |

| incidencia_id | empresa_id | comuna_id | comuna      | densidad | descripcion_densidad | documento  |
|---------------|------------|-----------|-------------|----------|----------------------|------------|
| 39780607      | 22         | 8305      | Mulchen     | D1       | MUY BAJA             | 2023004308 |
| 39780607      | 22         | 8306      | Nacimiento  | D2       | BAJA                 | 2023004308 |
| 39780607      | 22         | 8307      | Negrete     | D2       | BAJA                 | 2023004308 |
| 39780607      | 22         | 8301      | Los Angeles | D1       | MUY BAJA             | 2023004308 |
| 39780607      | 22         | 9209      | Renaico     | D2       | BAJA                 | 2023004308 |