



Companies of the CDEC-SING

AES GENER
ATACAMA AGUA
ATACAMA MINERALS
CARENPA
CELTA
CERRO COLORADO
CODELCO NORTE
COLLAHUASI
EDELNOR
EL ABRA
EL TESORO

ELECTROANDINA
ENAEX
ENORCHILE
ESCONDIDA
GABY
GASATACAMA
GRACE
HALDEMAN
LOMAS BAYAS
MANTOS BLANCOS
MERIDIAN
MICHILLA

MOLY-COP
NORGENER
QUEBRADA BLANCA
RAYROCK
SIERRA MIRANDA
SPENCE
SQM
TRANSELEC NORTE
TRANSEMEL
XSTRATA COPPER - ALTONORTE
ZALDÍVAR



This document encloses a CD containing the published information and also includes statistics since 1993. Detailed information of charts and tables is available for spreadsheets.

The information contained on the CD is also published on www.cdec-sing.cl.

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LETTER FROM THE CHAIRMAN OF THE CDEC-SING

In representation of the Board of the Economic Charge Dispatch Center of the SING (CDEC-SING), I have the pleasure of presenting the new version of the Operation Statistics of the Norte-Grande Interconnected System (SING) to you. Through this publication, the CDEC-SING places at the disposition of all interested parties the operational information corresponding to the ten year period 1999-2008, as well as a summary of the relevant facts from the SING's operation during 2008.

Without doubt, the event of greatest relevance for the CDEC-SING during 2008 corresponded to the application of the Supreme Decree N° 291 (SD 291/2007) from the Ministry of Economy, Fomentation and Construction, published in the Official Journal of August 4th 2008, which establishes a new structure, functioning and financing of the Economic Charge Dispatch Centers.

Highlighted within the changes that this new order introduces, is the incorporation of free clients and the sub-transmission companies as new members of the CDEC-SING, which implies an increase from seven to thirty four companies integrated in this.

Another major change, was related to the structure of the Board of Directors, given that the SD 291/2007 determined that its new structure would consist of 10 members: 2 representatives of the sector of electrical power station owners whose total installed capacity is inferior to 300 MW, 3 representatives of the sector of electrical power station owners whose total installed capacity is above or equal to 300 MW. 2 representatives of the seqment of owners of the trunk transmission facilities, 2 representatives from the segment of the sub-transmission facility owners and 1 representative of the free clients.

The 10 permanent directors, with their respective replacements, were elected in an assembly held on October 9th 2008, where the representatives of the companies that make up all the segments of the CDEC-SING participated. Finally, the new Board of Directors was established on November 10th 2008.

In the structure of the CDEC, the creation of the Administration and Budget Authority, which is added to the original Operation and Toll Authorities, is also highlighted. This new Authority will be in charge of the making, executing and control of CDEC-SING's budget and its related tasks.

The SD 291/2007 also introduced changes in the matter of procedures destined to determine the criteria and considerations that each Authority needs for the fulfillment of their own functions and obligations. The drawing up of these procedures became the obligation of the respective Authorities of the CDEC and not of the Board of Directors.

Another relevant event for the CDEC-SING was the implementation of an optimization tool for the short term and predispatch program development, which was placed on trial at the beginning of last November. This new multinodal tool represents an important landmark in the history of the CDEC-SING, considering that it constitutes a radical change in the methodology used for the obtaining of the optimal dispatch program. The implementation of this model covered professional work of over two years that involved the development of technical specifications, the making of an international bidding process and several exhaustive test periods which followed additional developments by the supplier, with the objective of fulfilling the specific needs of the electrical system. That is to say, the system today has a state-of-theart pre-dispatch tool recognized within the international market, which models all the current technical restrictions in the SING.

The operation of the SING during 2008 reached a new maximum gross generation level of 1,897 MW, while the annual gross energy contribution was equal to 14,502 GWh, which meant an annual increase of 3.9% in relation to 2007. In terms of physical energy sales to end clients, these accumulated, during 2008, a total of 13,219 GWh, which represents an increase of 4.3% in respect to the previous year.

In terms of the distribution by fuel type, the generation of energy injected to the SING in 2008, came in 58.5% from generating plants that used coal, 26.7% from plants that used Diesel Oil, and 11.8% from plants that used natural gas. The rest of the contributions were divided between units that operate with Fuel Oil (2.5%) and hydraulic units with 0.5%.

Upon analyzing the previous figures, it should be mentioned that from 2004 the SING has been subject to strong restrictions in the natural gas supply from Argentina, which up to October 2008 had been particularly severe. From November 2008, this trend reversed, temporarily increasing the amount of natural gas available for the SING. As a result, the system's operation in 2008 had to be done under a scenario that required an unusual demand for diesel, which resulted in a greater effort both for the units that use these fuels as well as the companies supplying them.

From the point of view of the supply's continuity, the performance of the SING during 2008 presented important improvements in respect to 2007, registering in 2008 a total of 222 failure events with Non Supplied Energy (NSE) associated to 3.452 MWh, which is only 11% of the NSE of 2007. On the other hand, during this year there was no total supply loss in the SING, a difference to 2007 when there were two; in both cases as a result of earthquakes with epicenters in the Second Region.

However, before this scenario of fuel scarcity, the system underwent operational situations with margins of minimum reserves, which caused the application of consumption restrictions on 31 occasions during the year. These were short duration restrictions, reaching levels between 5% and 20% of the system's consumption.

Consequently, the system's operation cost increased considerably, driven additionally both by record level increases in the fuel prices in the international markets, and due to the placing of new taxes on natural gas exportation by the Argentinean Government. In spite of the aforementioned, towards the end of 2008, the rapid fall seen in the petrol price caused an important reduction in the operation costs.

In terms of the projects carried out during 2008, it is worth mentioning the start up of the Gaby Substation, owned by Minera Gaby, the Llanos and Aguas Blancas Substations, owned by Atacama Minerals, the Aggreko Diesel Power Station, property of Minera Escondida and the installation of backup generation units in the Minera Cerro Colorado facilities.

In relation to the development of the Studies established in the Safety and Service Quality Technical Norm, during 2008, the CDEC-SING published all of those foreseen in the said Technical Norm, including concrete recommendations to be carried out. In respect to this, it is worth highlighting that in December 2008, the Automatic Generation Disconnection Schematics (AGDS) due to over frequency was implemented in line with that established in the study carried out by the Operation Authority during 2007.

In respect to the SING's transmission system, the Decree 207 published on January 15th 2008, that fixed the system's trunk transmission section, its value and the payment by those who inject and withdraw energy in the system was applied.

2009 is foreseen as bringing a shortage of natural gas for electrical generation, which will probably oblige the generation companies to extend their efforts to replace said fuel for diesel or coal, but beginning the year with lower fuel prices than those seen at the beginning of 2008. CDEC will face the challenge of adequately coordinating the maintenance of the units that have undergone continued operation, as well as the start up and operation of local generation projects, driven by the mining companies, which are looking to contribute to maintain the continuity of the supply in their facilities. Additionally, the CDEC-SING must assume the responsibilities assigned to it by Decree 320, published on January 9th 2009, in the matter of payments associated to the sub-transmission system.

2009 will also be a year of consolidation for the new organizational structure of the CDEC-SING, with strong challenges both at Board level and in the Authorities.

Pedro de la Sotta Sánchez. Chairman of the Board CDEC-SING

BOARD OF DIRECTORS OF THE CDEC-SING

CHAIRMAN

Pedro De la Sotta Sánchez GASATACAMA CHILE S.A.

DIRECTORS

Segment A Eduardo Soto Trincado CELTA S.A.

Segment A

NORGENER S.A.







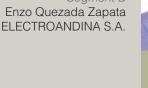


Segment B Carlos Aguirre Pallavicini AES GENER S.A.

Juan Pablo Cárdenas Pérez



Segment B



SECRETARY Alvaro Grondona Camp CDEC-SING LTDA.



Segment C Rodrigo López Vergara TRANSELEC NORTE S.A.



Segment C Raúl Valpuesta Araya TRANSELEC NORTE S.A.



Segment D Alfredo Cárdenas Ocampo TRANSELEC NORTE S.A.



Segment D Robin Cuevas Canales EDELNOR S.A.



Segment E Ramón Cifuentes Baeza MINERA ESCONDIDA LTDA.

SUBSTITUTE DIRECTORS

Segment A Miguel Buzunáriz Ramos CELTA S.A.





Segment C Jaime Cancino Castro TRANSELEC NORTE S.A.







Segment C Christian Perigault Sanguineti TRANSELEC NORTE S.A.

Segment B Javier Alemany Martínez GASATACAMA CHILE S.A.







Segment D Belisario Maldonado Molina TRANSELEC NORTE S.A.







Segment D Rosa Abasolo Quinteros EDELNOR S.A.



Segment E Alex Schnake Silva CIA. MINERA DOÑA INÉS DE COLLAHUASI S.A.

DIRECTOR OF OPERATIONS AND WHEELING (I) Patricio Troncoso Romero

STRUCTURE OF THE CDEC-SING

ADMINISTRATION AND BUDGET DIRECTOR Alvaro Grondona Camp

SUBDIRECTOR OF OPERATIONS Patricio Troncoso Romero

SUBDIRECTOR OF WHEELING Claudia Carrasco Arancibia

HEAD OF THE DISPATCH AND CONTROL CENTER Raúl Moreno Tornería

HEAD OF PLANNING AND STUDIES DEPARTMENT Patricio Valenzuela Vásquez

HEAD OF TRANSFERS José Miguel Arévalo Araneda

HEAD OF STUDIES Felipe Morales Silva

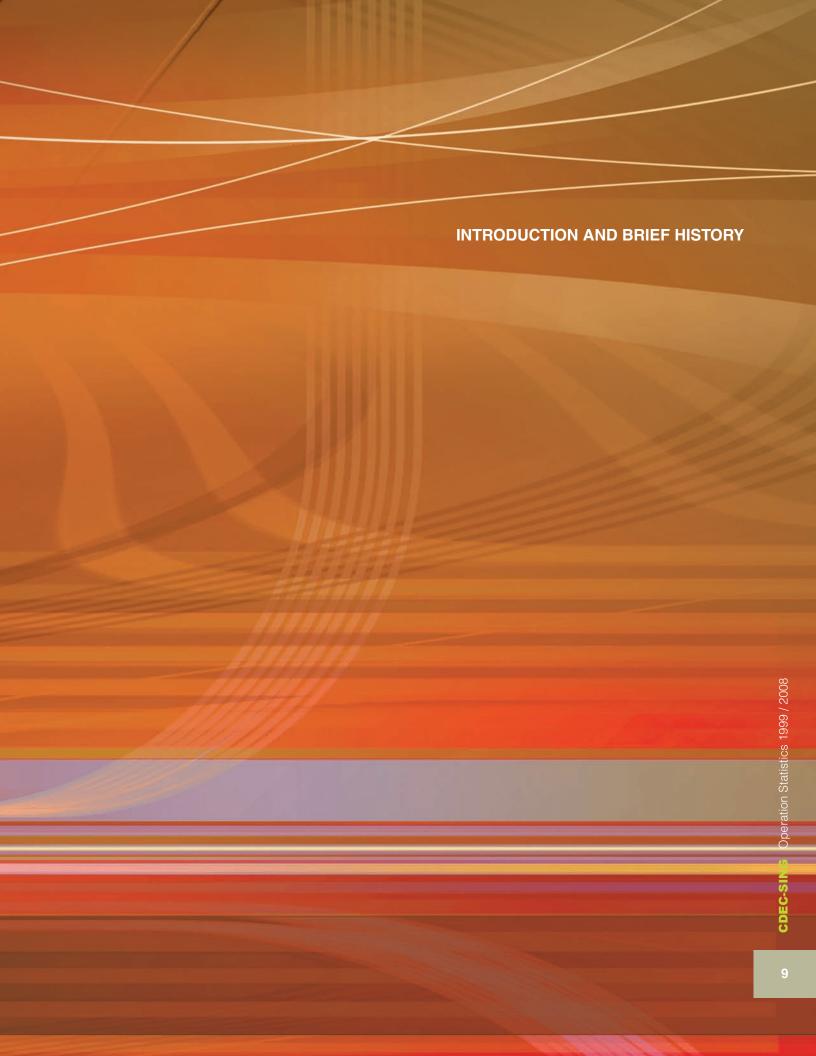


CDEC-SING ANTOFAGASTA STAFF



CDEC-SING SANTIAGO STAFF





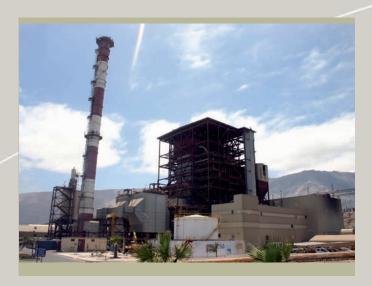
GENERAL DESCRIPTION

The Sistema Interconectado del Norte Grande (SING) runs between Arica - Parinacota, Tarapacá and Antofagasta, the Fifteenth, First and Second regions of Chile, respectively, covering a surface area of 185,142 km², which corresponds to 24.5% of the continental territory. The zone is characterized by an extremely dry climate, which explains for an arid landscape that can be guite diversified

in terms of relief cross-section and height. This has greatly affected population distribution and density; people definitely favor the coastal edge. The present population, based on the 2002 Census, accounts for 6.1 percent of the national total and is concentrated in a handful of widely spaced cities and villages.

SING highlights:

- Scant supply of water for electric power generation.
- Electric consumption centers located far apart.
- · Energy used mainly by mining compa-





HISTORICAL BACKGROUND

Based on the SING's hydrological, climatic and geographical conditions, electric supply to consumption centers was first provided by unrelated local systems designed to meet their own needs. In late 1987 some of these systems were interconnected, giving birth to the Norte Grande Interconnected System.

Coordinated operation of the interconnected facilities began on July 30, 1993. when the Economic Load Dispatch Center (CDEC) of the SING (CDEC-SING) set to work. Initially the CDEC-SING was made up of three generating companies, EDELNOR S.A., ENDESA and the former Tocopilla Division of CODELCO-CHILE, today ELECTROANDINA S.A.

At the end of 2008, with the publication of the SD 291, the members of the CDEC-SING increased to 34, based on the incorporation of the free or non-regulated clients.

CONTENTS OF THIS DOCUMENT

This document contains some of the most relevant information for the SING from January 1999 to December 2008. It is arranged in five chapters, as follows:

- Chapter 1 contains the Letter from the Chairman, the Members of the Board and the structure of the Directorate of Operation and Tolls.
- Chapter 2 shows a brief history of the CDEC-SING's creation.



- Chapter 3 describes the CDEC-SING's tasks and duties, including its governing legal framework as of December 2008, as well as its powers and responsibilities. It also includes information on the transmission network and generating plants as of December 2008, with an emphasis on the features of the transmission and generation facilities, and the identification of the SING's major consumptions.
- Chapter 4 shows the relevant events occurred within the SING during 2007. Chapter 5 illustrates system operation statistics, from January 1999 to December 2008, with charts and tables explaining the evolution of generation and consumption, along with the amounts and prices of energy and power transfers between member companies.

BRIEF HISTORY

Initially, the electric supply needs of the Norte Grande region were met with electric systems that evolved along separate ways.

In 1980 the National Energy Commission (NEC), convinced of the benefits of interconnected electric systems, conducted a study on the feasibility of connecting the Tocopilla-Chuquicamata system of CODELCO-CHILE's Chuquicamata Division with EDELNOR's systems in the Norte Grande region. EDELNOR, CO-DELCO, ENDESA and SOQUIMICH were of great help.

The study yielded extremely positive results, and the NEC gave the project a decided boost.

The first steps were taken in 1983: CO-DELCO and EDELNOR agreed on the construction work required for Unit Nº 12, the first coal steam unit to operate within the SING. Later, in 1984, a contract provided that CODELCO-CHILE's Tocopilla Division should supply 56 MW to EDELNOR as from November 1987. This amount would subsequently grow to 101 MW.

With the decisive support of the National Energy Commission (NEC) and the joint efforts of EDELNOR, CODELCO-CHILE and ENDESA, the SING saw the light in November 1987. The next logical step for CODELCO was to add a modern Load Dispatch Center in Tocopilla, equipped with a Supervisory Control and Data Acquisition (SCADA) system. Besides, CODELCO expanded its Tocopilla Power Plant by installing two 125-MW coal steam units, No. 14 and No. 15, and built 220-kV transmission lines running from the Tocopilla to the Crucero and Chuquicamata Substations.

EDELNOR, in turn, set up 220-kV lines connecting the Tarapacá and Antofagasta systems. Additionally, it erected the Mejillones and Pozo Almonte Terminal Substations, together with the Crucero Substation, which provided a link to the CODELCO system. EDELNOR, furthermore, raised the Arica-Pozo Almonte voltage to 110 kV and reinforced the Iquique-Pozo Almonte connection. Finally, the company furnished a 110-kV connection between Mejillones and Antofagasta, and introduced a Load Dispatch Center equipped with a SCADA system in Antofagasta.

In 1993 ENDESA set into operation its 74-MW Mejillones Power Plant in the city of the same name. ENDESA joined the system on July 30, 1993, giving origin to the coordinated operation of generation and transmission facilities, under the provisions of the 1982 Chilean Electricity Law (Decree Law Nº 1 of 1982) and the Coordination Regulations set forth in Supreme Decree (SD) N°6 of 1985 (SD N°6/1985). By the time the CDEC-SING came to life, total installed power amounted to 745.1 MW.

NORGENER was added to the CDEC-SING in February 1995 through the commercial operation of Unit Nº 1, located in the city of Tocopilla.

EDELNOR rented the Mantos Blancos Diesel Power Plant in September 1995. Besides, it signed a contract with EEC-SA for the total output of the Cavancha Power Plant as from November 1995. Also in 1995, ENDESA began to operate Gas Turbine Nº 3 at the Mejillones Substation. EDELNOR's Unit Nº 1, at the Mejillones Thermoelectric Power Plant, was integrated in 1995. EDEL-NOR contracted the total production of the ENAEX Power Plant as from February 1996. During 1996 as well, CODELCO-CHILE's Tocopilla Division changed its corporate name to ELECTROANDINA. NORGENER's Unit Nº 2 was connected to the system in 1997. The NORGENER



substation was also interconnected to the system, in addition to the 220-kV, double circuit transmission line extending from the NORGENER Substation to the Crucero Substation. ENDESA's gas turbine Nº 3 was removed from the system on January 1, 1997. In 1998, EDELNOR activated Unit Nº 2 of the Mejillones Thermal Power Plant. CELTA, in turn, joined the CDEC-SING through the commercial operation of a gas turbine called TGTAR. In October 1998, NOPEL was added to the CDEC-SING.

During 1999, the CDEC-SING allowed the following interconnections: CELTA's coal steam Unit N° 1 at its Tarapacá Thermal Power Plant; NOPEL's combined cycles N° 1 and N° 2 at its Atacama Power Plant; and GENER's gas turbines N° 11 and N° 12 at its Salta Power Plant (in April 1999).

ENDESA's gas turbines in Mejillones were removed from the SING on January 3, 1999, to be transferred to the Interconnected Central System (SIC). On May 12, 1999, ENDESA's diesel gas turbine in Patache was also removed from the SING to be transferred to the SIC. ENDESA, therefore, left the CDEC-SING. On November 29, 1999, this diesel gas turbine, then owned by CELTA, was reconnected to the SING. A number of lines were connected to the transmission system in 1999: NOPEL's 220-kV Atacama-Encuentro and Encuentro-Crucero lines in February; GENER's 220-kV Andes-Oeste line, the two circuits of its 220-kV Andes-Nueva Zaldívar line, and its 345-kV Salta-Andes line, in April; GENER's Laberinto-Mantos Blancos line in May; and EDELNOR's 110-kV Capricornio-Alto Norte and Capricornio-Antofagasta lines in November.

Steam turbine Nº 10 at GENER's Salta Power Plant joined the generating system in April 2000, while EDELNOR's combined cycle Unit Nº 3 at its Mejillones Power Plant started commercial operations in June 2000.

ELECTROANDINA's combined cycle Unit U16 at the Tocopilla Thermoelectric Power Plant was put into service in February 2001.

In July 2001, NEC's Exempt Resolution N° 236 approved the CDEC-SING's Internal Regulations.

GENER changed its corporate name to AES GENER in August 2001.

In late 2001 and early 2002, NOPEL's 220-kV Atacama-Esmeralda, Tarapacá-Cóndores, and Cóndores-Parinacota lines were connected, in order to supply electricity to the Antofagasta, Iquique and Arica distribution companies, respectively. For this purpose a new company, TRANSEMEL, was created. TRANSEMEL is not a member of the CDEC-SING; it is affiliated to the distribution companies whose transmission facilities were used. In this way new substation and transmission lines were put into service, while some existing ones were modified.

In October 2002 NOPEL changed its corporate name to GASATACAMA GENERACIÓN.

GASATACAMA GENERACIÓN initiated the commercial operations of the TG2A gas turbine of combined cycle N° 2 in November 2002.

In June 2003, under the provisions contained in Article Nº 168 of SD Nº 327, HQI TRANSELEC NORTE S.A. joined the CDEC-SING upon acquiring transmission assets, first from CELTA and then from GASATACAMA GENERACIÓN.

The 220-kV Encuentro-Collahuasi line owned by the Doña Inés de Collahuasi mining company was connected in June 2004.

As from December 10, 2004, ELEC-TROANDINA announced the removal from service of its Unit U09.



In 2005, transmission facilities owned by mining companies were placed into service, as follows:

- 220/69/13.8 kV Sulfuros Substation (Minera Escondida).
- 220 kV Domeyko Sulfuros Line (Minera Escondida).
- 220/23 kV Spence Substation (Minera Spence).
- 220 kV Encuentro Spence Line (Minera Spence).
- 220/100/13.8 kV Salar Substation (CODELCO NORTE).
- 220 kV Crucero Salar, Tower № 323 - Salar Line (CODELCO NORTE).
- 220 kV Salar Chuquicamata, Salar - Tower № 323 Line (CODELCO NORTE).
- 110 kV Salar km6 Line (CODELCO NORTE).

HQI TRANSELEC NORTE S.A. changed its corporate name to TRANSELEC NORTE S.A. in October 2006.

During 2006, new transmission facilities owned by mining companies were set into service, as follows:

- 220 kV Atacama O'Higgins Line was changed into 220 kV Mejillones -O'Higgins Line (Minera Escondida).
- Nueva Victoria Substation (SQM).
- Tap Off Barriles Substation (GRACE).
- Mantos de la Luna Substation (GRACE).
- 110 kV Tap Off Barriles Mantos de la Luna Line (GRACE).

In February 2007, ENORCHILE's Zofri Diesel Power Plant connected at the Iquique 13.8kV bar was incorporated. This Power Plant is represented in the CDEC-SING by NORGENER.

In September 2007, the project that makes feasible the connection of the steam turbine of Salta Power Plant, TV10, to the Sistema Argentino de Interconexión (Argentinean Interconnected System or SADI) was carried out. This way, the units of the combined cycle of the Salta Power Plant add to the existing configurations declared in the SING operation, those corresponding to one or two gas turbines connected to the SING and the steam turbine connected to the SADI.

Additionally, during 2007, new transmission installations were put into service, which are indicated as follows:

- SE021-A Substation(SQM)
- 66kV Tap Off Line La Cruz SE021;
 Mobile Substation . SE021 (SQM)
- 66kV Tap Off Line La Cruz SE021;
 La Cruz Tap Off Mobile Substation (SQM)
- Capricornio Sierra Miranda 110 kV Line (EDELNOR).
- Zofri Diesel Power Plant Iquique 13.8 kV Line (ENORCHILE)
- Zofri Diesel Power Plant 13.2/0.4 kV Transformer №1 and №2 (ENORCHILE).
- Laberinto Gaby 220 kV Line (ELECTROANDINA)

Finally, the gross installed power of the SING at December 2007 reached 3,601.9 MW.

During 2008, the following startups were registered:

- Gaby Substation.
- Llanos and Aguas Blancas Substations (Atacama Minerals).
- Aggreko Diesel Power Plant (Minera Escondida).
- Backup generating units for DMC (Cerro Colorado).

In August 2008, the SD 291 of the Ministry of Economy, Fomentation and Reconstruction was published in the Official Journal, marking a substantial change in the workings of the CDEC: Within the changes, the most relevant are the incorporation of free or non-regulated clients as members, the creation of a new Administration and Budget Authority, the determination of five segments within the members of the CDEC, and the obligation of the authorities to elaborate their own procedures that adjust to the new norm.



REGULATORY FRAMEWORK

The regulatory framework described below was in force as at December 31, 2008.

As stipulated in Decree Law 1/1982, amended by Law N° 19.940/2004, the CDEC-SING is responsible for:

- a) Maintaining reliable electric service within the SING.
- b) Guaranteeing the most economic operation to SING facilities as a whole.





- Guaranteeing open access to trunk transmission and subtransmission systems.
- d) Guarantee the open access to the additional transmission systems.
- e) Determine the economic transfers between the members.
- f) Make the studies and reports required by the National Energy Commission, the Electricity and Fuels Superintendence, or the Ministry of Economy, within the scope of their respective attributions, and the rest that the current norm establishes.

Coordination in accordance with the provisions of the Chilean Electricity Law should comply with the rules and regulations specified by the National Energy Commission (NEC).

Also, coordination instructions issued by the CDEC-SING are mandatory for all system facilities, including electric power generation plants; trunk transmission, subtransmission and additional lines; and electric substations, including primary distribution substations and consumption bars of customers not subject to price regulations and directly supplied from a transmission system's facility, interconnected among them, allowing the generation, transportation and distribution of electric power within the system.

Likewise, each member of the Economic Load Dispatch Center will be individually responsible for compliance with the requirements established by the laws or regulations. The remaining entities that, according to the laws and regulations, must subject their facilities' operations to the coordination of the CDEC-SING, will be equally responsible for compliance with the instructions and schedules issued by the Center.

CDEC-SING's duties include:

- a) Planning the electric system's short-term operations, considering both current conditions and medium and long-term projections; as well as notifying all members of such plans, so their facilities can be operated in accordance with the resulting schedules.
- b) Calculating the instantaneous marginal costs of electric energy as derived from planned operation.
- c) Coordinating major preventive maintenance for the system's generating units.

- d) Checking compliance with operation and major preventive maintenance schedules, and taking the required corrective measures.
- e) Determining and valuing power transfers among CDEC-SING member companies.
- f) Specifying the procedures needed to meet service quality requirements and the additional standards set forth by law, and include them in its Internal Regulations.
- g) Setting, coordinating and checking the system's power reserve.
- h) Coordinating load shedding, and taking any other steps needed to maintain overall reliability of the SING's service.
- i) Issuing the reports required by the regulations.
- j) Checking that all system nodes from which power is drawn exhibit service reliability levels in conformity with the law.
- k) Establishing the minimum technical requirements to be met by any facility interconnected with the SING or modified by its owner. These requirements will be associated with the facility's contribution to reliability and service quality goals.
- Defining, managing and operating complementary services in order to guarantee the system's operation, respecting the reliability and service quality requirements and minimizing the SING's operating costs.

STRUCTURE OF THE CDEC-SING

In accordance with the provisions of Supreme Decree (SD) Nº 291, the CDEC-SING's organizational chart is shown below:

Directorate of Operation
Director, Professional and
Technical Employees

Control and Dispatch Center
Head and Dispatchers

Directorate of Toll
Director, Professional and
Technical Employees

Board of Directors

Chairman and Directors

Directorate of Administration and Budget Director and professionals

The Board of Directors is responsible for the normative aspects and for guaranteeing the proper working of the Operation, Toll and Administration and Budget Authorities. Among the main activities is the designation of the directors of the authorities, approval of the internal regulations of the CDEC-SING and the approval of the annual budget.

By law, discrepancies that may arise within the CDEC-SING about matters defined in the regulations will be submitted to a panel of experts for a decision. The panel will consist of seven professionals: five engineers or bachelors in economic sciences, and two lawyers, all of them with extensive professional or academic experience. These experts will be appointed through a resolution of the Ministry of the Economy, Fomentation and Reconstruction. The Operation Authority, the Toll Authority and the Administration and Budget Authority are defined as eminently technical and executive entities, in charge of fulfilling their activities according to the general criteria that the Board of Directors fixes.

Among other functions, Operation is charged with:

a) Setting, coordinating and checking the system's power reserve; coordinating load disconnection; and taking any other steps needed by the system's generating and transmission units to maintain overall service reliability.

- b) Planning short, medium and long-term operation, in addition to coordinating maintenance of the SING's generating units and transmission lines, and duly notifying the Dispatch and Control Center of such plans.
- c) Supervising compliance with the schedules contained in operation plans, tracking deviations and their causes, and correcting undesired deviations.
- d) Calculating firm power for each generating plant and checking relevant balances for each generating company.
- e) Calculating instantaneous marginal costs of electric energy for all SING nodes.
- f) Determining on a monthly basis the earnings yielded by each stretch of the transmission system, and valuing power transfers in line with the stipulated procedures.

The CDEC-SING Dispatch and Control Center, located in Antofagasta, is responsible for coordinating real-time operation not only for the system as a whole, but also for each generating unit and transmission line.

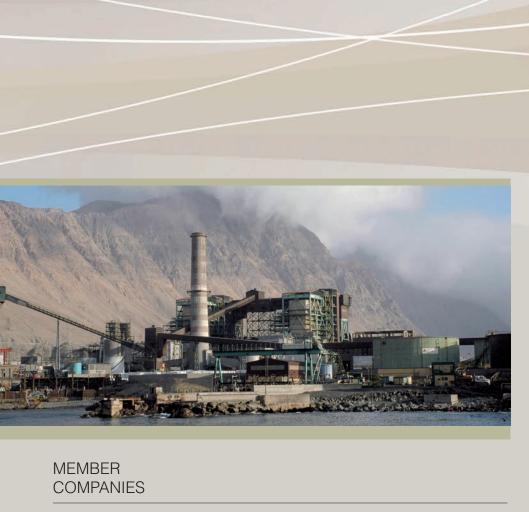
Among other functions, Tolls is charged with:

- a) Submitting to the Board of Directors for their review, the decisions and procedures aimed at guaranteeing open access to trunk transmission and subtransmission systems interconnected within the SING.
- b) Projecting capacity and use as specified by the regulations.

- c) Calculating transmission costs to be paid by the corresponding companies.
- d) Announcing an open international invitation to tender for trunk transmission system expansion projects, examining the bids, announcing the winning bid and informing the relevant agencies. Additionally, performing an annual consistency analysis of development and expansion facilities.

The Administration and Budget Authority is responsible among other roles, for:

- a) Calculating the amount to be financed by the members, for the effects of the CDEC-SING's annual budget, in line with that stated in Articles N° 64 to 80 of the SD 291.
- b) Make, coordinate, execute and administrate the CDEC-SING's annual budget.
- c) Administrate the regime of hiring of the members of the Board of Directors, of the Authorities and of the Dispatch and Control Center, as well as those of external third parties for the purposes of studies and consultancy.
- d) Administrate the regime of acquisitions and purchases by the Board of Directors, Authorities and Dispatch and Control Center.
- e) Annually update the value of the investments made for the workings of the Board of Directors and the Authorities.
- f) Report biannually to the Board of Directors the advance in the CDEC-SING's budget execution and planning.



In accordance with SD N°6/1985, which was in effect when the CDEC-SING was incorporated but is now repealed, electric companies with an installed generating capacity exceeding the CDEC-SING's total installed capacity by 2 percent at the time of its creation were entitled to join. Also eligible were autoproducers with an installed generation capacity that under normal conditions would surpass the sum of their peak annual demand or 2 percent of the system's installed power at the time.

When the CDEC-SING was incorporated, the system had an installed power of 745.1 MW, so the minimum installed power required for membership totaled 14.90 MW.

SD Nº 327 added other companies to the CDEC-SING as well: those whose main line of business was the management of electric power transmission systems with

a voltage level equal to or higher than 23 kV, and at least one stretch of line measuring more than 100 km in length. Likewise, membership was extended to electric power companies with an installed generating capacity of over 9 MW.

Additionally, the SD 291, issued during 2008, includes as members, the segment named free clients, defining them as those whose consumption bars are not submitted to price regulation, and that are supplied directly from transmission facilities.

Up to December 2008, the number of members, with the incorporation of the free clients, has increased from seven to thirty four.

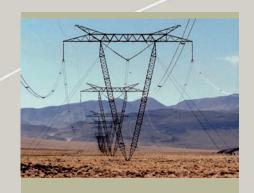
ECONOMIC OPERATION OF THE SING

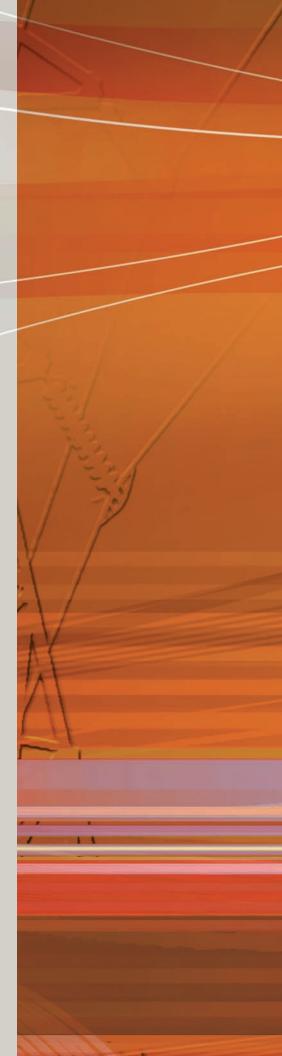
The economic operation of the SING assigns priority to dispatch from units with the lowest variable production costs. The variable production cost of a generating unit is defined as specific fuel consumption multiplied by fuel price, plus a nonfuel variable cost that is chiefly accounted for by spare parts, chemical additives and lubricants.

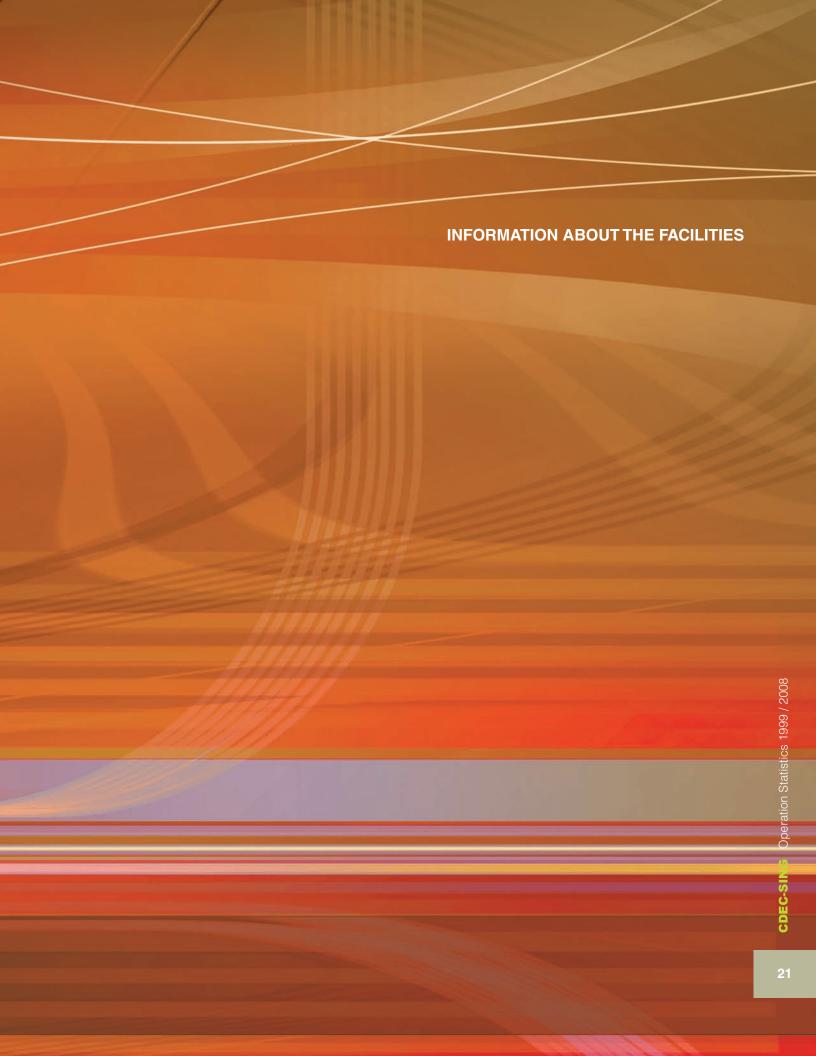
For an appropriate comparison of generation costs at each generating unit, a variable cost table is applied. The table shows the variable production costs of each generating unit as related to the system's load center or basic node, through factors that encompass marginal losses in the transmission grid (penalty factors). The present load center is the 220-kV Crucero node.

Operations are planned and marginal costs determined on a weekly basis. The result is a generation schedule that considers hourly demand forecasts, generating unit maintenance and transmission systems. Also taken into account are the technical restrictions of generating units, such as maximum and minimum power limits, startup times and minimum operating times.

The CDEC-SING Dispatch and Control Center provides real-time coordination of the daily schedule with the corresponding Control Centers, making any real-time operation corrections required to absorb variations or deviations.







Owner Name of Power Plant Unit Gross of Components **Total Power** [MW] Celta Termoeléctrica Tarapacá TGTAR (1) 23,750 1 **CTTAR** 1 158,000 2 CHAP 10,200 Edelnor Chapiquiña Diesel Arica M1AR 3 2,997 M2AR 2 2,924 4 8,400 **GMAR** SUIQ 3 Diesel Iquique 4,200 MIIQ 2 2,924 MAIQ 1 5,936 **TGIQ** 23,750 MSIQ 1 6,200 Diesel Antofagasta (7) MAAN 2 11,872 Termoeléctrica Mejillones CTM1 1 165,900 CTM2 1 175,000 CTM3 2 250,750 Diesel Mantos Blancos (2) 10 28,640 MIMB CAVA Cavancha (3) 1 2,602 Diesel Enaex (5) **DEUTZ** 3 1,959 **CUMMINS** 1 0,722 1 37,500 Electroandina Termoeléctrica Tocopilla U10 U11 1 37,500 U12 1 85,300 U13 1 85,500 U14 (8) 1 136,400 1 U15 130,300 2 U16 400,000 TG1 1 24,698 TG2 1 24,931 TG3 (4) 1 37,500 **AES Gener** Salta CC SALTA (6) 3 642,800 Gasatacama Generación CC1 3 395,900 Atacama

CC2

NT01

NTO2

ZOFRI_1-6

ZOFRI_2-5

3

1

2

4

SYSTEM TOTAL AT DECEMBER 31ST 2008

384,700

136,300

141,040

0,900

5,160

3.593,155

Notes: abbreviations will be used in tables and charts for the names of member companies, as follows:

Termoeléctrica Norgener

Celta: Celta S.A. Edelnor: Edelnor S.A.

Norgener

Electroandina: Electroandina S.A. AES Gener: AES Gener S.A.

Gasatacama: Gasatacama Generación S.A.

SING GENERATING UNITS 2008

Norgener: Norgener S.A.

Transelec Norte: HQI Transelec Norte S.A.

| | Injection Busbar | Type of Unit | Year Put into Service in the System |
|-------|--------------------------|------------------------------|---|
| | Tarapacá 220 kV | Diesel-Gas Turbine | 1998 |
| | Tarapacá 220 kV | Steam-Coal | 1999 |
| | Arica 66 kV | Run-of-the-river hydro plant | 1967 |
| | Arica 66 kV | Diesel Engine | 1953 |
| | Arica 66 kV | Diesel Engine | 1961-63 |
| | Arica 66 kV | Diesel Engine | 1973 |
| | Iquique 66 kV | Diesel Engine | 1957 |
| | Iquique 66 kV | Diesel Engine | 1963-64 |
| | Iquique 66 kV | No. 6 FO E ngine | 1972 |
| | Iquique 66 kV | Diesel-Gas Turbine | 1978 |
| | Iquique 66 kV | No. 6 FO Engine | 1985 |
| | Antofagasta 13,8 kV | No. 6 FO Engine | 1970 |
| | Chacaya 220 kV | Steam-Coal | 1995 |
| | Chacaya 220 kV | Steam-Coal | 1998 |
| | Chacaya 220 kV | Natural Gas Combined Cycle | 2000 |
| | Mantos Blancos 23 kV | No. 6 FO Engine | 1995 |
| | Iquique 66 kV | Run-of-the-river hydro plant | 1995 |
| | Enaex 110 kV | Diesel Engine | 1996 |
| | Enaex 110 kV | Diesel Engine | 1996 |
| -, - | Central Tocopilla 110 kV | Vapor-F0 6 | 1970 |
| | Central Tocopilla 110 kV | Vapor-F0 6 | 1970 |
| | Central Tocopilla 110 kV | Steam-Coal | 1983 |
| | Central Tocopilla 110 kV | Steam-Coal | 1985 |
| -1 | Central Tocopilla 220 kV | Steam-Coal | 1987 |
| -L | Central Tocopilla 220 kV | Steam-Coal | 1990 |
| | Central Tocopilla 220 kV | Natural Gas Combined Cycle | 2001 |
| | Central Tocopilla 110 kV | Diesel-Gas Turbine | 1975 |
| | Central Tocopilla 110 kV | Diesel-Gas Turbine | 1975 |
| _ = = | Central Tocopilla 220 kV | Diesel - Natural Gas Turbine | 1993 |
| -1 - | Central Salta 345 kV | Natural Gas Combined Cycle | 2000 |
| | Central Atacama 220 kV | Natural Gas Combined Cycle | 1999 |
| | Central Atacama 220 kV | Natural Gas Combined Cycle | 1999 |
| | Norgener 220 kV | Steam-Coal | 1995 |
| | Norgener 220 kV | Steam-Coal | 1997 |
| | Iquique 13.8 kV | Diesel Engine | 2007 |
| | Iquique 13.8 kV | Diesel Engine | 2007 |

⁽¹⁾ During the period January - November 1999 the TGTAR Unit belonged to Endesa. From May 12th 1999 it was transferred to SIC and was reintegrated to SING on November 29th 1999, as property of Celta.

⁽²⁾ The Diesel Mantos Blancos Power Plant is represented at the CDEC-SING by Edelnor.

⁽³⁾ The Cavancha Power Plant is represented at the CDEC-SING by Edelnor.

⁽⁴⁾ The Gas Turbine has been available for natural gas operation since September 2000.

⁽⁵⁾ The Enaex Diesel Power Plant is represented in the CDEC-SING by Gasatacama until May 2007. From June 2007 it is represented by Edelnor.

⁽⁶⁾ The steam turbine TV10 of the CC Salta unit, upon requirement of the Organism In Charge of the Dispatch (OCD) of the Argentinean Republic, may be connected to the Argentinean Interconnection System (SADI in its Spanish acronym) supplying a maximum power of 226.8 MW.

⁽⁷⁾ The GMAN Unit was withdrawn from the Antofagasta Diesel Power Plant on January 17th 2008.

⁽⁸⁾ The U14 Unit increased its gross power from 128,300 to 136,400 MW on April 29th 2008.

| Owner | Transmission Line | Voltage (kV) | N° of Circuits | Approx. Legth (km) | Capacity (MVA) | | Year Put nto service |
|-----------------|------------------------------------|-----------------|-------------------|-----------------------|-------------------|-----------------------------|-------------------------|
| Edelnor | Crucero - Lagunas 1 | 220 | 1 | 170,0 | 328 | Additional | 1987 |
| | Chacaya - Crucero | 220 | 1 | 152,7 | 328 | Additional | 1987 |
| | Chacaya - Mantos Blancos | 220 | 1 | 66,0 | 377 | Additional | 1996 |
| | Chacaya - Mejillones | 220 | 1 | 1,3 | 377 | Subtransmission | 1987 |
| | Lagunas - Pozo Almonte | 220 | 1 | 70,0 | 328 | Additional | 1987 |
| | Laberinto - Gaby | 220 | 1 | 62,0 | 189 | Additional | 2007 |
| | Arica - Pozo Almonte | 110 | 1 | 216,0 | 35 | Subtransmission | 1987 |
| | Capricornio - Alto Norte | 110 | 1 | 44,1 | 137 | Additional | 2000 |
| | Capricornio - Antofagasta | 110 | 1 | 28,0 | 137 | Subtransmission | 2000 |
| | Capricornio - Sierra Miranda | 110 | 1 | 26,2 | 25,98 | Additional | 2007 |
| | Chacaya - Mejillones | 110 | 1 | 1,4 | 122 | Additional | 1995 |
| | Salar - Calama | 110 | 1 | 10,0 | 69 | Subtransmission | 1982 |
| | Mejillones - Antofagasta | 110 | 1 | 63,3 | 80 | Subtransmission | 1987 |
| | Central Chapiquiña - Arica | 66 | 1 | 84,0 | 48 | Additional | 1967 |
| | Central Diesel Arica - Arica | 66 | 1 | 6,8 | 41 | Subtransmission / Additiona | |
| | Central Diesel Iquique - Iquique | 66 | 1 | 1,6 | 48 | Additional | 1970 |
| | Iquique - Pozo Almonte 1 | 66 | 1 | 42,4 | 41 | Subtransmission | 1964 |
| | Iquique - Pozo Almonte 2 | 66 | 1 | 41,0 | 56 | Subtransmission | 1987 |
| | Pozo Almonte - Tamarugal | 66 | 1 | 20,8 | 10 | Subtransmission | 1968 |
| Electroandina | Central Tocopilla - Crucero | 220 | 2 | 71.4x2 | 330x2 | Additional | 1986 |
| | Crucero - Chuquicamata | 220 | 1 | 68,0 | 330 | Additional | 1986 |
| | Crucero - Salar (ver no | ta 1)220 | 1 | 75,4 | 330 | Additional | 2005 |
| | Salar - Chuquicamata (ver no | ta 2)220 | 1 | 19,3 | 330 | Additional | 2005 |
| | Crucero - El Abra | 220 | 1 | 101,0 | 330 | Additional | 1995 |
| | Crucero - Radomiro Tomic | 220 | 1 | 82,0 | 450 | Additional | 1996 |
| | Laberinto - Gaby | 220 | 1 | 62,0 | 183 | Additional | 2007 |
| | Tap Off El Loa - El Loa | 220 | 1 | 8,4 | 91,4 | Additional | 2000 |
| | Central Tocopilla - A.Circuito N°1 | 110 | 1 | 141,0 | 90 | Additional | 1910 |
| | Central Tocopilla - A.Circuito N°2 | 110 | 1 | 141,0 | 90 | Additional | 1910 |
| | Central Tocopilla - A.Circuito N°3 | 110 | 1 | 141,0 | 90 | Additional | 1915 |
| | Central Tocopilla - Salar | 110 | 1 | 152,0 | 90 | Additional | 1982 |
| AES Gener | Central Salta - Andes | 345 | 1 | 408,0 | 777 | Additional | 1999 |
| ALO GONO | Andes - Oeste | 220 | 1 | 38,0 | 290 | Additional | 1999 |
| | Andes - Nueva Zaldívar | 220 | 2 | 63.3x2 | 370x2 | Additional | 1999 |
| | Nueva Zaldívar - Zaldívar | 220 | 1 | 0,2 | 360 | Additional | 1994 |
| | Laberinto - Mantos Blancos | 220 | 1 | 70,0 | 290 | Additional | 1999 |
| Norgener | Norgener - Crucero | 220 | 2 | 72x2 | 948 | Additional | 1997 |
| Norgener | Laberinto - Oeste | 220 | 1 | 85,0 | 290 | Additional | 1998 |
| | Laberinto - Lomas Bayas | 220 | 1 | 10,0 | 209 | Additional | 1997 |
| | Oeste - Minsal | 110 | 1 | 33,0 | 50 | Additional | 1997 |
| T 1 N 1 | | | | | | | |
| Transelec Norte | Atacama - Encuentro | 220 | 2 | 153x2 | 416x2 | Additional | 1999 |
| | Atacama - Esmeralda | 220 | 1 | 70,0 | 189 | Subtransmission | 2001 |
| | Crucero - Encuentro 1 | 220 | | 0,83 | 404 | Trunk | 1999 |
| | Crucero - Encuentro 2 | 220 | 1 | 1,10 | 404 | Trunk | 2000 |
| | Crucero - Lagunas 2 | 220 | 1 | 173,2 | 183 | Additional | 1998 |
| | Tarapacá - Lagunas | 220 | 2 | 56x2 | 200x2 | Additional | 1998 |
| | Tarapacá - Cóndores | 220 | 1 | 70,0 | 189 | Subtransmission | 2002 |
| | Cóndores - Parinacota | 220 | 1 | 225,0 | 189 | Subtransmission | 2002 |
| Minera Zaldívar | Crucero - Laberinto | 220 | 1 | 133,0 | 330 | Additional | 1994 |
| | Laberinto - Nueva Zaldívar | 220 | 1 | 75,0 | 330 | Additional | 1994 |

| Owner | Transmission Line | Voltage (kV) | N° of Circuits | Approx. Legth (km) | Capacity (MVA) | | Year Pu nto servi |
|---|--|-----------------|-------------------|--------------------|-------------------|------------------------------------|----------------------|
| Minera Escondida | Atacama - Domeyko | 220 | 2 | 205x2 | 203x2 | Additional | 1999 |
| | Mejillones - O'Higgins | 220 | 1 | 73,0 | 183 | Additional | 2006 |
| | Crucero - Escondida | 220 | 1 | 236,0 | 270 | Additional | 1995 |
| | Domeyko - Escondida | 220 | 1_ | 7,0 | 180 | Additional | 1999 |
| | Domeyko - Laguna Seca | 220 | 1 | 13,0 | 256 | Additional | 2001 |
| | Domeyko - Planta Óxidos | 220 | 1 | 1,0 | 100 | Additional | 1998 |
| | Domeyko - Sulfuros | 220 | 1 | 1,0 | 293 | Additional | 2005 |
| | Nueva Zaldívar - Sulfuros | 220 | 1 | 13,0 | 293 | Additional | 2006 |
| | O'Higgins - Coloso | 220 | 1 | 32,0 | 163 | Additional | 1993 |
| | O'Higgins - Domeyko | 220 | | 128,0 | 180 | Additional | 1999 |
| | Zaldívar - Escondida | 220 | 1 | 14,0 | 300 | Additional | 1995 |
| Codelco Norte | Chuquicamata - A | 100 | 2 | 9,0 | 100x2 | Additional | - |
| | Chuquicamata - Km6 | 100 | 1 | 5,9 | 100 | Additional | - |
| | Salar - Km6 | 100 | 2 | 2,2 | 60 | Additional | - |
| Minera Collahuasi | Lagunas - Collahuasi 1 | 220 | 1 | 118,0 | 180 | Additional | 1996 |
| | Lagunas - Collahuasi 2 | 220 | 1 | 118,0 | 180 | Additional | 1998 |
| | Encuentro - Collahuasi | 220 | 1 | 201,0 | 109 | Additional | 2004 |
| Minera Quebrada Blanca | Collahuasi - Quebrada Blanca | 220 | 1 | 18,0 | 180 | Additional | 2002 |
| Minera El Tesoro | Encuentro - El Tesoro | 220 | 1 | 90,0 | 125 | Additional | 2000 |
| Minera Spence | Encuentro - Spence | 220 | 1 | 67,0 | 318 | Additional | 2005 |
| Planta Molycop | Chacaya - Molycop | 220 | 1 | 0,8 | 291 | Additional | 2004 |
| undición Alto Norte | Antofagasta - Alto Norte | 110 | 1 | 24,0 | 122 | Subtransmission / Additional | 1993 |
| Minera Michilla | Mejillones - El Lince | 110 | 1 | 72,0 | 30 | Additional | 1991 |
| Minera Cerro Colorado | Pozo Almonte - Cerro Colorado | 110 | 1 | 61,0 | 164 | Additional | 1993 |
| Grace | Barriles - Mantos de la Luna | 110 | 1 | 27,0 | 70 | Additional | 2005 |
| Minera Meridian | Tap Off Palestina - El Peñón | 66 | 1 | 65,7 | 60 | Additional | 1999 |
| Enaex | Endesa - Enaex | 110 | 1 | 1,4 | 93 | Additional | 1999 |
| Endesa | Mejillones - Endesa | 110 | 1 | 0,08 | 93 | Additional | 1999 |
| Minera Rayrock | Tap Off Pampa - Iván Zar | 66 | 1 | 17,0 | 8 | Additional | 1994 |
| Minera Haldeman | Pozo Almonte - Sagasca | 66 | 1 | 55,0 | 5 | Additional | 1971 |
| Emelari | Tap Off Quiani - Quiani | 66 | 1 | 3,97 | 16 | Subtransmission | 1998 |
| ransemel | Esmeralda - La Portada | 110 | _ 1 | 17,1 | 73 | Subtransmission | 2001 |
| | Esmeralda - Centro | 110 | 1 | 0,6 | 73 | Subtransmission | 2001 |
| | Esmeralda - Uribe | 110 | 1 | 16,2 | 73 | Subtransmission | 2001 |
| | Esmeralda - Sur | 110 | 1 | 6,7 | 73 | Subtransmission | 2002 |
| | Cóndores - Alto Hospicio | 110 | 1 | 2,7 | 80 | Subtransmission | 2002 |
| | Alto Hospicio - Dragón | 110 | 1 | 2,2 | 80 | Subtransmission | 2002 |
| | Cóndores - Palafitos | 110 | 1 | 8,6 | 73 | Subtransmission | 2002 |
| | Cóndores - Pacífico | 110 | 1 | 10,5 | 73 | Subtransmission | 2002 |
| | Parinacota - Quiani | 66 | 1 | 3,9 | 44 | Subtransmission | 2002 |
| | Parinacota - Chinchorro Parinacota - Pukará | 66 66 | 1 | 3,5 2,5 | 44 | Subtransmission Subtransmission | 2002 2002 |
| | i aiiilabula - Fukala | 66 | | | 44 | Subtransinission | 2002 |
| T-1-1 00 1) / 1 : | | | | 348,2 | 465 | | |
| Total 66 kV Lines | | | | | | | |
| Total 110 kV Lines | | | | 1.247,0 | 2.186 | | |
| Total 66 kV Lines Total 110 kV Lines Total 220 kV Lines Total 345 kV Lines | | | | 4.261,6 408,0 | 15.215 777 | | |

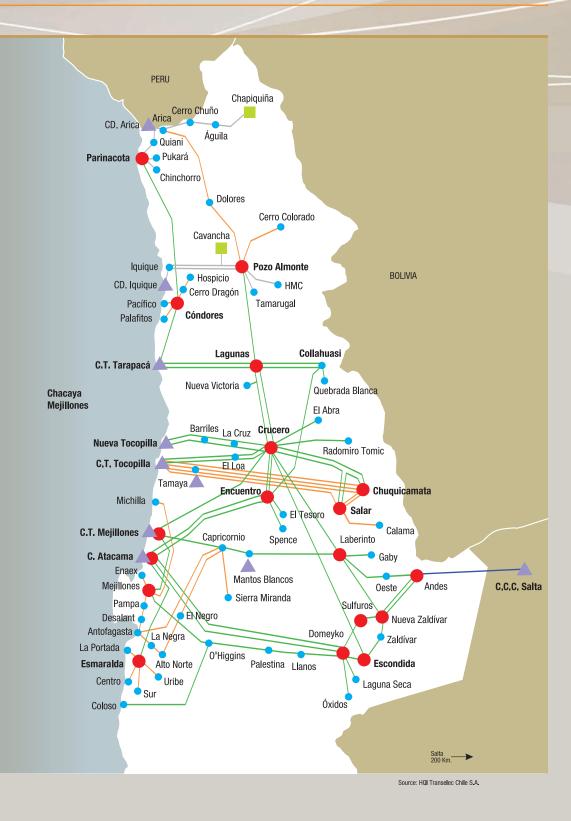
Notes: (1) Ownership of the line is shared, as detailed below:

Crucero - Tower 340 Stretch owned by Electroandina; Tower 340 - Salar Stretch owned by Codelco Norte.

⁽²⁾ Ownership of the line is shared, as detailed below: Salar - Tower 340 Stretch owned by Codelco Norte; Tower 340 - Chuquicamata Stretch owned by Electroandina.

MAJOR SING CUSTOMERS AT DECEMBER 2008

| CUSTOMER | CATEGORY | SUPPLY BUSBAR | SUPPLIER |
|---------------------------|--------------|--|-----------------------|
| ACF Minera | Mining | Lagunas 220 kV | Celta |
| Aguas Blancas | Mining | Mejillones 220 kV | Edelnor |
| Aguas del Altiplano | Industrial | Pozo Almonte 66 kV - Tamarugal 66 kV - Arica 66 kV | Edelnor - Gasatacama |
| Altonorte | Industrial | Antofagasta 110 kV | Edelnor |
| Cerro Colorado | Mining | Pozo Almonte 220 kV | Edelnor |
| Chuquicamata | Mining | Crucero 220 kV - C.Tocopilla 110 kV | Electroandina |
| Cia. Portuaria Mejillones | Industrial | Mejillones 23 kV | Edelnor |
| Collahuasi | Mining | Lagunas 220 kV | Celta - Gasatacama |
| Cosayach | Mining | Pozo Almonte 66 kV | Edelnor |
| Atacama Agua | Industrial | Antofagasta 110 kV | Edelnor |
| Minera Nueva Victoria | Mining | Lagunas 220 kV | Celta |
| El Abra | Mining | Crucero 220 kV | Electroandina |
| El Peñón | Mining | C. Atacama 220 kV | Gasatacama |
| El Tesoro | Mining | Encuentro 220 kV | Gasatacama |
| Elecda | Distribution | Esmeralda 110 kV | Gasatacama |
| Eligsa | Distribution | Cóndores 110 kV | Gasatacama |
| Emelari | Distribution | Parinacota 66 kV | Gasatacama |
| Enaex | Industrial | Mejillones 110 kV | Gasatacama - Edelnor |
| Escondida | Mining | Crucero 220 kV - C. Atacama 220 kV - Nueva Zaldívar 220 kV | Norgener - Gasatacama |
| Esperanza | Mining | Encuentro 220 kV | Electroandina |
| Gaby | Mining | Laberinto 220 kV | Electroandina |
| Grace | Mining | Barriles 220 kV | AES Gener |
| Haldeman | Mining | Pozo Almonte 66 kV | Edelnor |
| Inacesa | Industrial | Antofagasta 110 kV | Gasatacama |
| Lomas Bayas | Mining | Laberinto 220 kV | AES Gener - Edelnor |
| Mantos Blancos | Mining | Mantos Blancos 220 kV | Edelnor |
| Michilla | Mining | Mejillones 110 kV | Edelnor |
| Molycop | Industrial | Chacaya 220 kV | Edelnor |
| Polpaico | Industrial | Mejillones 23 kV | Edelnor |
| Quebrada Blanca | Mining | Collahuasi 220 kV | Gasatacama |
| Quiborax | Mining | Arica 66 kV | Edelnor |
| Radomiro Tomic | Mining | Crucero 220 kV | Electroandina |
| Rayrock | Mining | Antofagasta 110 kV | Edelnor |
| Santa Margarita | Mining | Calama 100 kV | Electroandina |
| Sermob | Industrial | Antofagasta 23 kV | Edelnor |
| Sierra Miranda | Mining | Capricornio 23 kV, Capricornio 110 kV | Edelnor |
| Spence | Mining | Encuentro 220 kV | Edelnor |
| SQM EI Loa | Mining | Crucero 220 kV | Electroandina |
| SQM Nitratos | Mining | Crucero 220 kV | Norgener |
| SQM Nva.Victoria | Mining | Lagunas 220 kV | Electroandina |
| SQM Salar | Mining | Laberinto 220 kV | Norgener |
| SQM Salar | Mining | El Negro 110 kV | Electroandina |
| Zaldívar | Mining | Laberinto 220 kV | AES Gener - Edelnor |



REFERENCES

- Important Nodes
- Substation
- Thermal Power Plant
- Hydro Power Plant
- --- 345 kV Line
- ____ 220 kV Line
- ---- 110 kV Line
- Minor Lines







GENERATION AND TRANSMISSION PROJECTS

During 2008 the startups of the following facilities were registered:

- Company: Minera Gaby
 - Project: Gaby Substation. Facilities and start up:
 - Gaby Substation. Consumption projected at 67 MW.
- Company: Electroandina
 - Project: Laberinto-Gaby 220 kV Line
 - Facilities and start up:
 - 62 km long and 189 MVA Laberinto-Gaby 220 kV line.
- Company: Minera Atacama Minerals
 - Project: Aguas Blancas Facilities and start up:
 - Tap-Off Llanos and Aguas Blancas Substation.
- Company: Minera Escondida.
 - Project: Aggreko Diesel Power
 - Facilities and start up:
 - 72 generating units of 1.034MW power each one.
- Company: Cerro Colorado Mining Company.
 - Project: Backup generation units. Facilities and start up:
 - 5 generating units of 1.276 MW power each one.

OPERATION

The annual gross production of the SING in 2008, reached 13,946 GWh which is broken down according their fuel, into:

- 58.5% Coal
- 11.8% Natural Gas
- 29.2% Heavy Oil and Diesel
- 0.5% Hydraulic generation

The growth of consumption compared to 2007 reflects an increase of 3.9% of the gross energy generation and of 4.3% in the total energy sales. Divided by client type, 89.5% corresponds to free clients (mining and industrial consumption), and 10.5% to regulated clients (distribution companies).

The maximum demand of the system ocurred on December 21th 2008 at 10 PM, which is reflected by a gross generation value of 1,897 MW, representing an increase of 8.3% over 2007.

OTHERS

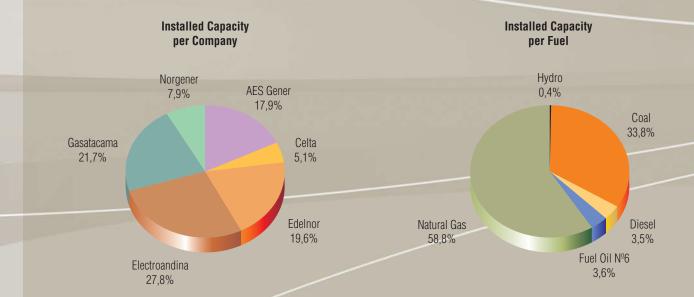
On August 4th 2008, the SD 291/2008 was issued, approving the regulation that established the structure, workings and financing of the Economic Load Dispatch Centers.

On October 9th 2008, the Assembly where the new Permanent and Replacement Directors for each one of the Segment contained in the SD 291/2008 was held.

On October 16th 2008 the discrepancy that originated in the Assembly to elect the CDEC-SING's Board of Directors, in which it did not achieve the designation of the two Directors of the Segment representing the Trunk Transmission was sent to the Panel of Experts.

After the Panel of Expert's Report N° 17 - 2008, on November 10th 2008, the CDEC-SING's Board of Directors was established in accordance with SD 291/2008, being conformed by ten permanent representatives and the same number of replacements. The same day, Mr. Pedro de la Sotta Sánchez is chosen as the President of the Board of Directors of CDEC-SING.





INSTALLED CAPACITY PER COMPANY 1999-2008

IN PHYSICAL UNITS (MW)

| Company \ Year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Celta | 158 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 |
| Edelnor | 471 | 722 | 719 | 719 | 719 | 719 | 719 | 719 | 722 | 705 |
| Electroandina | 629 | 629 | 1.029 | 1.029 | 1.037 | 992 | 992 | 992 | 992 | 1.000 |
| Endesa | 98 | | | | | | | | | |
| AES Gener | 416 | 643 | 643 | 643 | 643 | 643 | 643 | 643 | 643 | 643 |
| Gasatacama | 588 | 588 | 590 | 783 | 783 | 783 | 783 | 783 | 781 | 781 |
| Norgener | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 283 | 283 |
| TOTAL | 2.637 | 3.040 | 3.440 | 3.633 | 3.641 | 3.596 | 3.596 | 3.596 | 3.602 | 3.593 |

IN PERCENTAGES (%)

| Company \ Year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Celta | 6,0% | 6,0% | 5,3% | 5,0% | 5,0% | 5,1% | 5,1% | 5,1% | 5,0% | 5,1% |
| Edelnor | 17,9% | 23,7% | 20,9% | 19,8% | 19,8% | 20,0% | 20,0% | 20,0% | 20,0% | 19,6% |
| Electroandina | 23,9% | 20,7% | 29,9% | 28,3% | 28,5% | 27,6% | 27,6% | 27,6% | 27,5% | 27,8% |
| Endesa | 3,7% | | | | | | | | | |
| AES Gener | 15,8% | 21,1% | 18,7% | 17,7% | 17,7% | 17,9% | 17,9% | 17,9% | 17,8% | 17,9% |
| Gasatacama | 22,3% | 19,3% | 17,2% | 21,6% | 21,5% | 21,8% | 21,8% | 21,8% | 21,7% | 21,7% |
| Norgener | 10,5% | 9,1% | 8,1% | 7,6% | 7,6% | 7,7% | 7,7% | 7,7% | 7,9% | 7,9% |
| TOTAL | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

INSTALLED CAPACITY PER TYPE OF FUEL 1999 - 2008

IN PHYSICAL UNITS (MW)

| Fuel | Company | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Hydro | Edelnor | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Subtotal | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Coal | Celta | 158 | 158 | 158 | 158 | 158 | 158 | 158 | 158 | 158 | 158 |
| | Edelnor | 341 | 341 | 341 | 341 | 341 | 341 | 341 | 341 | 341 | 341 |
| | Electroandina | 429 | 429 | 429 | 429 | 429 | 429 | 429 | 429 | 429 | 438 |
| | Norgener | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 277 | 277 |
| Subtotal | | 1.206 | 1.206 | 1.206 | 1.206 | 1.206 | 1.206 | 1.206 | 1.206 | 1.206 | 1.214 |
| Diesel | Celta | | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| | Edelnor | 65 | 65 | 62 | 62 | 62 | 62 | 62 | 62 | 65 | 48 |
| | Electroandina | 80 | 42 | 42 | 42 | 50 | 50 | 50 | 50 | 50 | 50 |
| | Endesa | 98 | | | | | | | | | |
| | Gasatacama | | | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | Norgener | | | | | | | | | 6 | 6 |
| Subtotal | | 242 | 130 | 130 | 130 | 138 | 138 | 138 | 138 | 144 | 127 |
| Fuel Oil | Edelnor | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 |
| | Electroandina | 120 | 120 | 120 | 120 | 120 | 75 | 75 | 75 | 75 | 75 |
| Subtotal | | 173 | 173 | 173 | 173 | 173 | 128 | 128 | 128 | 128 | 128 |
| Natural Gas | Edelnor | | 251 | 251 | 251 | 251 | 251 | 251 | 251 | 251 | 251 |
| | AES Gener | 416 | 643 | 643 | 643 | 643 | 643 | 643 | 643 | 643 | 643 |
| | Gasatacama | 588 | 588 | 588 | 781 | 781 | 781 | 781 | 781 | 781 | 781 |
| | Electroandina | | 38 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 |
| Subtotal | | 1.004 | 1.519 | 1.919 | 2.112 | 2.112 | 2.112 | 2.112 | 2.112 | 2.112 | 2.112 |
| TOTAL | | 2.637 | 3.040 | 3.440 | 3.633 | 3.641 | 3.596 | 3.596 | 3.596 | 3.602 | 3.593 |

Notes:

EN PERCENTAGES (%)

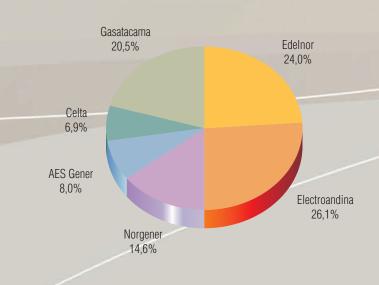
| Fuel | Company | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Hydro | Edelnor | 0,5% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% |
| Subtotal | | 0,5% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% | 0,4% |
| Coal | Celta | 6,0% | 5,2% | 4,6% | 4,3% | 4,3% | 4,4% | 4,4% | 4,4% | 4,4% | 4,4% |
| | Edelnor | 12,9% | 11,2% | 9,9% | 9,4% | 9,4% | 9,5% | 9,5% | 9,5% | 9,5% | 9,5% |
| | Electroandina | 16,3% | 14,1% | 12,5% | 11,8% | 11,8% | 11,9% | 11,9% | 11,9% | 11,9% | 12,2% |
| | Norgener | 10,5% | 9,1% | 8,1% | 7,6% | 7,6% | 7,7% | 7,7% | 7,7% | 7,7% | 7,7% |
| Subtotal | | 45,7% | 39,7% | 35,0% | 33,2% | 33,1% | 33,5% | 33,5% | 33,5% | 33,5% | 33,8% |
| Diesel | Celta | | 0,8% | 0,7% | 0,7% | 0,7% | 0,7% | 0,7% | 0,7% | 0,7% | 0,7% |
| | Edelnor | 2,5% | 2,1% | 1,8% | 1,7% | 1,7% | 1,7% | 1,7% | 1,7% | 1,8% | 1,3% |
| | Electroandina | 3,0% | 1,4% | 1,2% | 1,2% | 1,4% | 1,4% | 1,4% | 1,4% | 1,4% | 1,4% |
| | Endesa | 3,7% | | | | | | | | | |
| | Gasatacama | | | 0,1% | 0,1% | 0,1% | 0,1% | 0,1% | 0,1% | | |
| | Norgener | | | | | | | | | 0,2% | 0,2% |
| Subtotal | | 9,2% | 4,3% | 3,8% | 3,6% | 3,8% | 3,8% | 3,8% | 3,8% | 4,0% | 3,5% |
| Fuel Oil | Edelnor | 2,0% | 1,7% | 1,5% | 1,4% | 1,4% | 1,5% | 1,5% | 1,5% | 1,5% | 1,5% |
| | Electroandina | 4,6% | 3,9% | 3,5% | 3,3% | 3,3% | 2,1% | 2,1% | 2,1% | 2,1% | 2,1% |
| Subtotal | | 6,5% | 5,7% | 5,0% | 4,8% | 4,7% | 3,5% | 3,5% | 3,5% | 3,5% | 3,6% |
| Natural Gas | Edelnor | | 8,2% | 7,3% | 6,9% | 6,9% | 7,0% | 7,0% | 7,0% | 7,0% | 7,0% |
| | AES Gener | 15,8% | 21,1% | 18,7% | 17,7% | 17,7% | 17,9% | 17,9% | 17,9% | 17,8% | 17,9% |
| | Gasatacama | 22,3% | 19,3% | 17,1% | 21,5% | 21,4% | 21,7% | 21,7% | 21,7% | 21,7% | 21,7% |
| | Electroandina | | 1,2% | 12,7% | 12,0% | 12,0% | 12,2% | 12,2% | 12,2% | 12,1% | 12,2% |
| Subtotal | | 38,1% | 50,0% | 55,8% | 58,1% | 58,0% | 58,7% | 58,7% | 58,7% | 58,6% | 58,8% |
| TOTAL | | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

Notes: * Starting 2000, Electroandina's TG3 Unit is considered to be fueled with natural gas.

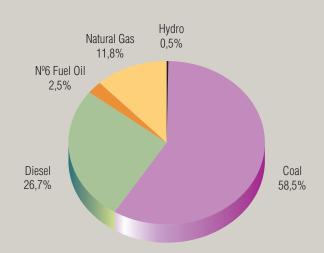
^{*} Starting 2000, Electroandina's TG3 Unit is considered to be fueled with natural gas. * Edelnor's generating units using Diesel-Fuel Oil mixtures are associated to Fuel Oil.

^{*} Edelnor's generating units using Diesel-Fuel Oil mixtures are associated to Fuel Oil.

Gross Generation by Companies Total: 14.502,3 GWh



Gross Generation by Fuels Total: 14.502,3 GWh



GENERATION BY SING POWER PLANTS 2008 (GWh)

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| ELECTROANDINA | | | | | | | | | | | | | |
| U10 - U11 | 29,1 | 24,0 | 32,8 | 34,2 | 33,3 | 29,0 | 30,7 | 32,1 | 32,9 | 20,3 | 14,1 | 9,0 | 321,6 |
| U12 - U13 | 113,2 | 105,4 | 60,2 | 95,1 | 98,1 | 101,7 | 90,9 | 84,5 | 51,6 | 109,9 | 105,0 | 109,3 | 1.124,9 |
| U14 - U15 | 85,3 | 84,4 | 159,6 | 95,9 | 161,5 | 170,0 | 177,9 | 175,9 | 177,9 | 159,2 | 177,2 | 159,1 | 1.784,1 |
| U16 | 24,4 | 2,3 | 46,1 | 58,4 | 40,9 | 0,0 | 51,3 | 3,0 | 0,0 | 17,1 | 71,1 | 159,2 | 473,9 |
| TG1 | 0,0 | 0,4 | 1,1 | 2,7 | 2,8 | 0,3 | 0,6 | 2,5 | 1,0 | 0,3 | 0,6 | 0,0 | 12,3 |
| TG2 | 3,6 | 0,8 | 0,7 | 2,0 | 2,1 | 0,1 | 0,5 | 0,9 | 1,1 | 0,2 | 0,4 | 0,0 | 12,5 |
| TG3 | 10,1 | 4,5 | 0,0 | 4,6 | 8,9 | 5,2 | 0,5 | 8,1 | 7,7 | 2,9 | 3,3 | 0,2 | 55,9 |
| Total Gross Generation | 265,8 | 221,9 | 300,6 | 293,0 | 347,7 | 306,3 | 352,4 | 307,1 | 272,2 | 310,0 | 371,7 | 436,7 | 3.785,2 |
| Plant Consumption | 15,8 | 15,2 | 21,3 | 18,8 | 23,2 | 22,1 | 24,2 | 22,1 | 20,2 | 22,4 | 24,2 | 25,1 | 254,3 |
| Total Net Generation | 250,0 | 206,7 | 279,4 | 274,2 | 324,5 | 284,2 | 328,2 | 285,0 | 252,0 | 287,6 | 347,5 | 411,6 | 3.530,9 |
| EDELNOR | | | | | | | | | | | | | |
| CHAPIQUIÑA | 5,7 | 4,2 | 4,4 | 3,9 | 4,3 | 4,4 | 4,5 | 4,1 | 3,8 | 4,0 | 4,5 | 4,8 | 52, |
| CAVANCHA | 1,3 | 1,2 | 1,3 | 1,2 | 1,3 | 1,2 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 15, |
| CD ARICA | 4,3 | 1,5 | 1,9 | 2,7 | 4,4 | 2,2 | 2,7 | 4,0 | 3,7 | 1,4 | 1,9 | 1,0 | 31, |
| CD IQUIQUE | 6,4 | 4,4 | 3,8 | 5,2 | 5,7 | 5,2 | 2,7 | 10,0 | 7,9 | 4,4 | 3,4 | 1,2 | 60, |
| CD ANTOFAGASTA | 0,0 | 0,0 | 0,0 | 0,0 | 0,2 | 0,2 | 0,7 | 1,7 | 1,7 | 0,5 | 0,3 | 0,3 | 5, |
| CD MANTOS BLANCOS | 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, |
| CTM3 | 85,7 | 64,2 | 60,4 | 59,6 | 135,3 | 96,1 | 89,0 | 113,5 | 58,1 | 10,1 | 0,0 | 41,9 | 813, |
| CTM2 | 95,3 | 101,0 | 76,7 | 99,7 | 119,2 | 110,2 | 120,5 | 120,7 | 116,8 | 101,4 | 116,7 | 119,7 | 1.298, |
| CTM1 | 114,3 | 98,1 | 105,8 | 107,4 | 30,0 | 110,2 | 83,8 | 111,7 | 110,4 | 113,1 | 107,2 | 109,7 | 1.201, |
| DEUTZ | 0,1 | 0,0 | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0, |
| CUMMINS | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 | 0, |
| Total Gross Generation | 313,1 | 274,6 | 254,3 | 279,8 | 300,5 | 329,8 | 305,2 | 366,9 | 303,8 | 236,3 | 235,4 | 280,1 | 3.479, |
| Plant Consumption | 19,9 | 18,0 | 16,8 | 18,5 | 16,9 | 21,4 | 20,6 | 23,1 | 20,7 | 16,5 | 17,3 | 19,8 | 229, |
| Total Net Generation | 293,1 | 256,6 | 237,4 | 261,4 | 283,6 | 308,4 | 284,6 | 343,7 | 283,1 | 219,8 | 218,1 | 260,3 | 3.250, |
| CELTA | | | | | | | | | | | | | |
| CTTAR | 99,0 | 93,8 | 87,0 | 95,1 | 104,7 | 100,3 | 101,4 | 99,1 | 99,6 | 97,8 | 3,1 | 0,0 | 981, |
| rgtar | 1,7 | 0,7 | 0,4 | 1,4 | 2,9 | 0,8 | 1,3 | 3,5 | 2,4 | 0,8 | 1,4 | 0,7 | 17, |
| Total Gross Generation | 100,7 | 94,5 | 87,4 | 96,5 | 107,6 | 101,1 | 102,7 | 102,6 | 102,1 | 98,6 | 4,4 | 0,7 | 998, |
| Plant Consumption | 7,9 | 7,5 | 7,2 | 7,8 | 8,5 | 8,3 | 8,6 | 8,3 | 8,3 | 8,2 | 0,3 | 0,0 | 80, |
| Total Net Generation | 92,8 | 87,1 | 80,2 | 88,7 | 99,1 | 92,9 | 94,1 | 94,4 | 93,8 | 90,4 | 4,2 | 0,7 | 918, |
| NORGENER | | | | | | | | | | | | | |
| NTO1 | 94,2 | 89,4 | 93,4 | 92,1 | 88,6 | 91,6 | 94,5 | 64,2 | 58,4 | 91,1 | 88,8 | 93,2 | 1.039, |
| NTO2 | 44,8 | 90,0 | 96,5 | 83,5 | 96,5 | 94,4 | 96,5 | 83,2 | 90,8 | 96,3 | 93,0 | 95,0 | 1.060, |
| ZOFRI_1-6 | 0,2 | 0,1 | 0,1 | 0,2 | 0,3 | 0,1 | 0,2 | 0,3 | 0,2 | 0,1 | 0,2 | 0,1 | 2, |
| ZOFRI_2-5 | 1,2 | 0,5 | 0,6 | 1,4 | 1,7 | 0,7 | 1,0 | 1,2 | 1,0 | 0,4 | 1,0 | 0,5 | 11, |
| Total Gross Generation | 140,4 | 180,0 | 190,7 | 177,2 | 187,1 | 186,8 | 192,3 | 148,8 | 150,4 | 188,0 | 182,9 | 188,8 | 2.113, |
| Plant Consumption | 9,6 | 12,1 | 13,0 | 11,9 | 12,6 | 12,7 | 13,1 | 10,6 | 10,4 | 12,8 | 12,6 | 13,2 | 144, |
| Total Net Generation | 130,9 | 167,9 | 177,7 | 165,3 | 174,5 | 174,1 | 179,2 | 138,3 | 140,0 | 175,2 | 170,4 | 175,6 | 1.968,9 |

GENERATION BY SING POWER PLANTS 2008 (GWh)

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| GASATACAMA | | | | | | | | | | | | | |
| TG1A | 69,0 | 61,2 | 60,1 | 64,3 | 49,6 | 67,8 | 69,0 | 68,3 | 63,9 | 63,9 | 57,6 | 22,7 | 717,6 |
| TG1B | 67,7 | 62,0 | 59,7 | 65,6 | 74,7 | 67,9 | 65,9 | 67,8 | 65,4 | 52,7 | 35,0 | 56,9 | 741,3 |
| TV1C | 83,5 | 76,7 | 75,0 | 77,8 | 71,5 | 81,3 | 81,2 | 79,4 | 77,3 | 69,9 | 53,9 | 45,0 | 872,5 |
| TG2A | 13,2 | 5,5 | 2,8 | 19,7 | 25,5 | 5,2 | 21,9 | 25,0 | 49,4 | 60,4 | 59,8 | 42,5 | 330,9 |
| TG2B | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 25,2 | 51,1 | 47,1 | 123,5 |
| TV2C | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 14,0 | 48,7 | 68,0 | 54,6 | 185,2 |
| DEUTZ | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| CUMMINS | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Total Gross Generation | 233,4 | 205,3 | 197,6 | 227,4 | 221,3 | 222,1 | 237,9 | 240,6 | 270,1 | 320,8 | 325,5 | 268,9 | 2.970,9 |
| Plant Consumption | 5,5 | 5,2 | 5,4 | 5,4 | 5,0 | 5,3 | 5,5 | 5,0 | 6,8 | 8,3 | 8,3 | 7,5 | 73,1 |
| Total Net Generation | 227,9 | 200,2 | 192,2 | 222,0 | 216,3 | 216,8 | 232,4 | 235,6 | 263,2 | 312,6 | 317,2 | 261,4 | 2.897,8 |
| | | | | | | | | | | | | | |
| AES GENER | | | | | | | | | | | | | |
| Central Salta | 127,0 | 139,4 | 158,2 | 111,6 | 68,2 | 53,2 | 6,3 | 68,0 | 75,2 | 90,2 | 123,1 | 133,7 | 1.154,2 |
| Total Gross Generation | 127,0 | 139,4 | 158,2 | 111,6 | 68,2 | 53,2 | 6,3 | 68,0 | 75,2 | 90,2 | 123,1 | 133,7 | 1.154,2 |
| Plant Consumption | 4,8 | 4,8 | 5,2 | 3,9 | 0,3 | 0,2 | 0,0 | 0,3 | 0,5 | 0,5 | 0,6 | 0,8 | 22,1 |
| Total Net Generation | 122,2 | 134,6 | 153,0 | 107,7 | 67,8 | 53,0 | 6,3 | 67,6 | 74,7 | 89,7 | 122,5 | 133,0 | 1.132,1 |

| TOTAL SING | | | | | | | | | | | | | | |
|-------------------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------|--|
| Gross Generation | 1.180,5 | 1.115,7 | 1.188,8 | 1.185,5 | 1.232,3 | 1.199,4 | 1.196,8 | 1.233,9 | 1.173,7 | 1.243,9 | 1.243,0 | 1.308,9 | 14.502,3 | |
| Plant Consumption | 63,5 | 62,7 | 68,9 | 66,2 | 66,5 | 69,9 | 72,0 | 69,4 | 66,9 | 68,6 | 63,2 | 66,4 | 804,4 | |
| Net Generation | 1.116,9 | 1.053,0 | 1.119,9 | 1.119,3 | 1.165,8 | 1.129,4 | 1.124,8 | 1.164,5 | 1.106,8 | 1.175,3 | 1.179,8 | 1.242,5 | 13.698,0 | |
| Transmission Losses | 58,3 | 38,2 | 40,3 | 36,3 | 40,1 | 38,1 | 36,1 | 38,5 | 30,4 | 36,2 | 40,0 | 46,6 | 479,0 | |
| Sales to Unregulated Customer | rs 946,4 | 908,5 | 966,3 | 966,9 | 1.008,9 | 977,0 | 968,3 | 1.006,9 | 961,8 | 1.019,3 | 1.024,1 | 1.077,7 | 11.832,126 | |
| Sales to Regulated Customers | s 112,4 | 106,3 | 113,3 | 116,1 | 116,8 | 114,3 | 120,4 | 119,0 | 114,6 | 119,8 | 115,6 | 118,3 | 1.386,818 | |
| Total Sales | 1.058,8 | 1.014,8 | 1.079,6 | 1.083,0 | 1.125,7 | 1.091,3 | 1.088,7 | 1.125,8 | 1.076,4 | 1.139,1 | 1.139,7 | 1.196,0 | 13.218,944 | |

| TOTAL SING (en %) | | | | | | | | | | | | | |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gross Generation | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Plant Consumption | 5% | 6% | 6% | 6% | 5% | 6% | 6% | 6% | 6% | 6% | 5% | 5% | 6% |
| Net Generation | 95% | 94% | 94% | 94% | 95% | 94% | 94% | 94% | 94% | 94% | 95% | 95% | 94% |
| Transmission Losses | 5% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 4% | 3% |
| Sales to Unregulated Customers | 80% | 81% | 81% | 82% | 82% | 81% | 81% | 82% | 82% | 82% | 82% | 82% | 82% |
| Sales to Regulated Customers | 10% | 10% | 10% | 10% | 9% | 10% | 10% | 10% | 10% | 10% | 9% | 9% | 10% |
| Total Sales | 90% | 91% | 91% | 91% | 91% | 91% | 91% | 91% | 92% | 92% | 92% | 91% | 91% |

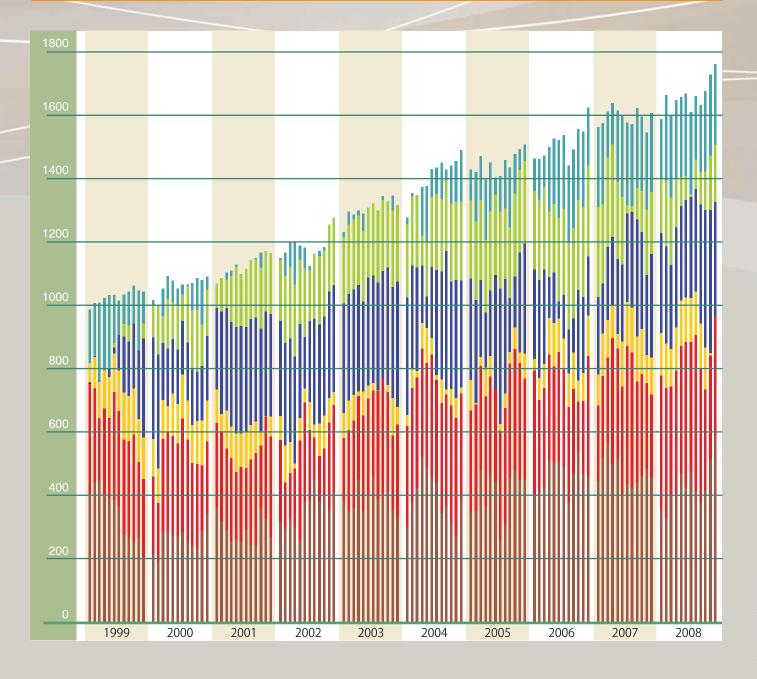
GENERATION BY SING POWER PLANTS 1999 - 2008 (GWh)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CELTA | | | | | | | | | | |
| CTTAR | 1.083 | 1.061 | 760 | 639 | 435 | 435 | 422 | 830 | 1012 | 981 |
| TGTAR | 0 | 17 | 3 | 1 | 1 | | 0 | 2 | 14 | 18 |
| Total Gross Generation | 1.083 | 1.079 | 763 | 640 | 436 | 436 | 423 | 832 | 1026 | 999 |
| Plant Consumption | 82 | 84 | 67 | 61 | 40 | 39 | 39 | 72 | 84 | 81 |
| Total Net Generation | 1.001 | 994 | 696 | 579 | 397 | 398 | 383 | 760 | 941 | 918 |
| | | | | | | | | | | |
| EDELNOR | | | | | | | | | | |
| CHAPIQUIÑA | 46 | 43 | 53 | 54 | 51 | 51 | 45 | 55 | 53 | 53 |
| CAVANCHA | 14 | 13 | 12 | 13 | 14 | 15 | 15 | 15 | 15 | 15 |
| CD ARICA | 22 | 6 | 5 | 2 | 1 | 5 | 2 | 7 | 33 | 32 |
| CD IQUIQUE | 62 | 31 | 14 | 8 | 6 | 11 | 4 | 13 | 50 | 60 |
| CD ANTOFAGASTA | 58 | 8 | 5 | 2 | 2 | 7 | 2 | 15 | 32 | 6 |
| CD MANTOS BLANCOS | 58 | 9 | 7 | 6 | 7 | 16 | 4 | 25 | 7 | 0 |
| CD ENAEX | 0 | 0 | | | | | | | 1 | 0 |
| CTM1 | 1.092 | 618 | 257 | 18 | 144 | 498,7 | 446,6 | 880 | 1057 | 1202 |
| CTM2 | 1.139 | 984 | 774 | 918 | 575 | 1.003 | 849 | 1033 | 1188 | 1298 |
| CTM3 | 2 | 711 | 1.131 | 849 | 1.695 | 1.449 | 1.601 | 600 | 400 | 814 |
| Total Gross Generation | 2.493 | 2.424 | 2.257 | 1.870 | 2.495 | 3.054 | 2.970 | 2643 | 2837 | 3480 |
| Plant Consumption | 174 | 173 | 131 | 111 | 113 | 162 | 159 | 169 | 200 | 230 |
| Total Net Generation | 2.319 | 2.251 | 2.125 | 1.759 | 2.382 | 2.892 | 2.810 | 2475 | 2637 | 3250 |
| | | | | | | | | | | |
| ELECTROANDINA | | | | | | | | | | |
| U09 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| U10 - U11 | 148 | 56 | 29 | 1 | 0 | 7 | 0 | 19 | 187 | 322 |
| U12 - U13 | 1.182 | 503 | 338 | 663 | 455 | 478 | 207 | 463 | 1052 | 1125 |
| U14 - U15 | 1.623 | 1.509 | 664 | 1.266 | 1.304 | 1.409 | 1.549 | 1.688 | 1905 | 1784 |
| U16 | | 192 | 1.458 | 1.174 | 1.627 | 1.458 | 1.753 | 1.884 | 936 | 474 |
| TG1 - TG2 | 18 | 22 | 16 | 7 | 2 | 2 | 1 | 0 | 12 | 25 |
| TG3 | 20 | 32 | 43 | 4 | 11 | 91 | 43 | 12 | 40 | 56 |
| Total Gross Generation | 3.005 | 2.315 | 2.548 | 3.115 | 3.398 | 3.444 | 3.553 | 4.066 | 4.132 | 3.785 |
| Plant Consumption | 208 | 178 | 139 | 199 | 198 | 194 | 191 | 218 | 255 | 254 |
| Total Net Generation | 2.797 | 2.137 | 2.409 | 2.917 | 3.201 | 3.250 | 3.361 | 3.848 | 3.877 | 3.531 |
| | | | | | | | | | | |
| ENDESA (1) | | | | | | | | | | |
| TG Mej. 1 - 2 | 0 | | | | | | | | | |
| TG Mej. 3 | | | | | | | | | | |
| TGTAR | 6 | | | | | | | | | |
| Total Gross Generation | 6 | | | | | | | | | |
| Plant Consumption | 0 | | | | | | | | | |
| | | | | | | | | | | |

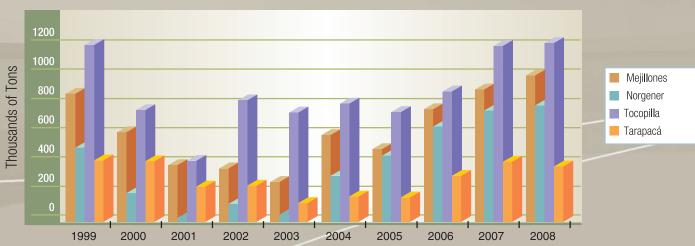
⁽¹⁾ In 1993, Endesa put into service two Gas Turbines at the Mejillones Substation, with a capacity of 74 MW, which were removed from the SING starting on January 3rd 1999, to be transferred to the SIC. In 1995, Endesa put into service one Gas Turbine at the Mejillones Substation, with a capacity of 23.75 MW, which was removed from the SING on January 1st 1997. In 1998, the Tarapacá Substation is reincorporated to the SING as property of CELTA S.A. and under the name of TGTAR.

GENERATION BY SING POWER PLANTS 1999 - 2008 (GWh)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|------------------------------------|------------------|---------------------|------------------|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| AES GENER | | | | | | | | | | |
| TG11 | 102 | | | | | | | | | |
| TG12 | 12 | | | | | | | | | |
| CC Salta | | 1.217 | 1.386 | 1.813 | 1.950 | 1.903 | 2.154 | 2.285 | 1.628 | 1.154 |
| Total Gross Generation | 114 | 1.217 | 1.386 | 1.813 | 1.950 | 1.903 | 2.154 | 2.285 | 1.628 | 1.154 |
| Plant Consumption | 0 | 27 | 35 | 45 | 46 | 43 | 44 | 46 | 38 | 22 |
| Total Net Generation | 114 | 1.191 | 1.351 | 1.768 | 1.904 | 1.860 | 2.110 | 2.239 | 1.590 | 1.132 |
| | | | | | 100 | | | | | |
| GASATACAMA | | | | | | | | | | |
| CC1 | 801 | 970 | 1.462 | 1.431 | 1.434 | 1.168 | 1.144 | 411 | 1.002 | 2.231 |
| CC2 | 116 | 812 | 1.368 | 1.216 | 1.568 | 1.530 | 1.338 | 1.285 | 1.311 | 640 |
| ENAEX | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Gross Generation | 916 | 1.782 | 2.830 | 2.647 | 3.002 | 2.698 | 2.482 | 1.696 | 2.313 | 2.971 |
| Plant Consumption | 39 | 70 | 91 | 77 | 82 | 82 | 69 | 61 | 75 | 73 |
| Total Net Generation | 877 | 1.711 | 2.739 | 2.570 | 2.920 | 2.615 | 2.413 | 1.635 | 2.237 | 2.898 |
| | | | | | | | | | | |
| NORGENER | | | | | | | | | | |
| NTO1 | 526 | 264 | 1 | 63 | 16 | 216 | 549 | 776 | 897 | 1.039 |
| NTO2 | 858 | 246 | 67 | 252 | 126 | 578 | 528 | 938 | 1.107 | 1.061 |
| ZOFRI_1-6 | | | | | | | | | 1 | 2 |
| ZOFRI_2-5 | | | | | | | | | 7 | 11 |
| Total Gross Generation | 1.384 | 510 | 68 | 315 | 142 | 794 | 1.077 | 1.714 | 2.011 | 2.113 |
| Plant Consumption | 109 | 52 | 7 | 32 | 14 | 66 | 91 | 125 | 138 | 145 |
| Total Net Generation | 1.275 | 458 | 61 | 283 | 128 | 727 | 986 | 1.589 | 1.873 | 1.969 |
| TOTAL OING | | | | | | | | | | |
| TOTAL SING | 0.004 | 0.007 | 0.054 | 40.400 | 44 404 | 40.000 | 40.057 | 40.000 | 40.040 | 44.500 |
| Gross Generation Plant Consumption | 9.001 612 | 9.327 | 9.851 471 | 10.400 524 | 11.424 | 12.330 | 12.657 | 13.236 | 13.946 | 14.502 |
| Net Generation | 8.389 | 585 8.743 | 9.381 | 9.876 | 492 10.932 | 587 11.743 | 594 12.063 | 692 12.544 | 790 13.156 | 804 13.698 |
| Transmission Losses | 269 | 345 | 390 | 394 | 452 | 503 | 503 | 515 | 481 | 479 |
| Sales to Unregulated Customers | | 7.499 | 8.046 | 8.473 | 9.433 | 10.164 | 10.401 | 10.774 | 11.343 | 11.832 |
| Sales to Regulated Customers | | 899 | 945 | 1.009 | 1.047 | 1.075 | 1.159 | 1.256 | 1.332 | 1.387 |
| Total Sales | 8.120 | 8.398 | 8.991 | 9.482 | 10.480 | 11.240 | 11.560 | 12.029 | 12.674 | 13.219 |
| Total bales | 0.120 | 0.030 | 0.331 | 3.402 | 10.400 | 11.240 | 11.000 | 12.023 | 12.074 | 10.213 |
| TOTAL SING (%) | | | | | | | | | | |
| Gross Generation | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Plant Consumption | 7% | 6% | 5% | 5% | 4% | 5% | 5% | 5% | 6% | 6% |
| Net Generation | 93% | 94% | 95% | 95% | 96% | 95% | 95% | 95% | 94% | 94% |
| Transmission Losses | 3% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 3% | 3% |
| Sales to Unregulated Customers | | 80% | 82% | 81% | 83% | 82% | 82% | 81% | 81% | 82% |
| Sales to Regulated Customers | | 10% | 10% | 10% | 9% | 9% | 9% | 9% | 10% | 10% |
| Total Sales | 90% | 90% | 91% | 91% | 92% | 91% | 91% | 91% | 91% | 91% |



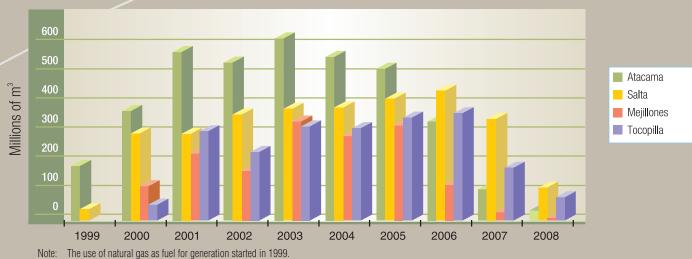
ANNUAL CONSUMPTION OF COAL PER PLANT



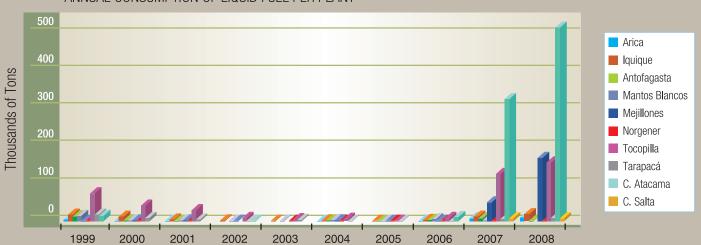
Note: Starting from 2001, the consumption of the Mejillones Power Plant is based on a Coal-Petcoke mix.

Starting from 2004, the consumption of the Tocopilla and Norgener Power Plants is based on a Coal-Petcoke mix.

ANNUAL CONSUMPTION OF NATURAL GAS PER PLANT



ANNUAL CONSUMPTION OF LIQUID FUEL PER PLANT



Note: The consumption of liquid fuel corresponds to Diesel Oil and Fuel Oil Nº 6.

| | | Sales | | | Growth | |
|------|--------------------------|------------------------|--------|--------|-------------------|-------------|
| Year | Unregulated Customers | Regulated Customers | Total | Annual | Average Growth | Accumulated |
| 1999 | 7.313 | 807 | 8.120 | 22,7% | 19,1% | 139,2% |
| 2000 | 7.499 | 899 | 8.398 | 3,4% | 16,5% | 147,4% |
| 2001 | 8.046 | 945 | 8.991 | 7,1% | 15,2% | 164,9% |
| 2002 | 8.473 | 1.009 | 9.482 | 5,5% | 13,9% | 179,3% |
| 2003 | 9.433 | 1.047 | 10.480 | 10,5% | 13,6% | 208,8% |
| 2004 | 10.164 | 1.075 | 11.240 | 7,2% | 12,9% | 231,1% |
| 2005 | 10.401 | 1.159 | 11.560 | 2,8% | 12,0% | 240,6% |
| 2006 | 10.774 | 1.256 | 12.029 | 4,1% | 11,4% | 254,4% |
| 2007 | 11.343 | 1.332 | 12.674 | 5,4% | 10,9% | 273,4% |
| 2008 | 11.832 | 1.387 | 13.219 | 4,3% | 10,4% | 289,4% |

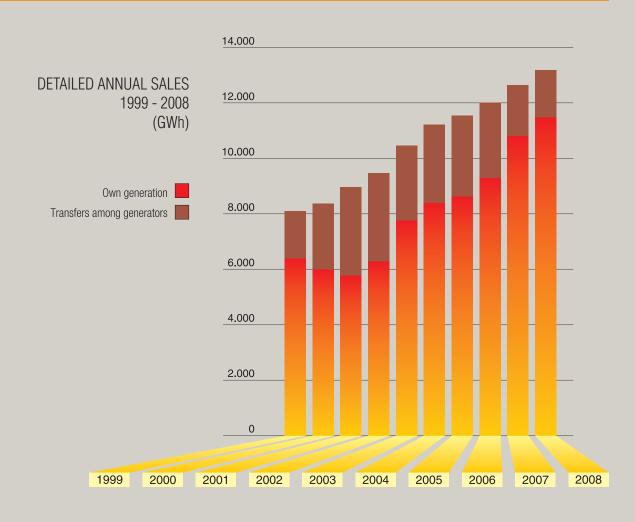
Note: The accumulated percent growth refers to 1994 sales (3,394.4 GWh).

Annual sales equal net generation less transmission losses.



DETAILED ANNUAL SING SALES 1999 - 2008

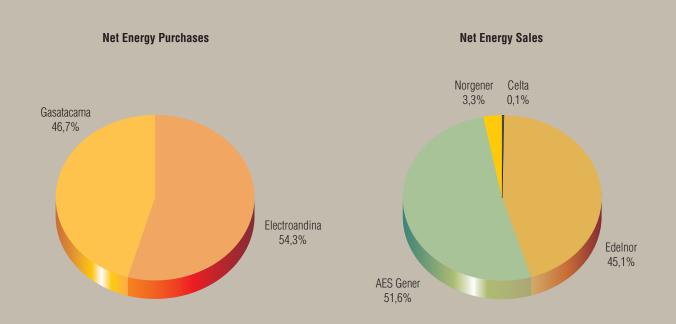
| Year | Energy Sales (GWh) | Own Generation (GWh) | Transfers among Generators (GWh) | Transfers Sales/Percentage (%) |
|------|-----------------------|-------------------------|-------------------------------------|--------------------------------|
| 1999 | 8.120 | 6.415 | 1.705 | 21% |
| 2000 | 8.398 | 6.007 | 2.391 | 28% |
| 2001 | 8.991 | 5.808 | 3.183 | 35% |
| 2002 | 9.482 | 6.299 | 3.183 | 34% |
| 2003 | 10.480 | 7.777 | 2.703 | 26% |
| 2004 | 11.240 | 8.407 | 2.832 | 25% |
| 2005 | 11.560 | 8.654 | 2.905 | 25% |
| 2006 | 12.029 | 9.332 | 2.698 | 22% |
| 2007 | 12.674 | 10.838 | 1.836 | 14% |
| 2008 | 13.219 | 11.513 | 1.706 | 13% |



ENERGY TRANSFERS AMONG CDEC-SING GENERATORS (GWh) 2008

| COMPANY | | JAN. | FEB. | MAR. | APR. | MAY. | JUN. | JUL. | AUG. | SEP. | OCT. | NOV. | DEC. | TOTAL |
|---------------|-----------|-------|-------|------|------|------|-------|------|------|-------|------|-------|-------|-------|
| CELTA | Purchases | | | | | | | | | | | 75,8 | 85,7 | 161,5 |
| | Sales | 15,4 | 20,0 | 0,8 | 7,4 | 20,7 | 20,1 | 12,7 | 16,3 | 31,3 | 17,9 | | | 162,6 |
| EDELNOR | Purchases | | | | | | | | | | 48,2 | 43,7 | 23,2 | 115,1 |
| | Sales | 111,0 | 89,5 | 49,9 | 69,8 | 78,9 | 123,0 | 46,0 | 88,6 | 38,5 | | | | 695,1 |
| ELECTROANDINA | Purchases | 103,8 | 125,4 | 54,8 | 62,7 | 33,8 | 58,4 | 26,9 | 81,9 | 101,5 | 79,7 | 10,4 | | 739,5 |
| | Sales | | | | | | | | | | | | 40,6 | 40,6 |
| AES GENER | Purchases | | | | | | 10,6 | 2,4 | | | | | | 13,0 |
| | Sales | 50,2 | 67,8 | 80,3 | 40,8 | 1,1 | | | 56,8 | 64,9 | 80,2 | 112,1 | 122,4 | 676,7 |
| GASATACAMA | Purchases | 51,5 | 64,2 | 94,4 | 61,7 | 73,8 | 84,1 | 60,2 | 59,5 | 16,7 | | | 51,3 | 617,4 |
| | Sales | | | | | | | | | | 14,1 | 14,8 | | 28,9 |
| NORGENER | Purchases | 21,3 | | | | | | | 20,2 | 16,5 | | | 2,9 | 60,9 |
| | Sales | | 12,2 | 18,2 | 6,4 | 6,9 | 10,0 | 30,7 | | | 15,7 | 3,1 | | 103,4 |

Note: The amounts indicated do not include the sales operations between Edelnor and Electroandina.



ENERGY TRANSFERS AMONG CDEC-SING GENERATORS (GWh) 1999 - 2008

| | | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---------------|-----------|-------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| CELTA | Purchases | | 21,2 | 263,6 | 390,8 | 601,4 | 663,2 | 628,5 | 343,1 | 160,0 | 161,5 |
| | Sales | 419,7 | 116,0 | 10,4 | | | | | 0,2 | 45,2 | 162,6 |
| EDELNOR | Purchases | 97,1 | 97,8 | 54,9 | | | | | 26,2 | | 115,1 |
| | Sales | 273,0 | 255,3 | 292,1 | 801,1 | 1.263,8 | 1.637,3 | 1.522,8 | 1.057,6 | 714,9 | 695,1 |
| ELECTROANDINA | Purchases | 733,3 | 1.438,0 | 1.497,4 | 1.109,5 | 831,7 | 1.000,1 | 968,1 | 540,8 | 382,3 | 739,4 |
| | Sales | 20,2 | | | | | 18,9 | | 23,0 | 69,8 | 40,6 |
| ENDESA | Purchases | 260,2 | | | | | | | | | |
| | Sales | - | | | | | | | | | |
| AES GENER | Purchases | 397,4 | | 2,7 | | | | | | 121,0 | 13,0 |
| | Sales | | 473,7 | 629,2 | 997,8 | 1.088,9 | 1.050,3 | 1.335,6 | 1.357,0 | 812,2 | 676,7 |
| GASATACAMA | Purchases | 0,3 | | | 24,0 | 3,5 | 430,2 | 806,1 | 1.638,1 | 1.126,2 | 617,4 |
| | Sales | 844,4 | 1.549,6 | 2.251,5 | 792,7 | 350,1 | 126,3 | 36,1 | | | 28,9 |
| NORGENER | Purchases | 216,4 | 833,9 | 1.364,7 | 1.067,2 | 1.266,1 | 739,2 | 503,1 | 150,3 | 104,4 | 60,9 |
| | Sales | 172,0 | | | | | | 11,3 | 260,7 | 251,7 | 103,4 |
| | | | | | | | | | | | |

Note: Provisional values from May 2000 to December 2008.

POWER TRANSFERS AMONG CDEC-SING GENERATORS (MW) 2008

| FIRM POWER BALANC | CE 2008 | | | | | | |
|-------------------|---------|---------|---------------|-----------|------------|----------|------------|
| | CELTA | EDELNOR | ELECTROANDINA | AES GENER | GASATACAMA | NORGENER | TOTAL SING |
| Injections [MW] | 264,7 | 620,8 | 493,2 | 363,6 | 845,6 | 217,5 | 2.805,4 |
| Withdrawals [MW] | 291,6 | 587,3 | 498,7 | 297,3 | 831,3 | 299,2 | 2.805,4 |
| Balance [MW] | -27,0 | 33,5 | -5,5 | 66,3 | 14,3 | -81,6 | 0,0 |

| FIRM POWER TRANS | FER 2008 | | | | | | |
|------------------|----------|---------|---------------|-----------|------------|----------|------------|
| | CELTA | EDELNOR | ELECTROANDINA | AES GENER | GASATACAMA | NORGENER | TOTAL SING |
| PURCHASES (MW) | 27,0 | 0,0 | 5,5 | 0,0 | 0,0 | 81,6 | 114,1 |
| SALES (MW) | 0,0 | 33,5 | 0,0 | 66,3 | 14,3 | 0,0 | 114,1 |

PRICE OF THE POWER OF THE CRUCERO 220kV NODE

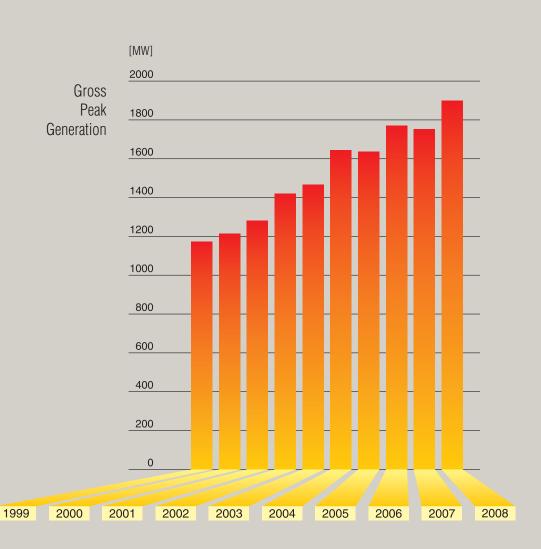
| Tariff | Te | Price of Power | |
|--------------------|----------|----------------|---------------|
| Setting Date | From | То | [\$/kW-month] |
| Oct-07 | 1/11/07 | 15/2/08 | 3.835,63 |
| Oct-07 (index Feb) | 16/2/08 | 30/4/08 | 3.692,18 |
| Apr-08 | 1/5/08 | 15/8/08 | 3.455,74 |
| Apr-08 (index Aug) | 16/8/08 | 15/10/08 | 3.882,18 |
| Apr-08 (index Oct) | 16/10/08 | 31/10/08 | 4.124,06 |
| Apr-08 (index Nov) | 1/11/08 | 31/12/08 | 4.198,66 |

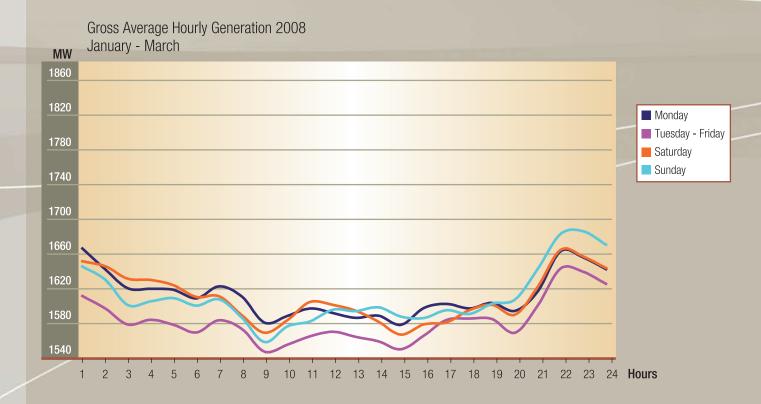
POWER TRANSFER AMONG CDEC-SING GENERATORS (MW) 1999 - 2008

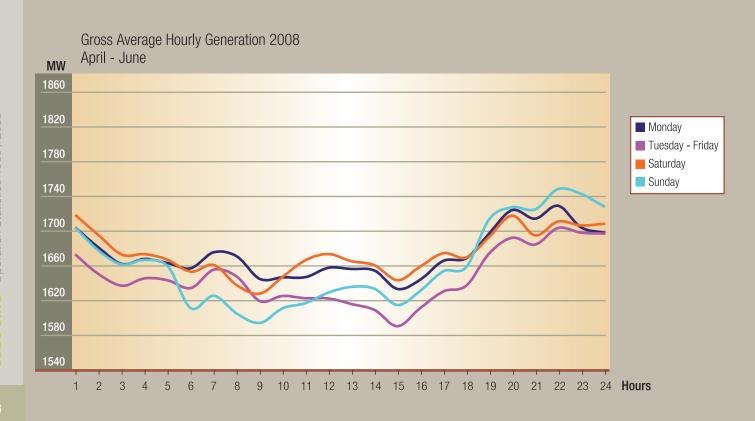
| | CEI | .TA | EDEL | NOR | ENDI | SA | ELECTRO | ANDINA | AES G | ENER | GASATA | CAMA | NORG | ENER |
|--------------------------|-----------|-------|-----------|-------|-----------|-------|-----------|--------|-----------|-------|-----------|-------|-----------|-------|
| | Purchases | Sales | Purchases | Sales | Purchases | Sales | Purchases | Sales | Purchases | Sales | Purchases | Sales | Purchases | Sales |
| 1999 | 2,5 | | 62,5 | | | | | 14,5 | 72,0 | | | 40,0 | | 82,5 |
| 2000 | 45,3 | | 81,3 | | | | 206,0 | | | 156,6 | | 242,8 | 66,8 | |
| 2001 | 59,4 | | 33,5 | | | | 146,6 | | | 152,0 | | 172,8 | 85,3 | |
| 2002 (January-March) | 48,5 | | | 145,8 | | | 138,0 | | | 183,2 | 73,0 | | 69,4 | |
| 2002 (April-December) | 55,1 | | | 141,7 | | | 174,0 | | | 178,9 | 9,8 | | 81,7 | |
| 2003 | 52,9 | | | 123,9 | | | 117,5 | | | 164,4 | 34,9 | | 83,1 | |
| 2004 | 65,5 | | | 132,3 | | | 119,3 | | | 179,6 | 43,0 | | 84,2 | |
| 2005 | 56,4 | | | 140,1 | | | 124,2 | | | 184,6 | 61,4 | | 82,7 | |
| 2006 | 71,8 | | | 159,1 | | | 86,8 | | | 202,9 | 122,9 | | 80,4 | |
| 2007 | 55,6 | | | 64,8 | | | 41,8 | | | 178,8 | 55,1 | | 91,0 | |
| 2008 | 27,0 | | | 33,5 | | | 5,5 | | | 66,3 | | 14,3 | 81,6 | |

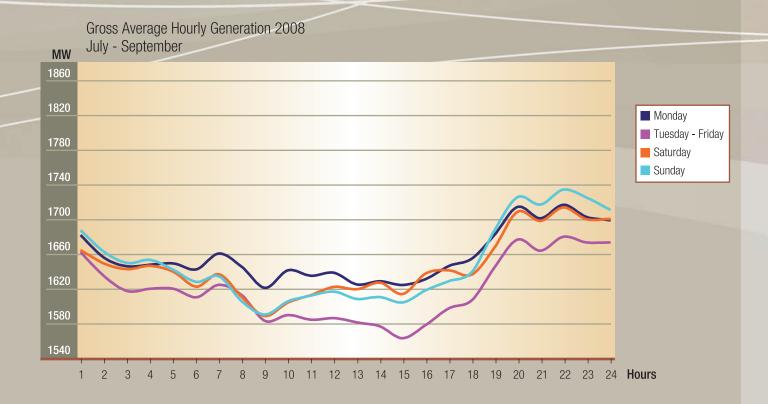
| Year | Day | Time | Gross Peak Generation (MW) | Gross Peak Demand (MW) |
|------|-----------|------|----------------------------|------------------------|
| 1999 | 13-dec-99 | 22 | 1.173 | 1.094 |
| 2000 | 15-dec-00 | 22 | 1.213 | 1.153 |
| 2001 | 5-nov-01 | 22 | 1.281 | 1.221 |
| 2002 | 23-dec-02 | 22 | 1.420 | 1.360 |
| 2003 | 14-dec-03 | 22 | 1.467 | 1.416 |
| 2004 | 19-dec-04 | 23 | 1.644 | 1.567 |
| 2005 | 27-nov-05 | 22 | 1.635 | 1.566 |
| 2006 | 15-dec-06 | 23 | 1.770 | 1.676 |
| 2007 | 24-apr-07 | 22 | 1.751 | 1.665 |
| 2008 | 21-dec-08 | 22 | 1.897 | 1.805 |

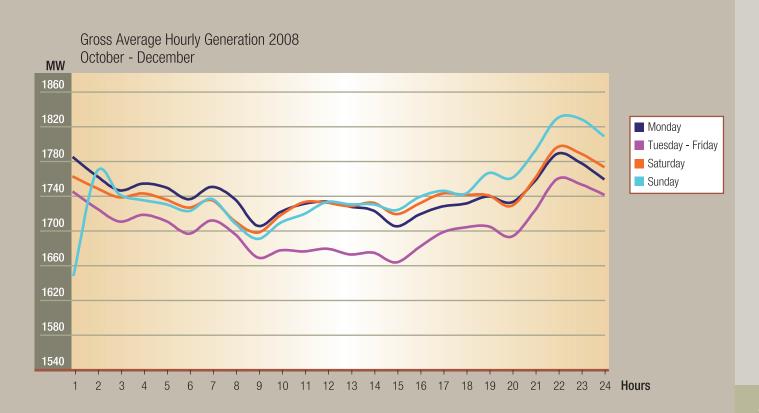
Note: Gross Peak Demand is equivalent to the power plants' gross generation less consumption.











MARGINAL ENERGY COSTS - 220 kV CRUCERO NODE 2008

| Day | January | February | March | April | May | June | |
|---------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| 1 | 59,44134 | 75,69823 | 64,80119 | 63,65938 | 81,54485 | 108,17775 | |
| 2 | 63,80717 | 87,48683 | 81,36587 | 42,99793 | 96,38386 | 104,55255 | |
| 3 | 81,10710 | 81,34352 | 43,12718 | 50,16211 | 95,32837 | 79,49415 | |
| 4 | 94,21532 | 71,59967 | 54,73391 | 48,33319 | 112,59706 | 51,65943 | |
| 5 | 98,97933 | 56,79918 | 51,93331 | 94,45258 | 93,64696 | 75,27493 | |
| 6 | 96,99808 | 86,62207 | 79,00412 | 100,79081 | 101,03146 | 106,76917 | |
| 7 | 101,50218 | 62,89706 | 99,37580 | 109,98472 | 103,92715 | 116,19830 | |
| 8 | 87,26227 | 93,83300 | 92,83688 | 40,09956 | 76,28531 | 114,37215 | |
| 9 | 65,11431 | 89,81326 | 99,56886 | 75,58881 | 58,70488 | 114,59025 | |
| 10 | 89,45831 | 80,16939 | 89,48276 | 80,30735 | 104,17320 | 133,24405 | |
| 11 | 83,71695 | 68,03497 | 97,45108 | 85,41646 | 134,69207 | 120,19656 | |
| 12 | 100,34407 | 63,04944 | 89,47179 | 87,17594 | 111,09689 | 107,59423 | |
| 13 | 100,11644 | 60,84450 | 103,20682 | 98,47071 | 80,74417 | 135,46626 | |
| 14 | 103,42706 | 90,60921 | 103,86337 | 95,45988 | 103,20520 | 122,35346 | |
| 15 | 76,56886 | 75,65562 | 88,68757 | 96,58045 | 95,98034 | 90,31446 | |
| 16 | 107,47458 | 70,94428 | 87,47991 | 76,51341 | 111,47214 | 115,08527 | |
| 17 | 118,71232 | 79,77497 | 83,53332 | 86,61219 | 120,42868 | 122,32886 | |
| 18 | 105,56230 | 108,60015 | 69,30026 | 103,18369 | 115,87629 | 115,40030 | |
| 19 | 157,83580 | 90,65605 | 42,52356 | 115,99897 | 106,70991 | 123,60233 | |
| 20 | 156,47980 | 125,65872 | 48,19220 | 106,73962 | 85,68946 | 137,41444 | |
| 21 | 138,83683 | 87,41530 | 44,39206 | 87,51713 | 106,82322 | 123,56255 | |
| 22 | 91,52827 | 85,20128 | 65,58015 | 104,33600 | 108,12549 | 125,85650 | |
| 23 | 93,77912 | 89,95604 | 58,40085 | 111,14992 | 119,91934 | 117,13685 | |
| 24 | 88,21506 | 88,88709 | 33,89714 | 103,51702 | 112,72733 | 93,94428 | |
| 25 | 101,25084 | 71,70440 | 62,11055 | 95,30700 | 111,57861 | 110,18934 | |
| 26 | 103,31186 | 70,04414 | 58,58850 | 108,79987 | 141,11389 | 157,91195 | |
| 27 | 89,29852 | 83,72454 | 59,69779 | 111,87285 | 153,26528 | 159,11945 | |
| 28 | 101,14435 | 79,63538 | 76,59397 | 116,56615 | 161,22722 | 149,91788 | |
| 29 | 100,04051 | 83,67684 | 63,92778 | 101,56481 | 128,70094 | 135,81690 | |
| 30 | 100,88741 | | 82,77320 | 93,57346 | 109,56485 | 64,55643 | |
| 31 | 92,24318 | | 75,54530 | | 110,91241 | | |
| Average | 98,34386 | 81,39087 | 72,62732 | 89,75773 | 108,17667 | 114,40337 | |
| | | | | | | | |

| 107,46232 123,80077 125,33008 117,01882 101,53479 74,85788 45,45681 176,45021 114,52734 115,00111 125,52200 68,9488 122,10905 181,24285 146,84111 132,22875 126,55929 77,09458 132,72186 106,33298 143,56816 125,74707 125,68287 68,62577 131,26745 124,45974 157,22754 104,55420 140,06919 68,38862 81,27068 156,95774 146,33987 124,08665 113,27704 90,45525 100,01037 225,67825 170,57646 116,52199 126,37403 97,18586 124,47379 207,27392 160,70765 89,79669 136,68057 86,38571 124,86465 169,57690 135,93290 106,74939 122,89845 87,02661 104,46151 147,95680 151,61711 127,73696 116,44620 57,26349 81,98663 169,55297 127,05896 121,01389 117,23194 77,51517 116,65436 125,63048 128,77940 114,74442 98,53902 71,49584 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,84954 141,30786 88,87375 118,02405 61,78220 116,6220 157,44122 128,57184 113,02863 118,00399 57,88740 82,96103 117,26600 97,44623 118,94778 112,02656 56,71519 135,1316 107,85702 124,98030 122,00988 99,9162 56,72519 135,1316 107,85702 124,98030 122,00988 99,9162 57,36943 136,40056 176,2200 144,57366 136,240073 156,2500 157,44122 128,57184 113,02863 118,00399 57,88740 142,57366 136,240073 157,56723 56,5252 124,03814 107,0066 47,13461 144,57366 136,240073 177,6566 97,44623 118,94778 112,02656 56,71519 135,1316 107,85702 124,98030 122,00988 99,9162 59,93162 59,37237 170,00324 157,56723 56,5252 124,03814 107,0066 47,13461 144,57366 136,240073 146,740380 159,14311 123,60149 121,79165 75,00963 73,28016 144,25736 133,24159 95,00600 70,76562 77,34671 74,87624 120,90723 167,00462 96,60370 126,2003 94,80078 75,54062 129,00981 139,9467 138,00403 138,96643 132,64789 119,52067 111,74486 111,14001 75,5033 70,72526 144,41335 139,6403 118,95271 48,7010 61,00628 67,42290 1166,63042 138,06163 117,49467 124,94890 77,13260 54,24941 120,90723 167,00462 96,60370 126,2003 144,41335 139,6403 118,95271 48,7010 61,00628 67,42290 166,630424 138,66163 117,49467 124,94890 77,13260 54,24941 120,90291 150,52568 124,9659 111,9829 106,69001 68,822497 140,00291 150,52568 124,9659 111,982 | July | August | September | October | November | December |
|--|-----------|-----------|-----------|-----------|-----------|----------|
| 122.10905 181.24285 146.84111 192.2875 126.59929 77.09456 132.72186 166.33295 143.56616 125.74707 125.68287 68.62377 131.28745 124.45974 157.22754 104.35420 140.66919 66.38682 81.27088 156.95774 146.33887 124.08865 113.27704 90.45525 100.01037 225.67825 170.57646 116.52199 126.37403 97.15586 124.47379 207.27392 160.70705 89,79669 136.60057 86.8371 126.88495 169.57690 135.93290 106,74539 122.69845 87.02661 104.46151 147,95580 151.61711 127.73996 118.4620 57.28349 89,9663 169.65227 127.06995 121.01389 117.23194 77.51517 114,65436 125.63048 128.17940 114.2442 96.53602 71.49264 113,94467 138.71405 121.07208 79.97324 123.38951 64.20036 75,54891 127,64054 | 107,46232 | 123,80077 | 135,33008 | 117,01882 | 101,53479 | 74,85788 |
| 132,72186 166,33295 143,56616 125,7407 125,68287 68,62377 131,28745 124,45974 157,22754 104,35420 140,68919 86,38882 81,27068 156,95774 146,33887 124,08685 113,27704 90,45525 100,01037 225,57825 170,57646 116,52199 126,37403 97,16586 124,47379 207,27392 160,70705 89,79669 136,68057 86,33871 126,88495 169,57690 135,93290 106,74539 122,69845 87,02641 104,46151 147,95580 151,61711 127,75696 116,48220 57,26349 89,98653 169,55227 127,06595 121,01389 117,23194 77,51517 114,65436 125,53049 128,17940 114,24442 96,53802 71,49264 113,94467 138,71405 121,07208 79,97324 123,38851 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 < | 45,45661 | 178,45021 | 114,52734 | 115,40011 | 125,82980 | 66,94369 |
| 131,28745 124,48974 157,22754 104,35420 140,66919 86,38682 81,27068 156,95774 146,33887 124,08685 113,27704 90,45525 100,01037 225,67825 170,57646 116,52199 126,37403 97,18586 124,47379 207,27392 180,70705 89,79689 136,68057 86,38871 126,88495 169,57690 135,93290 106,74539 122,59945 87,02661 104,46151 147,95580 151,61711 127,73696 116,44620 57,26349 89,98663 166,65227 127,06595 121,01389 117,23194 77,51517 114,65436 128,63048 128,17940 114,24442 98,59602 71,48264 113,94467 138,71405 121,07208 79,3734 123,39951 64,20036 75,54891 127,64054 141,30786 68,88735 118,02406 61,7820 116,65230 157,44122 128,57184 130,2363 118,00839 57,88740 82,96103 117,26960 | 122,10805 | 181,24285 | 146,84111 | 132,22875 | 126,55929 | 77,09456 |
| 81_27068 156,95774 146,33887 124,08685 113,27704 90,45525 100,01037 225,67825 170,57646 116,52199 126,37403 97,18586 124,47379 207,27392 180,70705 89,79669 136,68057 86,83871 126,88495 169,57690 135,83290 106,74539 122,69845 87,02661 104,46151 147,95580 151,61711 127,73696 116,44620 57,26349 89,98683 169,65227 127,06595 121,01389 117,23194 77,51517 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,90786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,4823 118,94778 112,08256 56,71519 135,13106 107,85702 <td< td=""><td>132,72186</td><td>166,33295</td><td>143,56616</td><td>125,74707</td><td>125,68287</td><td>68,62377</td></td<> | 132,72186 | 166,33295 | 143,56616 | 125,74707 | 125,68287 | 68,62377 |
| 100,01037 225,67825 170,57646 116,52199 126,37403 97,18586 124,47379 207,27392 160,70705 89,79669 136,68057 86,83871 126,88495 169,57690 135,93290 106,74539 122,69845 87,02661 104,46151 147,95580 151,61711 127,73696 116,44620 57,26349 89,98663 169,65227 127,06595 121,01389 117,23194 77,51517 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,39951 64,20036 75,54691 127,64054 141,30786 68,87375 118,04406 61,78220 116,65230 157,44122 128,57184 113,0293 118,0406 67,78274 82,96103 117,26960 97,44623 118,94778 112,08256 56,71619 135,13106 107,85702 124,98030 122,00938 99,99162 53,72377 170,09324 157,56723 | 131,28745 | 124,45974 | 157,22754 | 104,35420 | 140,66919 | 86,38682 |
| 124,47379 207,27392 160,70705 89,79669 136,68057 86,83871 126,68495 169,57690 135,93290 106,74539 122,69845 87,02661 104,46151 147,95580 151,61711 127,73696 116,44620 57,26349 89,9663 169,65227 127,06595 121,01389 117,23194 77,51517 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,0998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 6 | 81,27068 | 156,95774 | 146,33887 | 124,08685 | 113,27704 | 90,45525 |
| 126,88495 169,57690 135,93290 106,74539 122,69845 87,02661 104,46151 147,95580 151,61711 127,73696 116,44620 57,26349 89,96663 169,65227 127,06595 121,01389 117,23194 77,51517 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,0839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 1 | 100,01037 | 225,67825 | 170,57646 | 116,52199 | 126,37403 | 97,18586 |
| 104,46151 147,95580 151,61711 127,73696 116,44620 57,26349 89,98663 169,65227 127,06595 121,01389 117,23194 77,51517 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 1 | 124,47379 | 207,27392 | 160,70705 | 89,79669 | 136,68057 | 86,83871 |
| 89,98663 169,65227 127,06595 121,01389 117,23194 77,51517 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72277 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,4717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95, | 126,88495 | 169,57690 | 135,93290 | 106,74539 | 122,69845 | 87,02661 |
| 114,65436 125,63048 128,17940 114,24442 98,53602 71,49264 113,94467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,0839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,0482 96,063 | 104,46151 | 147,95580 | 151,61711 | 127,73696 | 116,44620 | 57,26349 |
| 113,9467 138,71405 121,07208 79,97324 123,38951 64,20036 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15 | 89,98663 | 169,65227 | 127,06595 | 121,01389 | 117,23194 | 77,51517 |
| 75,54891 127,64054 141,30786 68,87375 118,02406 61,78220 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,9 | 114,65436 | 125,63048 | 128,17940 | 114,24442 | 98,53602 | 71,49264 |
| 116,65230 157,44122 128,57184 113,02363 118,00839 57,88740 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119, | 113,94467 | 138,71405 | 121,07208 | 79,97324 | 123,38951 | 64,20036 |
| 82,96103 117,26960 97,44623 118,94778 112,08256 56,71519 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 | 75,54891 | 127,64054 | 141,30786 | 68,87375 | 118,02406 | 61,78220 |
| 135,13106 107,85702 124,98030 122,00998 99,99162 53,72377 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117 | 116,65230 | 157,44122 | 128,57184 | 113,02363 | 118,00839 | 57,88740 |
| 170,09324 157,56723 56,32532 124,03814 107,10666 47,13461 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118 | 82,96103 | 117,26960 | 97,44623 | 118,94778 | 112,08256 | 56,71519 |
| 164,00292 167,55555 67,41541 128,13870 102,62309 64,13382 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117, | 135,13106 | 107,85702 | 124,98030 | 122,00998 | 99,99162 | 53,72377 |
| 76,04297 140,70781 118,41717 135,02727 89,29548 71,34727 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125, | 170,09324 | 157,56723 | 56,32532 | 124,03814 | 107,10666 | 47,13461 |
| 146,79380 159,14311 123,60149 121,79165 75,05963 73,28016 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 164,00292 | 167,55555 | 67,41541 | 128,13870 | 102,62309 | 64,13382 |
| 142,57736 135,21519 95,00600 70,76562 77,34671 74,87624 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 76,04297 | 140,70781 | 118,41717 | 135,02727 | 89,29548 | 71,34727 |
| 120,90723 167,00482 96,06370 126,28033 94,63078 75,54062 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 146,79380 | 159,14311 | 123,60149 | 121,79165 | 75,05963 | 73,28016 |
| 129,09521 171,67475 125,15476 104,62616 111,18406 64,78831 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 142,57736 | 135,21519 | 95,00600 | 70,76562 | 77,34671 | 74,87624 |
| 95,84263 137,40943 137,93880 117,80161 95,80842 60,94190 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 120,90723 | 167,00482 | 96,06370 | 126,28033 | 94,63078 | 75,54062 |
| 138,96643 132,64789 119,52067 111,78438 81,05203 61,92258 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 129,09521 | 171,67475 | 125,15476 | 104,62616 | 111,18406 | 64,78831 |
| 130,74384 121,06947 123,86098 120,58802 129,38777 63,72951 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 95,84263 | 137,40943 | 137,93880 | 117,80161 | 95,80842 | 60,94190 |
| 154,82885 130,54337 117,86760 114,10011 75,75033 70,72526 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 138,96643 | 132,64789 | 119,52067 | 111,78438 | 81,05203 | 61,92258 |
| 144,41335 139,46403 118,95271 48,70810 61,30628 67,42280 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 130,74384 | 121,06947 | 123,86098 | 120,58802 | 129,38777 | 63,72951 |
| 166,39424 138,66158 117,49467 124,94890 77,13260 54,26441 162,27173 133,26546 125,15962 47,47319 | 154,82885 | 130,54337 | 117,86760 | 114,10011 | 75,75033 | 70,72526 |
| 162,27173 133,26546 125,15962 47,47319 | 144,41335 | 139,46403 | 118,95271 | 48,70810 | 61,30628 | 67,42280 |
| | 166,39424 | 138,66158 | 117,49467 | 124,94890 | 77,13260 | 54,26441 |
| 120,90291 150,25368 124,96359 111,98329 106,69001 68,82497 | 162,27173 | 133,26546 | | 125,15962 | | 47,47319 |
| | 120,90291 | 150,25368 | 124,96359 | 111,98329 | 106,69001 | 68,82497 |

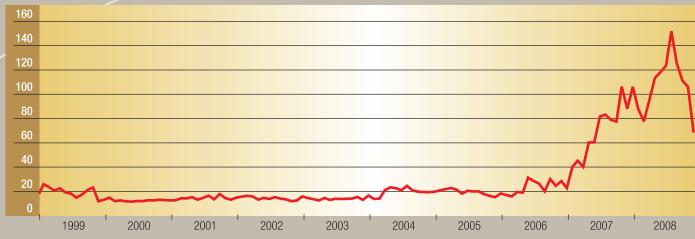
MARGINAL ENERGY COSTS - 220 kV CRUCERO NODE 1999 - 2008

| Month \ Year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------|------|------|------|------|------|------|------|------|------|-------|
| January | 10,7 | 8,9 | 8,8 | 10,7 | 12,0 | 12,6 | 15,5 | 14,9 | 19,2 | 98,3 |
| February | 17,5 | 10,1 | 8,9 | 11,4 | 11,0 | 10,4 | 16,3 | 13,8 | 34,2 | 81,4 |
| March | 16,1 | 8,1 | 10,2 | 11,9 | 10,4 | 10,6 | 17,3 | 12,9 | 38,7 | 72,6 |
| April | 14,0 | 8,6 | 10,2 | 11,6 | 9,5 | 16,2 | 18,2 | 16,0 | 34,5 | 89,8 |
| May | 15,3 | 8,1 | 11,0 | 9,7 | 11,0 | 18,3 | 17,1 | 15,7 | 52,5 | 108,2 |
| June | 13,0 | 7,9 | 9,5 | 10,7 | 9,8 | 17,7 | 14,4 | 26,4 | 53,1 | 114,4 |
| July | 12,4 | 8,3 | 10,5 | 10,1 | 10,6 | 16,4 | 16,6 | 24,2 | 72,7 | 120,9 |
| August | 10,0 | 8,2 | 12,0 | 11,3 | 10,4 | 19,3 | 16,1 | 22,2 | 74,9 | 150,3 |
| September | 11,9 | 8,8 | 9,7 | 10,5 | 10,6 | 16,4 | 16,4 | 16,9 | 71,9 | 125,0 |
| October | 14,5 | 8,8 | 13,1 | 10,1 | 10,6 | 15,5 | 14,5 | 25,5 | 70,9 | 112,0 |
| November | 16,0 | 9,3 | 10,6 | 8,9 | 11,7 | 15,3 | 13,2 | 20,6 | 98,1 | 106,7 |
| December | 7,9 | 9,1 | 9,5 | 9,3 | 9,7 | 15,1 | 12,3 | 24,0 | 81,5 | 68,9 |
| Average | 13,3 | 8,7 | 10,3 | 10,5 | 10,6 | 15,3 | 15,6 | 19,4 | 58,5 | 104,0 |

Note: Provisional values for April and May 1998, and from May 2000 to December 2008. Monthly averages in nominal \$/kWh.

MARGINAL ENERGY COSTS MONTHLY AVERAGES

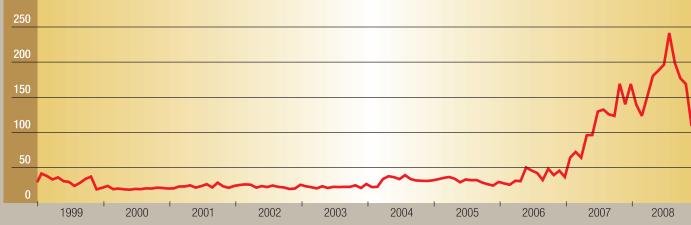
MARGINAL ENERGY COSTS AT CRUCERO NODE - MONTHLY AVERAGES (\$/kWh)



Note: Provisional values for April and May 1998, and from May 2000 to December 2008.

Marginal costs updated by CPI of December 2008.

MARGINAL ENERGY COSTS AT CRUCERO NODE - MONTHLY AVERAGES (US\$/MWh)



Note: Provisional values for April and May 1998, and from May 2000 to December 2008.

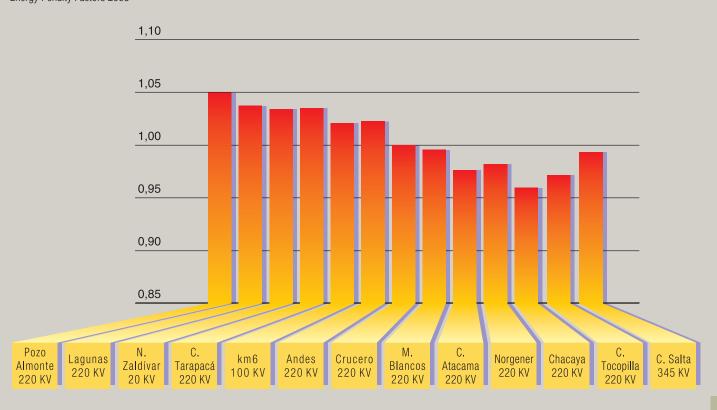
Marginal costs updated by CPI of December 2008 and converted to USD using the exchange rate current for December 31st 2008.

ENERGY PENALTY FACTORS 2008

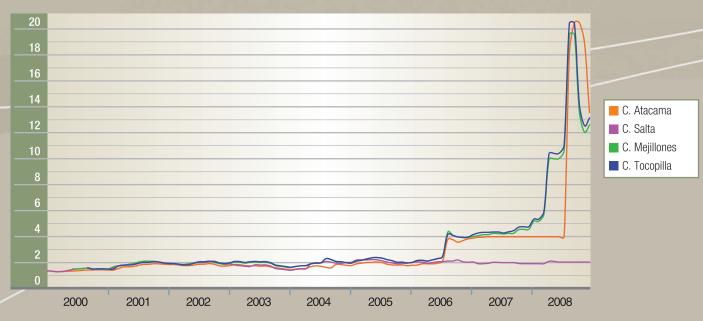
| Busbar | Average | Maximum | Minimum |
|---------------------|---------|---------|---------|
| Pozo Almonte 220 kV | 1,05 | 1,08 | 1,03 |
| Lagunas 220 kV | 1,04 | 1,07 | 1,02 |
| N.Zaldívar 220 kV | 1,03 | 1,07 | 1,01 |
| C.Tarapacá 220 kV | 1,04 | 1,07 | 1,02 |
| km6 100 kV | 1,02 | 1,02 | 1,01 |
| Andes 220 kV | 1,02 | 1,05 | 1,00 |
| Crucero 220 kV | 1,00 | 1,00 | 1,00 |
| M.Blancos 220 kV | 1,00 | 1,01 | 0,98 |
| C.Atacama 220 kV | 0,98 | 0,99 | 0,96 |
| Norgener 220 kV | 0,98 | 0,98 | 0,98 |
| Chacaya 220 KV | 0,96 | 0,99 | 0,92 |
| C.Tocopilla 220 kV | 0,97 | 0,98 | 0,97 |
| C.Salta 345 kV | 0,99 | 1,02 | 0,93 |

Note: Values from weekly scheduling .

Energy Penalty Factors 2008



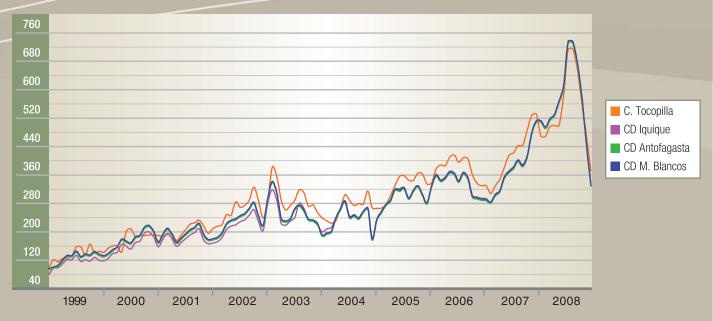
NATURAL GAS PRICES Average monthly values updated to December 2008 (US\$ / Mbtu)



COAL PRICES Average monthly values updated to December 2008 (US\$ / ton)



 $\mbox{N}^{\circ}\mbox{6}$ FUEL OIL PRICES Average monthly values updated to December 2008 (US\$ / ton)



DIESEL OIL PRICES Average monthly values updated to December 2008 (US\$ / $\rm m^3$)

