

ANNUAL REPORT STATISTICS AND OPERATION



CDEC-SING

Center for Economic Load Dispatch of the Northern Interconnected System





Contents

Letter from the Chairman of the Board	2
Letter from the Chief Executive Officer	4
Who are we?	6
CDEC-SING: Vision, Mission and Values	12
2011 Energy Environment	14
2011 CDEC-SING Divisions and their Management	18
SING Clients and Facilities	26
Facilities before SING's formation 1984	28
First SING's facilities 1988	30
SING's facilities as of 1995	32
SING's facilities as of 2002	34
SING's facilities at present	36
Operations Statistics	42
I. SING: Generation Installed Capacity	44
II. SING: Energy Generation	46
III. Fuels: Consumption and Prices	52
IV. Energy and Power Prices	55
V. 2002-2011 SING Energy Annual Sales	59
VI. 2002-2011 SING Energy and Power Transfers	61
VII. Tolls: Payment for the use of SING Transmission System	63
VIII. Energy and Power Demand SING 2002-2011	65
IX. Non-Conventional Renewable Energies (NCRE)	69
X. CDEC-SING Budget	70



●●● Letter from the Chairman of the Board

On behalf of the CDEC-SING Board, I am pleased to present the CDEC-SING Annual Operating Statistics for year 2011.

You will find therein the operational results of 2011, as well as the system statistics corresponding to the 10-year term 2002-2011.

After overcoming the operation's uncertainty experienced some years ago, as a result of the restrictions in the natural gas coming from Argentina, the SING started a continuous improvement process in the compliance of its safety, economic efficiency aims, as well as in the access to the transmission system. Such process has materialized through a greater adequacy regarding generation, expansion and transmission soundness, together with a better demand supply.

With such a purpose in view, we are able to state with satisfaction that progress has been made, and year 2011 is a proof of it.

Regarding generation, the year was marked by the incorporation of three new projects which together contributed with 598 MW to the existing installed capacity of the system, consolidating a standardized supply at a worldwide level.

On the other hand, in the transmission area, year 2011 revealed some of the detected weaknesses as regards the need to increase transmission infrastructure in those areas of greater deficiency. I refer to SING's Northern zone supply, which at the closing of 2011 showed very tight supply conditions. Nevertheless, the application of an extraordinary Handling Plan allowed to control the situation in a coordinate fashion, and to have some technical resources available in order to enhance the use of transmission resources showing deficiency.

Regarding CDEC-SING organization, on November 10, 2011 a new Chairman was appointed who will be in office until November 9, 2012. At the beginning of this new stage, all the companies that are a part of the Northern Interconnected System reaffirm our commitment with the human and technical capital of this CDEC-SING and we express our firm support to the working plan, which purposes are: (a) to comply with the tasks that the Law, the regulations in force and the internal rules establish for this CDEC, and (b) the SING safe and efficient operation.

The SING's Board particularly values the steps towards certification. The Quality Management System certification according to Standard ISO 9001:2008 led by Operations Management is a concrete proof that CDEC-SING realizes the strategic importance of its function in the electric sector, and as a fundamental service for the country. At the same time, it

shows a continuous improvement process that differentiates it as a leading organization within its area.

We are aware that progress made is only a part of a continuous process with which CDEC-SING must continue year after year in order to comply with its purposes. In 2012 we expect to address, among other, matters such as guaranteeing that ERNC insertion in the system is made in a safe way, together with the possible implementation of the supplementary services provided by Law, as well as those issues that may arise in the area as a result of the recently announced energy policy in the country.

We expect that this Annual Report 2011 is a contribution to the information for all the agents participating at the SING, as well as for those who watch or analyze its development, and for all investors interested in deeply knowing the electric market of the North of the country.



CARLOS FINAT DÍAZ

CDEC-SING Chairman of the Board



●●● Letter from the Chief
Executive Officer

Once again we complete this task of presenting you with the Annual Operating Statistics Report of the Center for Economic Load Dispatch of the Northern Interconnected System (CDEC-SING), which includes an analysis of the matters related to year 2011 of the SING.

The statistics, indicators and the most significant elements related to SING's operation are deployed herewith and they will allow you to become aware in depth of the Northern electric system reality.

As we pointed out, regarding operations 2011 was the year of consolidation for physical adaptation or normalization of the system supply. We have new generation plants, which as whole contributed with 598 MW.

Regarding transmission, we have worked in two lines of action: one of operational nature related to operation measures and handling plans to optimize the use of existing infrastructure, and another related to the preparation of planning studies for the expansion of the transmission system in order to move towards a greater and better information to contribute to the industry's decision making.

In the organizational area, we may state with satisfaction that we have reached significant milestones. The most important is undoubtedly having obtained the Quality Management System Certification under standard ISO 9001:2008. Such achievement initiates the compliance with one of the main strategic goals of the entity, which is its process certification according to international standards for an excellent coordination of the Northern Interconnected System's operation.

This road started by the entity, coherent with its Quality Policy, means an improvement of the industry better practices and their application through a Quality Management System, as a basic tool of the organization.

Consistent with the above, in 2011 progress was made in the Competences Certification, a process that in 2012 expects to obtain achievements as important as the one previously described.

In order to establish working methodologies, criteria and mechanisms known and agreed by this CDEC, progress was made in a significant number of Procedures. The CDEC-SING has a total 38 Procedures, at different development or progress levels, and we expect that in 2012 additional progress is made in this area.

We have made progress regarding quality, communications, knowledge management, technical competences and leadership, a road with a commitment to address all necessary areas to fully comply with the strategic function that our entity has in the electric sector and in the country.



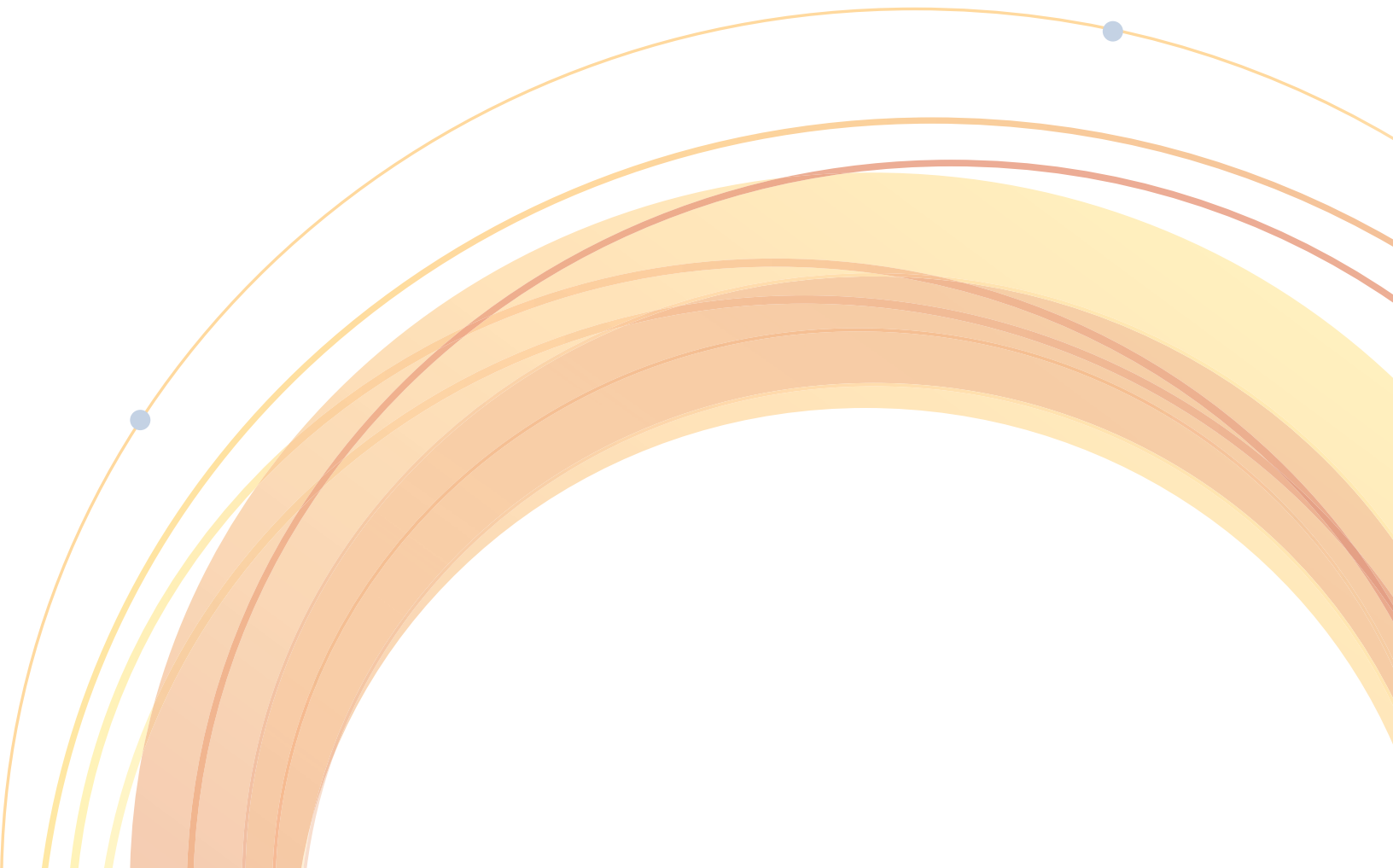
DANIEL SALAZAR JAQUE

Chief Executive Officer / Operation and Tolls Director
CDEC-SING

●●● Who are we?



CDEC-SING





The Center for Economic Load Dispatch of the Northern Interconnected System (CDEC-SING), is the entity in charge of coordinating the operations of electric facilities in the Northern zone of the country, preserving safety and service quality.

The CDEC-SING is considered a strategic entity by the Chilean Government, given the public nature of its function and the relationship existing between electric supply, population's safety and the normal operation of the country's industry and economy.

Generation, transmission and consumption electric facilities that interconnected form the SING, cover the territory between Arica-Parinacota, Tarapacá and Antofagasta regions, equivalent to 24.5% of the country's continental territory.

The CDEC-SING is formed by 41 member companies, which operate in the generation, transmission and consumption areas, all of them represented at a Board formed by 10 members which annually renews its Chairman.

CDEC-SING COORDINATED AND MEMBER COMPANIES

Segment A		
Generation companies with a capacity lower than 300 MW		
1	Cavancha S.A.	A
2	Compañía Eléctrica Tarapacá S.A.	A
3	Empresa Eléctrica Angamos S.A.	A
4	Enorchile S.A.	A
5	Equipos de Generación S.A.	A
6	Norgener S.A.	A
7	Central Termoeléctrica Andina S.A.	A
8	Inversiones Hornitos S.A.	A
9	Enaex S.A. (*)	A
10	Sociedad Anglo American Norte S.A. (*)	A

Segment B		
Generation companies with a capacity higher than 300 MW		
1	AES Gener S.A.	B
2	Gasatacama Chile S.A.	B
3	E-CL S.A. (*)	B

Segment C		
Trunk Transmission companies		
1	E-CL S.A. (*)	C
2	Transelec Norte S.A. (*)	C

Segment D		
Sub-transmission companies		
1	Empresa de Transmisión Eléctrica Transemel S.A.	D
2	E-CL S.A. (*)	D
3	Codelco (*)	D
4	Xstrata Copper - Altonorte (*)	D
5	Transelec Norte S.A. (*)	D

Segment E		
Free Clients		
1	Atacama Agua y Tecnología Ltda.	E
2	Atacama Minerals Chile S.C.M.	E
3	Compañía Minera Cerro Colorado Ltda.	E
4	Compañía Minera Doña Inés de Collahuasi SCM.	E
5	Compañía Minera Teck Quebrada Blanca S.A.	E
6	Compañía Minera Xstrata Lomas Bayas	E
7	Compañía Minera Zaldívar S.A	E
8	Grace S.A.	E
9	Haldeman Mining Company S.A.	E
10	Minera El Tesoro	E
11	Minera Escondida Ltda.	E
12	Minera Esperanza	E
13	Minera Gaby S.A.	E
14	Minera Meridian Ltda.	E
15	Minera Michilla S.A.	E
16	Minera Rayrock Ltda.	E
17	Minera Spence S.A.	E
18	Moly-Cop Chile S.A.	E
19	Sociedad Contractual Minera El Abra	E
20	Sociedad GNL Mejillones S.A.	E
21	Sociedad Química y Minera de Chile S.A.	E
22	Enaex S.A. (*)	E
23	Sociedad Anglo American Norte S.A. (*)	E
24	Codelco (*)	E
25	Xstrata Copper - Altonorte (*)	E
26	Empresa Aguas del Altiplano S.A.	E
27	Noracid S.A.	E
(*) Companies that are a part of two or more segments.		



BOARD OF DIRECTORS

The CDEC-SING is formed by two representatives of the generation segment with a capacity lower than 300 MW (segment A), three representatives of the generation segment with an installed capacity higher or equal to 300 MW (segment B), two representatives of the trunk transmission segment (segment C), two representatives of the sub-transmission segment (segment D), and one representative of the free clients segment (segment E).

The existing Board is chaired by Mr. Carlos Finat Díaz, Energy Director of Compañía Minera Doña Inés de Collahuasi, and

the Vice-chairman is Mr. Raúl Valpuesta Araya, from Transelec Norte S.A.

Pursuant to electric regulations, the Board must look after the compliance with the regulatory aspects of the system, to monitor the proper function of the CDEC areas, as well as to appoint such areas Directors, to prepare the Internal Regulations and to annually approve the entity's Budget.

Segment A	Segment B	Segment C	Segment D	Segment E
Eduardo Soto Trincado (10)	Pedro de la Sotta Sánchez (9)	Rodrigo López Vergara (6)	Robin Cuevas Canales (4)	Carlos Finat Díaz (5)
Juan Pablo Cárdenas Pérez (8)	Carlos Aguirre Pallavicini (2)	Raúl Valpuesta Araya (7)	Alfredo Cárdenas Ocampo (3)	
	Enzo Quezada Zapata (1)			

CDEC-SING Alternate Directors

<i>Segment A</i>	<i>Segment B</i>	<i>Segment C</i>	<i>Segment D</i>	<i>Segment E</i>
<i>Miguel Buzunáriz R. Marcos Cisterna O.</i>	<i>Felipe Rodríguez Ch. Francisco Promis B. Javier Alemany M.</i>	<i>Jaime Cancino C. Patricio Carmona R.</i>	<i>Belisario Maldonado Jaime Misraji C.</i>	<i>Carolina Merino L.</i>



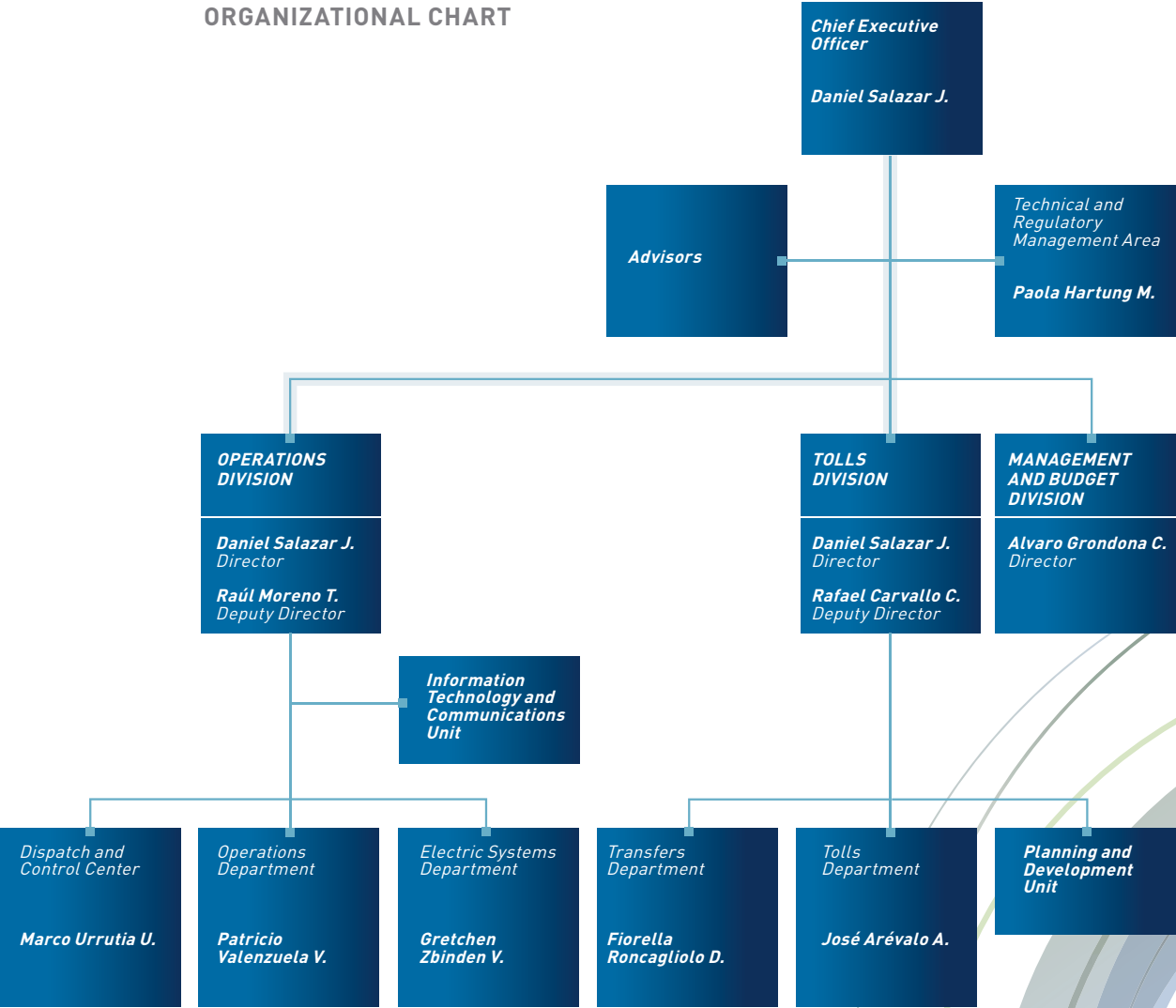


CDEC-SING AREAS

The CDEC-SING structure is formed by three Technical Departments: Operations, Tolls and Management and Budget, coordinated by an Executive Management.

The three CDEC-SING Departments are essentially technical and executive entities which carry out their functions according to the standards in force. The persons in charge of the Departments are appointed for a 4-year term by the Board's agreement, and they may be removed and re-elected by the Board, only for another term. The entity's organizational chart is as follows:

ORGANIZATIONAL CHART



●●● CDEC-SING: Vision, Mission and Values



Our Vision

"To be a technical model for the Chilean electric sector, offering coordination services for the operation and development of the Northern Interconnected System, being reliable and efficient for our clients; having an excellence-oriented poly-functional team which carries out high quality processes and uses technology and state-of-the art tools optimally"

Our Mission

"To carry out with excellence the SING's operation coordination and to lead its development, contributing to maintain safety and efficiency, guaranteeing Access to the System"

Our Values



QUALITY POLICY CDEC-SING OPERATION DIVISION

The CDEC-SING Operation Division undertakes to deliver coordination services for the operation and development of the Northern Interconnected System, with a professionalism and quality that convert it into the leader in its area.

Services shall be delivered strictly according to the legislation in force, incorporating the developed knowledge as well as the best practice in the industry, through a quality management system as a basic tool for the organization.

Regarding processes and services quality, the CDEC-SING Operation Division has posed the following global objectives:

- 1) To take care of the service safety and of the Northern Interconnected System operation efficiency, and to maintain a permanent service in order to continuously improve the quality of its processes and services.
- 2) To perform its tasks at any time with competent, responsible, motivated and client-oriented staff.
- 3) To timely deliver operation coordination services, with the trust and quality level required by its clients.
- 4) To develop and maintain a permanent and quality communication with its clients and its principal.

In order to comply with such purposes, the CDEC-SING Operation Division undertakes to make available the necessary resources to ensure continuous quality, professionalism and efficiency of the services rendered through time.

●●● 2011 Energy Environment



2011 will be remembered in the Chilean electric sector as one of the most intense regarding discussion and debate on the strengths and weaknesses of the electric sector, as well as on its future development.

The creation of the Electric Development Advising Commission –CADE– by the Executive Power, the Technical Congress Citizens Commission led by citizen and congress associations, as well as several academic and business initiatives brought the Chilean energy future into discussion in 2011.

Apart from the emphases, nuances and orientations, all the analyses have in common the promising growth expectations of the country in the next few years, which shall unavoidable demand higher energy requirements, which in turn shall be accompanied by solid electric systems, of greater capacity, safety and efficiency.





A fact that particularly jeopardized the Chilean electric sector in 2011 was the so-called “Caso Campanario”. This experience showed the sensitivity and the consequences of breaking the payment chain in the area, since it is a fundamental element for the correct and efficient function of the market.

All the above has implied, and probably will require future standardization adjustments optimizing and promoting a more determined investment, which deliver better tools regarding planning, which offer certain guarantees in case of critical events, such as breaking the payment chain, and advances regarding systems operation, both in the Central Interconnected System and the Northern Interconnected System.

When the perspective is adjusted and taken to a more particular angle, the two main electric systems existing in the country: the Central Interconnected System (SIC) and the Northern Interconnected System (SING), show us a reality requiring different priorities and times.



In the case of the SING, subjects related to a greater capacity of the system have been addressed progressively during the last few years, and currently a solid offer is available, which has offered a greater stability to the system in 2011.

Regarding transmission segment, the SING's attention was particularly focused on overcoming some of the restrictions that made an impact on SING's operations towards the end of 2011. Particularly, in the northern zone of the SING, the application of an extraordinary handling plan allowed to give a quick answer to the tightness and contingency situations in order to move forward toward a more solid and safe segment.

Also, in 2011 there was a growing emergence of projects based on the use of Non-Conventional Renewable Energies (NCRE), reaching in global terms the consolidation of a project portfolio at the SING of over 2000 MW to this date.

In fact, this reality has meant a great resource investment for the review of projects and study analysis, allowing to measure the impact of new projects based on such technologies for the system, since a fundamental task of the CDEC-SING is to guarantee the normal function of the system and to take care that its performance complies with the highest safety and efficiency standards required by the law.

These are some of the elements that participated in the Chilean electric system during 2011, particularly in the Northern Interconnected System. As a technical model in charge of the SING's operation coordination, we expect to contribute with these and other issues necessary to fulfill with excellence our role of preserving safety and efficiency, and to guarantee access to the SING.

●●● 2011 CDEC-SING Divisions and their Management





DISPATCH AND CONTROL CENTER

- **Backup Site • Blackout drill**
- **Quality Certification**
- **24/7 the 365 days of the year**

The CDEC-SING is formed by three Divisions: Operation, Tolls and Management and Budget, all of them coordinated by the Chief Executive Officer.

The persons responsible for the Divisions are appointed for a 4-year term by a Board's agreement, and they may be removed or re-elected only for another term.

The Chief Executive Officer also has the cooperation of a group of advisors, who offer crossed support to the work done by the Operation, Tolls and Management and Budget Divisions, as well as to the Board. We refer to the role played in the legal, Communications and Human Resources areas.

In addition, in 2012 the Technical and Regulatory Management Area was created (AGTR), which depends from the Chief Executive Officer with the purpose of better contributing to the System's reliability, carrying out a follow-up and control of the compliance with the Safety and Service Quality Technical Standard. At the same time, it acts as a crossed support to the entire organization through the coordination of new projects' connection and procedures' management of all CDEC-SING Technical Divisions.

OPERATION DIVISION

Its purpose is to coordinate with safety and economic efficiency the operation of the facilities that are a part of the Northern Interconnected System. It also has three departments: the Dispatch and Control Center (CDC), the Operation Department and the Electric Systems Department.

Besides, as from this year it has an Information Technology and Communication Unit which provides crossed support to the entire organization.

2011 Management – Operation Division

The emphasis on matters related to the strategic purposes of the entity to maintain continuous improvement, to deepen matters related to knowledge and to optimize communication with the environment were fundamental axes in the management of the Operation Division during 2011.

At continuous improvement level, it is worth noting the end of the ISO 9001: 2008 Certification Process, which adaptation work implied the Division's management adaptation to the high requirements of this international standard.

Regarding safety of the system's operation, it is worth noting the work done as from the main emergencies occurred at the SING during 2011: the tsunami threat of March 11, as a consequence of the earthquake occurred in Japan, and the

ELECTRIC SYSTEMS DEPARTMENT

- **Technical standard**
- **Studies for a System's Better Safety**
- **Projects Review**

OPERATIONS DEPARTMENT

- **Transparency**
- **Historical variables for a better analysis and operation decisions**

partial blackout occurred in June 19, which caused the loss of the supply to two thirds of demand. The extensive analysis of both events resulted into the implementation of about ten preventive and corrective actions of different level, which significantly contributed to a safer and more reliable system. A similar situation resulted from a new drill of the total blackout in December 2011. It resulted into a more representative exercise than those previously made, since a step forward was made with an effective movement of dispatchers from the Main Site of the Dispatch and Control Center (CDC) to the CDC Backup site, putting on trial the protocols of the latter.

The analysis of the system failures, as well as the preparation and review of studies related to the incorporation of new projects has been intense. It is worth bearing in mind the high flow of new projects the system has had during the last years, which has implied significant topological changes originated by the start-up of the different projects that have entered the system.

The incorporation of better access protocols and a greater strictness in the treatment of requests to coordinate the work resulted from this exercise, thus implying a greater safety for the system.



Regarding technical resources, in 2011 a better availability of the SCADA System was achieved, mainly regarding the handling of historical variables thus allowing to improve the quality and opportunity of the information used in the analysis of the system operation, achieving an efficient operation in real time.

TOLLS DIVISION

The purpose of this Division is to manage economic transfers and to guarantee open access to the Northern Interconnected System trunk transmission systems, sub-transmission and additional.

It has two departments within its structure, the Transfers Department and the Tolls Department. The Planning and Development Unit was added in 2012, to service the growing needs of the transmission system planning and development.

2011 Management – Tolls Division

During 2011, Tolls Division emphasized the corporate purposes of “operating the system in a safe manner, adopting better practice and improving its economic efficiency”.

DEPARTMENT TOLLS

- **Trunk expansion recommendations**
 - **Development of new technical capacities**
- **New analysis tools**

Regarding the system' safe operation, in 2011 a review and analysis of the Trunk Transmission Study was carried out. Particularly, studies were conducted and recommendations were made on the enhancement of the SING's trunk transmission system, especially concerning transmission increased capacity of the trunk sectors at the SING's Northern Zone, as well as reinforcement of the trunk sub-stations which require greater redundancy to soften and improve the system's operation in the next few years.

From the already mentioned studies, a set of expansion works and increased capacity of the non-trunk transmission were determined, which are necessary for the correct and optimal function of the system, showing the Division's commitment to the corporate vision and mission fulfillment through its contribution to the system' safe and efficient development.

In preparation for the application of a new Trunk Transmission Decree for the 2011-2014 four-year term, and taking into account the new definitions issued by the new Trunk Transmission Study, Tolls Division was in charge of developing a methodology to determine uses and payments of the facilities out of the Common Influence Area.

All the matters above meant significant investments in technical capacity and new analysis tools allowing taking up such studies internally, meaning a great advance in independence and capacity by the Division.

Also, during 2011 an infrastructure study was initiated on the transmission supplying the urban centers of the system, analyzing different development alternatives for the secondary transmission systems, so that supply of great populated centers increases safety and reliability.

Regarding economic transfers among the system's members, several improvements made during 2011 had a positive impact on the payment chain to the companies that participate at the SING transfers, as regards diligence, continuity and certainty. This was concretely reflected in the Transfers Assessment Report (IVT) which is monthly issued and showed a low rate of corrections and, in the case of the 2010 Final Firm Power Balance and the Trunk Toll and sub-transmission reports, no remarks were received.

As during the previous year, in order to avoid successive restatements in 2011 emphasis was made on concentrating –

TRANSFERS DEPARTMENT

- **Methodologies for a Better Administrative and Commercial Smoothness**
- **Monthly Report on Transfers Assessment**



or postponing- restatements, in order to avoid administrative costs and inefficiencies generated by such processes. Thanks to this, applying “restatement over restatement” was avoided, making administrative and commercial management derived from transfers smoother.

MANAGEMENT AND BUDGET DIVISION

Its purpose is to prepare, manage and carry out the CDEC-SING annual budget.

Its structure includes a unit which carries out and distributes the work in two lines of action: financial and human resources.

2011 Management – Management and Budget Division

Regarding financials and accounting, one of the main purposes achieved in 2011 was the transfer of the corporate financial and accounting information to IFRS international standards, which started being massively implemented in the country in 2008, allows –among other things- to have

standardized, reliable and close information on market value of all CDEC-SING’s assets.

As regards staff, the process to obtain Competences Certification was initiated, by implementing job descriptions, determining required competences and assessing critical competences. The first group of professionals to certify was submitted to the corresponding authority and it is expected that in 2012 certification is given to all Dispatchers of the Dispatch and Control Center (CDC) of the CDEC-SING.

The web page of the CDEC-SING published all procedures related to administrative and professional duties that must guide the actions of the entire corporation as a part of the Human Resources Policy.

MANAGEMENT AND BUDGET DIVISION

- **IFRS international standards**
- **Competences certification**
- **Critical Competences assessment**



OPERATION AND TOLLS DIVISION PROCEDURES PROGRESS STATUS

In compliance with the work program presented to the Board during the first quarter of 2011, and with the purpose of establishing work methodologies, criteria and mechanisms known and agreed by this CDEC, progress was made with a significant number of Procedures.

As a result, currently 38 Procedures are available, at different progress stages. Of this total, 15 were issued in 2011 as a first version for comments and remarks by the member companies.

At the end of 2011, the balance shows the remittance of 14 Procedures for report by the Energy National Commission, obtaining a favorable report for 4 Procedures of the total universe.

The following chart shows a summary of each Procedure status, as well as progresses made during 2011.

Stage' status

- Stage completed up to January 1, 2011
- Stage completed between January 1, 2011 and January 1, 2012
- Stage without activity

N°		Stages			
		Internal Version	Version according to article N° 10 of DS 291	Procedure Remitted to the CNE	Procedure with a favorable report by the CNE
D0 Procedure					
1	Short circuit maximum level calculation				
2	Definition of Technical and Operational Parameters for sending data to the SISTR of CDC				
3	Technical Audits development				
4	Frequency Control performance				
5	Determination of maximum Losses and Surpluses at the Sub-transmission and Additional Systems				
6	Operational Safety Margin Determination				
7	Fitting out of Frequency Control, Voltage Control, EDAC and PRS facilities				
8	Coordinates Failure reports				
9	Voltages Profile and Reactive Power Dispatch Programming				
10	Minimum Technical Requirements of facilities interconnecting the SING				
11	Monitoring System				
12	EDAC, EDAG and ERAG optimal set-up verification				
13	Communications with CDEC-SING's Divisions				
14	Work Coordination at the SING				
15	Fuels Costs of SING Generating Stations				
16	Determination of Generating Units' Operational Variable Costs				
17	Preparation of Equipment Movement for SING's facilities				
18	Specific consumption information				
19	Non-fuel variable costs information				
20	Technical Minimum Information				
21	Start-up and Stop Processes Information Parameters				
22	Interconnection, Amendment and Removal of SING's facilities				
23	Major Maintenance of generating units				
24	Short-term operation programming				
25	Maximum power trials at generating units				
26	Dispatch and Control Center tasks and responsibilities				
27	Specific Measures for Supply Safety Plans				
DP Procedure					
1	Facilities and Equipment Technical Information				
2	Supply and Product Quality				
3	Calculation of marginal costs for energy transfer among generating companies				
4	Calculation and determination of Firm Power Balance				
5	Information for the SING's Planning, Expansion and Development Studies				
6	Energy Measurement Systems				
7	Power Transfers among Generating Companies				
8	Treatment of BESS Type devices				
9	Economic Transfers Assessment				
10	Restatements due to the Implementation of a Supply Safety Plan				
11	Trunk Unique Collection Charge accounting				

- CNE: National Energy Commission.
- Sitr: Real Time Information System.

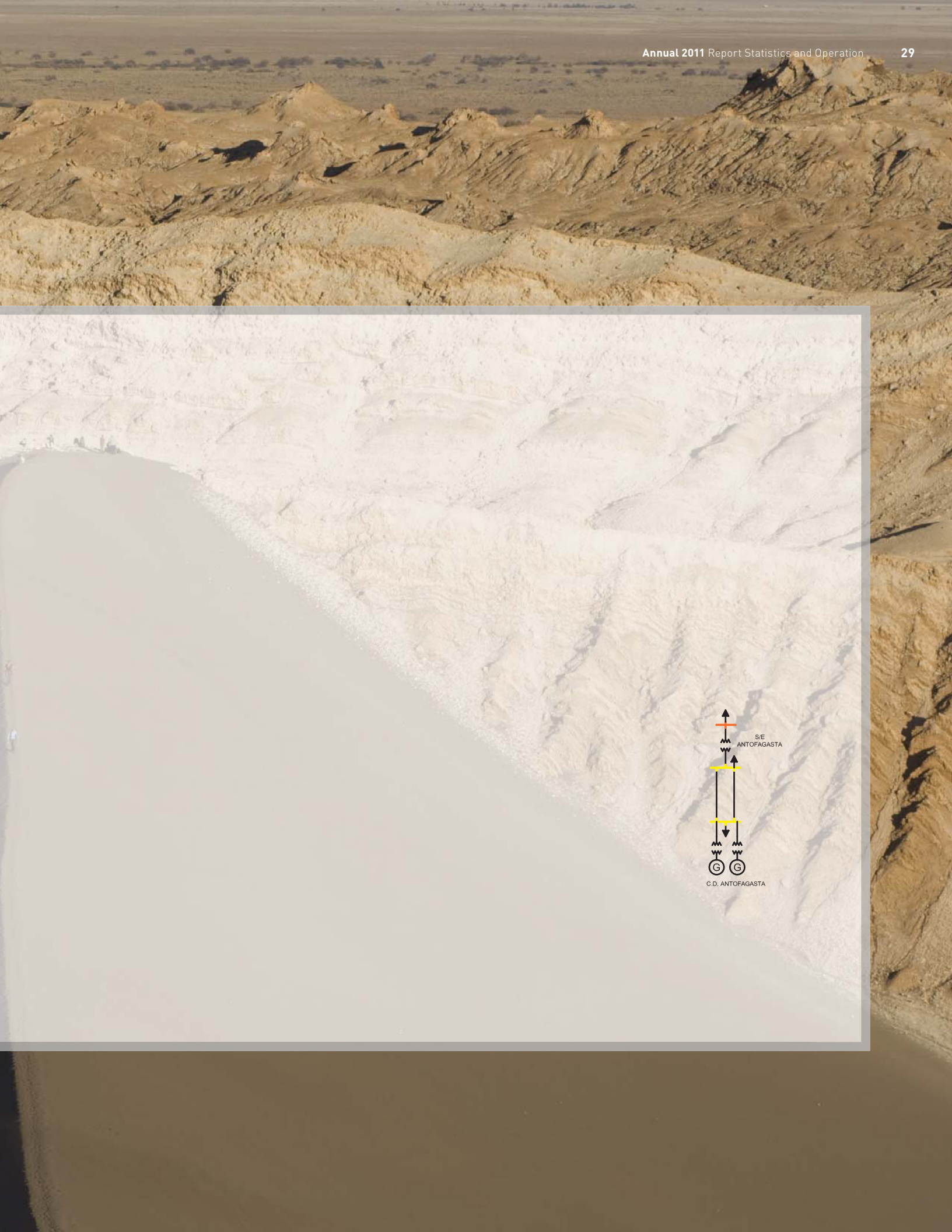


●●● SING Clients and Facilities

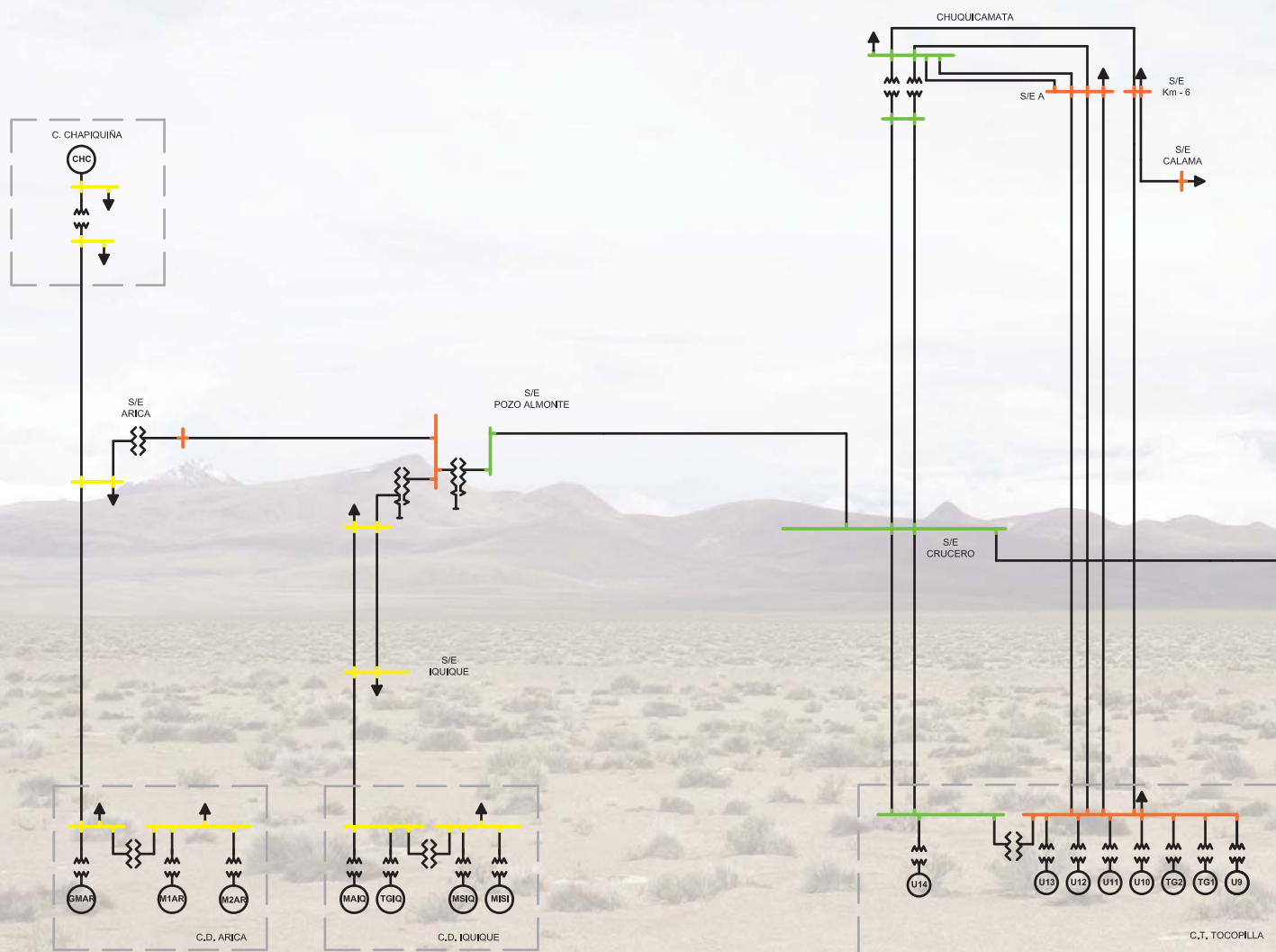


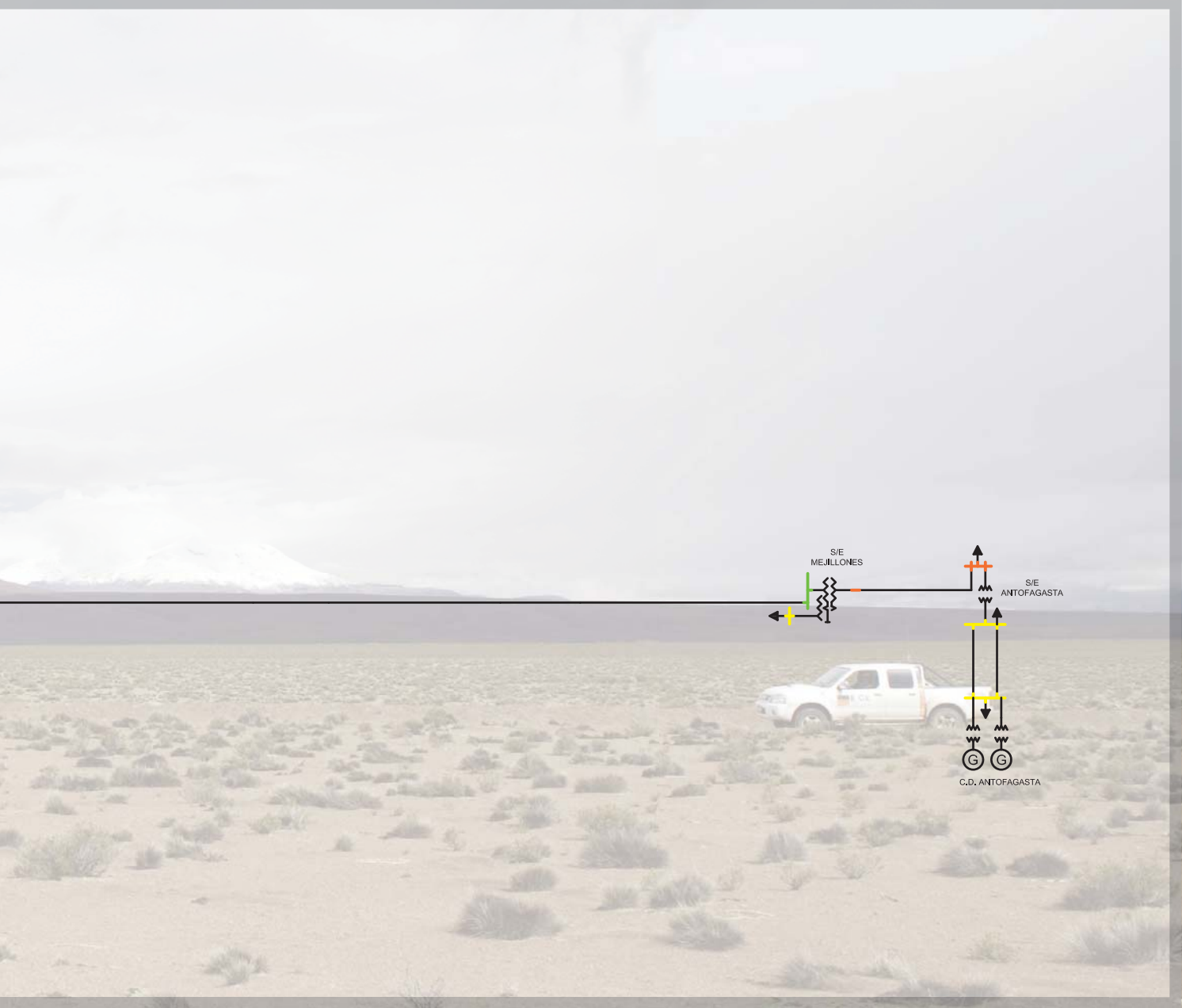
Facilities before SING's formation 1984



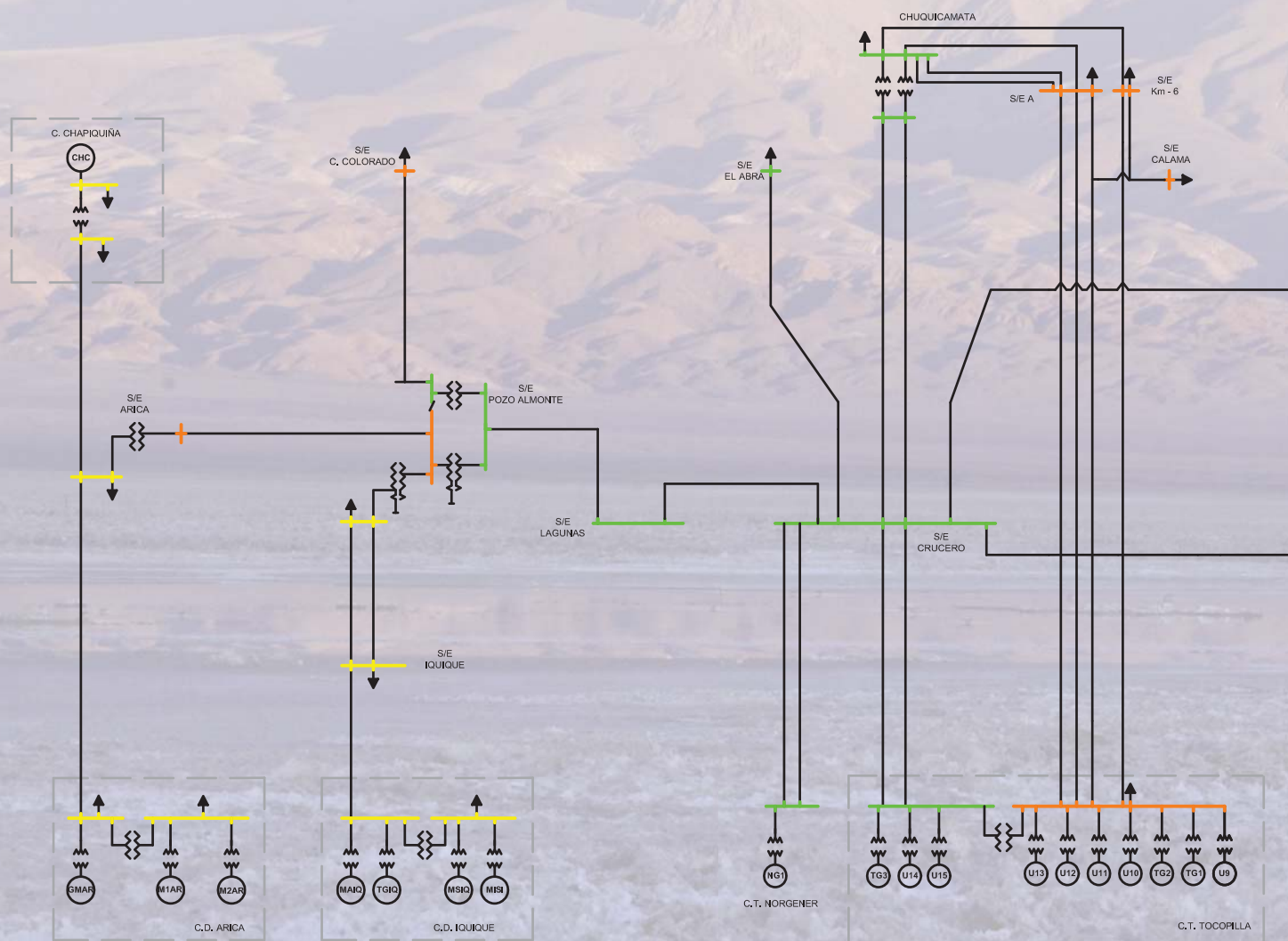


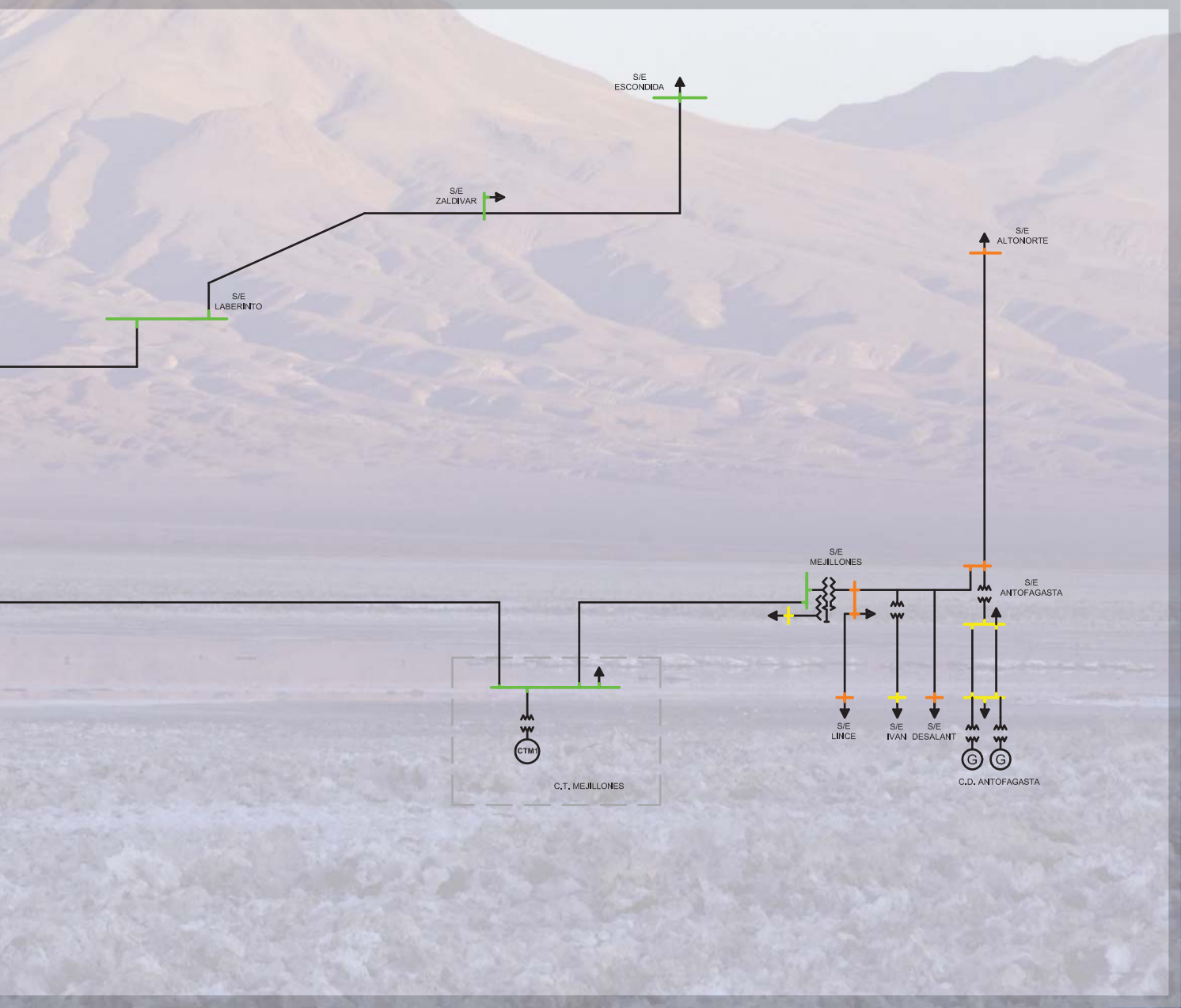
First SING's facilities 1988



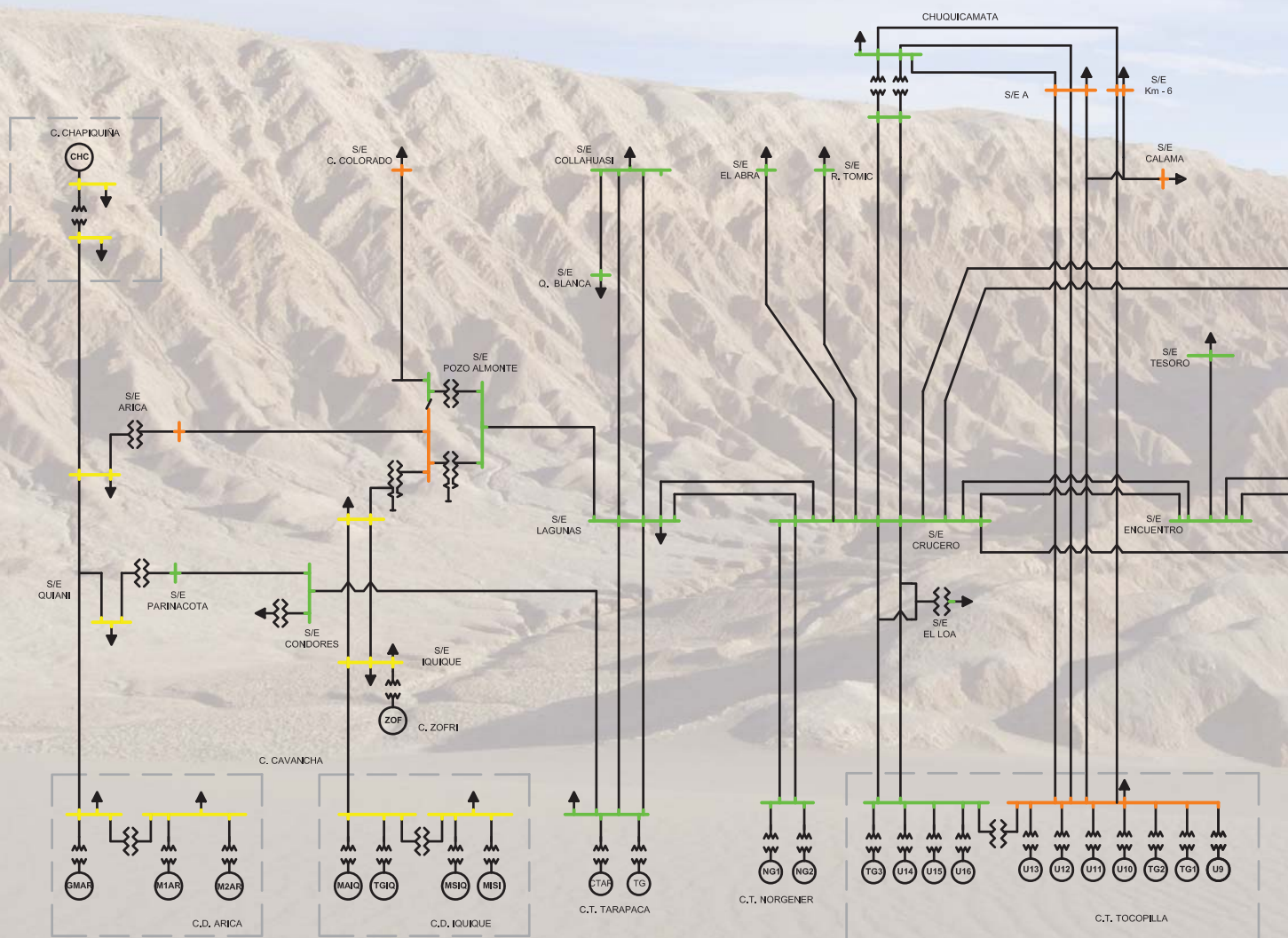


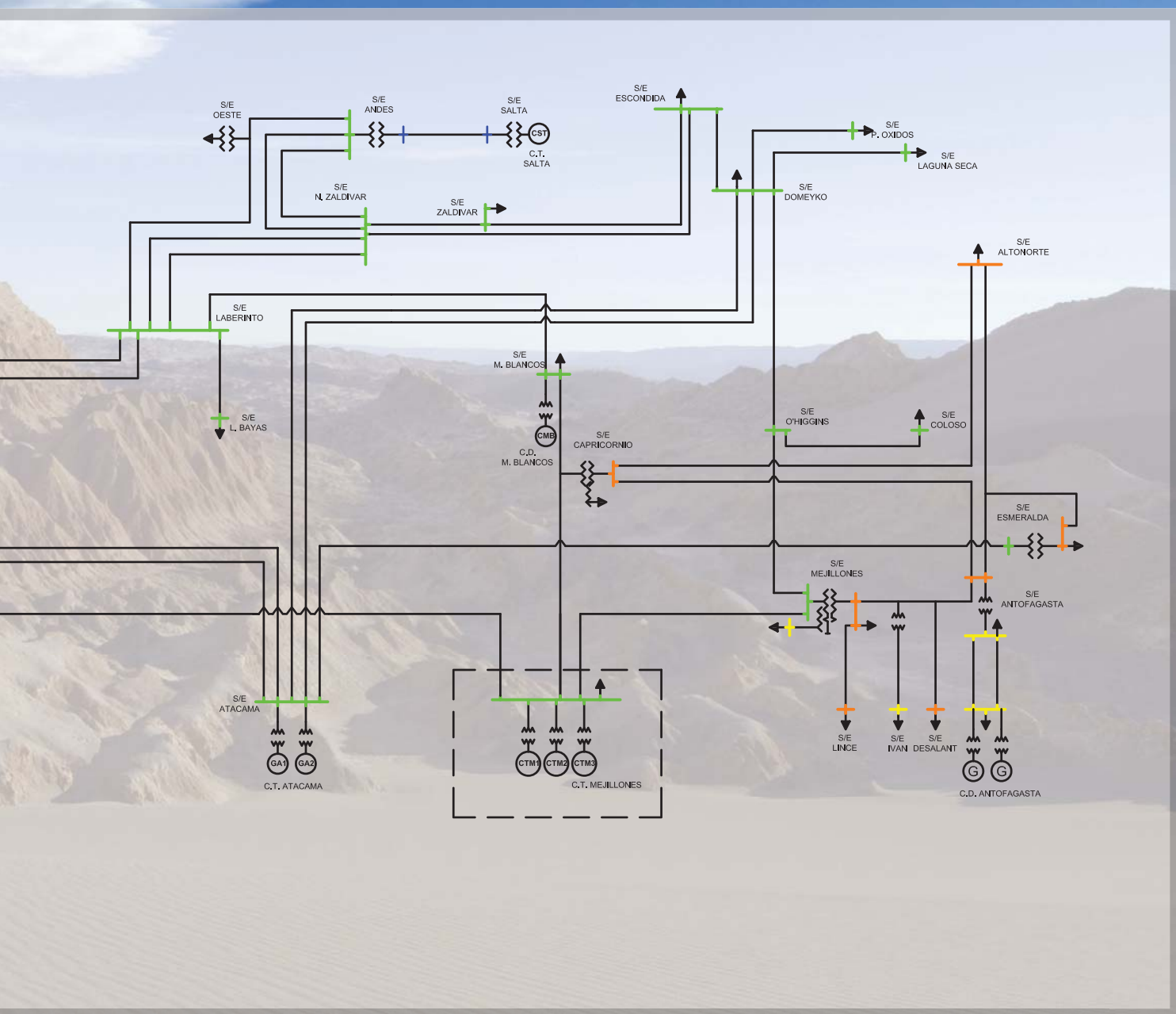
SING's facilities as of 1995



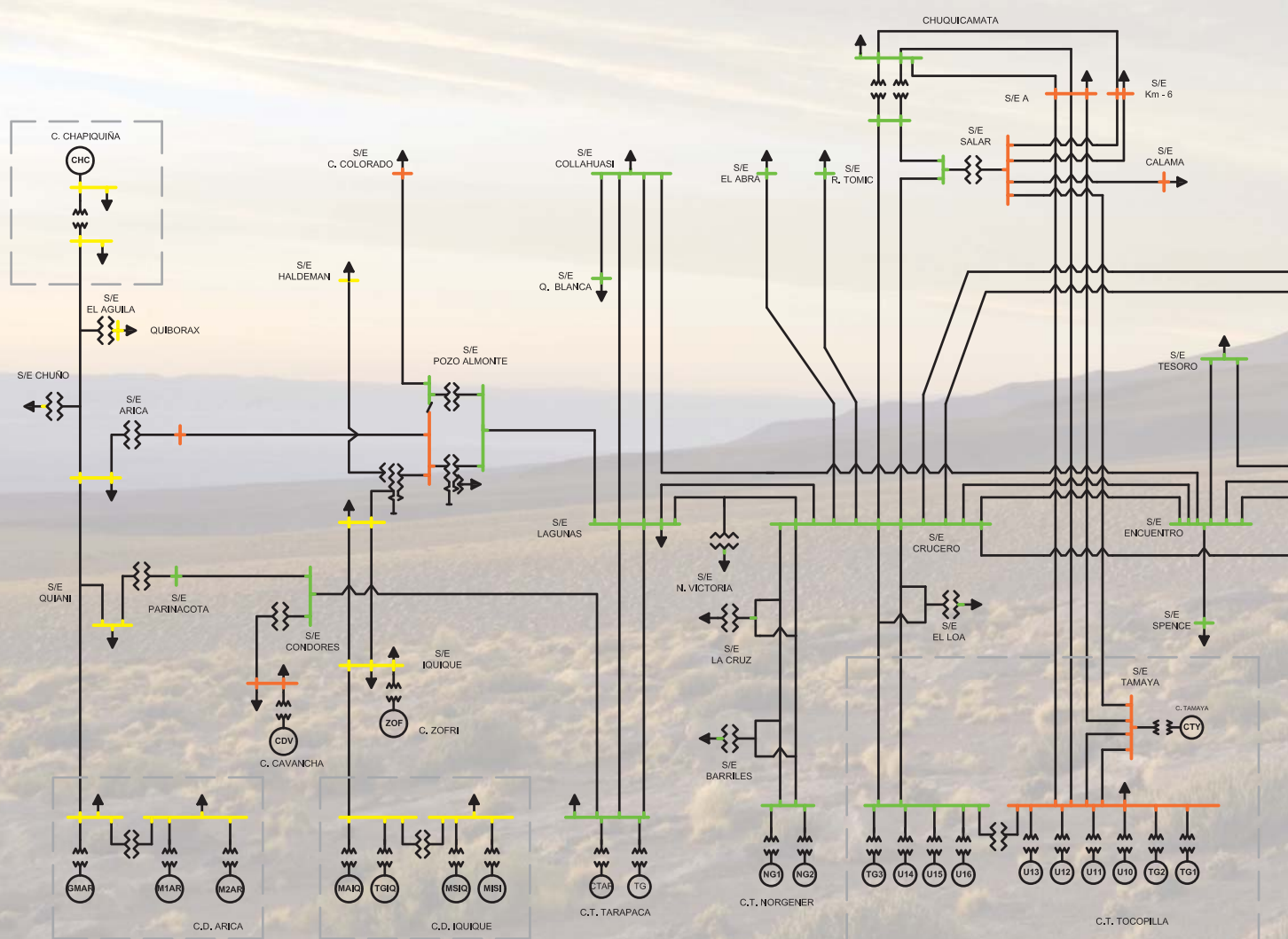


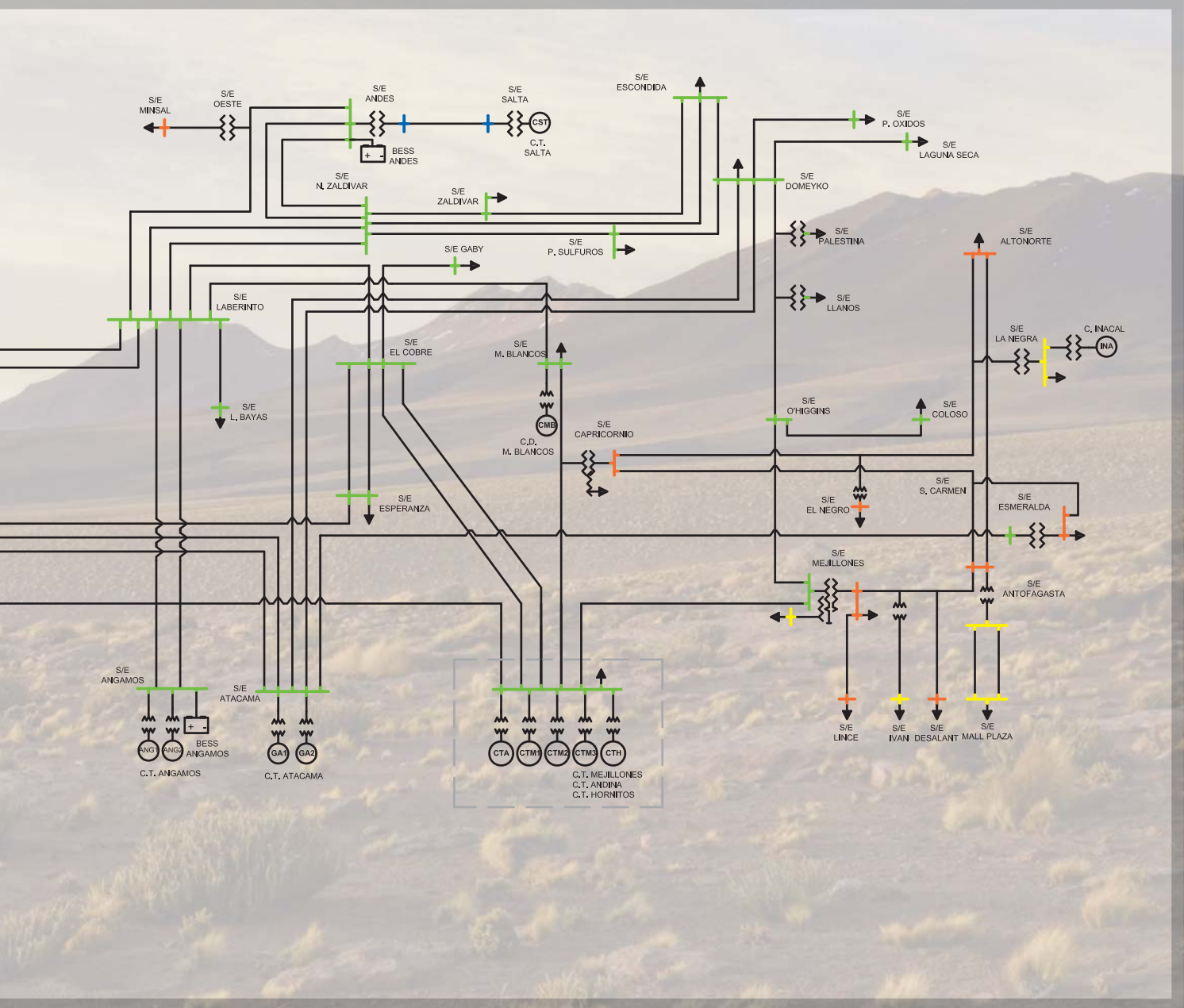
SING's facilities as of 2002





SING's facilities at present





GENERATING UNITS AS OF DECEMBER, 2011

Owner	Station Name	Unit	Nº Components	Gross Total Power [MW]	Injection Bar	Type of Unit	System's Start-up year
Celta	Termoeléctrica Tarapacá	TGTAR (1)	1	23,750	Tarapacá 220 kV	Turbogas Diesel	1998
		CTTAR	1	158,000	Tarapacá 220 kV	Steam-Coal	1999
E-CL	Chapiquiña	CHAP	2	10,200	Arica 66 kV	Hydroelectric	1967
		M1AR	3	2,997	Arica 66 kV	Diesel engine	1953
	Diesel Arica	M2AR	2	2,924	Arica 66 kV	Diesel engine	1961-63
		GMAR	4	8,400	Arica 66 kV	Diesel engine	1973
		SUIQ	3	4,200	Iquique 66 kV	Diesel engine	1957
	Diesel Iquique	MIQ	2	2,924	Iquique 66 kV	Diesel engine	1963-64
		MAIQ	1	5,936	Iquique 66 kV	Engine FO 6	1972
		TGIQ	1	23,750	Iquique 66 kV	Turbogas Diesel	1978
		MSIQ	1	6,200	Iquique 66 kV	Engine FO 6	1985
		CTM1	1	165,900	Chacaya 220 kV	Steam-Coal	1995
	Termoeléctrica Mejillones	CTM2	1	175,000	Chacaya 220 kV	Steam-Coal	1998
		CTM3	2	250,750	Chacaya 220 kV	Natural Gas Combined Cycle	2000
	Diesel Mantos Blancos (2)	MIMB	10	28,640	Mantos Blancos 23 kV	Engine FO 6	1995
	Diesel Enaex (4)	DEUTZ	3	1,959	Enaex 110 kV	Diesel engine	1996
		CUMMINS	1	0,722	Enaex 110 kV	Diesel engine	1996
Electroandina (8)	Termoeléctrica Tocopilla	U10	1	37,500	Central Tocopilla 110 kV	Steam-FO 6	1970
		U11	1	37,500	Central Tocopilla 110 kV	Steam-FO 6	1970
		U12	1	85,300	Central Tocopilla 110 kV	Steam-Coal	1983
		U13	1	85,500	Central Tocopilla 110 kV	Steam-Coal	1985
		U14 (6)	1	136,400	Central Tocopilla 220 kV	Steam-Coal	1987
		U15 (7)	1	132,400	Central Tocopilla 220 kV	Steam-Coal	1990
		U16	2	400,000	Central Tocopilla 220 kV	Natural Gas Combined Cycle	2001
		TG1	1	24,698	Central Tocopilla 110 kV	Turbogas Diesel	1975
		TG2	1	24,931	Central Tocopilla 110 kV	Turbogas Diesel	1975
		TG3 (3)	1	37,500	Central Tocopilla 220 kV	Turbogas Gas Natural - Diesel	1993
	Diesel Tamaya	SUTA	10	103,680	Central Tamaya 110 kV	Engine FO 6	2009
AES Gener	Salta	CC SALTA (5)	3	642,800	Central Salta 345 kV	Natural Gas Combined Cycle	2000
Gasatacama Generación	Atacama	CC1	3	395,900	Central Atacama 220 kV	Natural Gas Combined Cycle	1999
		CC2	3	384,700	Central Atacama 220 kV	Natural Gas Combined Cycle	1999
Norgener	Termoeléctrica Norgener	NT01	1	136,300	Norgener 220 kV	Steam-Coal	1995
		NT02	1	141,040	Norgener 220 kV	Steam-Coal	1997
Enorchile	Zofri	ZOFRI 1-6	2	0,900	Iquique 13.8 kV	Diesel engine	2007
		ZOFRI 2-5	4	5,160	Iquique 13.8 kV	Diesel engine	2007
	Diesel Estandartes	ZOFRI 7-12	6	4,800	Iquique 66 kV	Diesel engine	2009
Inacal	Diesel Inacal	INACAL	4	6,800	La Negra 23 kV	Engine FO 6	2009
Termoeléctrica Andina S.A.	Termoeléctrica Andina	CTA	1	168,800	Chacaya 220 kV	Steam-Coal	2011
Inversiones Hornitos	Termoeléctrica Hornitos	CTH	1	170,100	Chacaya 220 kV	Steam-Coal	2011
Eléctrica Angamos	Termoeléctrica Angamos	ANG1	1	272,357	Angamos 220 kV	Steam-Coal	2011
		ANG2	1	272,596	Angamos 220 kV	Steam-Coal	2011

TOTAL TO DECEMBER 31 ST OF 2011

4,579,914

Owner	Station Name	Unit	Nº Components	Gross Total Power [MW]	Primary SE Bar for Associated Distribution	Type of Unit	System's Start-up year
Cavancha	Cavancha	CAVA	1	2,800	Cerro Dragón 13.8 kV	Hydroelectric	2010
Enernuevas	Minihidro Alto Hospicio	MHAH	1	1,100	Alto Hospicio 13.8 kV	Hydroelectric	2010
Enernuevas	Minihidro El Toro N° 2	MHT2	1	1,100	Alto Hospicio 13.8 kV	Hydroelectric	2010

TOTAL PMGD TO DECEMBER 31 ST 2011

5,000

TOTAL SING TO DECEMBER 31 ST 2011

4,584,914

Notes:

(1) During the term January – November 1999 the TGTAR unit belonged to Endesa. As from May 12, 1999 it was transferred to the SIC and it became a part of the SING on November 29, 1999 owned by Celta.

(2) Diesel Station Mantos Blancos is represented at the CDEC-SING by E-CL.

(3) The TG3 unit is available to operate with natural gas as from September, 2000.

(4) Enaex Diesel Station was represented at the CDEC-SING by Gasatacama until May, 2007. As from June, 2007 it is represented by E-CL.

(5) At the requirement of the Organization in Charge of Dispatch (OED) of the Republic of Argentina, TG11 and TG12 gas turbines of CC Salta unit may connect to the Argentine Interconnection System (SADI), contributing to it with a maximum power of 416 [MW].

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

(7) The U15 unit increased its gross power from 130,300 to 132,400 MW on June 12, 2009.

(8) Electroandina generation units became a part of E-CL as from December 1, 2011.

SING TRANSMISSION LINES

Owner	Transmission line	Voltage (kV)	Nº Circuits	Approximate length (km)		Capacity (MVA)		System type	Start-up year
Aes Gener	Andes - Tap Off Oeste	220	1	38	38	229	228,63	Additional	1998
	Andes - Nueva Zaldívar. Circuito N°1	220	1	63	63	365,8	365,80	Additional	1999
	Andes - Nueva Zaldívar. Circuito N°2	220	1	63	63	274,4	274,40	Additional	1999
	Laberinto - Mantos Blancos	220	1	70	70	290	290,00	Additional	1999
	Nueva Zaldívar - Zaldívar	220	1	0,2	0,2	330	330,00	Additional	1994
Angamos	Central Salta - Andes	345	1	408	408	777	777,00	Additional	1999
Codelco Norte	Angamos - Laberinto	220	2	142x2	284	540x2	1080,00	Additional	2010
	Chuquicamata - 10	100	1	7	7	83,1	83,10	Additional	1988
	Chuquicamata - 10A	100	1	8	8	90,9	90,90	Additional	1988
	Chuquicamata - A	100	2	0,8x2	1,6	99,9x2	199,80	Additional	1988
	Chuquicamata - Chamy	100	1	12	12	62,4	62,40	Additional	1990
	Chuquicamata - K1	100	1	6	6	90,9	90,90	Additional	1988
	Chuquicamata - KM6	100	1	11	11	100	100,00	Additional	1988
	K1 - 10	100	1	1,3	1,3	90,9	90,90	Additional	1985
	KM6 - 10A	100	1	6	6	90,9	90,90	Additional	1988
	KM6 - Sopladores	100	1	2	2	58,9	58,90	Additional	1993
	Salar - km6	100	2	2,2x2	4	62x2	124,00	Additional	2005
	Salar - Calama	110	1	14	14	44	44,00	Sub-transmission	1982
	Central Chapiquiña - Arica	66	1	84	84	20,6	20,60	Additional	1967
	Central Diesel Arica - Arica (4)	66	1	7	7	20,6	20,60	Sub-transmission / Additional	1964
E-Cl	Central Diesel Iquique - Iquique	66	1	1,6	1,6	41,2	41,20	Additional	1970
	Iquique - Pozo Almonte. Circuito N°1	66	1	44	44	27,4	27,40	Additional	1964
	Iquique - Pozo Almonte. Circuito N°2	66	1	39	39	27,4	27,40	Additional	1987
	Pozo Almonte - Tamarugal	66	1	21	21	9,1	9,10	Sub-transmission	1968
	Tap Off Llanos - Aguas Blancas	66	1	N/I	N/I	N/I	N/I	Additional	N/I
	Arica - Pozo Almonte	110	1	216	216	34,3	34,30	Sub-transmission	1987
	Capricornio - Alto Norte	110	1	44	44	120	120,00	Additional	2000
	Capricornio - Antofagasta	110	1	28	28	91,5	91,50	Additional	2000
	Capricornio - Sierra Miranda	110	1	25	25	22,9	22,90	Additional	2007
	Chacaya - GNL Mejillones	110	1	11	11	122	122,00	Additional	2010
	Chacaya - Mejillones	110	1	1,4	1,4	34,3	34,30	Additional	1987
	Mejillones - Enaex	110	1	1,4	1,4	182,9	182,90	Additional	N/I
	Mejillones - Antofagasta	110	1	63	63	91,5	91,50	Additional	1987
	Central Diesel Tamaya - A	110	1	127	127	65	65,00	Additional	2009
	Central Diesel Tamaya - Salar	110	1	138	138	65	65,00	Additional	2009
	Central Tocopilla - A	110	2	141x2	282	65x2	130,00	Additional	1910
	Central Tocopilla - Central Diesel Tamaya	110	2	14x2	28	65x2	130,00	Additional	2009
	Chacaya - El Cobre	220	2	144x2	288	350,57x2	701,14	Additional	2011
	Laberinto - El Cobre (By-pass)	220	1	2,7	3	380,6	380,60	Additional	2011
	Laberinto - El Cobre	220	1	3	3	229	229,00	Additional	2010
	Chacaya - Crucero	220	1	153	153	304,8	304,80	Additional	1987
	Chacaya - Mantos Blancos	220	1	66	66	304,8	304,80	Additional	1996
	Chacaya - Mejillones	220	1	1,4	1,4	365,8	365,81	Additional	1987
	Crucero - Lagunas 1	220	1	174	174	182,9	182,90	Troncal	1987
	Lagunas - Pozo Almonte	220	1	70	70	182,9	182,90	Additional	1987
	El Cobre - Gaby	220	1	57	57	73	73,00	Additional	2010
	Central Tocopilla - Crucero	220	2	71,4x2	143	365,8x2	731,60	Additional	1986
	Crucero - Chuquicamata	220	1	70	70	274	274,00	Additional	1986
	Crucero - El Abra	220	1	101	101	182,9	182,90	Additional	1995
	Crucero - Radomiro Tomic	220	1	82	82	182,9	182,90	Additional	1996
	Crucero - Salar (1)	220	1	75	75	365,8	365,81	Additional	2005
	Salar - Chuquicamata (2)	220	1	13	13	274,4	274,36	Additional	2005
	Tap Off El Loa - El Loa	220	1	8	8	91,5	91,50	Additional	2000
Emelari	Parinacota - Quiani (3)	66	1	7	7	12,6	12,60	Sub-transmission	2002
	Tap Off Quiani - Quiani	66	1	0,5	0,5	12,6	12,60	Sub-transmission	1998
Grace	Tap Off Barriles - Mantos de la Luna	110	1	27	27	57,16	57,16	Additional	2006
Haldeman	Pozo Almonte - Sagasca	66	1	55	55	3,4	3,40	Additional	1971
Minera Cerro Colorado	Pozo Almonte - Cerro Colorado	110	1	61	61	68,6	68,60	Additional	1993
Minera Collahuasi	Encuentro - Collahuasi	220	1	201	201	109	109,00	Additional	2004
	Lagunas - Collahuasi	220	2	118x2	236	109x2	218,00	Additional	1996
Minera El Tesoro	Encuentro - El Tesoro	220	1	90	90	125	125,00	Additional	2000

Owner	Transmission line	Voltage (kV)	N° Circuits	Approximate length (km)		Capacity (MVA)		System type	Start-up year
Minera Escondida	Atacama - Domeyko	220	2	205x2	410	245,8x2	491,60	Additional	1999
	Crucero - Laberinto. Circuito N°1	220	1	133	133	293	293,00	Additional	2010
	Domeyko - Escondida	220	1	7	7	245,8	245,80	Additional	1999
	Domeyko - Laguna Seca	220	1	13	13	245,8	245,80	Additional	2001
	Domeyko - Planta Óxidos	220	1	1	1	182,9	182,90	Additional	1998
	Domeyko - Sulfuros	220	1	1	1	293	293,00	Additional	2005
	Laberinto - Nueva Zaldívar. Circuito N°1	220	1	95	95	293	293,00	Additional	2010
	Mejillones - O'Higgins	220	1	73	73	182,9	182,90	Additional	2006
	Nueva Zaldívar - Escondida	220	1	14	14	293	293,00	Additional	2010
	Nueva Zaldívar - Sulfuros	220	1	13	13	293	293,00	Additional	2006
	O'Higgins - Coloso	220	1	32	32	91,5	91,50	Additional	1993
Minera Esperanza	O'Higgins - Domeyko	220	1	128	128	182,9	182,90	Additional	1999
	Chacaya - Muelle	110	1	55	55	95	95,00	Additional	2010
	Muelle - Tap Off Licancabur	110	1	10	10	57	57,00	Additional	2010
	Tap Off Licancabur - Guayaques	110	1	40	40	19	19,00	Additional	2010
	El Cobre - Esperanza	220	2	81,3x2	163	179x2	358,00	Additional	2010
Minera Meridian	El Tesoro - Esperanza	220	1	13	13	85,4	85,40	Additional	2010
Minera Meridian	Tap Off Palestina - El Peñón	66	1	66	66	27,4	27,40	Additional	1999
Minera Michilla	Mejillones - El Lince	110	1	74	74	34,3	34,30	Additional	1991
Minera Quebrada Blanca	Collahuasi - Quebrada Blanca	220	1	18	18	68,6	68,60	Additional	2002
Minera Rayrock	Tap Off Pampa - Iván Zar	66	1	17	17	1	1,00	Additional	1994
Minera Spence	Encuentro - Spence	220	1	67	67	274,4	274,40	Additional	2005
Minera Zaldivar	Crucero - Laberinto. Circuito N°2	220	1	133	133	330	330,00	Additional	1994
	Laberinto - Nueva Zaldívar. Circuito N°2	220	1	95	95	228,6	228,60	Additional	1994
	Zaldívar - Escondida	220	1	14	14	293	293,00	Additional	1995
Moly-Cop	Chacaya - Molycop	220	1	0,8	0,8	45,7	45,70	Additional	2004
Norgener	Tap Off Oeste - Minsal	110	1	33	33	34,3	34,30	Additional	1997
	Laberinto - Lomas Bayas	220	1	10	10	91,5	91,50	Additional	1997
	Tap Off Oeste - Laberinto	220	1	85	85	228,63	228,63	Additional	1998
	Norgener - Crucero	220	2	72x2	144	304,8x2	609,60	Additional	1997
Transelec Norte	Atacama - Encuentro	220	2	153x2	306	386x2	772,00	Troncal	1999
	Atacama - Esmeralda	220	1	69	69	197,4	197,40	Sub-transmission	2001
	Crucero - Encuentro.Circuito N°1	220	1	0,8	0,8	304,8	304,80	Troncal	1999
	Crucero - Encuentro.Circuito N°2	220	1	1,1	1,1	304,8	304,80	Troncal	2000
	Crucero - Lagunas 2	220	1	173	173	121,9	121,90	Troncal	1998
	Cóndores - Parinacota	220	1	222	222	72	72,00	Sub-transmission	2002
	Tarapacá - Cóndores	220	1	70	70	182,9	182,90	Sub-transmission	2002
	Tarapacá - Lagunas	220	2	56x2	112	152,4x2	304,80	Troncal	1998
Transemel	Cóndores - Cerro Dragón	110	1	5	5	34,3	34,30	Sub-transmission	2001
	Cóndores - Pacífico	110	1	11	11	34,3	34,30	Sub-transmission	2002
	Cóndores - Palafitos	110	1	9	9	34,3	34,30	Sub-transmission	2002
	Esmeralda - Centro	110	1	0,5	0,5	67,1	67,10	Sub-transmission	2001
	Esmeralda - La Portada	110	1	17	17	34,3	34,30	Sub-transmission	2001
	Esmeralda - Sur	110	1	7	7	34,3	34,30	Sub-transmission	2002
	Esmeralda - Uribe	110	1	17	17	68,6	68,60	Additional	2001
	Salar - Calama (nueva)	110	1	17	17	55,06	55,06	Sub-transmission	2011
	Tap Off Alto Hospicio - Alto Hospicio	110	1	0,1	0,1	34,3	34,30	Sub-transmission	2001
	Parinacota - Chinchorro	66	1	4	4	21	21,00	Sub-transmission	2002
	Parinacota - Pukará	66	1	4	4	42,1	42,10	Sub-transmission	2002
Xstrata Copper - Altonorte	Antofagasta - Alto Norte	110	1	24	24	68,6	68,60	Additional	1993
Total Lines 66 kV				349		266			
Total Lines 100 kV				58		992			
Total Lines 110 kV				1.385		1.964			
Total Lines 220 kV				4.966		15.811			
Total Lines 345 kV				408		777			
TOTAL SING TO DECEMBER 31 ST 2011				7.166		19.810			

Notes:

(1) This line is of shared ownership, as follows: Crucero-Torre 340 section owned by E-CL, Torre 340-Salar section owned by Codelco Norte.

(2) This line is of shared ownership, as follows: Salar-Torre 340 section owned by Codelco Norte, Torre 340-Chuquicamata section owned by E-CL.

(3) This line is of shared ownership between Minera Escondida and Minera Zaldivar.

(4) This line is of shared ownership between EMELARI and TRANSEMEL

(5) Arica - Tap Arica section is Sub-transmission; Tap Arica - Central Diesel Arica section is Additional

SING MAIN CLIENTS AS OF DECEMBER, 2011

Client	Category	Connected Power [MVA]	Maximum Demand [MW]	Annual Consumption [GWh]	Supplier	Supply Bar
ACF Minera	Minning	2,61	4,78	30,73	Celta	Lagunas 220 kV
Atacama Agua y Tecnología	Industrial	14,00	9,51	61,50	E-CL	Antofagasta 110 kV
Atacama Minerals	Minning	20,00	3,19	20,72	E-CL	Mejillones 220 kV
Camíña	Distribution	-	0,15	0,59	E-CL	Dolores 110 kV
Cerro Colorado	Minning	90,00	44,40	283,17	E-CL	Pozo Almonte 220 kV
Cerro Dominador - Sierra Gorda	Minning	7,73	4,89	29,06	E-CL	Encuentro 220 kV
Cerro Dominador - Santa Margarita	Minning	5,78	3,35	11,97	E-CL	Calama 110 kV
Cía. Portuaria Mejillones	Industrial	4,00	1,12	3,65	E-CL	Mejillones 110 kV
Clientes Chapiquiña	-	0,37	0,40	1,60	E-CL	Chapiquiña 66 Kv
Clientes Menores E-CL	-	0,04	0,06	0,45	E-CL	Arica 110 Kv
Codelco - Chuquicamata	Minning	1292,00	288,06	2140,30	E-CL	Crucero 220 kV - Chuquicamata 220 kV - Salar 220 kV - Salar 100 kV - S/E A 100 kV
Codelco - Radomiro Tomic	Minning	300,00	119,81	883,80	E-CL	Crucero 220 kV
Collahuasi	Minning	600,00	183,78	1272,12	Celta - Gasatacama	Collahuasi 220 kV
Cosayach	Minning	37,80	7,15	44,84	E-CL	Pozo Almonte 23 kV - Dolores 110 kV - Tamarugal 66 kV
El Abra	Minning	150,00	98,90	632,16	E-CL	Crucero 220 kV
El Tesoro	Minning	104,00	40,99	299,83	Gasatacama	Encuentro 220 kV
Elecda	Distribution	-	145,22	817,44	Gasatacama	Esmeralda 220 kV - Calama 110 kV - Tocopilla 5 kV - La Negra 23 kV - Mejillones 23 kV - Antofagasta 13,8 kV
Eliqsa	Distribution	-	88,73	446,46	Gasatacama	Cóndores 220 kV - Pozo Almonte 23 kV - Tamarugal 66 kV
Emelari	Distribution	-	51,61	278,99	Gasatacama	Parinacota 220 kV
Enaex	Industrial	12,00	11,22	50,06	E-CL	Mejillones 110 kV
Gaby	Minning	100,00	73,09	383,89	E-CL	El Cobre 220 kV
GNL Mejillones	Industrial	12,50	4,53	20,23	E-CL	Chacaya 110 kV
Grace	Minning	25,00	12,46	73,24	AES Gener	Barriles 220 kV
Haldeman	Minning	17,25	8,98	58,76	E-CL	Pozo Almonte 66 kV
Inacesa	Industrial	18,95	9,06	49,86	Enorchile	La Negra 23 kV
Lomas Bayas	Minning	38,00	36,32	268,11	E-CL	Laberinto 220 kV
Mall Plaza Antofagasta	Industrial	5,66	5,25	23,01	E-CL	CD Antofagasta 13,8 kV
Mamiña	Minning	0,15	0,17	0,67	E-CL	Pozo Almonte 220 kV
Mantos Blancos	Minning	50,00	33,68	230,85	E-CL	Mantos Blancos 220 kV
Megapuerto	Industrial	0,78	1,91	4,35	E-CL	Mejillones 23 kV
Michilla	Minning	31,20	21,74	151,17	E-CL	Mejillones 110 kV
Minera Escondida	Minning	3400,50	423,69	2858,44	Norgener - Gasatacama	Mejillones 220 kV - Zaldívar 220 kV - Crucero 220 kV - Atacama 220 kV
Minera Esperanza	Minning	100,00	119,12	537,59	E-CL	El Cobre 220 kV - Chacaya 110 kV
Minera Meridian	Minning	20,00	17,57	119,25	Gasatacama	C. Atacama 220 kV
Codelco - MMH	Minning	17,00	4,64	10,82	-	-
Molycop	Industrial	30,00	17,34	71,49	E-CL	Chacaya 220 kV
Molynor	Industrial	1,50	1,75	11,86	E-CL	Mejillones 23 kV
Muelle Esperanza	Industrial	30,00	6,86	106,74	E-CL	Chacaya 110 kV
Noracid	Industrial	52,00	6,55	6,64	-	-
Other Minor and Works	Miscellaneous	-	34,27	41,31	-	-
Polpaico	Industrial	3,83	2,33	7,64	E-CL	Mejillones 23 kV
Quebrada Blanca	Minning	50,00	13,16	18,16	Gasatacama	Collahuasi 220 kV
Quiborax	Minning	1,70	2,65	16,99	E-CL	El Águila 66 kV
Rayrock	Minning	8,00	3,16	17,33	E-CL	Pampa 110 kV
Spence	Minning	180,00	118,20	551,45	E-CL	Encuentro 220 kV
SQM El Loa	Minning	52,50	31,39	218,04	E-CL	El Loa 220 kV
SQM Minsal	Minning	20,00	24,61	135,20	Norgener	Oeste 220 kV
SQM Nitratos	Minning	10,00	3,16	9,08	Norgener	La Cruz 220 kV
SQM Nva.Victoria	Minning	30,00	6,64	44,40	E-CL	Nva.Victoria 220 kV
SQM Salar	Minning	5,78	3,64	24,89	E-CL	El Negro 110 kV
Xstrata Copper - Altonorte	Industrial	104,00	43,81	334,44	E-CL	Alto Norte 110 kV
Zaldívar	Minning	134,00	75,40	531,26	E-CL	Zaldívar 220 kV



●●● Operations Statistics



I. SING: Generation Installed Capacity

INSTALLED CAPACITY AS PER COMPANY

TERM 2002-2011

IN PHYSICAL UNITS (MW)

Company \ Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Celta	182	182	182	182	182	182	182	182	182	182
E-CL	719	719	719	719	719	722	705	693	691	691
Electroandina	1.029	1.037	992	992	992	992	1.000	1.105	1.105	1.105
Endesa										
AES Gener	643	643	643	643	643	643	643	643	643	643
Gasatacama	783	783	783	783	783	781	781	781	781	781
Norgener	277	277	277	277	277	283	283	277	277	277
Enorchile								11	11	11
Equipos de Generación (3)								7	7	7
Cavancha (1)									3	3
Enernuevas (2)									2	2
Termoeléctrica Andina										169
Inversiones Hornitos										170
Eléctrica Angamos										545
TOTAL	3.633	3.641	3.596	3.596	3.596	3.602	3.593	3.699	3.701	4.585

IN PERCENTAGES (%)

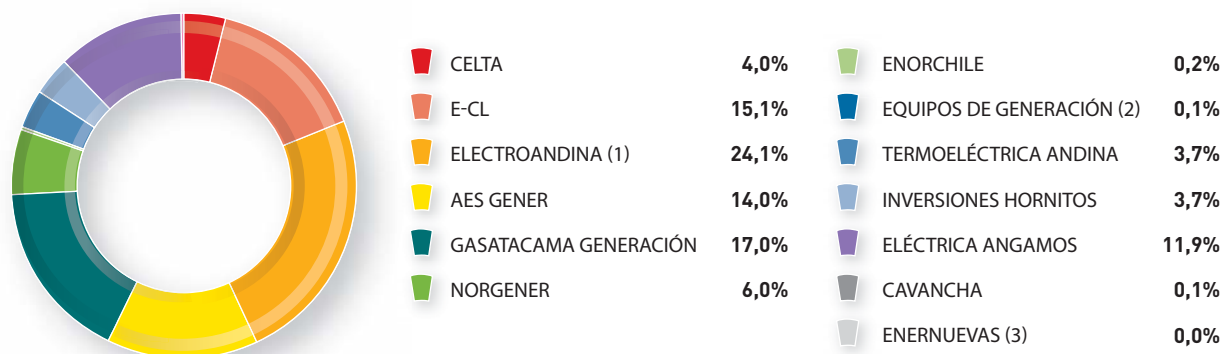
Company \ Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Celta	5,0%	5,0%	5,1%	5,1%	5,1%	5,0%	5,1%	4,9%	4,9%	4,0%
E-CL	19,8%	19,8%	20,0%	20,0%	20,0%	20,0%	19,6%	18,7%	18,7%	15,1%
Electroandina	28,3%	28,5%	27,6%	27,6%	27,6%	27,5%	27,8%	29,9%	29,9%	24,1%
Endesa										
AES Gener	17,7%	17,7%	17,9%	17,9%	17,9%	17,8%	17,9%	17,4%	17,4%	14,0%
Gasatacama	21,6%	21,5%	21,8%	21,8%	21,8%	21,7%	21,7%	21,1%	21,1%	17,0%
Norgener	7,6%	7,6%	7,7%	7,7%	7,7%	7,9%	7,9%	7,5%	7,5%	6,0%
Enorchile								0,3%	0,3%	0,2%
Equipos de Generación (3)								0,2%	0,2%	0,1%
Cavancha (1)									0,1%	0,1%
Enernuevas (2)									0,1%	0,0%
Termoeléctrica Andina										3,7%
Inversiones Hornitos										3,7%
Eléctrica Angamos										11,9%
TOTAL	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

(1) Since November 3, 2010 Cavancha Station belongs to PMGD. Before, it was represented at the CDEC-SING by E-CL.

(2) Enernuevas units correspond to PMGD.

(3) Former Inacal

INSTALLED CAPACITY AS PER COMPANY



(1) Electroandina generation assets became a part of E-CL as from December 1, 2011

(2) Former INACAL

(3) With a 2.2 MW installed capacity, Enernuevas interest is equivalent to 0.05% of the SING

INSTALLED CAPACITY AS PER FUEL TYPE

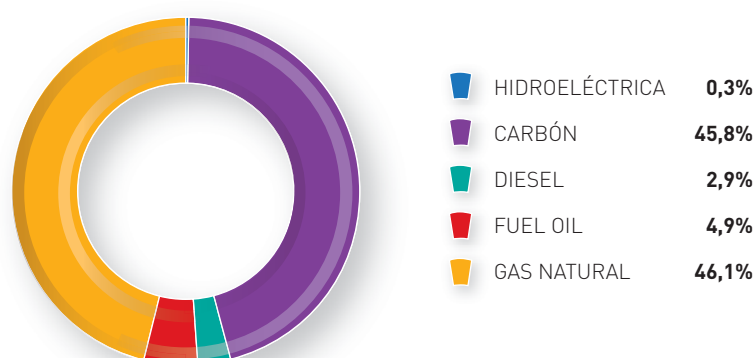
TERM 2002-2011

IN PHYSICAL UNITS (MW)

Fuel	Company	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Hydro	E-CL	13	13	13	13	13	13	13	10	10	10
	Cavancha								3	3	3
	Enernuevas									2	2
Subtotal		13	13	13	13	13	13	13	13	15	15
Coal	Celta	158,0	158,0	158,0	158,0	158,0	158,0	158,0	158,0	158,0	158,0
	E-CL	340,9	340,9	340,9	340,9	340,9	340,9	340,9	340,9	340,9	340,9
	Electroandina	429,4	429,4	429,4	429,4	429,4	429,4	437,5	439,6	439,6	439,6
	Norgener	277,3	277,3	277,3	277,3	277,3	277,3	277,3	277,3	277,3	277,3
	Andina										168,8
	Hornitos										170,1
	Angamos										545,0
Subtotal		1.206	1.206	1.206	1.206	1.206	1.206	1.214	1.216	1.216	2.100
Diesel	Celta	24	24	24	24	24	24	24	24	24	24
	E-CL	62	62	62	62	62	65	48	48	48	48
	Electroandina	42	50	50	50	50	50	50	50	50	50
	Endesa										
	Gasatacama	3	3	3	3	3					
	Enorchile						6	6	11	11	11
Subtotal		130	138	138	138	138	144	127	132	132	132
Fuel Oil	E-CL	53	53	53	53	53	53	53	41	41	41
	Electroandina	120	120	75	75	75	75	75	179	179	179
	Equipos de Generación (1)								7	7	7
Subtotal		173	173	128	128	128	128	128	226	226	226
Natural Gas	E-CL	251	251	251	251	251	251	251	251	251	251
	AES Gener	643	643	643	643	643	643	643	643	643	643
	Gasatacama	781	781	781	781	781	781	781	781	781	781
	Electroandina	438	438	438	438	438	438	438	438	438	438
Subtotal		2.112	2.112	2.112	2.112	2.112	2.112	2.112	2.112	2.112	2.112
TOTAL		3.633	3.641	3.596	3.596	3.596	3.602	3.593	3.699	3.701	4.585

(1) Former INACAL

INSTALLED CAPACITY AS PER FUEL TYPE



II. SING: Energy Generation

GENERATION AS PER COMPANY AND UNIT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	ANNUAL
ELECTROANDINA													
U10 - U11 (1)	6,71	2,88	4,22	3,65	5,72	3,93	0,43	0,30	3,56	0,82	0,00	0,00	32,22
U12 - U13 (1)	90,71	45,42	38,80	46,35	58,72	88,66	65,70	22,45	44,18	69,87	38,08	0,00	608,95
U14 - U15 (1)	122,67	134,93	158,97	154,69	154,74	153,25	126,54	125,51	139,09	80,80	95,77	0,00	1.446,97
U16 (1)	53,45	85,84	117,52	136,99	89,48	56,43	93,09	158,11	57,62	109,12	137,61	0,00	1.095,27
TG1 (1)	0,57	0,23	0,57	0,43	0,53	0,36	0,05	0,15	0,12	0,22	0,14	0,00	3,36
TG2 (1)	0,48	0,22	0,65	0,48	0,47	0,31	0,03	0,10	0,12	0,21	0,05	0,00	3,13
TG3 (1)	2,93	1,08	1,75	2,47	1,16	0,59	0,20	0,95	0,73	1,68	2,28	0,00	15,82
SUTA (1)	26,96	12,75	19,12	18,16	13,91	17,72	5,86	9,14	7,40	10,79	9,24	0,00	151,05
Total Gross Generation	304,48	283,35	341,61	363,23	324,73	321,26	291,90	316,72	252,82	273,52	283,17	0,00	3.356,78
Own Consumption	20,84	18,50	22,10	22,80	22,50	22,65	20,10	17,50	18,80	13,00	16,30	0,00	215,09
Total Net Generation	283,64	264,85	319,51	340,43	302,23	298,61	271,80	299,22	234,02	260,52	266,87	0,00	3.141,69
E-CL													
CHAPIQUINA	3,74	5,86	3,06	2,65	3,30	2,76	2,90	2,57	2,82	3,28	3,46	3,80	40,19
CD ARICA	2,36	1,15	2,10	2,58	0,69	1,44	0,43	0,65	0,47	0,56	0,79	2,37	15,58
CD IQUIQUE	4,36	1,57	3,64	3,94	1,80	2,83	0,56	1,00	2,00	2,76	3,35	6,33	34,15
CD MANTOS BLANCOS	8,06	3,54	7,74	5,92	3,73	3,27	0,61	1,73	2,50	5,85	4,18	1,88	49,02
CTM3	80,11	37,28	20,07	14,43	15,98	82,89	13,24	4,13	15,97	25,57	0,59	0,01	310,25
CTM2	105,63	90,91	94,01	105,28	114,40	49,21	87,42	101,70	101,82	114,40	82,85	111,38	1.158,99
CTM1	100,75	82,30	101,42	100,73	106,62	99,44	79,07	90,93	88,41	80,91	81,19	106,55	1.118,31
DEUTZ	0,03	0,00	0,02	0,00	0,01	0,02	0,01	0,01	0,03	0,05	0,01	0,00	0,19
CUMMINS	0,02	0,01	0,02	0,03	0,00	0,01	0,01	0,01	0,02	0,02	0,01	0,00	0,14
U10 - U11 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
U12 - U13 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	21,93	21,93
U14 - U15 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	127,09	127,09
U16 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	101,72	101,72
TG1 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,02	0,02
TG2 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,03	0,03
TG3 (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,91	0,91
SUTA (1)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	8,99	8,99
Total Gross Generation	305,05	222,61	232,08	235,57	246,52	241,86	184,25	202,73	214,02	233,41	176,41	493,02	2.987,52
Own Consumption	19,78	19,50	17,00	17,40	18,10	17,05	13,30	16,20	16,30	16,70	14,10	33,20	218,63
Total Net Generation	285,27	203,11	215,08	218,17	228,42	224,81	170,95	186,53	197,72	216,71	162,31	459,82	2.768,89
CELTA													
CTTAR	103,29	78,79	83,55	76,79	104,20	63,40	97,43	83,15	57,90	101,19	90,63	32,40	972,73
TGTAR	0,81	0,45	1,27	1,51	0,93	0,55	0,09	0,32	0,32	0,29	0,42	1,12	8,08
Total Gross Generation	104,09	79,24	84,82	78,30	105,13	63,95	97,52	83,47	58,22	101,48	91,05	33,52	980,80
Own Consumption	8,27	6,80	6,90	6,30	8,40	5,00	8,30	7,70	5,60	8,40	0,00	2,98	74,65
Total Net Generation	95,82	72,44	77,92	72,00	96,73	58,95	89,22	75,77	52,62	93,08	91,05	30,54	906,15
NORGENER													
NT01	98,97	89,57	93,54	97,01	100,66	93,10	95,75	99,32	95,41	50,39	91,09	99,45	1.104,27
NT02	99,65	89,79	99,55	43,56	100,53	96,26	99,13	100,56	97,17	98,25	96,21	99,65	1.120,31
Total Gross Generation	198,62	179,36	193,09	140,58	201,19	189,36	194,88	199,88	192,58	148,64	187,30	199,10	2.224,59
Own Consumption	13,08	11,90	12,90	9,20	13,20	12,50	13,10	13,10	13,10	9,80	12,40	14,80	149,08
Total Net Generation	185,54	167,46	180,19	131,38	187,99	176,86	181,78	186,78	179,48	138,84	174,90	184,30	2.075,51
GASATACAMA													
TG1A	38,04	18,06	40,82	41,58	77,68	33,73	11,83	28,34	32,88	37,27	26,85	41,25	428,33
TG1B	55,37	52,42	26,89	39,18	23,45	65,85	22,53	41,26	14,95	7,39	0,64	4,78	354,71
TV1C	53,34	41,14	38,98	46,37	59,02	58,31	18,83	38,86	26,72	25,84	14,29	25,23	446,94
TG2A	4,49	0,00	0,00	0,00	0,00	0,00	0,00	4,17	9,56	38,68	44,24	57,37	158,52
TG2B	52,11	27,38	63,74	41,91	2,58	41,85	72,07	28,11	38,32	21,75	22,86	5,55	418,22
TV2C	31,88	14,93	35,05	22,71	1,25	22,63	40,25	15,31	27,14	34,26	38,72	35,73	319,86
Total Gross Generation	235,24	153,92	205,48	191,75	163,98	222,36	165,51	156,05	149,57	165,21	147,61	169,91	2.126,57
Own Consumption	7,54	5,40	6,70	6,20	5,60	6,40	5,70	5,60	4,90	5,80	5,30	5,70	70,84
Total Net Generation	227,70	148,52	198,78	185,55	158,38	215,96	159,81	150,45	144,67	159,41	142,31	164,21	2.055,73

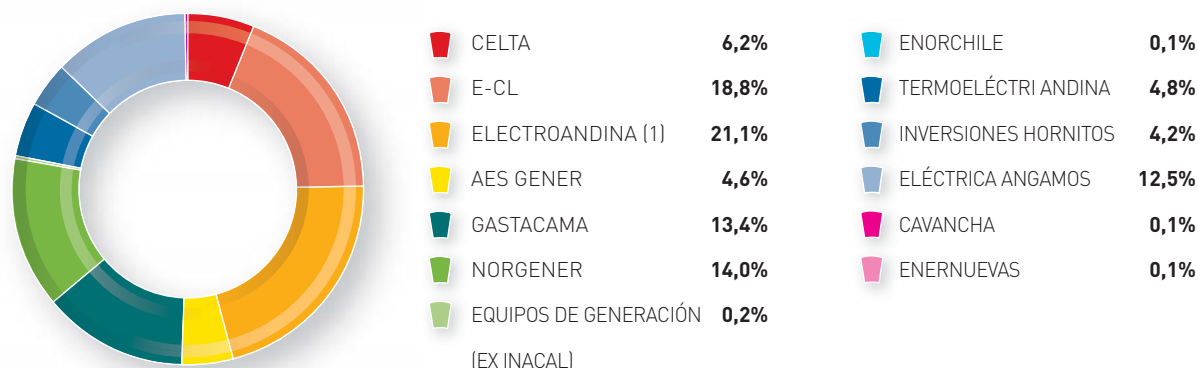
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	ANNUAL
AES GENER													
Central Salta	100,15	126,44	100,17	64,81	1,99	0,00	0,00	0,00	51,05	68,96	132,82	88,09	734,47
Total Gross Generation	100,15	126,44	100,17	64,81	1,99	0,00	0,00	0,00	51,05	68,96	132,82	88,09	734,47
Own Consumption	0,53	0,70	0,40	0,30	0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,94
Total Net Generation	99,62	125,74	99,77	64,51	1,98	0,00	0,00	0,00	51,05	68,96	132,82	88,09	732,53
CAVANCHA													
CAVA	1,24	1,17	1,27	1,22	1,24	1,16	1,24	1,22	0,99	1,30	1,17	1,32	14,53
Total Gross Generation	1,24	1,17	1,27	1,22	1,24	1,16	1,24	1,22	0,99	1,30	1,17	1,32	14,53
Own Consumption	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total Net Generation	1,24	1,17	1,27	1,22	1,24	1,16	1,24	1,22	0,99	1,30	1,17	1,32	14,53
ENORCHILE													
ZOFRI 1-6	0,10	0,06	0,10	0,10	0,04	0,05	0,02	0,03	0,02	0,03	0,05	0,13	0,73
ZOFRI 2-5	0,43	0,33	0,53	0,55	0,22	0,30	0,14	0,17	0,12	0,17	0,28	0,76	4,00
ZOFRI 7-12	0,88	0,45	0,81	0,60	0,23	0,52	0,21	0,32	0,22	0,14	0,36	1,16	5,89
Total Gross Generation	1,41	0,83	1,43	1,25	0,49	0,88	0,37	0,52	0,36	0,33	0,69	2,05	10,62
Own Consumption	0,02	0,03	0,02	0,02	0,02	0,02	0,03	0,03	0,02	0,01	0,01	0,01	0,24
Total Net Generation	1,39	0,80	1,41	1,23	0,47	0,86	0,34	0,49	0,34	0,32	0,68	2,04	10,38
EQUIPOS DE GENERACIÓN (2)													
INACAL1 - 4	3,05	3,25	2,88	3,73	1,72	2,76	1,12	1,48	1,13	1,65	0,94	0,52	24,23
Total Gross Generation	3,05	3,25	2,88	3,73	1,72	2,76	1,12	1,48	1,13	1,65	0,94	0,52	24,23
Own Consumption	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total Net Generation	3,05	3,25	2,88	3,73	1,72	2,76	1,12	1,48	1,13	1,65	0,94	0,52	24,23
ANDINA													
CTA1	0,00	6,78	44,61	32,03	96,81	87,63	88,99	99,21	95,21	37,86	58,49	107,91	755,53
Total Gross Generation	0,00	6,78	44,61	32,03	96,81	87,63	88,99	99,21	95,21	37,86	58,49	107,91	755,53
Own Consumption						8,94	9,60	10,90	10,70	3,90	7,60	11,60	63,24
Total Net Generation	0,00	6,78	44,61	32,03	96,81	78,69	79,39	88,31	84,51	33,96	50,89	96,31	692,29
ANGAMOS													
ANG1	30,43	83,71	92,62	148,65	168,28	165,85	98,94	128,39	99,84	123,54	49,17	91,07	1.280,49
ANG2	0,00	0,00	0,00	0,00	0,00	23,17	70,86	23,33	155,83	131,67	150,73	151,94	707,53
Total Gross Generation	30,43	83,71	92,62	148,65	168,28	189,01	169,80	151,72	255,67	255,22	199,90	243,01	1.988,03
Own Consumption	5,42	11,10	10,20	15,10	17,40	16,90	12,80	19,80	19,80	19,80	23,80	29,00	201,12
Total Net Generation	25,01	72,61	82,42	133,55	150,88	172,11	157,00	131,92	235,87	235,42	176,10	214,01	1.786,91
ENERNUEVAS													
MHAH - MHT2	1,29	1,28	1,48	1,41	1,42	1,30	1,23	1,40	1,37	1,47	1,40	1,51	16,56
Total Gross Generation	1,29	1,28	1,48	1,41	1,42	1,30	1,23	1,40	1,37	1,47	1,40	1,51	16,56
Own Consumption	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total Net Generation	1,29	1,28	1,48	1,41	1,42	1,30	1,23	1,40	1,37	1,47	1,40	1,51	16,56
HORNITOS													
CTH1	0,00	0,00	5,12	37,66	64,78	18,10	68,89	106,52	76,98	107,22	74,43	109,25	668,96
Total Gross Generation	0,00	0,00	5,12	37,66	64,78	18,10	68,89	106,52	76,98	107,22	74,43	109,25	668,96
Own Consumption				0,00	9,10	1,93	7,70	11,20	8,80	11,90	9,00	11,10	70,73
Total Net Generation	0,00	0,00	5,12	37,66	55,68	16,17	61,19	95,32	68,18	95,32	65,43	98,15	598,23

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	ANNUAL
TOTAL SING													
Gross Generation	1.285,04	1.141,94	1.306,67	1.300,16	1.378,29	1.339,64	1.265,69	1.320,92	1.349,96	1.396,26	1.355,40	1.449,22	15.889,18
Own Consumption	75,48	73,93	76,22	77,32	94,33	91,39	90,63	102,03	98,02	89,31	88,51	108,39	1.065,56
Net Generation	1.209,56	1.068,01	1.230,45	1.222,84	1.283,96	1.248,25	1.175,06	1.218,89	1.251,94	1.306,95	1.266,89	1.340,83	14.823,62
Transmission losses	44,40	34,30	51,30	57,50	54,60	17,90	39,80	40,00	54,90	56,90	50,10	59,00	560,70
Sales to free clients	1.039,50	917,90	1.047,00	1.041,00	1.096,10	1.097,40	999,40	1.046,00	1.070,90	1.117,10	1.086,80	1.144,40	12.703,30
Sales to regulated clients	125,60	115,80	132,20	124,40	133,30	133,00	135,80	132,90	126,10	133,00	130,00	137,50	1.559,60
Total Sales	1.165,10	1.033,70	1.179,20	1.165,40	1.229,40	1.230,40	1.135,20	1.178,90	1.197,00	1.250,10	1.216,80	1.281,90	14.262,90
TOTAL SING (IN %)													
Gross Generation	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Net Generation	6%	6%	6%	6%	7%	7%	7%	8%	7%	6%	7%	7%	7%
Net Generation	94%	94%	94%	94%	93%	93%	93%	92%	93%	94%	93%	93%	93%
Transmission losses	3%	3%	4%	4%	4%	1%	3%	3%	4%	4%	4%	4%	4%
Sales to free clients	81%	80%	80%	80%	80%	82%	79%	79%	79%	80%	80%	79%	80%
Sales to regulated clients	10%	10%	10%	10%	10%	10%	11%	10%	9%	10%	10%	9%	10%
Total Sales	91%	91%	90%	90%	89%	92%	90%	89%	89%	90%	90%	88%	90%

(1) Electroandina generation assets became a part of E-CL as from December 1, 2011

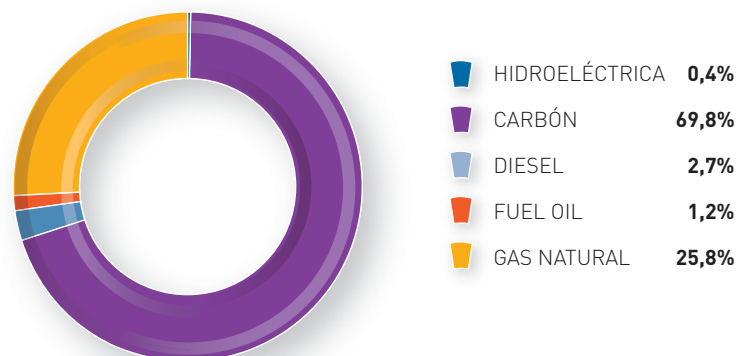
(2) Former INACAL

GROSS GENERATION AS PER COMPANY



(1) Electroandina generation assets became a part of E-CL as from December 1, 2011

GROSS GENERATION AS PER FUEL



GENERATION OF SING STATIONS

TERM 2002 - 2011 (GWh)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CELTA										
CTTAR	639	435	435	422	830	1012	981,0	1.065	1.076,3	972,7
TGTAR	1	1	1	0	2	14	17,9	11	9,6	8,1
Total Gross Generation	640	436	436	423	832	1026	999	1.076	1.085,9	980,8
Own Consumption	61	40	39	39	72	84	81	86	86,5	74,7
Total Net Generation	579	397	398	383	760	941	918	990	999,4	906,2
E-CL										
CHAPIQUIÑA	54	51	51	45	55	53	53	47	42	40
CAVANCHA (1)	13	14	15	15	15	15	15	15	13	
CD ARICA	2	1	5	2	7	33	32	17	25	16
CD IQUIQUE	8	6	11	4	13	50	60	31	42	34
CD ANTOFAGASTA	2	2	7	2	15	32	6	0	0	
CD MANTOS BLANCOS	6	7	16	4	25	7	0	69	88	49
CD ENAEX						1	0	1	1	
CTM1	18	144	498,7	446,6	880	1057	1202	1.191	1.114	1.118
CTM2	918	575	1.003	849	1033	1188	1298	1.282	1.220	1.159
CTM3	849	1.695	1.449	1.601	600	400	814	632	367	310
U10 - U11 (3)										0
U12 - U13 (3)										22
U14 - U15 (3)										127
U16 (3)										102
TG1 - TG2 (3)										0
TG3 (3)										1
SUTA (3)										9
Total Gross Generation	1.870	2.495	3.054	2.970	2643	2837	3480	3.285	2.912	2.988
Own Consumption	111	113	162	159	169	200	230	225	199	219
Total Net Generation	1.759	2.382	2.892	2.810	2475	2637	3250	3.060	2.713	2.769
ELECTROANDINA										
U09	0	0	0	0						
U10 - U11 (3)	1	0	7	0	19	187	322	112	45	32
U12 - U13 (3)	663	455	478	207	463	1052	1125	1.121	1.167	609
U14 - U15 (3)	1.266	1.304	1.409	1.549	1.688	1905	1784	1.820	1.888	1.447
U16 (3)	1.174	1.627	1.458	1.753	1.884	936	474	732	1.527	1.095
TG1 - TG2 (3)	7	2	2	1	0	12	25	12	4	7
TG3 (3)	4	11	91	43	12	40	56	33	20	16
SUTA (3)								184	187	151
Total Gross Generation	3.115	3.398	3.444	3.553	4.066	4.132	3.785	4.014	4.838	3.357
Own Consumption	199	198	194	191	218	255	254	249	294	215
Total Net Generation	2.917	3.201	3.250	3.361	3.848	3.877	3.531	3.764	4.545	3.142
AES GENER										
CC Salta	1.813	1.950	1.903	2.154	2.285	1.628	1.154	1.348	958	734
Total Gross Generation	1.813	1.950	1.903	2.154	2.285	1.628	1.154	1.348	958	734
Own Consumption	45	46	43	44	46	38	22	7	5	2
Total Net Generation	1.768	1.904	1.860	2.110	2.239	1.590	1.132	1.341	953	733

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GASATACAMA										
CC1	1.431	1.434	1.168	1.144	411	1.002	2.331,3	1.405	1.244	1.230
CC2	1.216	1.568	1.530	1.338	1.285	1.311	639,6	1.801	1.729	897
ENAE	0	0	0	0	0	0				
Total Gross Generation	2.647	3.002	2.698	2.482	1.696	2.313	2.971	3.205	2.973	2.127
Own Consumption	77	82	82	69	61	75	73	90	85	71
Total Net Generation	2.570	2.920	2.615	2.413	1.635	2.237	2.898	3.116	2.888	2.056
NORGENER										
NT01	63	16	216	549	776	897	1.039	1.049	1.099	1.104
NT02	252	126	578	528	938	1.107	1.061	911	1.170	1.120
ZOFRI_1-6 (Hasta 2008)						1	2			
ZOFRI_2-5 (Hasta 2008)						7	11			
Total Gross Generation	315	142	794	1.077	1.714	2.011	2.113	1.960	2.269	2.225
Own Consumption	32	14	66	91	125	138	145	134	149	149
Total Net Generation	283	128	727	986	1.589	1.873	1.969	1.826	2.120	2.076
CAVANCHA (2)										
CAVA									2	15
Total Gross Generation									2	15
Own Consumption									0	0
Total Net Generation									2	15
INACAL										
CD Inacal								13	44	24
Total Gross Generation								13	44	24
Own Consumption								0	0	0
Total Net Generation								13	44	24
ENORCHILE										
Central Estandartes								6	17	6
ZOFRI_1-6										1
ZOFRI_2-5										4
Total Gross Generation								6	17	11
Own Consumption								0	0	0
Total Net Generation								6	17	10
ANDINA										
CTA									1	756
Total Gross Generation									1	756
Own Consumption									0	63
Total Net Generation									1	692
ANGAMOS										
ANG1									0	1.280
ANG2										708
Total Gross Generation									0	1.988
Own Consumption									0	201
Total Net Generation									0	1.787

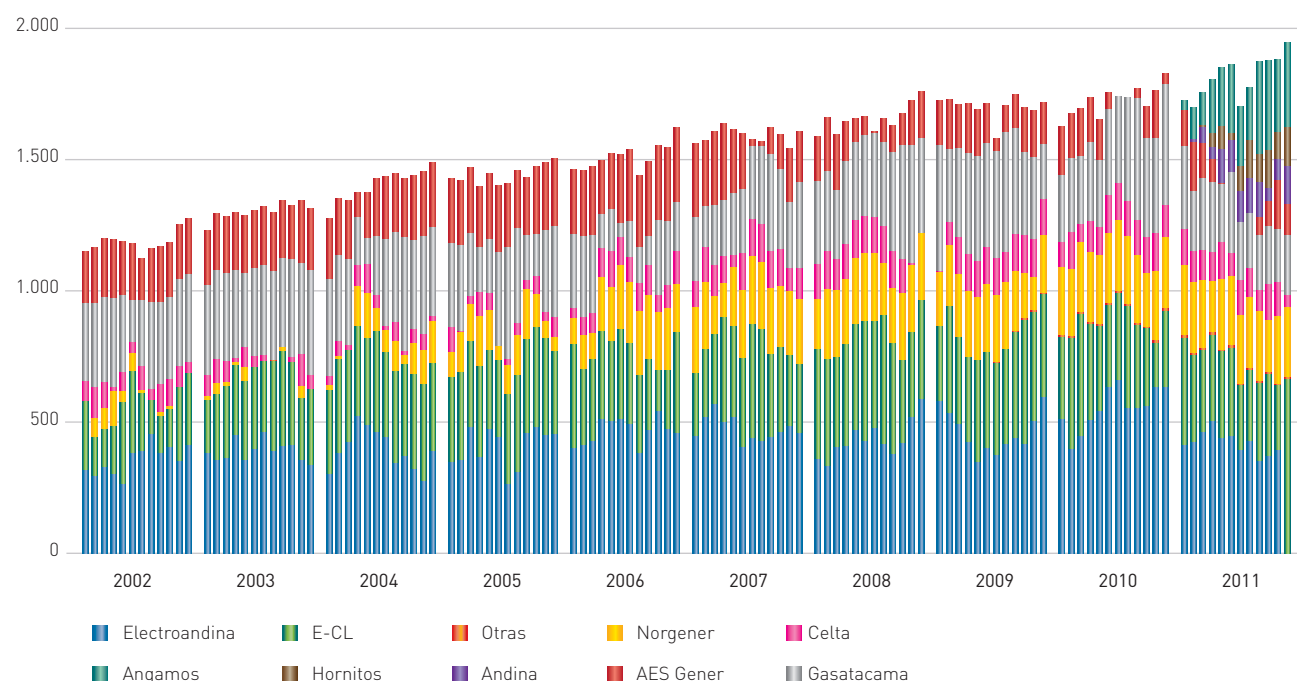
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
ENERNUEVAS										
MHAH - MHT2									3	17
Total Gross Generation									3	17
Own Consumption									0	0
Total Net Generation									3	17
TOTAL SING										
Gross Generation	10.400	11.424	12.330	12.657	13.236	13.946	14.502	14.907	15.104	15.889
Own Consumption	524	492	587	594	692	790	804	792	818	1.066
Net Generation	9.876	10.932	11.743	12.063	12.544	13.156	13.698	14.115	14.286	14.824
Transmission losses	394	452	503	503	515	481	479	459	493	561
Sales to free clients	8.473	9.433	10.164	10.401	10.774	11.343	11.832	12.240	12.297	12.703
Sales to regulated clients	1.009	1.047	1.075	1.159	1.256	1.332	1.387	1.417	1.496	1.560
Total Sales	9.482	10.480	11.240	11.560	12.029	12.674	13.219	13.656	13.792	14.263
TOTAL SING [%]										
Gross Generation	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Own Consumption	5%	4%	5%	5%	5%	6%	6%	5%	5%	7%
Net Generation	95%	96%	95%	95%	95%	94%	94%	95%	95%	93%
Transmission losses	4%	4%	4%	4%	4%	3%	3%	3%	3%	4%
Sales to free clients	81%	83%	82%	82%	81%	81%	82%	82%	81%	80%
Sales to regulated clients	10%	9%	9%	9%	9%	10%	10%	10%	10%	10%
Total Sales	91%	92%	91%	91%	91%	91%	91%	92%	91%	90%

(1) Cavancha up to November 3, 2010 represented at the CDEC-SING by E-CL.

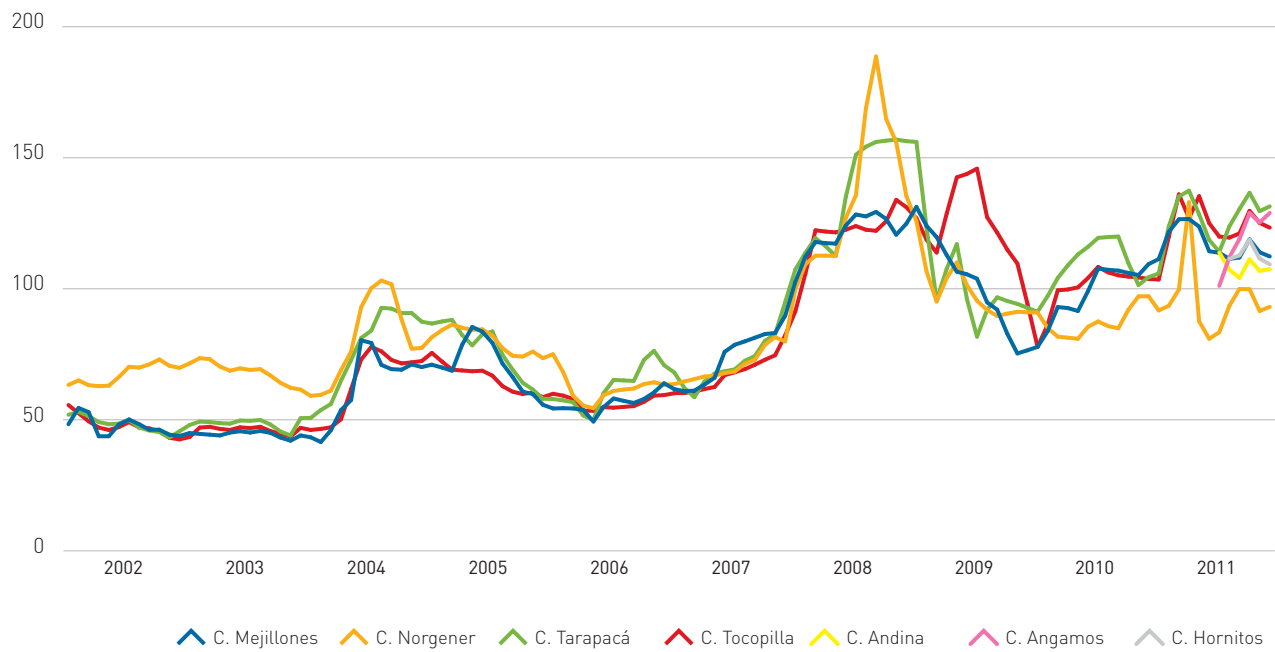
(2) Cavancha as from November 3, 2010 corresponds to PMGD.

(3) Units represented at the CDEC-SING by Electroandina up to December 1, 2011, then represented by E-CL:

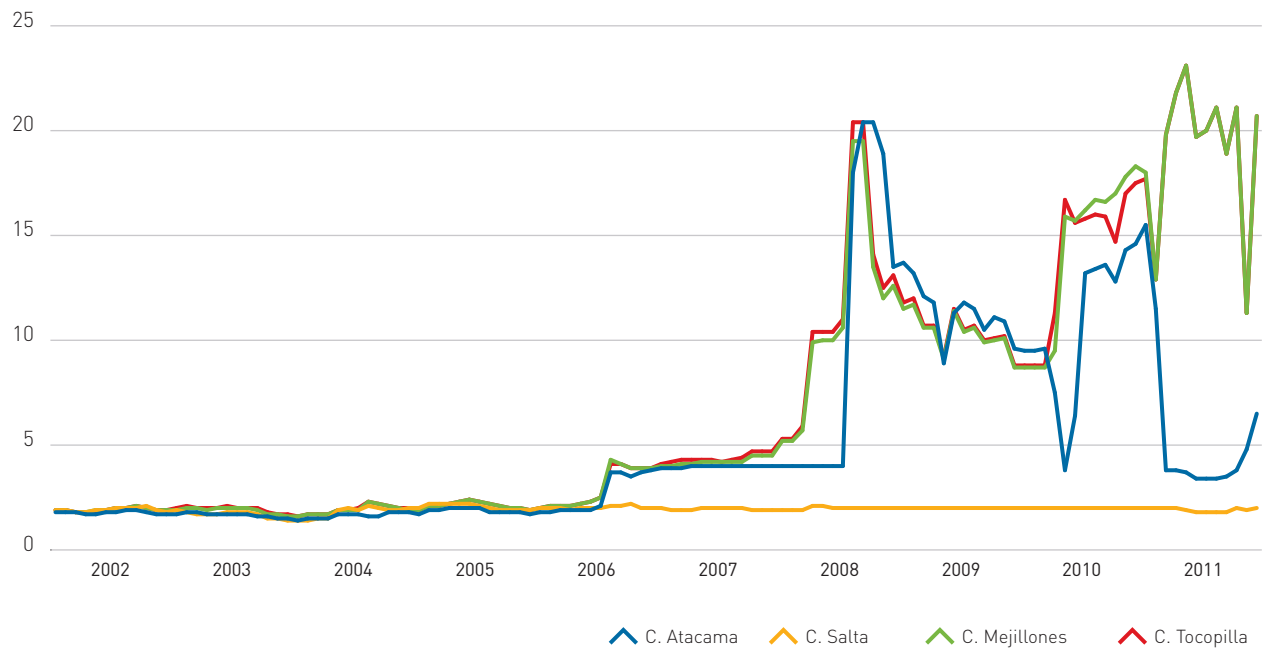
MONTHLY HOURLY MEDIUM GENERATION Power (MW) 2002 -2011



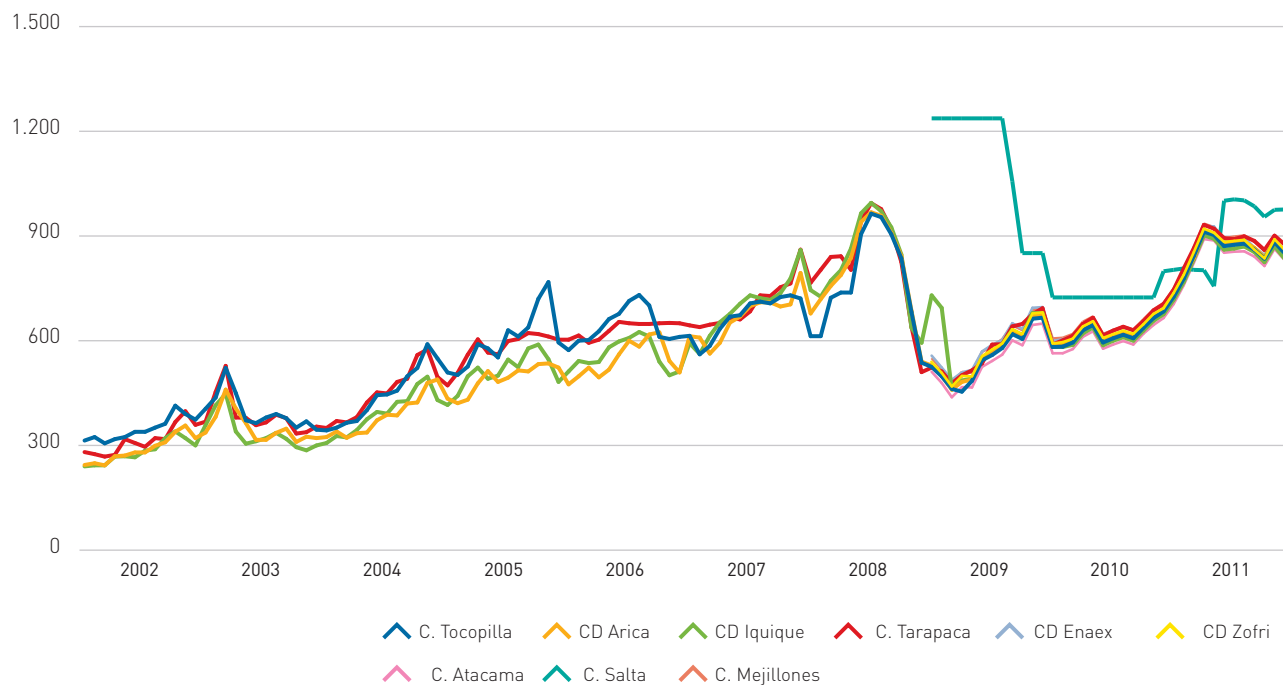
CARBON PRICE US\$/TON



NATURAL GAS PRICE US\$/MMBTU

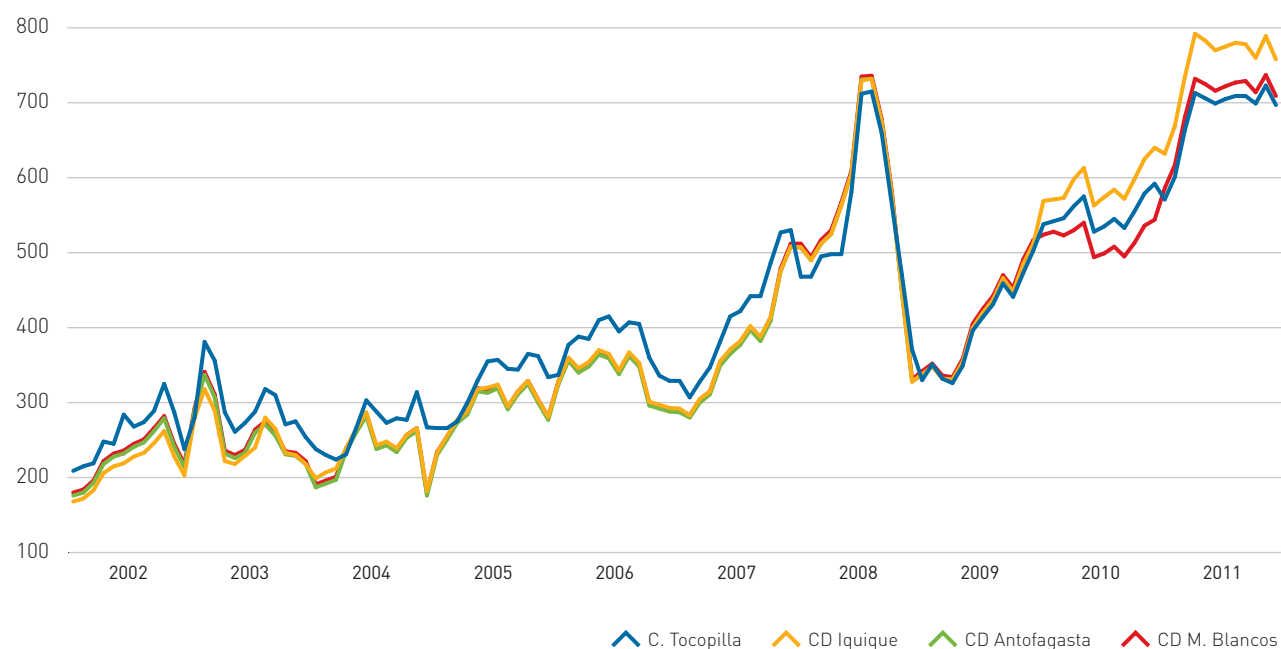


DIESEL OIL PRICE

US\$ / m³

FUEL OIL Nº6 PRICE

US\$/TON



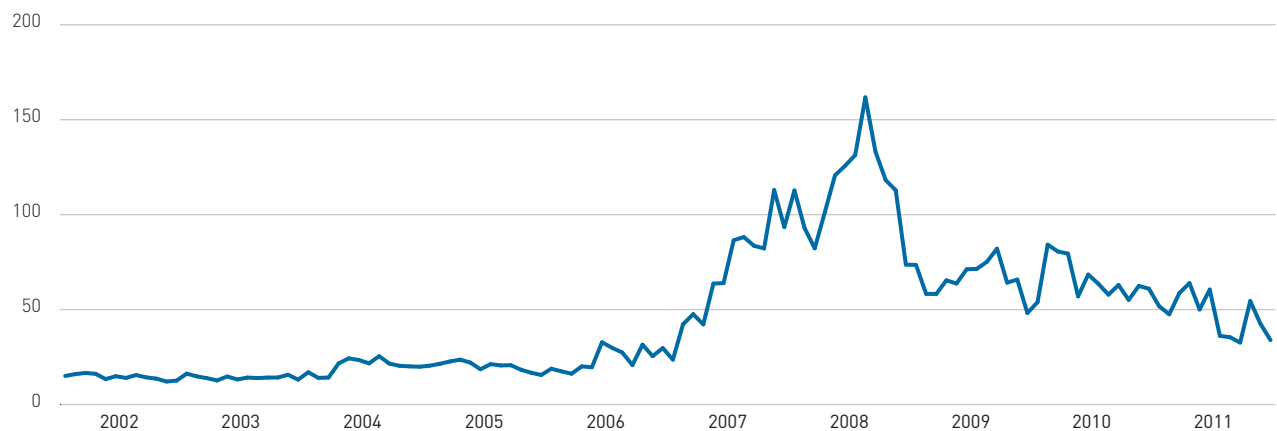
IV. Energy and Power Prices

MARGINAL COSTS OF ENERGY CRUCERO NODE 220 KV TERM 2002 - 2011

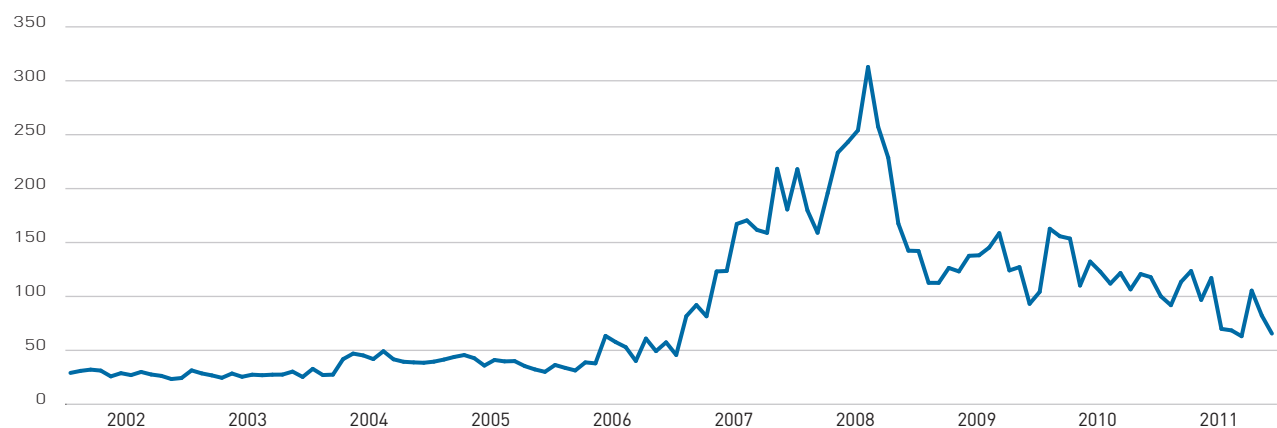
month \ year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
January	10,7	12,0	12,6	15,5	14,8	19,2	98,3	69,6	50,4	49,7
February	11,4	11,0	10,4	16,3	13,8	34,2	81,4	54,5	78,9	45,7
March	11,9	10,4	10,6	17,3	12,9	38,7	72,6	54,4	75,6	56,9
April	11,6	9,5	16,2	18,2	16,0	34,5	89,8	61,1	74,9	62,2
May	9,7	11,0	18,3	17,1	15,7	52,5	108,2	59,4	53,9	48,9
June	10,7	9,8	17,7	14,4	26,4	53,1	114,4	66,6	64,7	59,2
July	10,1	10,6	16,4	16,6	24,2	72,7	120,9	66,5	60,5	35,4
August	11,3	10,4	19,3	16,1	22,2	74,9	150,3	69,6	55,0	34,8
September	10,5	10,6	16,4	16,4	16,9	71,9	125,0	76,9	60,1	32,2
October	10,1	10,6	15,5	14,5	25,5	70,8	112,0	60,2	52,6	54,0
November	8,9	11,7	15,3	13,2	20,6	98,3	106,7	61,4	59,7	42,3
December	9,3	9,7	15,1	12,3	24,0	81,5	68,9	44,8	58,4	33,9
Average	10,5	10,6	15,3	15,6	19,4	58,5	104,0	62,1	62,1	46,3

Notes: Monthly averages in \$/kWh.

MONTHLY AVERAGE MARGINAL COSTS OF ENERGY IN CRUCERO NODE \$/ kWh



MONTHLY AVERAGE MARGINAL COSTS OF ENERGY IN CRUCERO NODE \$/ kWh



MARGINAL COSTS OF ENERGY CRUCERO NODE 220 KV – YEAR 2011

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	36,4	71,0	42,0	70,7	60,1	39,5	28,7	23,2	38,3	36,9	35,1	31,7
2	23,5	63,6	44,1	66,4	79,9	28,7	60,0	26,4	29,5	32,2	56,0	32,0
3	32,9	68,9	57,2	41,6	55,0	37,4	66,2	26,3	45,2	35,6	36,6	30,6
4	29,5	59,6	40,2	52,7	48,4	29,9	73,3	26,5	30,5	54,4	57,7	32,6
5	51,6	31,1	70,3	38,3	85,9	70,5	70,6	30,7	29,8	60,7	51,9	33,3
6	60,5	25,6	55,0	73,5	53,8	48,5	59,3	28,2	38,3	79,9	55,6	33,1
7	64,3	25,1	49,4	38,3	41,0	48,1	41,4	29,4	28,3	84,9	53,2	31,4
8	54,2	24,0	35,1	52,2	77,2	80,2	28,1	52,7	29,2	88,8	32,0	32,8
9	59,8	41,2	83,9	58,0	40,5	71,9	28,7	77,1	27,9	86,2	34,9	33,7
10	75,1	49,2	82,6	48,1	30,6	45,4	26,6	32,6	29,6	37,9	38,8	33,4
11	35,2	64,0	101,1	78,9	29,7	52,7	26,5	49,3	30,6	51,2	40,3	33,2
12	40,3	67,8	37,3	77,2	36,1	59,4	26,4	38,5	57,4	74,8	35,7	33,3
13	23,9	64,3	87,0	29,2	50,1	53,5	27,6	30,9	48,1	47,8	48,3	44,9
14	35,4	46,5	71,7	32,5	31,0	62,2	28,9	54,3	25,3	42,1	92,8	32,5
15	41,2	33,0	66,9	78,4	43,1	57,3	30,4	37,3	28,6	32,6	40,5	31,2
16	53,7	30,9	79,1	82,8	84,8	78,8	29,4	30,7	29,2	32,2	34,0	29,2
17	46,2	58,7	59,7	42,2	62,6	69,4	28,8	26,8	30,2	48,5	31,3	30,9
18	24,9	29,2	69,1	29,3	61,4	45,3	49,7	28,6	30,6	30,9	31,8	31,9
19	25,7	53,4	56,5	95,7	49,9	108,7	44,3	26,4	29,5	56,9	31,8	31,9
20	59,3	32,7	33,2	86,5	61,5	80,7	42,6	27,4	28,9	33,5	35,0	33,1
21	65,8	28,4	50,1	63,0	46,4	32,4	32,1	29,5	28,2	61,1	31,4	32,3
22	59,6	42,3	34,1	49,1	30,2	79,4	27,7	30,0	30,8	33,7	58,8	32,2
23	51,5	45,2	28,9	69,0	30,5	78,2	25,8	30,0	34,5	43,3	89,1	33,0
24	63,1	54,8	37,8	70,1	31,0	86,6	27,8	60,7	30,2	72,0	32,7	33,0
25	54,3	48,1	83,4	98,3	30,6	74,4	25,7	28,2	30,6	44,1	31,5	32,6
26	44,2	31,3	63,9	46,6	33,4	31,8	27,1	26,6	30,6	65,8	32,1	41,9
27	57,5	60,2	68,0	55,5	90,1	45,6	26,9	27,0	28,5	84,3	30,5	35,3
28	54,8	30,0	49,0	74,4	43,8	45,6	21,8	29,2	30,1	48,3	29,8	40,5
29	81,3		65,4	82,8	34,9	69,7	23,3	29,5	28,3	31,6	29,8	51,1
30	69,1		31,3	83,7	31,3	65,2	20,3	47,6	28,2	45,5	30,3	31,5
31	67,0		30,5		30,2		21,6	36,2		96,6		31,2
Average	49,7	45,7	56,9	62,2	48,9	59,2	35,4	34,8	32,2	54,0	42,3	33,9

Note: Daily averages in \$/KWh of every day.

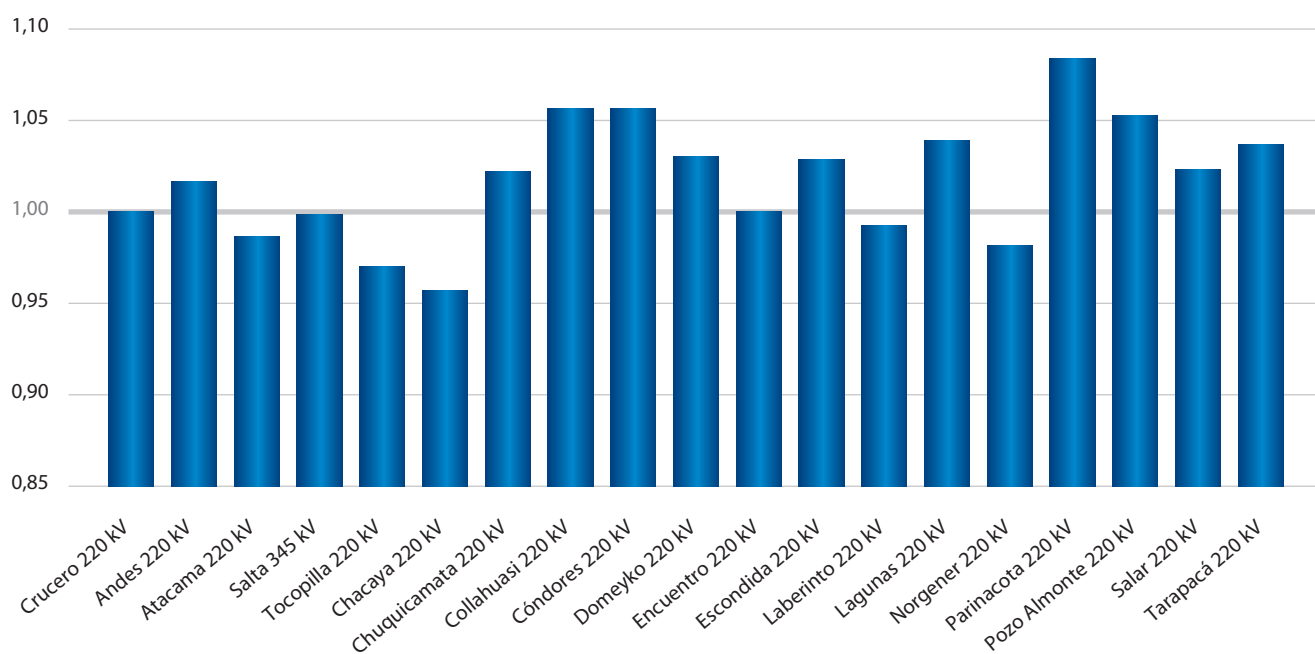
ENERGY PUNISHMENT FACTORS YEAR 2011

Bar	Average	Maximum	Minimum
Crucero 220 kV	1,00000	1,00000	1,00000
Andes 220 kV	1,01681	1,03354	0,99138
Atacama 220 kV	0,98677	0,99377	0,97863
Salta 345 kV	0,99859	1,02563	0,96215
Tocopilla 220 kV	0,97019	0,97690	0,96275
Chacaya 220 kV	0,95694	0,97274	0,94028
Chuquicamata 220 kV	1,02188	1,03545	1,01833
Collahuasi 220 kV	1,05641	1,06742	1,04749
Cóndores 220 kV	1,05634	1,07070	1,04711
Domeyko 220 kV	1,03010	1,04156	1,00626
Encuentro 220 kV	0,99997	0,99999	0,99997
Escondida 220 kV	1,02858	1,04028	1,00546
Laberinto 220 kV	0,99283	1,00875	0,97746
Lagunas 220 kV	1,03912	1,05099	1,03212
Norgener 220 kV	0,98169	0,98324	0,98108
Parinacota 220 kV	1,08405	1,09747	1,07403
Pozo Almonte 220 kV	1,05294	1,06380	1,04592
Salar 220 kV	1,02293	1,03970	1,01897
Tarapacá 220 kV	1,03661	1,05107	1,02842

Note: Average values corresponding to weekly programming.

ENERGY PUNISHMENT FACTORS – YEAR 2011

Average



PEAK POWER CRUCERO NODE 220 KV PRICE

Year	Rates setting	Validity		Power Price [\$ /kW-month]
		Since	To	
2001	oct-00	01/01/01	05/03/01	3.581,24
	apr-01	05/04/01	08/30/01	3.717,30
	apr-01 (index aug-01)	08/31/01	11/04/01	4.023,03
	oct-01	11/05/01	12/31/01	4.407,20
2002	oct-01	01/01/02	05/03/02	4.407,20
	apr-02	05/04/02	11/03/02	3.970,10
	oct-02	11/04/02	12/31/02	4.132,90
2003	oct-02	01/01/03	05/04/03	4.132,90
	apr-03	05/05/03	12/21/03	4.263,54
	oct-03	12/22/03	12/31/03	3.895,71
2004	oct-03	01/01/04	01/28/04	3.895,71
	oct-03 (index jan-04)	01/29/04	04/30/04	3.586,78
	apr-04	05/01/04	10/31/04	3.637,22
	oct-04	11/01/04	12/31/04	3.713,71
2005	oct-04	01/01/05	04/30/05	3.713,71
	apr-05	05/01/05	10/31/05	3.696,46
	oct-05	11/01/05	12/31/05	3.594,48
2006	oct-05	01/01/06	04/30/06	3.594,48
	apr-06	05/01/06	06/26/06	3.662,67
	apr-06 (index jun-06)	06/27/06	10/19/06	3.672,49
	apr-06 (index oct-06)	10/20/06	10/31/06	3.769,31
	oct-06	11/01/06	12/31/06	3.734,15
2007	oct-06	01/01/07	04/30/07	3.734,15
	abr-07	05/01/07	07/16/07	3.840,04
	apr-07 (index jul-07)	07/17/07	09/15/07	3.795,11
	apr-07 (index sep-07)	09/16/07	10/31/07	3.792,04
	oct-07	11/01/07	12/31/07	3.835,63
2008	oct-07	01/01/08	02/15/08	3.835,63
	oct-07 (index feb-08)	02/16/08	04/30/08	3.692,18
	apr-08	05/01/08	08/15/08	3.455,74
	apr-08 (index aug-08)	08/16/08	10/15/08	3.882,18
	apr-08 (index oct-08)	10/16/08	10/31/08	4.124,06
	oct-08	11/01/08	12/31/08	4.198,66
2009	oct-08	01/01/09	01/18/09	4.198,66
	oct-08 (index jan-09)	01/19/09	04/30/09	5.053,92
	abr-09	05/01/09	08/15/09	5.054,71
	apr-09 (index aug-09)	08/16/09	10/31/09	4.762,80
	oct-09	11/01/09	12/31/09	4.662,80
2010	oct-09	01/01/10	04/15/10	4.662,80
	oct-09 (index apr-10)	04/16/10	04/30/10	4.571,04
	apr-10	05/01/10	10/31/10	4.520,17
	oct-10	11/01/10	12/31/10	4.373,28
2011	oct-10	01/01/11	30/04/11	4.373,28
	apr-11	01/05/11	31/10/11	4.319,82
	oct-11	01/11/11	31/12/11	4.451,54
	oct-10	11/01/10	12/31/10	4.373,28

V. 2002-2011 SING Energy Annual Sales

SING ANNUAL SALES

TERM 2002-2011

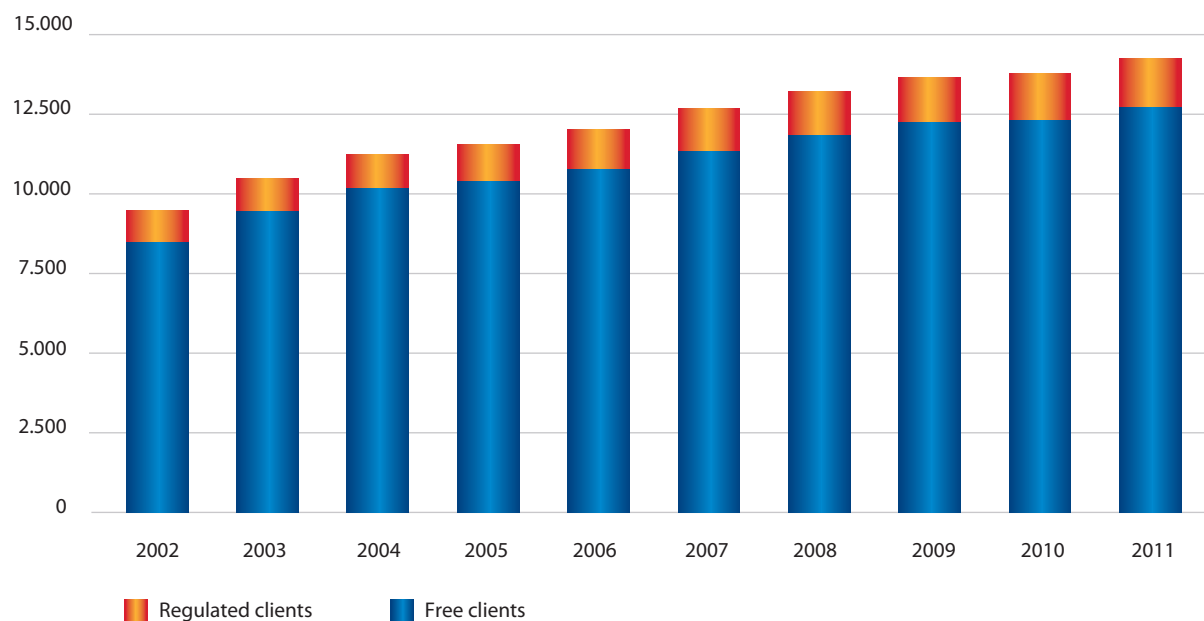
Year	Sales [GWh]		Total	Annual	Growth	
	Free Clients	Regulated Clients			Average Accrued	Accrued
2002	8.473	1.009	9.482	5,5%	2,7%	5,5%
2003	9.433	1.047	10.480	10,5%	5,3%	16,6%
2004	10.164	1.075	11.240	7,2%	5,8%	25,0%
2005	10.401	1.159	11.560	2,8%	5,2%	28,6%
2006	10.774	1.256	12.029	4,1%	5,0%	33,8%
2007	11.343	1.332	12.674	5,4%	5,1%	41,0%
2008	11.832	1.387	13.219	4,3%	5,0%	47,0%
2009	12.240	1.417	13.656	3,3%	4,8%	51,9%
2010	12.297	1.496	13.792	1,0%	4,4%	53,4%
2011	12.703	1.560	14.263	3,4%	4,3%	58,6%

Note:

Accrued percentage growth refers to year 2001 sales (8,991 GWh).

Annual sales correspond to net generation less transmission losses.

SING ANNUAL SALES EVOLUTION (GWh)

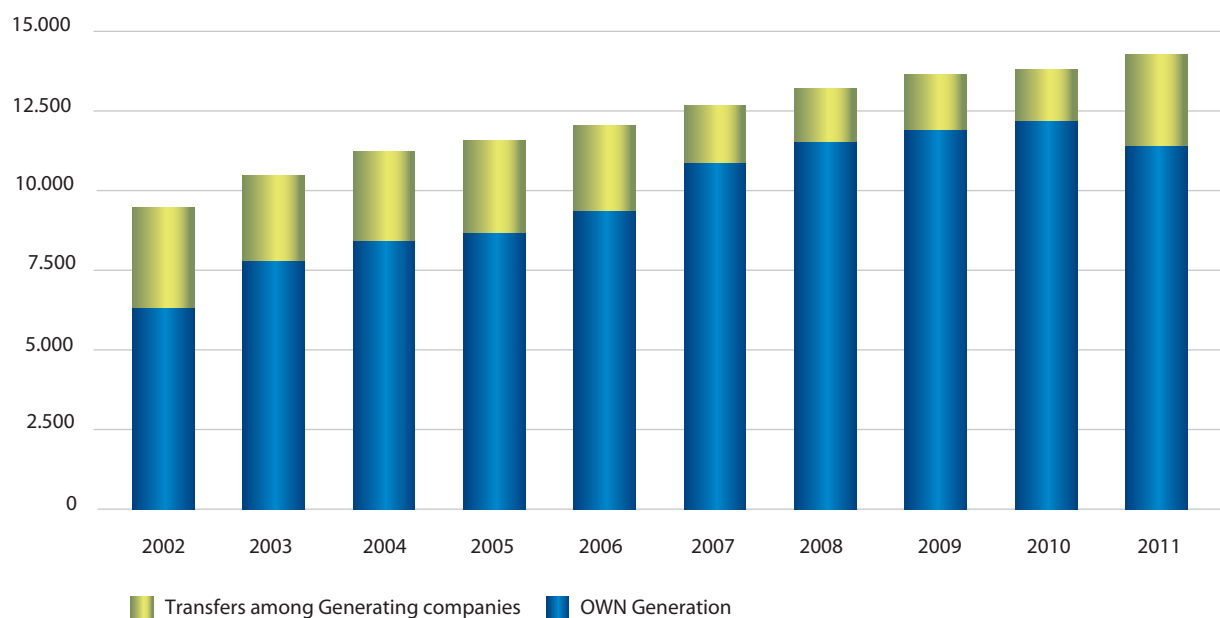


SING ANNUAL SALES COMPOSITION

TERM 2002-2011

Year	Energy Sales (GWh)	Own Generation (GWh)	Transfers among Generating companies (GWh)	Transfer Percentage /Sales (%)
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%
2009	13.656	11.890	1.766	13%
2010	13.792	12.154	1.639	12%
2011	14.263	11.385	2.878	20%

SING ANNUAL SALES COMPOSITION (GWh)



VI. 2002-2011 SING Energy and Power Transfers

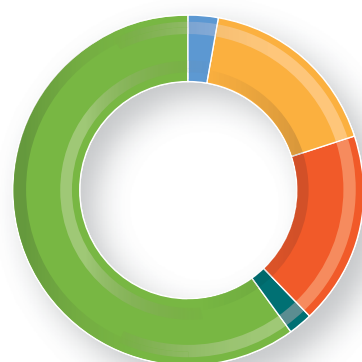
ENERGY TRANSFERS AMONG SING GENERATING COMPANIES (GWH)

YEAR 2011

COMPANY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	NET
AES GENER	Purchases					9,6	9,9	17,8	9,2					46,5	
	Sales	88,2	115,5	88,7	55,4					40,6	57,7	119,9	77,3	643,3	596,8
ANDINA	Purchases										49,8	31,9		81,7	
	Sales		5,5	37,8	26,9	86,2	78,1	30,6	3,9	2,8			10,8	282,6	200,9
ANGAMOS	Purchases														
	Sales	21,5	69,7	80,3	128,4	148,2	164,0	130,2	86,8	180,8	180,1	126,2	160,2	1.476,4	1.476,4
CAVANCHA	Purchases														
	Sales	1,2	1,2	1,3	1,2	1,2	1,2	1,2	1,2	1,0	1,3	1,2	1,3	14,5	14,5
CELTA	Purchases			6,1	18,0		25,3		5,8	22,0			61,6	138,8	76,2
	Sales	14,9	2,3			9,1		8,4			10,2	17,7		62,6	
E-CL	Purchases		36,4	60,6	48,2	65,9	57,1	65,0	7,7			32,3	60,7	433,9	415,3
	Sales	1,2								2,4	15,0			18,6	
ELECTROANDINA	Purchases	67,8	55,0	67,5		37,9	42,9	41,5	11,8	69,4	47,1	33,0		473,9	453,8
	Sales				20,1									20,1	
ENERNUEVAS	Purchases														
	Sales	1,3	1,3	1,5	1,4	1,4	1,3	1,2	1,4	1,4	1,5	1,4	1,5	16,6	16,6
ENORCHILE	Purchases	2,3	2,6	3,0	3,0	4,5	4,5	7,4	4,0	3,2	4,5	4,4	3,3	46,7	46,7
	Sales														
EQUIPOS DE GENERACION S.A.	Purchases														
	Sales	2,9	3,1	2,8	3,6	1,6	2,6	1,0	1,4	1,1	1,6	0,9	0,5	23,1	23,1
GASATACAMA	Purchases	76,8	119,2	95,1	108,0	154,8	89,6	109,4	131,3	151,2	159,9	160,5	161,8	1.517,6	1.517,6
	Sales														
HORNITOS	Purchases				24,0	0,2	32,4	0,9				5,6		63,1	
	Sales			4,1					26,5	8,0	33,7		29,1	101,4	38,3
NORGENER	Purchases				35,8						39,8			75,6	
	Sales	15,7	14,5	15,9		25,2	14,6	69,4	48,6	7,8		0,6	6,7	219,0	143,4

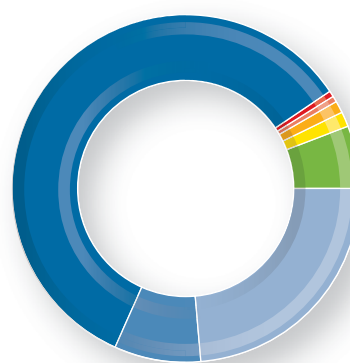
Note: The indicated amounts do not include purchase-sale operations agreed among generating companies.

ENERGY NET PURCHASES AT THE CDEC-SING



CELTA	3%
E-CL	17%
ELECTROANDINA (1)	18%
ENORCHILE	2%
GASATACAMA	60%

ENERGY NET SALES AT THE CDEC-SING



AES GENER	23,8%	ENERNUEVAS	0,7%
ANDINA	8,0%	E. GENERACIÓN	0,9%
ANGAMOS	58,8%	HORNITOS	1,5%
CAVANCHA	0,6%	NORGENER	5,7%

ENERGY TRANSFERS AMONG THE CDEC-SING GENERATING COMPANIES (GWH)

TERM 2002 – 2011

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CELTA	Purchases	390,8	601,4	663,2	628,5	343,1	160,0	162,0	102,0	64,7	138,8
	Sales	0,0	0,0	0,0	0,0	0,2	45,2	162,0	119,8	85,1	62,6
E-CL	Purchases	0,0	0,0	0,0	0,0	26,2	0,0	115,0	189,2	548,6	433,9
	Sales	801,1	1.263,8	1.637,3	1.522,8	1.057,6	714,9	695,0	193,5	75,4	18,6
ELECTROANDINA	Purchases	1.109,5	831,7	1.000,1	968,1	540,8	382,3	740,0	663,6	158,5	473,9
	Sales	0,0	0,0	18,9	0,0	23,0	69,8	41,0	89,8	418,3	20,1
AES GENER	Purchases	0,0	0,0	0,0	0,0	0,0	121,0	13,0	0,0	17,5	46,5
	Sales	997,8	1.088,9	1.050,3	1.335,6	1.357,0	812,2	676,0	1.201,4	836,0	643,3
GASATACAMA	Purchases	24,0	3,5	430,2	806,1	1.638,1	1.126,2	617,0	594,0	795,0	1.517,6
	Sales	792,7	350,1	126,3	36,1	0,0	0,0	29,0	66,9	19,9	0,0
NORGENER	Purchases	1.067,2	1.266,1	739,2	503,1	150,3	104,4	60,0	217,3	40,6	75,6
	Sales	0,0	0,0	0,0	11,3	260,7	251,7	103,0	82,7	150,2	219,0
INACAL	Purchases								0,0	0,0	0,0
	Sales								12,1	42,4	23,1
ANGAMOS	Purchases									1,5	0,0
	Sales									0,0	1.476,4
ENORCHILE	Purchases									12,2	46,7
	Sales									5,5	0,0
CAVANCHA	Purchases									0,0	0,0
	Sales									2,5	14,5
ANDINA	Purchases									0,0	81,7
	Sales									0,4	282,6
ENERNUEVAS	Purchases									0,0	0,0
	Sales									2,9	16,6
HORNIOS	Purchases										63,1
	Sales										101,4

FIRM POWER AND PEAK HOURS POWER DEMAND AS PER COMPANY – YEAR 2011

FIRM POWER	TOTAL SING	AES GENER	ANGAMOS	C.T. ANDINA	C.T. HORNIOS	CAVANCHA	CELTA	E-GENERACION (**)	E-CL (*)	ENERNUEVAS	ENORCHILE	GASATACAMA	NORGENER
Firm Power [MW]	2.001,7	74,4	132,4	34,2	30,7	2,2	104,8	4,6	1.009,6	1,6	8,0	444,2	155,1
Net Demand HP [MW]	1.929,3	11,4	32,6	69,8	88,5	0,0	115,6	0,0	836,4	0,0	12,0	496,5	266,6
Losses [MW]	72,4												

FIRM POWER BALANCE	AES GENER	ANGAMOS	C.T. ANDINA	C.T. HORNIOS	CAVANCHA	CELTA	E-GENERACION (**)	E-CL (*)	ENERNUEVAS	ENORCHILE	GASATACAMA	NORGENER
Purchases [MW]			35,5	57,8		10,8				4,0	52,3	111,5
Sales [MW]	62,9	99,8			2,2		4,6	173,1	1,6			

(*) Based on the calculation of 2011 Final Firm Power, Electroandina is considered as a E-CL's wholly-owned company.

(**) Based on the calculation of 2011 Final Firm Power, INACAL is considered as an E-GENERACION's wholly-owned company.

POWER TRANSFERS AMONG THE CDEC-SING GENERATING COMPANIES (MW)

TERM 2002 – 2011

		E-CL(*)		ELECTROANDINA(*)		NORGENER		CELTA		GASATACAMA		AES GENER		E-GENERACION(**)		ENORCHILE		CAVANCHA		ENERNUEVAS		C.T.ANDINA		C.T.HORNITOS		ANGAMOS	
		Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales
2002																											
January - March		145,8	138,0			69,4		48,5		73,0				183,2													
2002																											
April - December		141,7	174,0			81,7		55,1		9,8				178,9													
2003		123,9	117,5			83,1		52,9		34,9				164,4													
2004		132,3	119,3			84,2		65,5		43,0				179,6													
2005		140,1	124,2			82,7		56,4		61,4				184,6													
2006		159,1	86,8			80,4		71,8		122,9				202,9													
2007		64,8	41,8			91,0		55,6		55,1				178,8													
2008		33,5	5,5			81,6		27,0		14,3				66,3													
2009	20,2			59,3	102,9	20,8		26,2					109,4	1,3	0,1												
2010	84,9			106,7	96,0	11,6		27,7					105,9	4,9	2,2		0,4		0,2								
2011		173,1			111,5	10,8		52,3					62,9	4,6	4,0		2,2		1,6	35,5		57,8				99,8	

(*) Based on the calculation of 2011 Final Firm Power, Electroandina is considered as a E-CL's wholly-owned company.

(**) Based on the calculation of 2011 Final Firm Power, INACAL is considered as an E-GENERACION's wholly-owned company.

VII. Tolls: Payment for the use of SING Transmission System

TOLLS FOR TRUNK SYSTEM – YEAR 2011

PAYMENTS FROM GENERATING COMPANIES TO TRUNK COMPANIES [THOUSAND OF CH\$] – YEAR 2011

DE/A	ETSA			E-CL			TRANSELEC			TOTAL
	Injection Toll	Withdrawal Toll	PUB and CUE Adjustment (*)	Injection Toll	Withdrawal Toll	PUB and CUE Adjustment (*)	Injection Toll	Withdrawal Toll	PUB and CUE Adjustment (*)	
AES GENER	291	17	-1.101	4.036	97	-9.404	278.886	6.763	-18.539	261.048
ANDINA	508	150	0	37	372	0	4.253	26.150	0	31.470
ANGAMOS	1.255	1.557	0	1.823	335	0	129.799	28.340	0	163.109
CELTA	686	1.343	2.384	6.146	-816.358	20.368	537.733	-560.939	40.155	-768.483
E-CL	7.398	3.274	3.740	592	-461.750	31.954	65.870	-287.479	62.996	-573.407
ELECTROANDINA	34.726	944	737	0	-46.663	6.300	118.012	336.548	12.421	463.024
ENORCHILE	0	9	-596	0	9	-5.092	0	617	-10.038	-15.090
GASATACAMA	3.622	6.250	-2.353	35.161	-1.158.775	-20.105	2.433.053	9.096	-39.636	1.266.313
HORNITOS	482	618	-1.102	84	166	-9.415	7.400	13.501	-18.561	-6.828
INACAL	10	0	0	3	0	0	228	0	0	240
NORGENER	18.410	2.685	-1.709	0	13	-14.607	62.563	9.997	-28.797	48.555
TOTAL	67.387	16.847	0	47.881	-2.482.556	0	3.637.798	-417.406	0	869.951

(*) PUB: Unit Toll per Bar, CUE: Unique Expected Charge

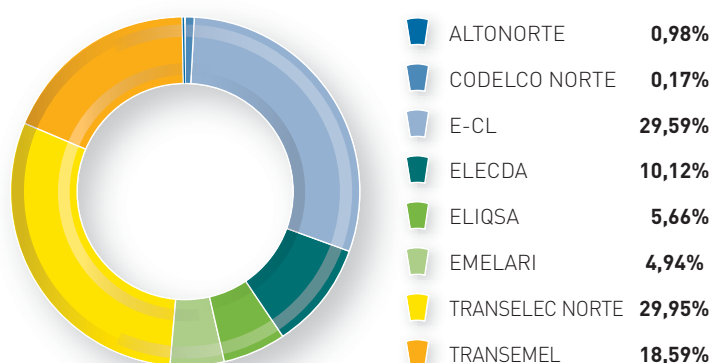


2011 SUB-TRANSMISSION SYSTEM TOLLS

VASTX PAYMENT FROM GENERATING COMPANIES TO SUB-TRANSMITTERS [THOUSAND OF CH\$] – YEAR 2011

A / DE	E-CL	ELECTROANDINA	ENORCHILE	GASATACAMA	NORGENER	TOTAL
ALTO NORTE	19.875	134	8.617	129.616	20	158.261
CODELCO NORTE	3.380	24	1.444	22.044	4	26.895
E-CL	601.638	4.053	260.752	3.922.854	595	4.789.891
ELECDA	205.788	1.385	89.220	1.342.044	203	1.638.640
ELIQSA	115.045	774	49.878	750.262	114	916.072
EMELARI	100.510	676	43.576	655.476	99	800.339
TRANSELEC NORTE	608.940	4.098	264.007	3.971.188	601	4.848.833
TRANSEMEL	377.882	2.538	163.943	2.465.067	372	3.009.803
Total	2.033.058	13.681	881.436	13.258.550	2.007	16.188.731

COLLECTION AS PER VASTX - YEAR 2011

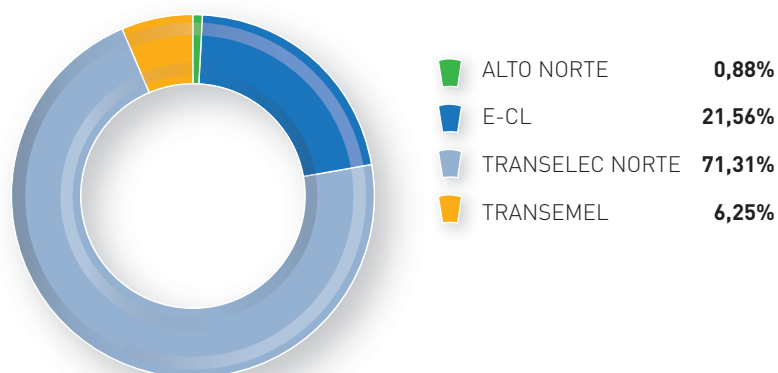


PAYMENT FROM SUB-TRANSMITTERS TO GENERATING COMPANIES DUE TO ENERGY AND POWER LOSSES

[THOUSAND OF CH\$] – YEAR 2011

DE/A	E-CL	ELECTROANDINA	ENORCHILE	GASATACAMA	NORGENER	Total general
ALTO NORTE	3.283	79	455	11.221	333	15.371
E-CL	80.424	2.098	10.391	278.885	6.380	378.178
TRANSELEC NORTE	265.005	6.908	33.585	924.238	21.365	1.251.102
TRANSEMEL	23.832	892	2.754	78.684	3.565	109.727
Total	372.544	9.978	47.185	1.293.029	31.643	1.754.378

PAYMENT FOR ENERGY AND POWER LOSSES – YEAR 2011

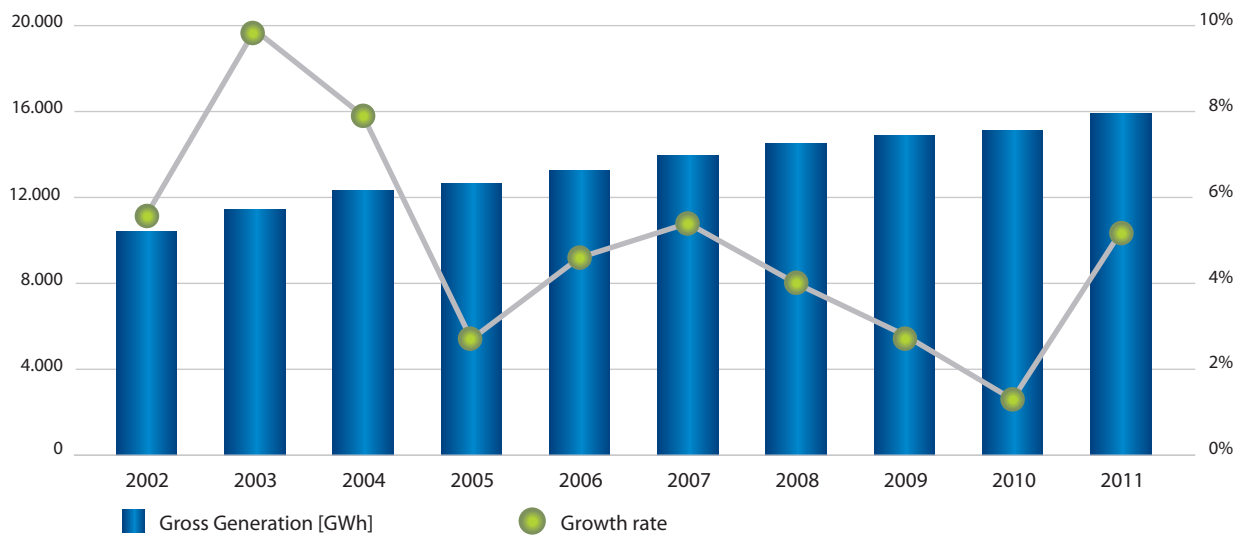


VIII. Energy and Power Demand SING 2002-2011

SING GROSS ENERGY DEMAND

Year	Gross Generation [GWh]	Growth Rate
2002	10.399,6	5,6%
2003	11.424,1	9,9%
2004	12.330,0	7,9%
2005	12.657,4	2,7%
2006	13.236,0	4,6%
2007	13.945,8	5,4%
2008	14.502,3	4,0%
2009	14.906,7	2,8%
2010	15.103,8	1,3%
2011	15.889,2	5,2%

SING GROSS ENERGY DEMAND T ERM 2002 - 2011



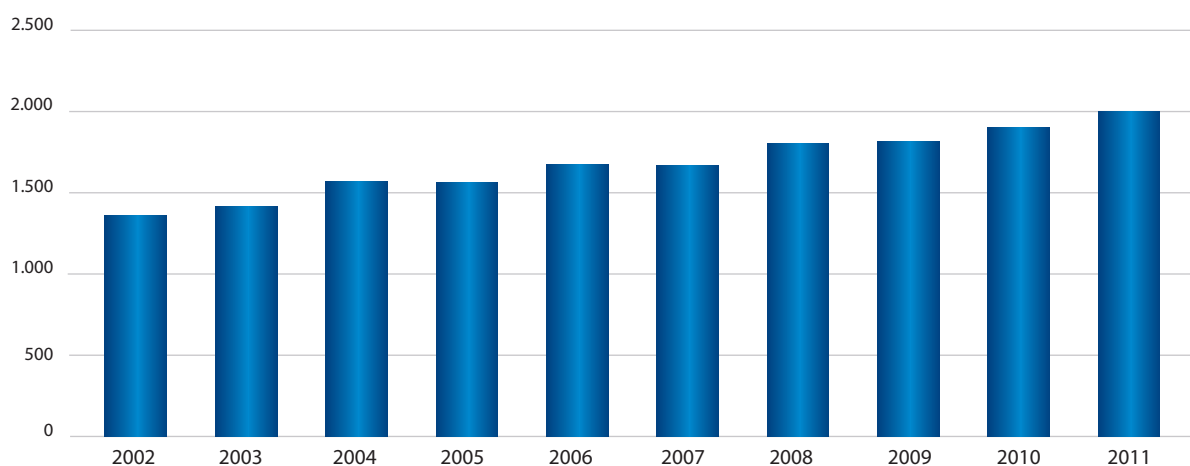
SING POWER MAXIMUM ANNUAL DEMAND

TERM 2002-2011

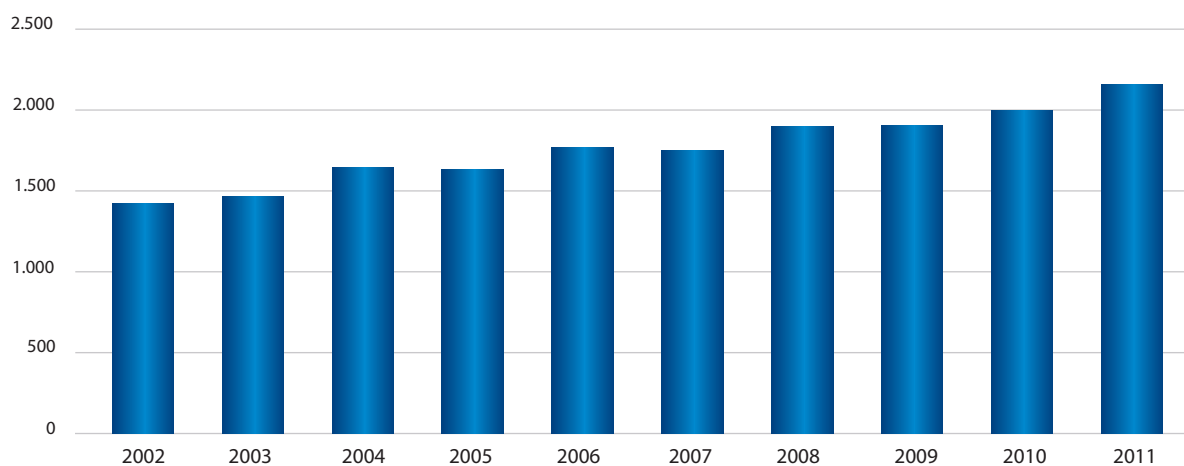
Year	Day	Time	Gross Maximum Generation (MW)	Net Maximum Demand (MW)
2002	23-dec-02	22	1.420	1.360
2003	14-dec-03	22	1.467	1.416
2004	19-dec-04	23	1.644	1.567
2005	27-nov-05	22	1.635	1.566
2006	15-dec-06	23	1.770	1.676
2007	24-apr-07	22	1.751	1.665
2008	21-dec-08	22	1.897	1.805
2009	27-sep-09	22	1.907	1.816
2010	26-dec-10	23	1.995	1.900
2011	23-dec-11	22	2.160	2.001

Note: Gross Maximum Demand is obtained as gross generation less stations' own consumption..

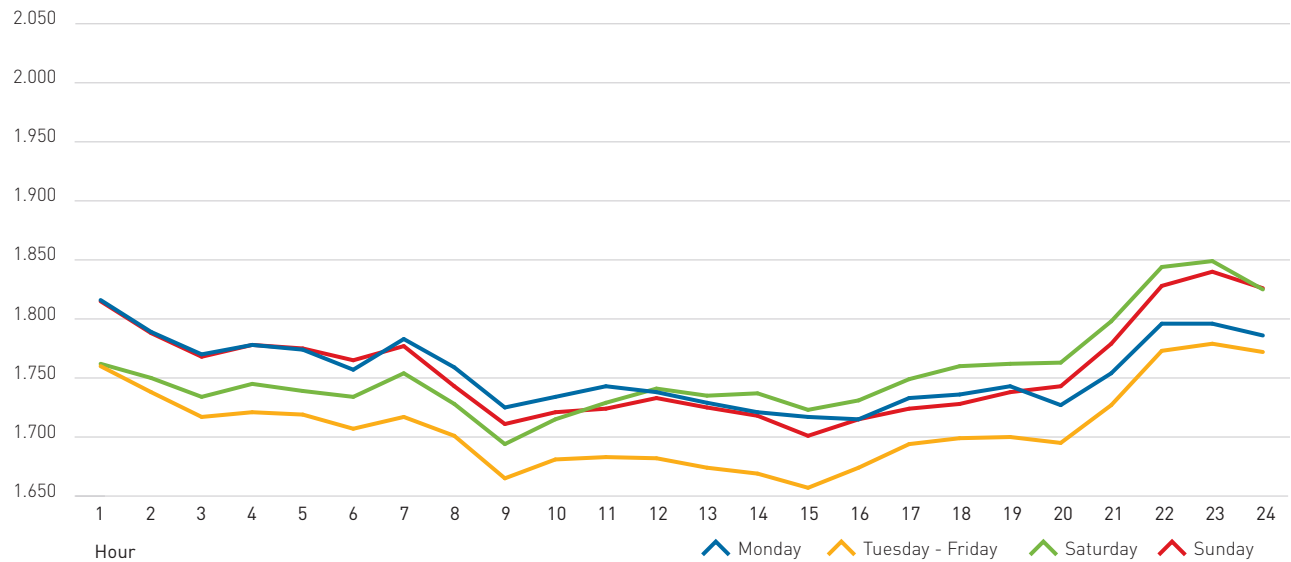
MAXIMUM NET DEMAND (MW)



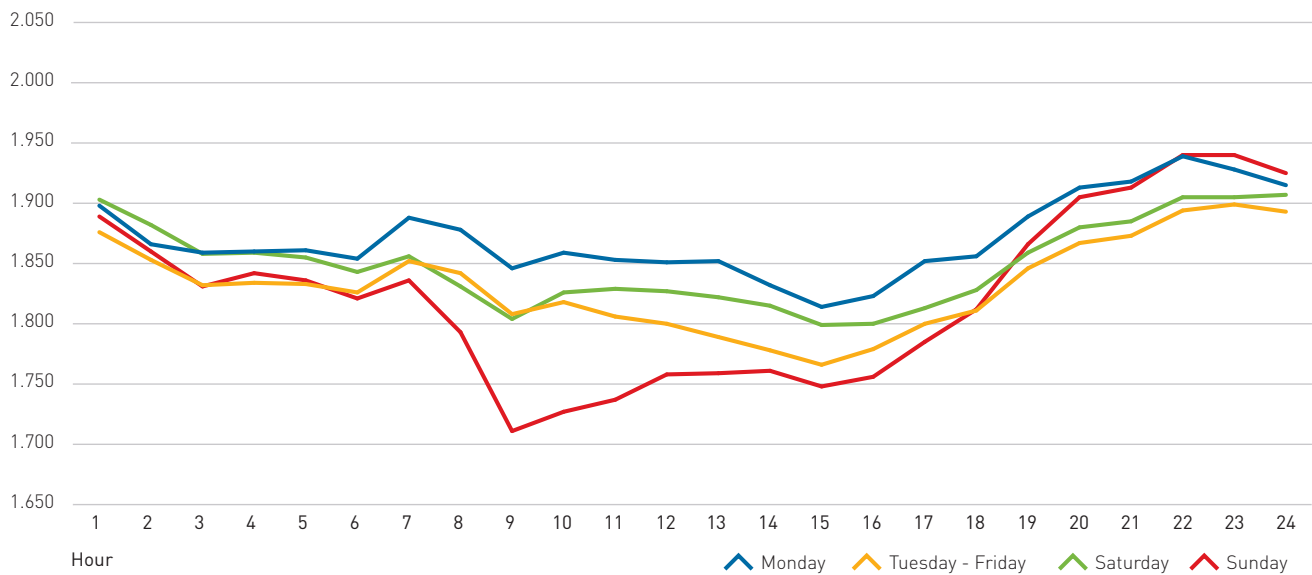
MAXIMUM GROSS ANNUAL GENERATION (MW)



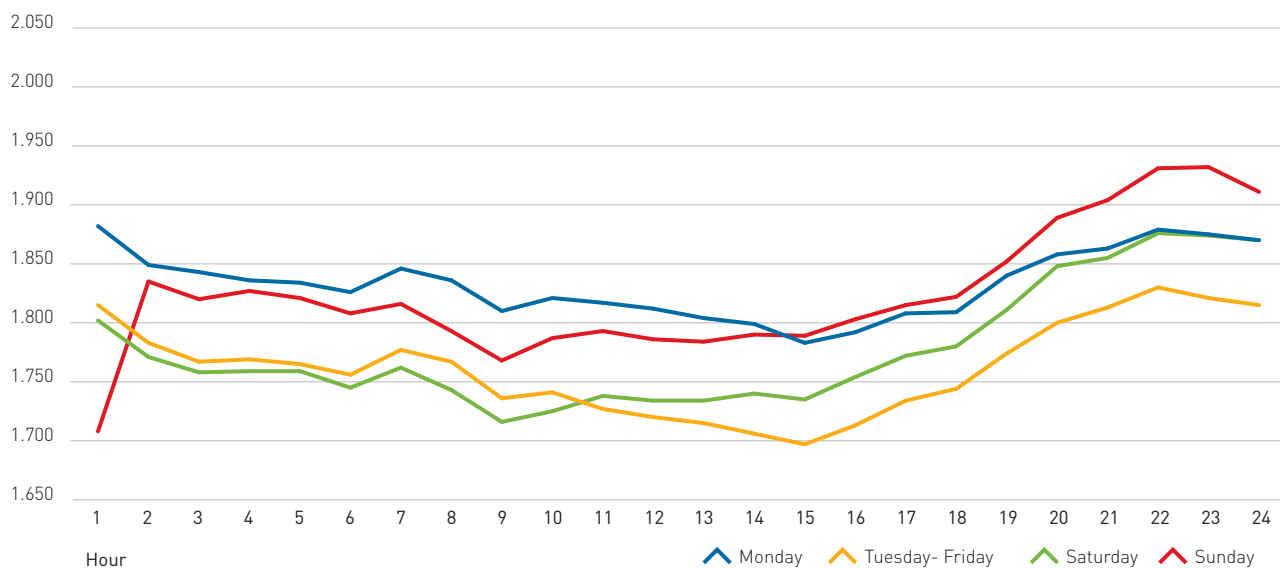
HOURLY AVERAGE GROSS GENERATION 2011 JANUARY – MARCH (MW)



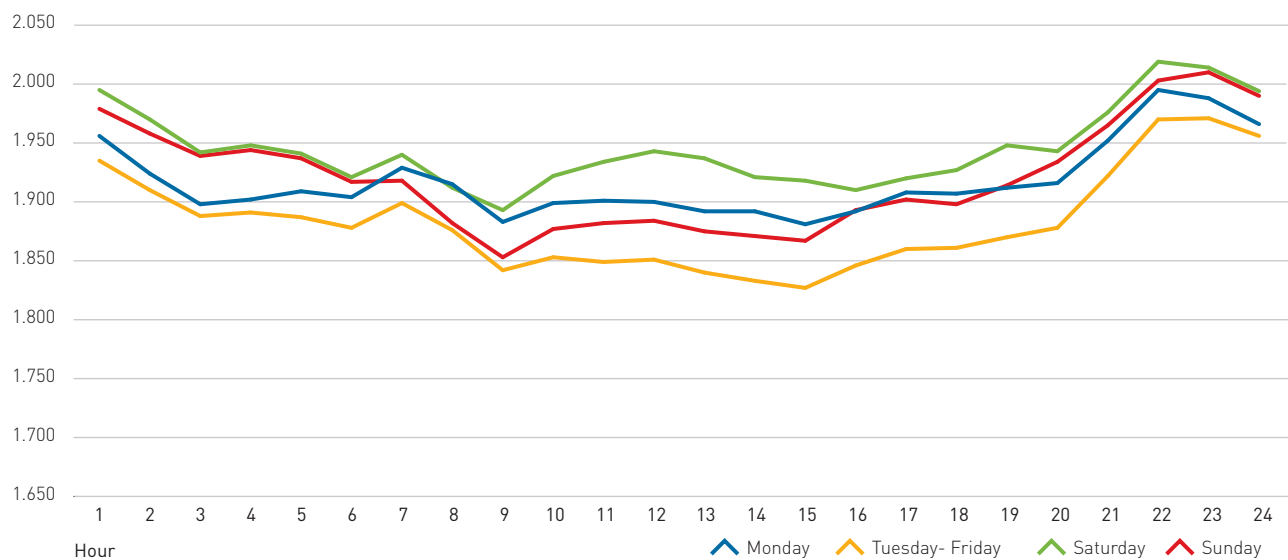
HOURLY AVERAGE GROSS GENERATION 2011 APRIL – JUNE (MW)



HOURLY AVERAGE GROSS GENERATION 2011 JULY – SEPTEMBER (MW)



HOURLY AVERAGE GROSS GENERATION 2011 OCTOBER – NOVEMBER (MW)



IX. Non-Conventional Renewable Energies (NCRE)

COMPLIANCE WITH LAW 20.257

Withdrawals subject to obligation	
System	Energy [GWh]
SIC	20641,0
SING	3338,4
Total	23979,4

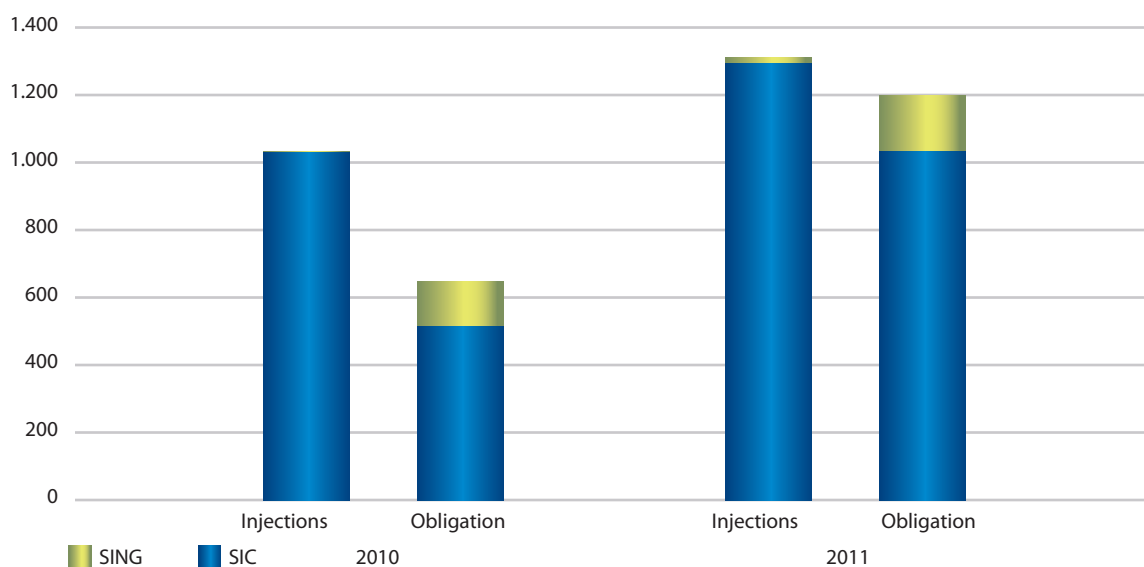
NCRE acknowledged injections	
System	Energy [GWh]
SIC	1293,4
SING	16,6
Total	1309,9

NCRE obligation (5% subject withdrawals)	
System	Energy [GWh]
SIC	1032,1
SING	166,9
Total	1199,0

NCRE Net Surplus / Shortage	
System	Energy [GWh]
SIC	261,3
SING	-150,4
Total	111,0



Balance NCRE 2010 – 2011
Energy (GWh)

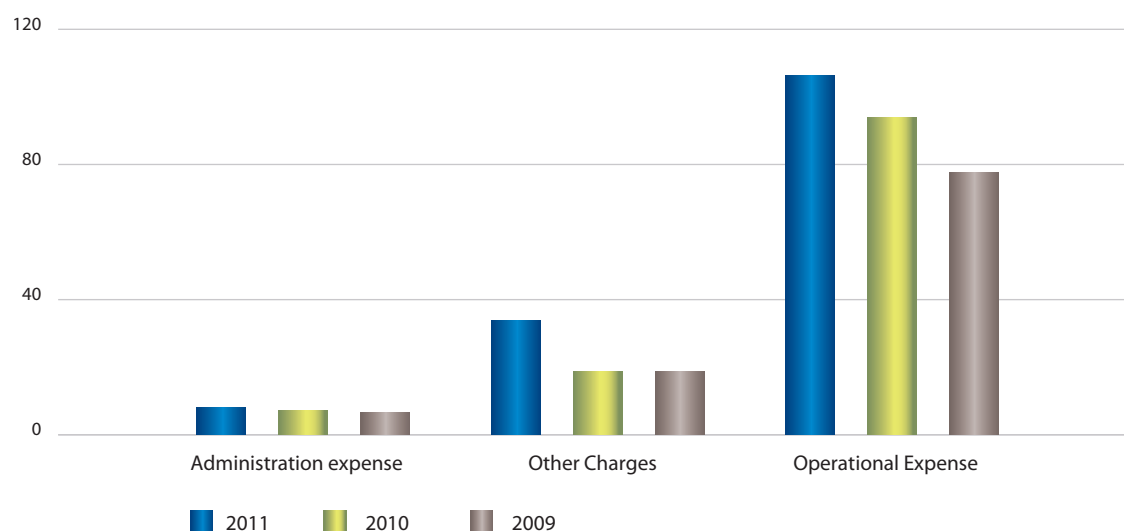


X. CDEC-SING Budget

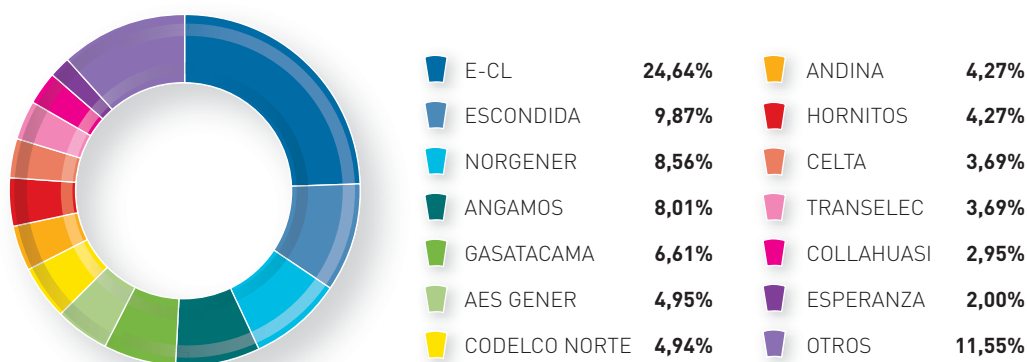
CDEC-SING BUDGET

CDEC-SING Budget [thousand UF]	2011	2010	2009	Variation (Thousands UF)	Variation %
Administration expense	8,1	7,1	6,5	1,0	13,7%
Other charges	33,9	18,8	18,6	15,1	80,7%
Operational costs	106,2	93,8	77,7	12,4	13,2%
Remuneration and Other related	72,5	63,2	57,8	9,3	14,7%
Office lease and related expense	10,4	7,8	7,1	2,5	32,3%
External Services and Advising	2,9	2,7	2,2	0,2	8,2%
Equipment, Software and Services lease	20,4	20,1	10,5	0,3	1,7%
Total	148	120	103	28	23,79%

CDEC-SING Budget [thousand UF]



BUDGET PARTICIPATION OF CDEC-SING MEMBERS



Note: Only the CDEC-SING members with an interest higher than 2% are presented individually



CERTIFICADO DE APROBACIÓN

Certificamos que el Sistema de Gestión de Calidad de:

**CENTRO DESPACHO ECONÓMICO DE CARGA
SISTEMA INTERCONECTADO DEL NORTE GRANDE
CDEC - SING
Av Apoquindo N° 4501, Piso 6, Las Condes,
Santiago - Chile**

ha sido aprobado por Lloyd's Register Quality Assurance
de acuerdo con la siguiente Norma de Sistemas de Gestión de Calidad:

ISO 9001:2008

El Sistema de Gestión de Calidad es aplicable a:

**Servicio de Coordinación de los trabajos de las Empresas
Coordinadas del Sistema Interconectado del Norte Grande,
según el Marco Legal Aplicable.**

Aprobación
Certificado No: SAC 6013224

Aprobación Original: 30 de Enero, 2012

Certificado en Vigor: 30 de Enero, 2012

Caducidad del Certificado: 29 de Enero, 2015

Emitido por: Lloyd's Register Central & South America Limited
en nombre de Lloyd's Register Quality Assurance Limited



Este documento está sujeto a los términos y condiciones que aparecen al dorso
71 Fenchurch Street, London EC3M 4BS United Kingdom. Registration number 1879370

Esta aprobación está condicionada a que la compañía mantenga el sistema de acuerdo con las normas establecidas, lo que será monitorizado por LRQA.
El uso de la Marca de Acreditación UKAS indica Acreditación con respecto a aquellas actividades cubiertas por el Certificado de Acreditación 001.

More Review 13



CDEC-SING

Avenida Apoquindo 4501, Piso 6, Las Condes, Santiago de Chile, Teléfono: 56 (2) 367 2400, Fax: 378 9296
Visítenos en: www.cdec-sing.cl