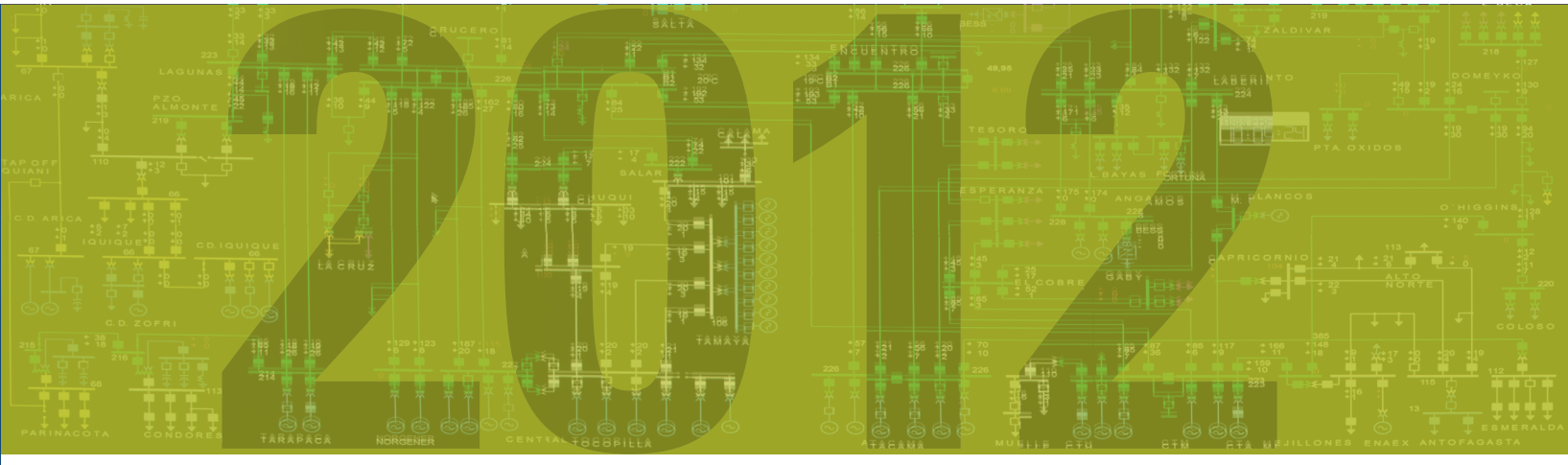
Annual Report *and Operation Statistics*



Center for Economic Load Dispatch of the Northern Interconnected System

CDEC-SING

Contents *of the Report*

Letter from the Chairman of the Board

The task developed by the technical organizations in charge of creating the national electric system operation is more relevant than ever, in a scenario where the CDEC-SING has a fundamental role.

It is with great satisfaction and in the name of the Board of the CDEC-SING, that I am honored to present you with the CDEC-SING Annual Report and Operation Statistics corresponding to 2012, where you will be able to find 2012 operational results and the system statistics, corresponding to the ten-year term 2003-2012.

Regarding energy, power and the system's capacity relevant data, it should be noted that energy generation increased by 5.5% in 2012 as compared to 2011, with a total 16,756 GWh, and as regards maximum power, during 2012 it reached 2,169 MW, which represents a 0.45% increase as compared to the maximum power of the previous year.

As regards generation, in 2012 the system was characterized by the incorporation of 2 new projects, which together contributed to the system with 27.85 MW: 26.5 MW from Mejillones sulfuric acid plant, which injects its surplus to the system, and 1.35 MW from the solar photovoltaic plant of La Huayca, which became the first generating plant with this type of technology connected to the SING. Also, during 2012 five transmission projects were implemented, adding over 200 km of 220 kV lines, and contributing with over 750 MVA of transmission capacity.

In 2012, as during the last years, the electric and energy industry of the country has been the subject for a debate that crosses its own boundaries due to its strategic condition, and has been focused on possible regulatory changes, both referred to regulatory issues and legal proposals.

Regarding this aspect, the task of the technical organizations in charge of implementing the operation of the national electric system is more relevant than ever, a scenario where the CDEC-SING plays a fundamental role. It is from our position that we have contributed to national debate on the subjects that have been under discussion within the national electric sector institutions.

Within the regulatory aspects, during September 2012 the Election of the new Board was carried out for the term 2012-2014, a process that took place successfully. On the other

hand, in October that year the Energy National Commission issued a favorable report on the CDEC-SING Internal Regulations, which had been prepared by the Board and presented to the Commission during 2009.

On the other hand, I believe it pertinent to point out that during 2012 a qualitative progress has been made at the main technological platforms we have. I refer to the new Control Room and the new SCADA system, which incorporate the highest international standards for real time operation coordination, which strengthens capabilities and infrastructure to preserve the system' safety.

All the above has been led by a team of great professionalism and technical experience, which has been subject to the organizational demands of a continuous improvement policy, and has been valued by the companies that are members of the organization. This way, we are sure that we will be able to continue contributing to the optimization of our organization's tasks, participating in the development of the global sector.

With pleasure and satisfaction I must state that the CDEC-SING, the entity I have chaired since November 2012, has faced the challenges posed by the industry of which it is a part.

We expect that the current Annual Report 2012 is a contribution to the information addressed to all the agents that participate at the SING, as well as for those who watch or analyze its development, and for all investors interested in knowing in depth the electric market in the country's Northern Region.

EDUARDO SOTO TRINCADO
Chairman of the Board CDEC-SING

I am pleased to present you with the Annual Report and Operation Statistics by the Center of Economic Load Dispatch of the Northern Interconnected System (CDEC-SING) which comprise the ten-year term 2003 – 2012.

At the end of 2012, the system's gross generation recorded a 5,5% increase as compared to the previous year, becoming the greatest increase of the last 8 years only exceeded by the 7.9% recorded in 2004, which shows the demand increase by the mining projects in the area and the urban centers related to such activity.

During 2012, both in operation and market management, as well as on management issues, the organization' strategic emphasis was addressed to responding with a high quality standard to the different challenges the industry and the country require. We refer to concrete issues: the possibility of interconnecting the two main electric systems in the country, the plan for integration and operation of projects based on NCRE, and the great demand increase projected for the second half of this decade, among other aspects.

Regarding safety, during 2012 the Dispatch and Control Center's infrastructure, as well as that of the Control Centers under its coordination, were subject to a close risks' analysis and integrity plan, which allowed the incorporation of relevant improvements in equipment, networks, communications and supplies, among other, which were implemented at the new Dispatch and Control Center which started Operation in January, 2013 in Santiago.

During the last years a significant number of generation projects based on Non-Conventional Renewable Energies (NCRE) have been identified, which Environmental Impact Studies have been approved and reported to the authorities and to the CDEC-SING. This information urged our organization to develop in 2012 the Integration Plan of NCRE to the SING. A relevant milestone of this plan was the publication of the Study

Letter from the Chief Executive Officer

As regards operation and market management, as well as on management issues, the organization' strategic emphasis was addressed to responding with a high quality standard to the different challenges the industry and the country require.

"Technical-Economic Effects of Eolic and Solar Energies' Integration to the SING".

Another relevant working area is the expansion, development and safety of the SING's transmission system. Within this context, a new review and analysis study was carried out on the consistency of the Transmission System facilities and their expansion alternatives. The study results recommended 11 expansion works of the SING's Trunk system, which referential investment amounts to an approximate total US$66 million.

At international level, meetings were held with operators from other countries such as Peru, Colombia, Denmark and Ireland, in order to exchange experiences and adopt the best practices of our peer organizations.

Finally, consistently with the organization' strategic statements, which particularly focus on the development of our teams and professionals, progress was made through different initiatives towards the implementation of the competences management model in order to add value to the processes undertaken at all CDEC-SING's areas.

Through this Annual Report we invite you to review both the information on what each Division of the CDEC-SING has performed, and the operational results achieved in 2012, the important process of changes and continuous improvement we are engaged in to fully comply with the strategic role our organization has in the electric sector and in the country.

DANIEL SALAZAR JAQUE
Chief Executive Officer /Operation and Tolls Director
CDEC-SING

Who *are we?*

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' 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 43 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 coordinates the electric operation at Arica-Parinacota, Tarapaca and Antofagasta, equivalent to 24,5% of the country's continental territory.

BOARD OF DIRECTORS 2012

The CDEC-SING's Board 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).

Segment A (Directors)	
Eduardo Soto Trincado	Juan Pablo Cárdenas Pérez
(Alternates)	
Miguel Buzunáriz Ramos	Marcos Cisterna Orellana

Segment B (Directors)		
Enzo Quezada Zapata	Carlos Aguirre Pallavicini	Pedro de la Sotta Sánchez
(Alternates)		
Francisco Promis Baeza	Felipe Rodríguez Chacón	Jaime de los Hoyos Silva

According to Articles N° 23 and 24 of DS 291 of 2007, which regulate the structure, operation and financing of the Load Economic Dispatch Centers (CDEC), on September 13, 2012 a meeting was held where all the companies participating in one of the member segments of the Northern Interconnected System selected their representatives at the CDEC-SING's Board.

The new Board will be in office for 2 years, with possible re-election for an equal term, as from November 10, and the members appointed Mr. Eduardo Soto Trincado as Chairman.

Segment C (Directors)	
Rodrigo López Vergara	Belisario Maldonado Molina
(Alternates)	
Jaime Cancino Castro	Robín Cuevas Canales

Segment D (Directors)	
Hugo Toro Álvarez	Alfredo Cárdenas Ocampo
(Alternates)	
Jaime Misraji Castro	Claudia Carrasco Arancibia

Segment E (Director)
Alejandro Heilbron Batista
(Alternates)
Verónica Cortéz Silva

CDEC-SING COORDINATED AND MEMBER COMPANIES AS OF DECEMBER 31, 2012

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

	Segment C	
	Trunk Transmission companies	
1	Transelec Norte S.A. (*)	C
2	Edelnor Transmisión 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	Algorta Norte S.A.	E
27	Sierra Gorda SMC	E

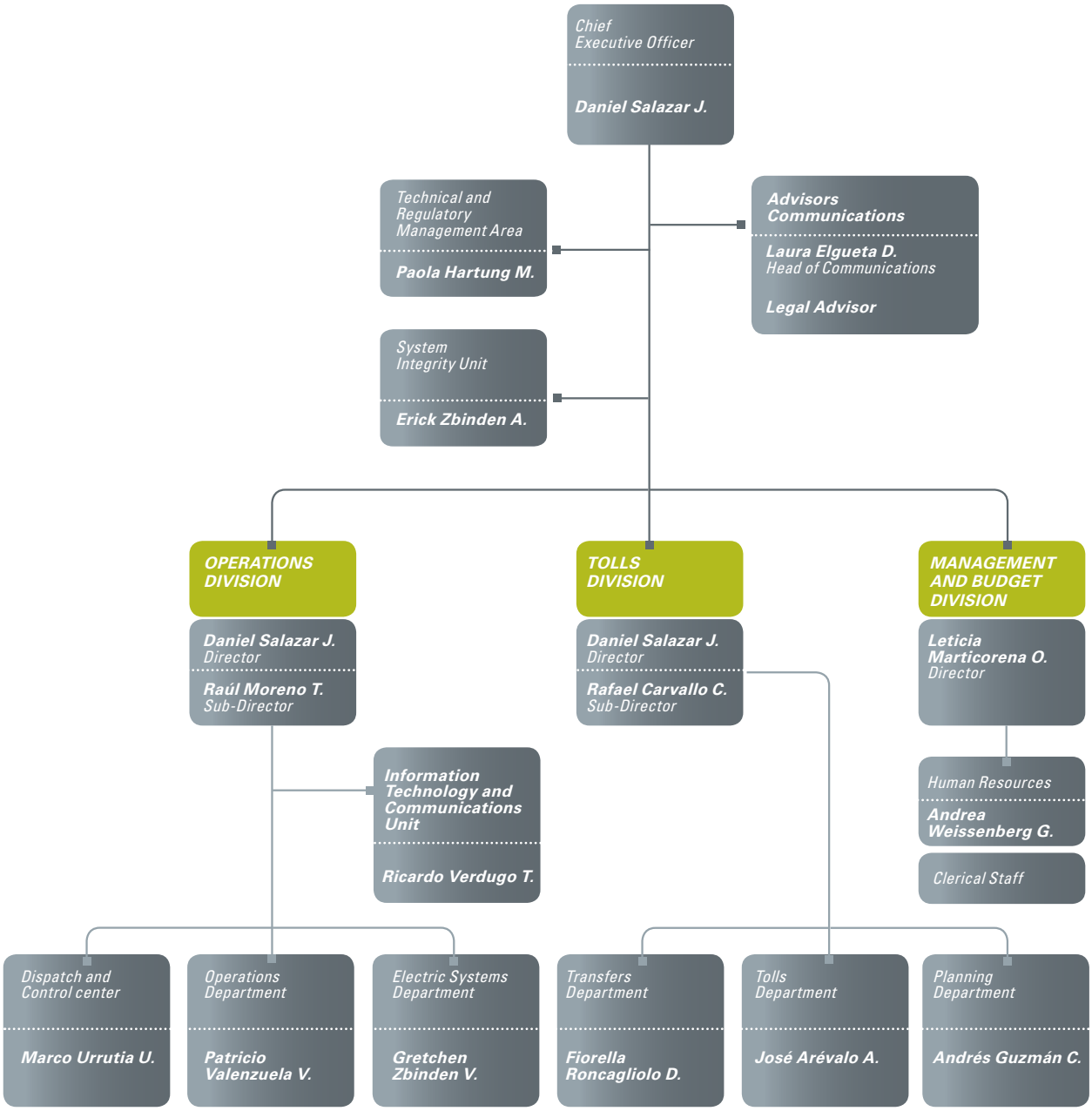
(*) Companies belonging to two or more Segments

The
CDEC-SING
is considered a **strategic organization**
by the Chilean **Government**

CDEC-SING AREAS

The CDEC-SING structure is formed by three Technical Divisions: 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 organization chart is as follows:



CENTER FOR ECONOMIC LOAD DISPATCH OF THE NORTHERN INTERCONNECTED SYSTEM (CDEC-SING).

We are an **organization** of men and women who **contribute** with their work values such as **responsibility,**

to the **SING's** development, with
loyalty, professionalism and **excellence.**

Mission, Vision and Value Promise of the CDEC SING

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 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"

QUALITY POLICY CDEC-SING OPERATION DIVISION

The CDEC-SING Operation Division undertakes to deliver coordination services for the operation and to support the development of the Northern Interconnected System, with a professionalism and quality so as to position it as 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.

Our Values

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.

Environment 2012

The release of the CDEC-SING 2012 Annual Report occurs within the framework of a year in which, once again, the issues on the country's energy future have a highlighted position in the national agenda.

This occurs as a continuation of the 2010 and 2011 events, a moment of stagnation of some projects and citizen's opposition to the construction of stations and transmission lines, everything accompanied by growing expectations on the progress of legislative initiatives and the prosecution of important projects in the center-south zone of the country.

This scenario led to an intense debate during 2012, and the settlement of reforms that have implied that the main actors of the electric industry act with openness and an attitude towards change, understanding that it is urgent to settle the bases for a new way to relate, capable of supporting the growth of the energy matrix, based on economic, environmental and social sustainability.

Regarding legislation, two law projects are under discussion, which are considered fundamental: the Concessions and Easements Project, and the Public Electric Highway Project. The first intends to shorten the terms and to simplify the mechanisms to deliver concessions to introduce a higher dynamism for the construction of new projects; the second is focused on decongesting the transmission system and strengthening the joint development of generation projects to take advantage of transmission scale economies, introducing the clearance and branches criterion.

A latent discussion of 2012 has been the possible interconnection between the main electric systems of the country, SIC and SING; the merit, opportunity, technical and juridical characteristics of a project of this size have been included in the debate and it is estimated that it will continue being so next year.

In the regulatory area, there are at least two Regulations that are worth mentioning. One is the enforcement of the Supplementary Services Regulation, which defines those services present at the generation, transmission, distribution facilities and clients not subject to price regulation which shall be delivered to ensure the proper operation of the country's electric systems. The implementation of this Regulation requires the adequacy of the current regime by all agents participating in the electric market.

The other regulation we must mention is the amendment to the current regulation of structure, operation and financing of the CDEC. This project, filed with the Republic's General Comptrollership on November 15, 2012, contains amendments regarding the Board' structure, reducing its current composition of ten to five members, who shall be elected by a specialized external company and who shall not be related in any manner to the CDEC members.

Another main element of this project is the creation of the Planning and Development Department, which shall be in

charge of studying and analyzing the requirements of the transmission system and of carrying out the necessary audits guarantee open access to the electric system.

These are some of the milestones in the Chilean electric environment during 2012, particularly in the Northern Interconnected System.

The CDEC-SING task has actively and proactively developed within this context, consolidating its structure and organization to approach in an optimal manner the current and future challenges, by efficiently implementing the changes and adjustments required by the area, and efficiently making a contribution from its position, with analysis and value information on the Northern Interconnected System.

In 2012 the infrastructure of the Dispatch and Control Center and the Control Centers under its coordination was subject to a thorough risk analysis and integrity plan.

2012 CDEC-SING *Divisions and their Management*

Currently, the CDEC-SING is formed by three Divisions: Operation (DO), Tolls (DP) and Management and Budget (DAP), 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 Divisions, as well as to the Board. We refer to the role played in the Juridical, Communications and Technical and Regulatory Management (AGTR) areas.

AGTR is in charge of carrying out a follow-up and control of the compliance with the Safety and Service Quality Technical Standard, of acting as the coordinator of new projects' connection, and of managing and coordinating the development of Procedures by the 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 has a structure of three departments: the Dispatch and Control Center (CDC), the Operation Department and the Electric Systems Department. Besides, it has an Information Technology and Communications Unit which provides crossed support to the entire organization.

2012 Management – Operation Division

The Operation Division worked in 2012 on safety, integrity and operation efficiency issues.

Regarding the system's operational safety, a significant aspect was the definition of the Maximum Dispatch Policy, which established the maximum power value that a unit may inject to the SING, in order to prevent that the unexpected exit of such unit jeopardizes the safety and operational continuation of the rest of the SING.

Also in this area it is worth mentioning the risk analysis and integrity plan carried out at the Dispatch and Control Center, and the Control Centers under its coordination which results allowed the incorporation of improvements in several aspects to provide safety to functions continuation

Energy consumption increased 5,5% in 2012 as compared to 2011, and maximum power amounted to 2.169 MW

The materialization of the new CDEC-SING Dispatch and Control Center and its new Back-up Site, now located in Santiago, was possible thanks to the strict selection of suppliers for the construction and start-up of the new facilities and the new SCADA/EMS system.

SCADA upgrade that was carried out in 2012 was intended to integrally solve the limitations noted at the SCADA/EMS platform of the CDEC-SING, particularly those related to the current size of the system, the new topological conditions and the growth estimates for the next years. The incorporation of new applications and tools, together with the new technologies currently available in the industry provide the CDEC-SING with a SCADA tool of international standards, consistent with the parameters and conditions in force and expected for the SING. It will allow, among other things, to increase capacity as regards the amount of Variables, Nodes and Connections; to have a better hot back-up level; to integrate new applications and tools; and to improve the response capability to new standards' requirements.

Regarding integration, in 2012 as in the previous year, the integration process of new Coordinates to the SCADA system continued. In general figures, Coordinates integration coverage increased from 79% in 2011 to 86% in 2012.

Regarding efficiency, it is worth mentioning that in August, 2012 the information regime of natural gas daily availability was modified into a maximum daily energy quota, in order to obtain a more economic operation at the SING. This has allowed a reduction in operational costs, particularly during peak hours of the system, where it has been possible to reduce the amount and permanence of variable high cost operational units when the system allows so.

NCRE INTEGRATION PLAN TO THE SING

The significant number of generation projects based on Non-Conventional Renewable Energies (NCRE) with approved Environmental Impact Studies reported to the authorities and to the CDEC-SING, as well as the progressive information

Operation' safety, integrity and efficiency.

requirements by companies and investors interested in developing projects based on NCRE to the SING, are the key factors for the CDEC-SING to start the Integration Plan of ERNC to the SING in 2012.

The Plan strategy focuses on three axes:

- Knowledge of the NCRE. With the purpose of generating fundamental knowledge related to the SING's operation, creating collaboration networks with domestic and international researchers and operators.

- Safe and Economic Operation, which intends to determine technical restrictions and to identify existing gaps to develop technical solutions operationally feasible.

- Standards. Aimed to contribute to the preparation of the regulatory framework and to establish Procedures that provide safety and efficiency to the operation and to the the decision making by the system's actors.

A significant milestone of the Integration Plan was the issue –in September- of the Study "Technical Economic Effects of Eolic and Solar Energy Integration to the SING".

TOLLS DIVISION

Its purpose is the management of economic transfers, and guaranteeing open access to the trunk, sub-transmission and additional transmission systems of the Northern Interconnected System.

It has three departments within its structure, the Transfers Department, the Tolls Department, and the Planning Department. The latter was created in 2013, from the Planning and Development Unit added in 2012. The main goals of the new department will be to face the growing demand for planning and development of the transmission system, according to the future demand needs and offer availability.

Expansion, development and safety of the SING's transmission system

2012 Management – Tolls Division

The Tolls Division worked hard during 2012 on expansion, development and safety of the SING's transmission system.

Regarding expansion, the bidding for the works of the new SING's trunk was carried out, corresponding to the line 2x220 kV Encuentro – Lagunas of the first circuit. This process was started in 2012 with the summons for international bidding, delivery of technical and administrative information to participants, management and accompanying on-site technical visits.

Regarding development, a new study to review and analyze the consistency of the Transmission System facilities was carried out, as established by the Law. This analysis was focused on the capacity of the transmission system facilities, particularly the trunk system, for the thorough supply of the SING's future demand both under normal operation and under contingency conditions, as well as in compliance with the requirements of the Quality and Service Safety Technical Standard.

The result of the study recommended 11 expansion works of the SING's trunk system, with a referential investment of approximately US$66 million, which consist in three new works amounting to US$32.6 million, and eight expansions of existing facilities for an approximate amount of US$33.4 million. It is worth mentioning that the Expansion Plan of the

Energy National Commission (CNE) for the term 2012-2013 included the 2012-2013 entire proposals presented by the CDEC-SING.

In June a Technical Report was prepared with the main results of Crucero and Encuentro sub-stations' analysis, and the expansion of the transmission system during a 15-year span. The report included a technical recommendation for bands, longitudinal and crossed, to protect the area of the mentioned substations, considering the expansion needs of the main transmission system (220 kV).

Also, in 2012 a project was studied and defined aimed to improve both the quality of the measures, as well as the efficiency of economic transfer' calculation processes. The final report of this study was finished in October with a proposal for technical solution and economic estimate, which was consolidated with the Measurements Centralized System Project to be developed during 2013. Such initiative consists in the implementation of the centralized system that will allow:

a) to ensure timeliness and a better quality of the measurements that participate in the processes developed by the CDEC-SING, through a frequent follow-up of measurements behavior and their correction whenever abnormalities are detected.
b) to enable measurements processing by centralizing the system at the CDEC-SING, including reading, processing and final use stages.
c) to enable access to measurements to all those who are coordinated by the CDEC-SING, allowing access to measurements information from the Database in different formats.

In the same area, and with the purpose of acquiring further technical knowledge on the matter, during the second semester a Measurement Data Registration & Transmission System was started up, in pilot mode, taken from measurement equipment located at Tarapacá and Lagunas sub-stations, and received in the CDEC-SING's network. This translated into a good approximation exercise for the operation of a future Measurement Centralized System, which will provide –through a direct reading system on the equipment

observed – direct data transmission, thus delivering a higher reliability to the calculation process of economic transfers.

Regarding economic transfers among the system's members, it is worth noting the implementation of several improvements during 2012, which had a positive impact on the payment chain of the companies participating from SING's transfers, regarding agility, continuation and certainty. This was reflected in the Transfers Valuation Report (IVT) issued monthly, which showed a high standard for the processes that determine Energy Balance, Firm Power and the Trunk and Sub-transmission Reports.

We are committed to a process of changes and continuous improvement

2012 MANAGEMENT AND BUDGET DIVISION

Its main functions are to prepare and manage the organization's financing and annual budget, to define and manage policies and programs on human resources, management, procurement and retention, and to lead the CDEC-SING's strategic planning and management control processes.

Its structure consists in two units: one of human resources and another of accounting and Budget, besides the clerical staff.

2012 Management – Management and Budget Division

A relevant project developed in 2012 at the organization was the transfer of the Dispatch and Control Center from Antofagasta to Santiago, which implied team unification and moving operators and their families to the capital.

For this purpose, the Management and Budget Division (DAP) implemented a "Transfer Plan" which among their main activities included:

1) Initial Detection of family needs, such as housing needs, social networks, education among other; then, retention of specialized advisors to accompany individuals in their installation process at their new houses.
2) Definition of a compensation program associated to the transfer, which includes help regarding housing, trips and transfers, real estate management in Antofagasta and Santiago, school management, among other; and
3) Transfer and installation of dispatchers and their families to Santiago.

This project was mostly implemented in 2012, leaving a small part for 2013, which consisted in the transfer of half the last dispatchers.

In the Management area, Electronic Invoicing was implemented in 2012 with positive results both in time optimization and delivery safety, and the corresponding control and follow-up of the CDEC-SING financing. Also, the fact of receiving electronic invoices from suppliers optimizes their time and makes tax management reliable.

In the Human Resources area, in 2012 tasks were focused on consolidating the Performance Assessment programs. In the first place a Performance Assessment System was developed and implemented according to the organization' strategic statements, and with a competences management model in order to add value to the processes in progress at all the CDEC-SING's areas.

TECHNICAL AND REGULATORY MANAGEMENT AREA

The creation of the Technical and Regulatory Management Area (AGTR) in 2012 started a significant action towards management of the Technical Directions Procedure, in the follow-up and control of the compliance with the Safety and Service Quality Technical Standard, and regards the connection of new projects to the system, contributing to deliver a greater transparency promptitude to the interconnection of new facilities' process.

As of 2012 the system has a portfolio of 72 projects reported to the CDEC-SING, 6 of which started their commercial operation or exploitation during the year.

A relevant aspect regarding projects' coordination is the re-ordering, systematization and supplementing of information to the organization's web site, resulting into making available to the requesting companies and other interested parties all information and mandatory requirements to have access to a connection to the SING. The new guidance shown in the web site represents a progress towards a greater transparency in the process, providing a clear and expeditious access to information.

PROJECTS INTERCONNECTED TO THE SING IN 2012

Project	Company	Type	Date
Sulfuric Acid Plant, Mejillones (PAM)	Noracid S.A.	Gx-Tx-Cx	October 2012
S/S Fortuna and 220 kV line Lomas Bayas - Fortuna	Minera Lomas Bayas	Tx-Cx	July 2012
Tap Off Room 360	Minera Escondida	Cx	July 2012
Algorta	Algorta Norte	Tx-Cx	June 2012
Circuit N°2 Line 2x220 kV Encuentro-Collahuasi	Minera Collahuasi	Tx	October 2012
Minera Sierra Gorda Stage 1	Minera Sierra Gorda	Tx-Cx	December 2012
Aguas del Altiplano disconnection	Aguas del Altiplano	Tx	August 2012

Gx: generation - Tx: transmission - Cx: consumption.

CDEC-SING 2012 PROCEDURES

As indicated in the Regulations that establish the structure, operation and financing of the Centers for Economic Load Dispatch (CDEC), approved by Supreme Decree N° 291/2007 of the Ministry of Economy, Development and Reconstruction, the Divisions of each CDEC" shall establish working methodologies and mechanisms through Procedures".

Such Procedures must abide by the legal stipulations (Law, Regulation and the rest of the electric standards in force) and once they have obtained a positive report by the CNE, they become mandatory for all those interconnected to the electric systems.

In the case of the CDEC-SING to this date a total 42 Procedures have been determined, 28 of them DO Procedures, 12 DP Procedures and 2 DAP Procedures.

During 2012 a significant progress was made in the status of the CDEC-SING Procedures. Six of them were granted a positive report by the CNE, thus making a total of 12 with such approval, while several of the rest have made different levels of progress in their cycle.

Procedure Name	Procedure Purpose*
Calculation of Short-circuit Maximum Level Exempt Resolution Nº 583 –CNE/ 06.10.2011	To define the information and methodology to be used for the calculation of the Short-circuit Maximum Level at each point of the IS, in order to verify the Minimum Requirements as established by the Safety and Quality of Service Technical Standard regarding the short-circuit levels the IS facilities shall endeavor. The equipment subject to short-circuit verification corresponds to those incorporated to the facilities of generating units and the Transmission system..
Development of Technical Audits Exempt Resolution Nº 352 –CNE/ 15.06.2006	To define the terms and conditions to request and develop Technical Audits as established by NTS and CS. In addition, it defines the requirements that must be complied with by those who wish to render the Audit service. The DO may request Coordinates to carry out a Technical Audit to any facility specified in the Standard.
Determination of Operation Safety Margin Exempt Resolution Nº 105 –CNE/ 27.02.2012	To define criteria to determine the Safety Margin for the Operation (MSO) of the IS facilities, according to NTS and CS and the Instances when their application shall be considered.
Coordinates Failure Reports Exempt Resolution Nº 594 –CNE/ 13.10.2011	To define contents and formats of the reports and information delivered by Coordinates In case of a failure. According to NTS and CS.
Works at the SING coordination Exempt Resolution Nº 696 –CNE /11.09.2012	To define processes, backgrounds and terms established to schedule and coordinate works at the facilities subject to coordination by the CDEC-SING, either of Precaution, Disconnection or Connection requests.
Load Manual Disconnection Exempt Resolution Nº 778 –CNE/ 30.10.2008	Procedure DO N° 20 that regulates the actions to be applied to coordinate manual disconnection and/or necessary limitation to load intake at consumption bars to maintain the safety of the system service.
Preparation of Equipment Movement for the SING's facilities. Exempt Resolution Nº 596 –CNE/ 13.10.2011	To establish criteria and methodologies to be used in the preparation of the statistical record of the set of data that will allow characterizing the behavior and events of daily real operation at the generation and transmission facilities subject to coordination. Also, the terms for publication, review and amendment of such movements.
Interconnection, Modification and withdrawal of SING's facilities Exempt Resolution Nº 627 –CNE/ 22.08.2012	a) To specify the technical, administrative and operational requirements for the coordination of the interconnection activities of new facilities declared under construction, amendment or withdrawal from the SING's facilities. b) To detail technical information that shall be delivered to the DO and DP of the company that owns, leases, usufructs or exploits under any circumstance the facility where the interconnection, modification or withdrawal from the SING has been requested.
Technical Information on Facilities and Equipment Exempt Resolution Nº 628–CNE/ 22.08.2012	To define technical information of the facilities subject to coordination by the CDEC-SING that shall be delivered to the DP by the companies being coordinated. To define delivery procedure or technical information updating to be incorporated and updated by the DP in the Technical Information Database of the SING's facilities (BDITS). To establish procedures so that DP manages the incorporation and updating of technical information to the BDITS, and the date they will be considered among the tasks carried out by DO, DP and DAP.
Payments for Re-settlement and Interests Calculation Exempt Resolution Nº 586–CNE/ 13.09.2010	DP procedure that contains the methodology to determine DP payments as per Re-settlement, related to settlements to be made by DP in the absence of specific conditions or criteria on the standards in force. Payments and interests arising from them shall be borne only by transmitting companies and/or companies that make injections or withdrawals.
Energy Measurement Systems Exempt Resolution Nº 108 –CNE/ 28.02.2012	Procedure that establishes the minimum responsibilities and requirements to be complied with by equipment and energy measurements used for the economic transfers referred to in Article 3, letter e), of DS 291/2007.
Collection Accounting Unique Trunk Charge Exempt Resolution Nº 188–CNE/ 13.04.2011	Establishes a methodology to be applied by DP to determine the accounting of payment by final users with a connected power lower or equal to 2 MW (segment 2 clients) by the application of a unique charge for use of the Trunk Transmission System. It also establishes the manner in which collection carried out by distribution concessionaries is transferred to generating companies that make withdrawals to supply regulated consumption.

*No textual

Our Relationship with the Environment

The CDEC-SING maintained an active presence in the local environment and encouraged and participated in different initiatives within the international environment.

Some of the highlighted events of 2012 are:

At domestic level the performance of eight "CDEC-SING Technical Days", which took place monthly in Antofagasta, summoning over 400 total attendants.

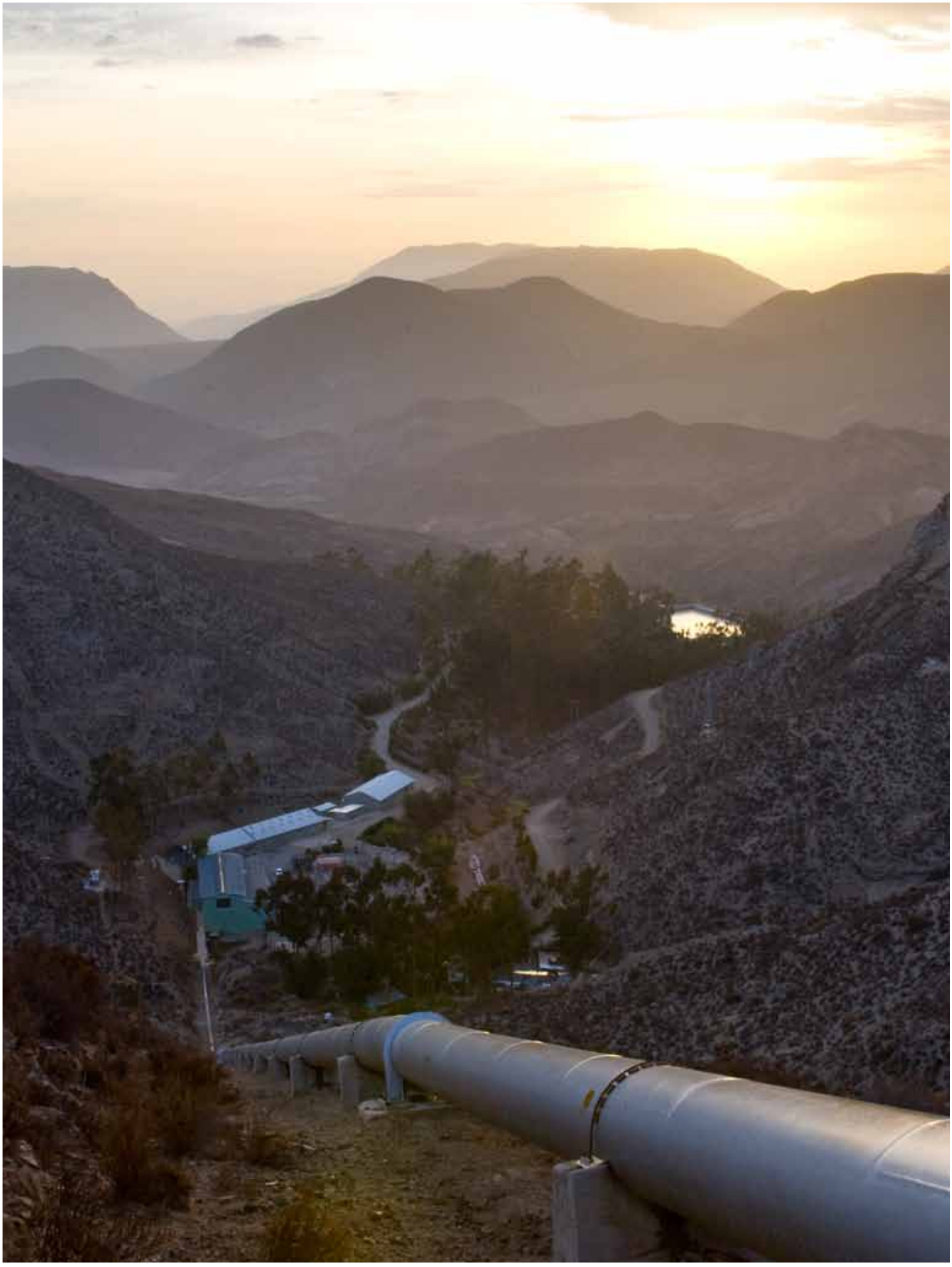
The Technical Days generated a technical exchange, promoting users' familiarity with the CDEC-SING's issues and tasks and creating a dialogue instance among the coordinated companies, the CDEC-SING's technical divisions and the main participants in the sector.

At international level, gatherings were held with operators from other countries such as Peru, Colombia, Denmark and Ireland, with the purpose of exchanging experiences mainly in issues related to the operation of electric systems, management of resources and reserves and non-conventional renewable energies integration to the electric network, among other.

At international instances level, in 2012 there was an active participation at the Market Operators and Managers Work Group of the CIER (Regional Energy Integration Commission).

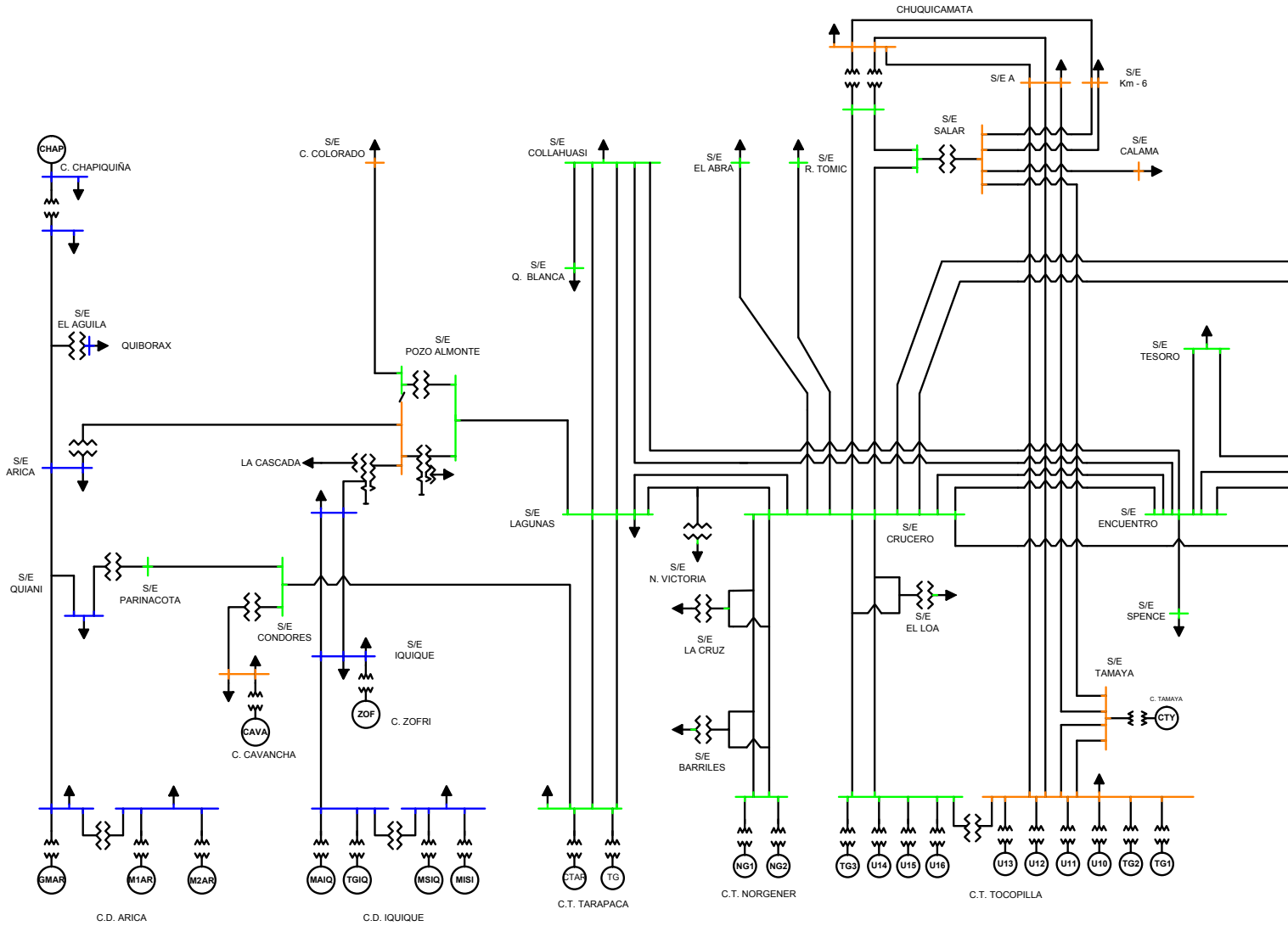
Such participation has resulted into a valuable source of information, transfer of experiences and valuable discussion opportunities among the Region's operators. It has allowed the CDEC-SING to acquire references and to learn, from an immediate source, the situation of different technologies and operation policies from a view of different realities, issues, challenges and solutions faced by regional operators in the management and operation of electric systems.

Also in 2012, another highlight was the participation at the Work Group of the Chilean Committee to the CIGRE –International Council of Large Electric Networks – on the Challenges and Solutions by the Chilean Electric Systems faced to the incorporation of NCRE, which has resulted into a direct connection between the Industry and the sector's Academia, with the purpose of analyzing and discussing current issues and to spread and exchange knowledge.



SING's *Clients and Facilities*

SING'S UNILINEAR LAYOUT



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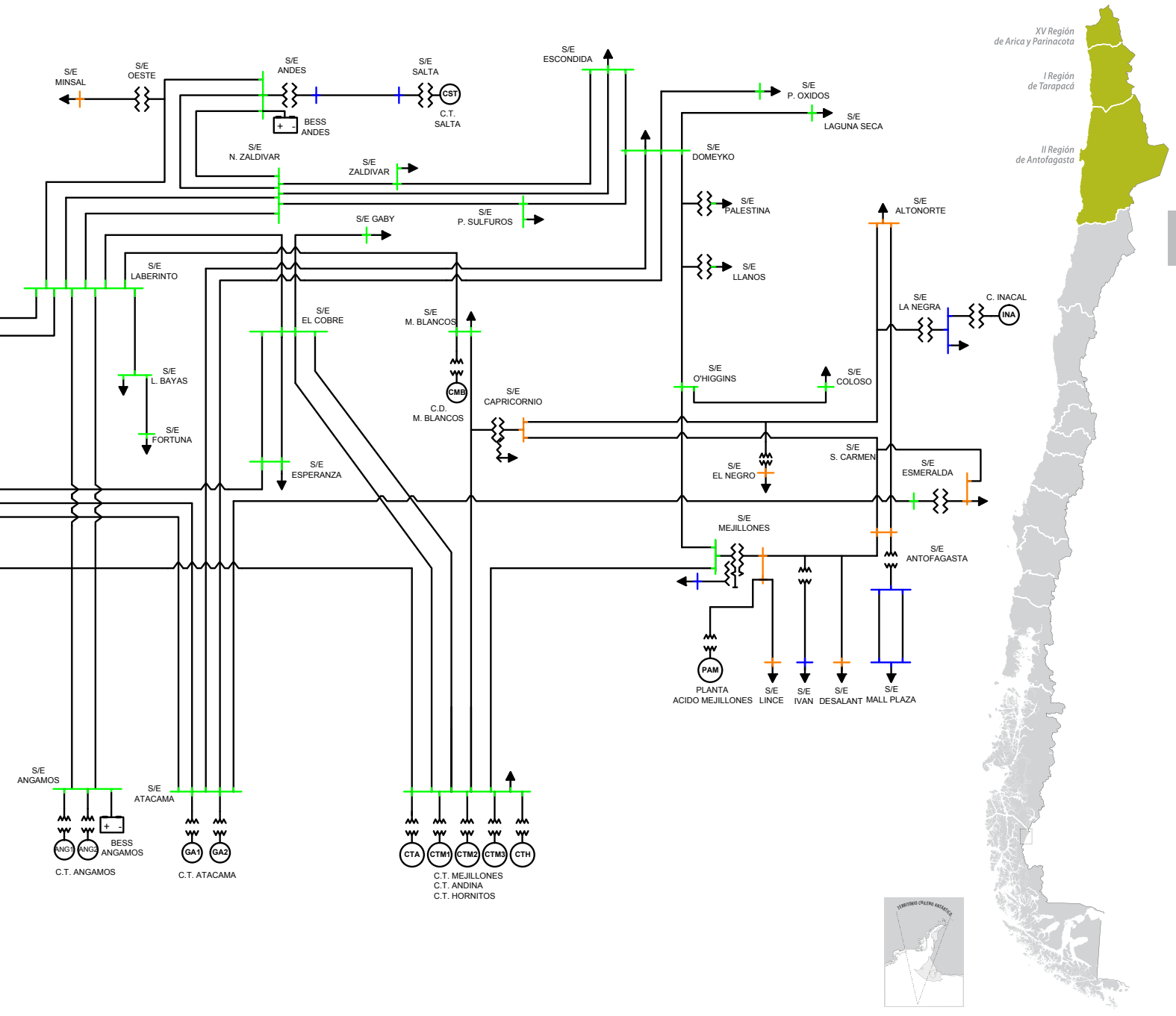
S/E MINSAL
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S/E LAGUNA SECA
S/E N. ZALDIVAR
S/E ZALDIVAR
S/E DOMEYKO
S/E GABY
S/E P. SULFUROS
S/E PALESTINA
S/E ALTONORTE
S/E LABERINTO
S/E LLANOS
S/E LA NEGRA
C. INACAL
INA
S/E EL COBRE
S/E M. BLANCOS
S/E L. BAYAS
CMB
C.D. M. BLANCOS
S/E CAPRICORNIO
S/E O'HIGGINS
S/E COLOSO
S/E FORTUNA
S/E ESPERANZA
S/E EL NEGRO
S/E S. CARMEN
S/E ESMERALDA
S/E MEJILLONES
S/E ANTOFAGASTA
PAM
PLANTA ACIDO MEJILLONES
S/E LINCE
S/E IVAN
S/E DESALANT
S/E MALL PLAZA
S/E ANGAMOS
S/E ATACAMA
ANG1
ANG2
BESS ANGAMOS
C.T. ANGAMOS
GA1
GA2
C.T. ATACAMA
CTA
CTM1
CTM2
CTM3
CTH
C.T. MEJILLONES
C.T. ANDINA
C.T. HORNITOS
XV Región de Arica y Parinacota
I Región de Tarapacá
II Región de Antofagasta

GENERATING UNITS AS OF DECEMBER, 2012

Owner	Name of Station	Unit	Nº Components	Total Gross Power [MW]	Injection Bar	Type of Unit	Year of Start-up in the System
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
	Diesel Arica	M1AR	3	2,997	Arica 66 kV	Diesel engine	1953
		M2AR	2	2,924	Arica 66 kV	Diesel engine	1961-63
		GMAR	4	8,400	Arica 66 kV	Diesel engine	1973
	Diesel Iquique	SUIQ	3	4,200	Iquique 66 kV	Diesel engine	1957
		MIIQ	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
	Termoeléctrica Mejillones	CTM1	1	165,900	Chacaya 220 kV	Steam-Coal	1995
		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
	Termoeléctrica Tocopilla (6)	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	1	136,400	Central Tocopilla 220 kV	Steam-Coal	1987
		U15	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 (6)	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 Chile	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	NTO1	1	136,300	Norgener 220 kV	Steam-Coal	1995
		NTO2	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
Equipos de Generación	Diesel Inacal	INACAL	4	6,800	La Negra 23 kV	Engine FO 6	2009
Termoeléctrica Andina	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
Noracid (7)	Planta de Ácido Sulfúrico Mejillones	PAM	1	17,500	Mejillones 110 kV	Cogeneration	2012
	TOTAL TO DECEMBER 31 ST OF 2012			**4.597,414**			

PMGD GENERATING UNITS AS OF DECEMBER, 2012

Owner	Name of Station	Unit	Nº Components	Total Gross Power [MW]	Injection Bar	Type of Unit	Year of Start-up in the System
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
Selray	La Huayca	HUAYCA1	1	1,350	Tamarugal 23 kV	Solar	2012
	Total PMGD to December 31 St 2012			**6,350**			
	Total SING to December 31 St 2012			**4.603,764**			

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 returned to the SING on November 29, 1999 owned by Celta.*
(2) Mantos Blancos diesel station is represented at the CDEC-SING by E- CL.
(3) The TG3 Unit is available for operation with natural gas as from September, 2000.
(4) Enaex diesel station is represented at the CDEC-SING by Gasatacama until May, 2007. As from June, 2007 it is represented by E-CL
(5) The TG11 and TG12 Units (Natural Gas) and TV10 (Steam) of CC Salta unit, at the requirement of the Organization in Charge of Dispatch (OED) of the Republic of Argentina, may connect to the Argentinian Interconnection System (SADI), contributing with a maximum power of 643 [MW].
(6) Electroandina's generation units started to be a part of E-CL as from December 1, 2011.
(7) Co-generation station, its power corresponds to the maximum surplus to be injected to the system.

SING TRANSMISSION LINES

Owner	Transmission Line	Tension (kV)	N° of Circuits	Approximate Length (km)	Capacity (7) (MVA)	Type of System	Year of Start-up
Aes Gener	Andes - Tap Off Oeste	220	1	38	277	Additional	1998
	Andes - Nueva Zaldívar	220	2	63,3x2	363,9	Additional	1999
	Laberinto - Mantos Blancos	220	1	70	272,07	Additional	1999
	Nueva Zaldívar - Zaldívar	220	1	0,2	308,65	Additional	1994
	Central Salta - Andes	345	1	408	777	Additional	1999
Angamos	Angamos - Laberinto	220	2	142x2	700x2	Additional	2010
Codelco Norte	Chuquicamata - 10	100	1	6,5	83,1	Additional	1988
	Chuquicamata - 10A	100	1	7,5	111,06	Additional	1988
	Chuquicamata - A	100	2	0,8x2	198.15x2	Additional	1988
	Chuquicamata - Chamy	100	1	12	62,4	Additional	1990
	Chuquicamata - K1	100	1	5,9	111,06	Additional	1988
	Chuquicamata - KM6	100	1	11	103,92	Additional	1988
	K1 - 10	100	1	1,3	111,06	Additional	1985
	KM6 - 10A	100	1	5,5	111,06	Additional	1988
	KM6 - Sopladores	100	1	2,0	58,9	Additional	1993
	Salar - km6	100	2	2,2x2	95.26x2	Additional	2005
E-CL	Central Chapiquiña - Arica	66	1	84	48,01	Additional	1967
	Central Diesel Arica - Arica (5)	66	1	6,8	41,15	Sub-transmission / Additional	1964
	Central Diesel Iquique - Iquique	66	1	1,6	48,01	Additional	1970
	Iquique - Pozo Almonte.Circuito N°1	66	1	46	18,29	Sub-transmission	2012
	Iquique - Pozo Almonte.Circuito N°2	66	1	39	45,73	Sub-transmission	1987
	Pozo Almonte - Tamarugal	66	1	21	9,1	Sub-transmission	1968
	Tap Off Llanos - Aguas Blancas	66	1	N/I	N/I	Additional	N/I
	Arica - Pozo Almonte	110	1	216	34,3	Sub-transmission	1987
	Capricornio - Alto Norte	110	1	44	120,03	Additional	2000
	Capricornio - Antofagasta	110	1	28	120,03	Additional	2000
	Capricornio - Sierra Miranda	110	1	25	121,94	Additional	2007
	Chacaya - GNL Mejillones	110	1	11	122	Additional	2010
	Chacaya - Mejillones	110	1	1,4	121,94	Additional	1987
	Mejillones - Enaex	110	1	1,4	182,9	Additional	N/I
	Mejillones - Antofagasta	110	1	63	95,26	Additional	1987
	Central Diesel Tamaya - A	110	1	127	144,8	Additional	2009
	Central Diesel Tamaya - Salar	110	1	140	144,8	Additional	2009
	Central Tocopilla - A. Circuito N°1	110	1	141	80.02	Additional	1910
	Central Tocopilla - A. Circuito N°2	110	1	141	93,36	Additional	1910
	Central Tocopilla - Central Diesel Tamaya	110	2	14x2	93.36x2	Additional	2009
	Chacaya - El Cobre	220	2	144x2	350.57x2	Additional	2011
	Laberinto - El Cobre	220	1	2,7	360,86	Additional	2012
	Chacaya - Crucero	220	1	153	304,8	Additional	1987
	Chacaya - Mantos Blancos	220	1	66	304,8	Additional	1996
	Chacaya - Mejillones	220	1	1,3	377,2	Sub-transmission	1987
	Lagunas - Pozo Almonte	220	1	70	190,53	Additional	1987
	El Cobre - Gaby	220	1	57	73	Additional	2010
	Central Tocopilla - Crucero	220	2	71,4x2	419x2	Additional	1986
	Crucero - Chuquicamata	220	1	70	442,02	Additional	1986
	Crucero - El Abra	220	1	101	457,26	Additional	1995
	Crucero - Radomiro Tomic	220	1	82	457,26	Additional	1996
	Crucero - Salar (1)	220	1	75	442,0	Additional	2005
	Salar - Chuquicamata (2)	220	1	13	442,0	Additional	2005
	Tap Off El Loa - El Loa	220	1	8,4	327,7	Additional	2000
Emelari	Parinacota - Quiani (4)	66	1	7,1	12,6	Sub-transmission	2002
	Tap Off Quiani - Quiani	66	1	0,5	17,15	Sub-transmission	2002
Grace	Tap Off Barriles - Mantos de la Luna	110	1	27	70,69	Additional	2006
Haldeman	Pozo Almonte - Sagasca	66	1	55	3,4	Additional	1971
Minera Cerro Colorado	Pozo Almonte - Cerro Colorado	110	1	61	164,04	Additional	1993
Minera Collahuasi	Encuentro - Collahuasi. Circuito N°1	220	1	201	133,37	Additional	2004
	Encuentro - Collahuasi. Circuito N°2	220	1	201	170	Additional	2012
	Lagunas - Collahuasi	220	2	118x2	109x2	Additional	1996
Minera El Tesoro	Encuentro - El Tesoro	220	1	90	125	Additional	2000

Owner	Transmission Line	Tension (kV)	N° of Circuits	Approximate Length (km)	Capacity (7) (MVA)	Type of System	Year of Start-up
Minera Escondida	Atacama - Domeyko	220	2	205x2	245,8x2	Additional	1999
	Crucero - Laberinto. Circuito Nº1	220	1	133	293	Additional	2010
	Domeyko - Escondida	220	1	7,0	245,8	Additional	1999
	Domeyko - Laguna Seca	220	1	13	245,8	Additional	2001
	Domeyko - Planta Óxidos	220	1	1,0	245,8	Additional	1998
	Domeyko - Sulfuros	220	1	1,0	293	Additional	2005
	Laberinto - Nueva Zaldívar. Circuito Nº1	220	1	95	293	Additional	2010
	Mejillones - O'Higgins	220	1	74	260,64	Additional	2006
	Nueva Zaldívar - Escondida	220	1	14	293	Additional	2010
	Nueva Zaldívar - Sulfuros	220	1	13	293	Additional	2006
	O'Higgins - Coloso	220	1	32	245,78	Additional	1993
	O'Higgins - Domeyko	220	1	128	245,78	Additional	1993
	Zaldívar - Escondida (3)	220	1	14	293	Additional	1996
	Escondida - Monturaqui	69	1	80	54,98	Additional	2008
	Laguna Seca - Tap Off 418	69	1	13	19,12	Additional	2002
Minera Esperanza	Chacaya - Muelle	110	1	55	97,55	Additional	2010
	Muelle - Guayaques	110	1	50	93,36	Additional	2010
	El Cobre - Esperanza	220	2	81,3x2	179x2	Additional	2010
	El Tesoro - Esperanza	220	1	13	85,4	Additional	2010
Minera Lomas Bayas	Lomas Bayas - Fortuna	220	1	6,3	187,93	Additional	2012
Minera Meridian	Tap Off Palestina - El Peñón	66	1	66	29,95	Additional	1999
Minera Michilla	Mejillones - El Lince	110	1	74	48,01	Additional	1991
Minera Quebrada Blanca	Collahuasi - Quebrada Blanca	220	1	18	197,38	Additional	2002
Minera Rayrock	Tap Off Pampa - Iván Zar	69	1	17	8,01	Additional	1994
Minera Spence	Encuentro - Spence	220	1	67	318,18	Additional	2005
Minera Zaldivar	Crucero - Laberinto. Circuito Nº2	220	1	133	377,24	Additional	1994
	Laberinto - Nueva Zaldívar. Circuito Nº2	220	1	73	377,24	Additional	1994
Moly-Cop	Chacaya - Molycop	220	1	0,8	327,7	Additional	2004
Norgener	Tap Off Oeste - Minsal	110	1	33	34,3	Additional	1997
	Laberinto - Lomas Bayas	220	1	10	272,07	Additional	1997
	Tap Off Oeste - Laberinto	220	1	85	272,07	Additional	1998
	Norgener - Crucero	220	2	72x2	426.78x2	Additional	1997
Sierra Gorda Scm	Tap Off Pampa Lina - Sierra Gorda	220	1	14	36,73	Additional	2012
Transelec Norte	Atacama - Encuentro	220	2	153x2	386x2	Troncal	1999
	Atacama - Esmeralda	220	1	69	197,4	Sub-transmission	2001
	Crucero - Encuentro	220	2	1x2	384,86x2	Troncal	1999
	Crucero - Lagunas 1 (6)	220	1	174	182,9	Troncal	1987
	Crucero - Lagunas 2	220	1	173	121,9	Troncal	1998
	Cóndores - Parinacota	220	1	222	197,38	Sub-transmission	2002
	Tarapacá - Cóndores	220	1	70	197,38	Sub-transmission	2002
	Tarapacá - Lagunas	220	2	56x2	254x2	Troncal	1996
Transemel	Cóndores - Cerro Dragón	110	1	4,9	34,3	Sub-transmission	2001
	Cóndores - Pacífico	110	1	11	34,3	Sub-transmission	2001
	Cóndores - Palafitos	110	1	8,5	34,3	Sub-transmission	2001
	Esmeralda - Centro	110	1	0,5	67,1	Sub-transmission	2001
	Esmeralda - La Portada	110	1	17	34,3	Sub-transmission	2001
	Esmeralda - Sur	110	1	6,8	34,3	Sub-transmission	2001
	Esmeralda - Uribe	110	1	17	68,6	Sub-transmission	2001
	Salar - Calama	110	1	17	55,06	Sub-transmission	2011
	Tap Off Alto Hospicio - Alto Hospicio	110	1	0,1	34,3	Sub-transmission	2001
	Parinacota - Chinchorro	66	1	3,5	21	Sub-transmission	2002
	Parinacota - Pukará	66	1	3,6	42,1	Sub-transmission	2003
Xstrata Copper - Altonorte	Antofagasta - Tap Off La Negra	110	1	19	121,94	Sub-transmission	1993
	Tap Off La Negra - Alto Norte	110	1	4,8	121,94	Additional	1993
Total Lines 66 Kv				**334**	**336**		
Total Lines 69 Kv				**110**	**82**		
Total Lines 100 Kv				**58**	**1.339**		
Total Lines 110 Kv				**1.372**	**2.636**		
Total Lines 220 Kv				**5.164**	**19.337**		
Total Lines 345 Kv				**408**	**777**		
Total SING to December 31 St 2012 (8)				**7.446**	**24.509**		

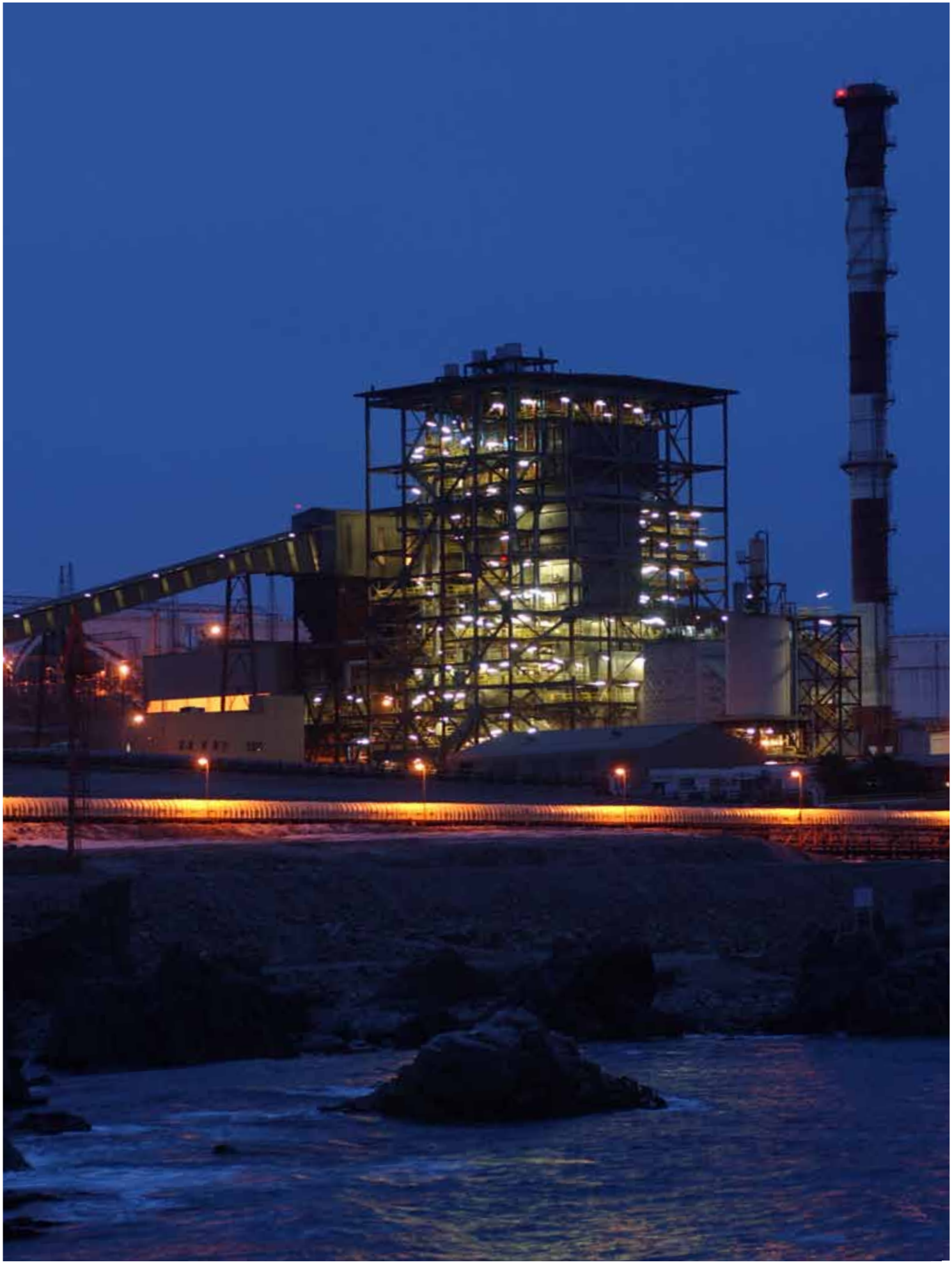
Notes:

(1) The line is of shared ownership, according to the following detail: Crucero-Torre 340 section owned by E-CL, Torre 340-Salar section owner by Codelco Norte.
(2) The line is of shared ownership, according to the following detail: Salar-Torre 340 section owned by Codelco Norte, Torre 340-Chuquicamata section owned by E-CL.
(3) The line is of shared ownership between Minera Escondida and Minera Zaldívar.
(4) The line is of shared ownership between EMELARI and TRANSEMEL
(5) Arica - Tap Arica section is for Sub-transmission; Tap Arica - Arica Diesel Section is additional
(6) Line owned by Transelec S.A., formed by two sections: Crucero - Nueva Victoria and Nueva Victoria - Lagunas
(7) Capacities of lines reported correspond to the thermal capacity of conductor.
(8) SING's total lengths as per circuit.

SING MAIN CLIENTS AS OF DECEMBER 2012

Client	Category	Connected Power [MVA]	Maximum Demand [MW]	Annual Consumption [GWh]	Supply Bar	Supplier
ACF Minera	Minning	2,61	2,54	19,8	Lagunas 220 kV	Celta
Algorta	Minning	2,50	3,21	19,3	Chacaya 110 kV	E-CL
Atacama Agua y Tecnología	Industrial	14,00	9,72	78,1	Antofagasta 110 kV	E-CL
Atacama Minerals	Minning	40,00	3,79	25,1	Mejillones 220 kV	E-CL - Ingenova
Camiña	Distribution	-	0,16	589,0	Dolores 110 kV	E-CL
Cerro Colorado	Minning	90,00	40,16	262,4	Pozo Almonte 220 kV	E-CL
Cerro Dominador - Sierra Gorda	Minning	7,73	5,09	20,6	Encuentro 220 kV	E-CL
Cerro Dominador - Santa Margarita	Minning	5,78	1,79	10,7	Calama 110 kV	E-CL
Cía. Portuaria Mejillones	Industrial	4,00	1,09	4,7	Mejillones 110 kV	E-CL
Clientes Chapiquiña	-	0,37	0,44	2,0	Chapiquiña 66 kV	E-CL
Clientes Menores E-CL	-	0,04	0,06	0,6	Arica 66 kV	E-CL
Codelco - Chuquicamata	Minning	1.292,00	282,36	2.289,6	Chuquicamata 220 kV	Andina - E-CL
Codelco - Radomiro Tomic	Minning	300,00	117,64	907,0	Crucero 220 kV	E-CL
Collahuasi	Minning	612,50	182,88	1.354,1	Collahuasi 220 kV	Celta - Gas Atacama
Cosayach	Minning	37,80	4,67	32,4	Pozo Almonte 23 kV - Dolores 110 kV - Tamarugal 66 kV	E-CL
El Abra	Minning	150,00	106,68	792,8	Crucero 220 kV	E-CL
El Tesoro	Minning	156,00	40,58	454,8	Encuentro 220 kV	E-CL - Hornitos
Elecda	Distribution	-	162,64	880,3	Esmeralda 220 kV - Calama 110 kV - Tocopilla 5 kV - La Negra 23 kV - Mejillones 23 kV - Antofagasta 13,8 kV	E-CL
Eliqsa	Distribution	-	45,25	538,7	Cóndores 220 kV - Pozo Almonte 23 kV - Tamarugal 66 kV	E-CL
Emelari	Distribution	-	33,21	331,5	Parinacota 220 kV	E-CL
Enaex	Industrial	12,00	6,94	57,6	Mejillones 110 kV	E-CL
Gaby	Minning	100,00	74,43	0,6	El Cobre 220 kV	Andina
GNL Mejillones	Industrial	12,50	5,56	25,3	Chacaya 110 kV	E-CL
Grace	Minning	25,00	11,82	25,3	Barriles 220 kV	Aes Gener
Haldeman	Minning	17,25	9,21	57,6	Pozo Almonte 66 kV	E-CL
Inacesa	Industrial	18,95	8,82	61,5	La Negra 110 kV	Enorchile
Lomas Bayas	Minning	38,00	39,38	314,1	Laberinto 220 kV	E-CL
Mall Plaza Antofagasta	Industrial	5,66	5,60	27,2	CD Antofagasta 13,8 kV	E-CL
Mamiña	Minning	0,17	0,17	696,5	Pozo Almonte 220 kV	E-CL
Mantos Blancos	Minning	50,00	31,50	234,8	Mantos Blancos 220 kV	E-CL
Megapuerto	Industrial	0,78	1,90	4,8	Mejillones 23 kV	E-CL
Michilla	Minning	31,20	20,62	161,7	Mejillones 110 kV	E-CL
Minera Escondida	Minning	2.267,00	448,84	3.318,7	Mejillones 220 kV - Zaldívar 220 kV - Atacama 220 kV	Angamos
Minera Esperanza	Minning	100,00	100,80	872,9	El Cobre 220 kV - Chacaya 110 kV	Hornitos
Minera Meridian	Minning	20,00	16,50	125,9	C. Atacama 220 kV	Gas Atacama
Codelco - MMH	Minning	98,86	8,03	137,4	Salar 110 kV - Crucero 220 kV	Norgener
Molycop	Industrial	30,00	17,43	81,4	Chacaya 220 kV	E-CL
Molynor	Industrial	1,50	1,79	13,5	Mejillones 23 kV	E-CL
Muelle Esperanza	Industrial	30,00	21,39	0,1	Chacaya 110 kV	Hornitos
Noracid (*)	Industrial	11,00	6,32	0,2	Mejillones 110 kV	Noracid (*)
Other Minor and Works (**)	Miscellaneous	-	-	-	-	-
Polpaico	Industrial	3,83	2,40	10,0	Mejillones 23 kV	E-CL
Quebrada Blanca	Minning	50,00	16,27	39,0	Collahuasi 220 kV	Gas Atacama
Quiborax	Minning	1,70	2,84	20,2	El Águila 66 kV	E-CL
Rayrock (**)	Minning	-	-	-	Pampa 110 kV	E-CL
Spence	Minning	180,00	87,53	568,5	Encuentro 220 kV	Angamos
Minera Sierra Gorda	Minning	120,00	7,93	280,8	Encuentro 220 kV	E-CL
SQM El Loa	Minning	52,50	32,06	249,1	El Loa 220 kV	Celta - E-CL
SQM Minsal	Minning	20,00	27,52	200,9	Oeste 220 kV	Celta
SQM Nitratos	Minning	10,00	4,90	0,0	La Cruz 220 kV	Celta
SQM Nva.Victoria	Minning	30,00	7,44	57,4	Nva.Victoria 220 kV	Celta - E-CL
SQM Salar	Minning	5,78	3,64	0,0	El Negro 110 kV	Celta
Xstrata Copper - Altonorte	Industrial	104,00	46,53	342,4	Alto Norte 110 kV	E-CL
Zaldívar	Minning	134,00	74,72	591,6	Zaldivar 220 kV	E-CL

(*) Self-Producer
(**) Disconnected During 2012



Operation *Statistics*

I. SING: Generation Installed Capacity

INSTALLED CAPACITY AS PER COMPANY 2003-2012 TERM

IN PHYSICAL UNITS (MW)

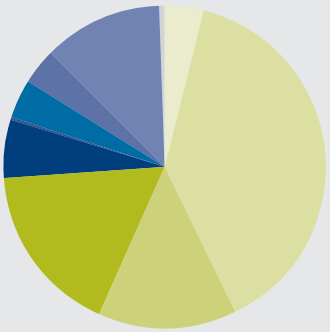
Company \ Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Celta	182	182	182	182	182	182	182	182	182	182
E-CL	719	719	719	719	722	705	693	691	691	1.796
Electroandina	1.037	992	992	992	992	1.000	1.105	1.105	1.105	
AES Gener	643	643	643	643	643	643	643	643	643	643
Gasatacama	783	783	783	783	781	781	781	781	781	781
Norgener	277	277	277	277	283	283	277	277	277	277
Enorchile							11	11	11	11
Equipos de Generación (3)							7	7	7	7
Cavancha (1)								3	3	3
Enernuevas (2)								2	2	2
Termoeléctrica Andina									169	169
Inversiones Hornitos									170	170
Eléctrica Angamos									545	545
Noracid										18
Selray										1
TOTAL	**3.641**	**3.596**	**3.596**	**3.596**	**3.602**	**3.593**	**3.699**	**3.701**	**4.585**	**4.604**

IN PERCENTAGES (%)

Company \ Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Celta	5,0%	5,1%	5,1%	5,1%	5,0%	5,1%	4,9%	4,9%	4,0%	3,9%
E-CL	19,8%	20,0%	20,0%	20,0%	20,0%	19,6%	18,7%	18,7%	15,1%	39,0%
Electroandina	28,5%	27,6%	27,6%	27,6%	27,5%	27,8%	29,9%	29,9%	24,1%	
Endesa										
AES Gener	17,7%	17,9%	17,9%	17,9%	17,8%	17,9%	17,4%	17,4%	14,0%	14,0%
Gasatacama	21,5%	21,8%	21,8%	21,8%	21,7%	21,7%	21,1%	21,1%	17,0%	17,0%
Norgener	7,6%	7,7%	7,7%	7,7%	7,9%	7,9%	7,5%	7,5%	6,0%	6,0%
Enorchile							0,3%	0,3%	0,2%	0,2%
Equipos de Generación (3)							0,2%	0,2%	0,1%	0,1%
Cavancha (1)								0,1%	0,1%	0,1%
Enernuevas (2)								0,1%	0,0%	0,0%
Termoeléctrica Andina									3,7%	3,7%
Inversiones Hornitos									3,7%	3,7%
Eléctrica Angamos									11,9%	11,8%
Noracid										0,4%
Selray										0,0%
TOTAL	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**

(1) Cavancha station corresponds to PMGD since November 3, 2010. Before this date it was represented at the CDEC-SING by E-CL.
(2) Units of Enernuevas company correspond to PMGD.
(3) Former Inacal

INSTALLED CAPACITY AS PER COMPANY



CELTA	3,9%	TERMOELÉCTRICA ANDINA	3,7%
E-CL (1)	39,0%	INVERSIONES HORNITOS	3,7%
AES GENER	14,0%	ELÉCTRICA ANGAMOS	11,8%
GASATACAMA GENERACIÓN	17,0%	CAVANCHA	0,1%
NORGENER	6,0%	ENERNUEVAS (3)	0,0%
ENORCHILE	0,2%	NORACID	0,4%
EQUIPOS DE GENERACIÓN (2)	0,1%	SELRAY (4)	0,0%

(1) Electroandina's generation assets became a part of E-CL as from December 1, 2011
(2) Former INACAL
(3) With 2.2 MW of installed capacity, Enernuevas participation is equivalent to 0.05% of the SING
(4) With 1.4 MW of installed capacity, Selray participation is equivalent to 0.03% of the SING

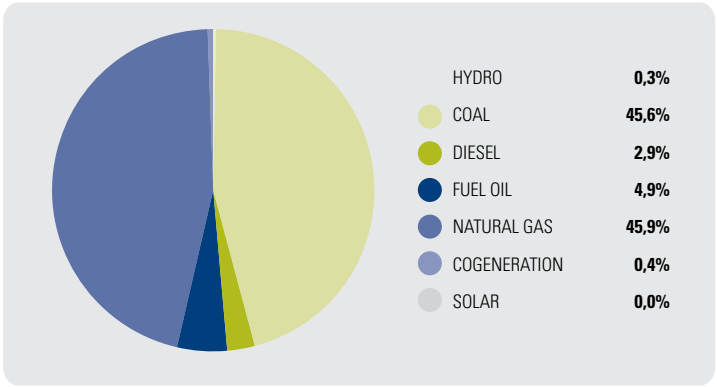
INSTALLED CAPACITY AS PER TYPE OF FUEL 2003-2012 TERM

IN PHYSICAL UNITS (MW)

Fuel	Company	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hydro	E-CL	13	13	13	13	13	13	10	10	10	10
	Cavancha							3	3	3	3
	Enernuevas								2	2	2
Subtotal		**13**	**13**	**13**	**13**	**13**	**13**	**13**	**15**	**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	780,5
	Electroandina	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	168,8
	Hornitos									170,1	170,1
	Angamos									545,0	545,0
Subtotal		**1.206**	**1.206**	**1.206**	**1.206**	**1.206**	**1.214**	**1.216**	**1.216**	**2.100**	**2.100**
Diesel	Celta	24	24	24	24	24	24	24	24	24	24
	E-CL	62	62	62	62	65	48	48	48	48	98
	Electroandina	50	50	50	50	50	50	50	50	50	
	Endesa										
	Gasatacama	3	3	3	3						
	Enorchile					6	6	11	11	11	11
Subtotal		**138**	**138**	**138**	**138**	**144**	**127**	**132**	**132**	**132**	**132**
Fuel Oil	E-CL	53	53	53	53	53	53	41	41	41	219
	Electroandina	120	75	75	75	75	75	179	179	179	
	Equipos de Generación (1)							7	7	7	7
Subtotal		**173**	**128**	**128**	**128**	**128**	**128**	**226**	**226**	**226**	**226**
Natural Gas	E-CL	251	251	251	251	251	251	251	251	251	688
	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	
Subtotal		**2.112**	**2.112**	**2.112**	**2.112**	**2.112**	**2.112**	**2.112**	**2.112**	**2.112**	**2.112**
Cogeneration	Noracid										18
Subtotal											18
Solar	Selray										1
Subtotal											1
TOTAL		**3.641**	**3.596**	**3.596**	**3.596**	**3.602**	**3.593**	**3.699**	**3.701**	**4.585**	**4.604**

Notes: (1) E-CL's generating units that use Diesel-Fuel Oil blends have been associated to Fuel Oil.
(2) Since November 3, 2010 Cavancha station corresponds to PMGD.
(3) Former Inacal

INSTALLED CAPACITY AS PER FUEL



II. SING: Energy Generation

GENERATION AS PER COMPANY AND UNIT

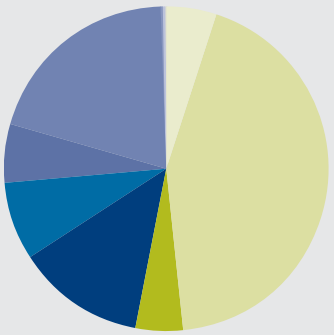
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	ANNUAL
E-CL													
CHAPIQUIÑA	5,46	5,57	5,51	4,45	3,32	3,23	3,57	3,30	2,98	3,04	3,68	4,45	48,57
CD ARICA	0,17	0,77	1,13	2,01	1,75	1,63	1,08	0,68	0,75	0,39	0,72	0,97	12,06
CD IQUIQUE	0,36	1,79	2,48	3,85	2,04	2,54	1,93	0,63	0,53	0,16	0,66	0,72	17,69
CD MANTOS BLANCOS	0,16	1,66	3,73	6,98	5,05	3,78	2,51	2,10	2,85	2,52	3,35	5,28	39,97
CTM3	17,87	85,73	61,46	15,26	30,62	32,48	21,66	0,98	25,03	14,42	0,24	0,65	306,38
CTM2	114,68	90,42	114,55	100,77	114,77	111,09	61,04	32,15	106,20	93,90	110,05	113,42	1.163,04
CTM1	110,97	101,28	90,17	106,70	110,42	83,31	80,90	102,79	105,03	110,42	106,60	95,38	1.203,96
DEUTZ	0,01	0,01	0,01	0,01	0,01	0,00	0,01	0,00	0,01	0,00	0,01	0,01	0,09
CUMMINS	0,01	0,01	0,00	0,01	0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,05
U10 - U11 (1)	0,00	1,65	0,81	0,00	3,76	0,00	0,00	0,15	0,00	0,00	0,66	0,00	7,02
U12 - U13 (1)	36,74	64,92	93,49	47,94	93,31	78,22	60,75	96,78	106,58	105,58	101,82	100,04	986,18
U14 - U15 (1)	157,25	149,47	167,59	166,50	175,41	170,44	176,08	159,11	87,62	160,96	169,21	175,73	1.915,37
U16 (1)	65,02	0,00	27,50	160,80	143,62	164,86	140,01	144,44	156,91	133,90	138,60	146,43	1.422,09
TG1 (1)	0,08	0,28	0,06	0,17	0,06	0,04	0,17	0,03	0,02	0,03	0,00	0,15	1,09
TG2 (1)	0,11	0,24	0,06	0,34	0,01	0,04	0,16	0,03	0,02	0,00	0,00	0,15	1,17
TG3 (1)	0,19	1,21	1,63	1,96	0,95	0,07	0,67	0,38	0,28	0,16	0,07	0,73	8,29
SUTA (1)	3,33	11,30	19,70	19,68	13,07	9,79	4,62	5,76	8,27	8,39	13,09	19,65	136,65
Total Gross Generation	**512,43**	**516,30**	**589,87**	**637,44**	**698,16**	**661,52**	**555,16**	**549,30**	**603,07**	**633,88**	**648,77**	**663,76**	**7.269,66**
Own Consumption	**36,30**	**34,70**	**40,60**	**39,50**	**45,30**	**41,30**	**36,10**	**35,32**	**37,34**	**41,09**	**41,95**	**42,38**	**471,88**
Total Net Generation	**476,13**	**481,60**	**549,27**	**597,94**	**652,86**	**620,22**	**519,06**	**513,98**	**565,73**	**592,79**	**606,82**	**621,38**	**6.797,78**
CELTA													
CTTAR	96,70	90,43	59,60	0,00	40,30	61,87	92,53	91,24	84,64	96,24	75,66	58,83	848,04
TGTAR	0,12	0,54	0,35	0,41	0,34	0,51	0,38	0,22	0,31	0,21	0,37	0,31	4,06
Total Gross Generation	**96,82**	**90,97**	**59,95**	**0,41**	**40,64**	**62,37**	**92,91**	**91,46**	**84,95**	**96,45**	**76,03**	**59,13**	**852,11**
Own Consumption	**9,90**	**9,80**	**5,60**	**0,00**	**3,00**	**5,00**	**7,10**	**7,54**	**6,84**	**7,76**	**6,74**	**4,79**	**74,07**
Total Net Generation	**86,92**	**81,17**	**54,35**	**0,41**	**37,64**	57,37	85,81	83,92	78,11	88,69	69,29	54,34	**778,04**
NORGENER													
NTO1	100,87	93,37	98,62	95,91	100,07	96,76	100,66	99,93	96,86	73,30	88,26	100,23	1.144,85
NTO2	100,61	91,90	98,12	94,92	48,31	0,00	67,32	100,61	97,05	100,83	97,74	100,89	998,29
Total Gross Generation	**201,48**	**185,27**	**196,74**	**190,84**	**148,38**	**96,76**	**167,98**	**200,54**	**193,91**	**174,13**	**186,00**	**201,12**	**2.143,15**
Own Consumption	**13,00**	**12,40**	**13,10**	**12,70**	**10,00**	**6,50**	**11,30**	**13,19**	**12,94**	**11,43**	**12,24**	**13,28**	**142,08**
Total Net Generation	**188,48**	**172,87**	**183,64**	**178,14**	**138,38**	**90,26**	**156,68**	**187,35**	**180,97**	**162,70**	**173,76**	**187,84**	**2.001,07**
GASATACAMA													
TG1A	54,79	27,36	0,14	5,13	0,12	5,09	0,00	3,68	2,60	8,90	12,88	1,09	121,79
TG1B	17,59	3,28	0,00	10,33	34,72	29,23	0,00	0,00	28,38	33,19	0,85	10,93	168,51
TV1C	42,96	17,00	0,00	5,61	19,88	18,76	0,00	1,64	17,00	23,01	2,15	5,85	153,86
TG2A	14,28	7,96	30,03	52,96	13,56	4,32	26,74	28,46	0,00	2,93	0,00	9,50	190,76
TG2B	0,00	2,78	0,00	0,00	0,84	7,13	0,00	0,00	0,00	0,47	2,55	12,16	25,93
TV2C	7,92	4,22	16,59	28,63	7,64	6,15	15,01	16,15	0,00	0,00	1,27	11,41	115,00
Total Gross Generation	**137,53**	**62,60**	**46,77**	**102,66**	**76,77**	**70,68**	**41,76**	**49,93**	**47,99**	**68,50**	**19,71**	**50,95**	**775,84**
Own Consumption	**4,90**	**3,10**	**2,90**	**4,00**	**3,70**	**3,40**	**2,60**	**2,69**	**2,61**	**3,15**	**1,88**	**2,92**	**37,85**
Total Net Generation	**132,63**	**59,50**	**43,87**	**98,66**	**73,07**	**67,28**	**39,16**	**47,24**	**45,38**	**65,35**	**17,83**	**48,03**	**737,99**
AES GENER													
Central Salta	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 Gross Generation	**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**
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	**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**
CAVANCHA													
CAVA	1,29	1,24	1,28	1,15	1,29	1,21	1,24	1,24	1,19	1,28	1,30	1,33	15,05
Total Gross Generation	**1,29**	**1,24**	**1,28**	**1,15**	**1,29**	**1,21**	**1,24**	**1,24**	**1,19**	**1,28**	**1,30**	**1,33**	**15,05**
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**	**1,24**	**1,28**	**1,15**	**1,29**	**1,21**	**1,24**	**1,24**	**1,19**	**1,28**	**1,30**	**1,33**	**15,05**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	ANNUAL
ENORCHILE													
ZOFRI_1-6	0,01	0,05	0,06	0,07	0,08	0,09	0,05	0,04	0,04	0,01	0,04	0,05	0,58
ZOFRI_2-5	0,03	0,26	0,28	0,41	0,48	0,51	0,23	0,15	0,20	0,09	0,18	0,23	3,05
ZOFRI_7-12	0,05	0,28	0,40	0,62	0,70	0,59	0,43	0,25	0,30	0,20	0,27	0,35	4,44
Total Gross Generation	**0,09**	**0,59**	**0,74**	**1,10**	**1,26**	**1,18**	**0,71**	**0,44**	**0,54**	**0,30**	**0,49**	**0,63**	**8,07**
Own Consumption	**0,00**	**0,01**	**0,02**	**0,02**	**0,02**	**0,02**	**0,02**	**0,03**	**0,03**	**0,03**	**0,02**	**0,02**	**0,24**
Total Net Generation	**0,09**	**0,58**	**0,72**	**1,08**	**1,24**	**1,16**	**0,69**	**0,41**	**0,51**	**0,27**	**0,47**	**0,61**	**7,83**
EQUIPOS DE GENERACIÓN (2)													
INACAL1 - 4	0,36	0,59	0,79	2,19	1,63	0,81	0,18	0,06	0,24	0,36	0,47	0,63	8,29
Total Gross Generation	**0,36**	**0,59**	**0,79**	**2,19**	**1,63**	**0,81**	**0,18**	**0,06**	**0,24**	**0,36**	**0,47**	**0,63**	**8,29**
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	**0,36**	**0,59**	**0,79**	**2,19**	**1,63**	**0,81**	**0,18**	**0,06**	**0,24**	**0,36**	**0,47**	**0,63**	**8,29**
ANDINA													
CTA1	102,07	101,97	114,34	108,79	94,22	111,01	112,49	116,40	112,78	116,71	104,38	116,61	1.311,78
Total Gross Generation	**102,07**	**101,97**	**114,34**	**108,79**	**94,22**	**111,01**	**112,49**	**116,40**	**112,78**	**116,71**	**104,38**	**116,61**	**1.311,78**
Own Consumption	**10,60**	**10,80**	**12,10**	**11,80**	**8,80**	**10,20**	**10,70**	**11,68**	**11,39**	**12,18**	**9,83**	**12,10**	**132,18**
Total Net Generation	**91,47**	**91,17**	**102,24**	**96,99**	**85,42**	**100,81**	**101,79**	**104,72**	**101,39**	**104,53**	**94,55**	**104,51**	**1.179,60**
ANGAMOS													
ANG1	77,60	103,40	135,27	170,97	145,20	86,96	66,53	120,71	86,31	150,95	165,06	170,81	1.479,77
ANG2	144,35	135,56	177,59	58,64	94,12	186,35	172,34	175,08	174,84	184,47	184,74	191,30	1.879,38
Total Gross Generation	**221,95**	**238,97**	**312,86**	**229,60**	**239,32**	**273,31**	**238,87**	**295,79**	**261,14**	**335,42**	**349,80**	**362,11**	**3.359,15**
Own Consumption	**28,60**	**28,50**	**34,20**	**24,80**	**25,20**	**28,10**	**27,00**	**33,97**	**29,12**	**37,33**	**36,21**	**37,77**	**370,80**
Total Net Generation	**193,35**	**210,47**	**278,66**	**204,80**	**214,12**	**245,21**	**211,87**	**261,82**	**232,02**	**298,09**	**313,59**	**324,34**	**2.988,35**
ENERNUEVAS													
MHAH - MHT2	1,54	1,42	1,49	1,42	1,52	1,43	1,52	1,49	1,42	1,52	1,51	1,52	17,80
Total Gross Generation	**1,54**	**1,42**	**1,49**	**1,42**	**1,52**	**1,43**	**1,52**	**1,49**	**1,42**	**1,52**	**1,51**	**1,52**	**17,80**
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	**1,54**	**1,42**	**1,49**	**1,42**	**1,52**	**1,43**	**1,52**	**1,49**	**1,42**	**1,52**	**1,51**	**1,52**	**17,80**
HORNITOS													
CTH1	116,22	106,56	100,89	109,20	109,98	112,12	115,47	115,76	68,72	0,00	0,00	14,37	969,29
Total Gross Generation	**116,22**	**106,56**	**100,89**	**109,20**	**109,98**	**112,12**	**115,47**	**115,76**	**68,72**	**0,00**	**0,00**	**14,37**	**969,29**
Own Consumption	**11,40**	**10,60**	**10,00**	**10,20**	**11,80**	**11,40**	**11,90**	**10,95**	**7,58**	**0,20**	**0,00**	**2,63**	**98,66**
Total Net Generation	**104,82**	**95,96**	**90,89**	**99,00**	**98,18**	**100,72**	**103,57**	**104,81**	**61,14**	**-0,20**	**0,00**	**11,74**	**870,63**
NORACID													
PAM	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,17	6,46	9,04	9,36	25,03
Total Gross Generation	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,17**	**6,46**	**9,04**	**9,36**	**25,03**
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	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,17**	**6,46**	**9,04**	**9,36**	**25,03**
SELRAY													
HUAYCA1	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,11	0,20	0,14	0,44
Total Gross Generation	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,11**	**0,20**	**0,14**	**0,44**
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	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,11**	**0,20**	**0,14**	**0,44**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	ANNUAL
TOTAL SING													
Gross Generation	**1.391,80**	**1.306,47**	**1.425,73**	**1.384,81**	**1.413,17**	**1.392,40**	**1.328,28**	**1.422,42**	**1.376,12**	**1.435,11**	**1.397,69**	**1.481,67**	**16.755,66**
Own Consumption	114,70	109,91	118,52	103,02	107,82	105,92	106,72	115,37	107,85	113,17	108,87	115,89	1.327,76
Net Generation	1.277,10	1.196,56	1.307,21	1.281,79	1.305,35	1.286,48	1.221,56	1.307,05	1.268,27	1.321,94	1.288,82	1.365,78	15.427,90
Transmission losses	**40,40**	**33,50**	**65,00**	**89,60**	**61,40**	**56,40**	**52,90**	**32,30**	**44,00**	**30,00**	**45,80**	**42,10**	**593,40**
Sales to free clients	1.102,70	1.025,60	1.097,00	1.058,50	1.104,50	1.090,80	1.026,80	1.124,90	1.088,40	1.144,40	1.097,60	1.170,90	13.132,10
Sales to regulated clients	134,00	137,50	145,20	133,70	139,40	139,30	141,80	149,90	135,80	147,50	145,40	149,20	1.698,70
Total Sales	**1.236,70**	**1.163,10**	**1.242,20**	**1.192,20**	**1.243,90**	**1.230,10**	**1.168,60**	**1.274,80**	**1.224,20**	**1.291,90**	**1.243,00**	**1.320,10**	**14.830,80**
TOTAL SING (in %)													
Gross Generation	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Net Generation	8%	8%	8%	7%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Net Generation	92%	92%	92%	93%	92%	92%	92%	92%	92%	92%	92%	92%	92%
Transmission losses	3%	3%	5%	6%	4%	4%	4%	2%	3%	2%	3%	3%	4%
Sales to free clients	79%	78%	77%	76%	78%	78%	77%	79%	79%	80%	79%	79%	78%
Sales to regulated clients	10%	11%	10%	10%	10%	10%	11%	11%	10%	10%	10%	10%	10%
Total Sales	**89%**	**89%**	**87%**	**86%**	**88%**	**88%**	**88%**	**90%**	**89%**	**90%**	**89%**	**89%**	**89%**

(1) Units represented at the CDEC-SING by Electroandina until December 1, 2011; after such date they are represented by E-CL:
(2) Former Inacal

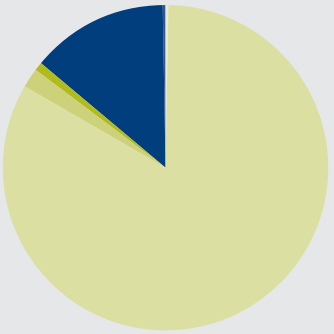
GROSS GENERATION AS PER COMPANY



CELTA	5,1%	TERMOELÉCTRICA ANDINA	7,8%
E-CL	43,4%	INVERSIONES HORNITOS	5,8%
AES GENER	0,0%	ELÉCTRICA ANGAMOS	20,0%
GASATACAMA	4,6%	CAVANCHA	0,1%
NORGENER	12,8%	ENERNUEVAS	0,1%
ENORCHILE	0,0%	NORACID	0,1%
EQUIPOS DE GENERACIÓN (EX INACAL)	0,0%	SELRAY	0,0%

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

GROSS GENERATION AS PER FUEL



HYDRO	0,5%
COAL	83,0%
DIESEL	1,9%
FUEL OIL	0,9%
NATURAL GAS	13,6%
COGENERATION	0,1%
SOLAR	0,0%

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

2003–2012 GENERATION OF SING' STATIONS (GWh)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CELTA										
CTTAR	435	435	422	830	1012	981,0	1.065	1.076,3	972,7	848
TGTAR	1	1	0	2	14	17,9	11	9,6	8,1	4
Total Gross Generation	**436**	**436**	**423**	**832**	**1.026**	**999**	**1.076**	**1.085,9**	**980,8**	**852**
Own Consumption	**40**	**39**	**39**	**72**	**84**	**81**	**86**	**86,5**	**74,7**	**74**
Total Net Generation	**397**	**398**	**383**	**760**	**941**	**918**	**990**	**999,4**	**906,2**	**778**
E-CL										
CHAPIQUIÑA	51	51	45	55	53	53	47	42	40	49
CAVANCHA (1)	14	15	15	15	15	15	15	13		12
CD ARICA	1	5	2	7	33	32	17	25	16	18
CD IQUIQUE	6	11	4	13	50	60	31	42	34	40
CD ANTOFAGASTA	2	7	2	15	32	6	0	0		306
CD MANTOS BLANCOS	7	16	4	25	7	0	69	88	49	1.163
CD ENAEX					1	0	1	1		1.204
CTM1	144	498,7	446,6	880	1.057	1.202	1.191	1.114	1.118	0
CTM2	575	1.003	849	1.033	1.188	1.298	1.282	1.220	1.159	0
CTM3	1.695	1.449	1.601	600	400	814	632	367	310	7
U10 - U11 (3)									0	986
U12 - U13 (3)									22	1.915
U14 - U15 (3)									127	1.422
U16 (3)									102	1
TG1 - TG2 (3)									0	1
TG3 (3)									1	8
SUTA (3)									9	137
Total Gross Generation	**2.495**	**3.054**	**2.970**	**2.643**	**2.837**	**3.480**	**3.285**	**2.912**	**2.988**	**7.270**
Own Consumption	**113**	**162**	**159**	**169**	**200**	**230**	**225**	**199**	**219**	**472**
Total Net Generation	**2.382**	**2.892**	**2.810**	**2.475**	**2.637**	**3.250**	**3.060**	**2.713**	**2.769**	**6.798**
ELECTROANDINA										
U09	0	0	0							
U10 - U11 (3)	0	7	0	19	187	322	112	45	32	0
U12 - U13 (3)	455	478	207	463	1.052	1.125	1.121	1.167	609	0
U14 - U15 (3)	1.304	1.409	1.549	1.688	1.905	1.784	1.820	1.888	1.447	0
U16 (3)	1.627	1.458	1.753	1.884	936	474	732	1.527	1.095	0
TG1 - TG2 (3)	2	2	1	0	12	25	12	4	7	0
TG3 (3)	11	91	43	12	40	56	33	20	16	0
SUTA (3)							184	187	151	0
Total Gross Generation	**3.398**	**3.444**	**3.553**	**4.066**	**4.132**	**3.785**	**4.014**	**4.838**	**3.357**	**0**
Own Consumption	**198**	**194**	**191**	**218**	**255**	**254**	**249**	**294**	**215**	**0**
Total Net Generation	**3.201**	**3.250**	**3.361**	**3.848**	**3.877**	**3.531**	**3.764**	**4.545**	**3.142**	**0**
AES GENER										
CC Salta	1.950	1.903	2.154	2.285	1.628	1.154	1.348	958	734	0
Total Gross Generation	**1.950**	**1.903**	**2.154**	**2.285**	**1.628**	**1.154**	**1.348**	**958**	**734**	**0**
Own Consumption	**46**	**43**	**44**	**46**	**38**	**22**	**7**	**5**	**2**	**0**
Total Net Generation	**1.904**	**1.860**	**2.110**	**2.239**	**1.590**	**1.132**	**1.341**	**953**	**733**	**0**
GASATACAMA										
CC1	1.434	1.168	1.144	411	1.002	2.331,3	1.405	1.244	1.230	444
CC2	1.568	1.530	1.338	1.285	1.311	639,6	1.801	1.729	897	332
ENAEX	0	0	0	0	0					
Total Gross Generation	**3.002**	**2.698**	**2.482**	**1.696**	**2.313**	**2.971**	**3.205**	**2.973**	**2.127**	**776**
Own Consumption	**82**	**82**	**69**	**61**	**75**	**73**	**90**	**85**	**71**	**38**
Total Net Generation	**2.920**	**2.615**	**2.413**	**1.635**	**2.237**	**2.898**	**3.116**	**2.888**	**2.056**	**738**
NORGENER										
NTO1	16	216	549	776	897	1.039	1.049	1.099	1.104	1.145
NTO2	126	578	528	938	1.107	1.061	911	1.170	1.120	998
ZOFRI_1-6 (Hasta 2008)					1	2				
ZOFRI_2-5 (Hasta 2008)					7	11				
Total Gross Generation	**142**	**794**	**1.077**	**1.714**	**2.011**	**2.113**	**1.960**	**2.269**	**2.225**	**2.143**
Own Consumption	**14**	**66**	**91**	**125**	**138**	**145**	**134**	**149**	**149**	**142**
Total Net Generation	**128**	**727**	**986**	**1.589**	**1.873**	**1.969**	**1.826**	**2.120**	**2.076**	**2.001**

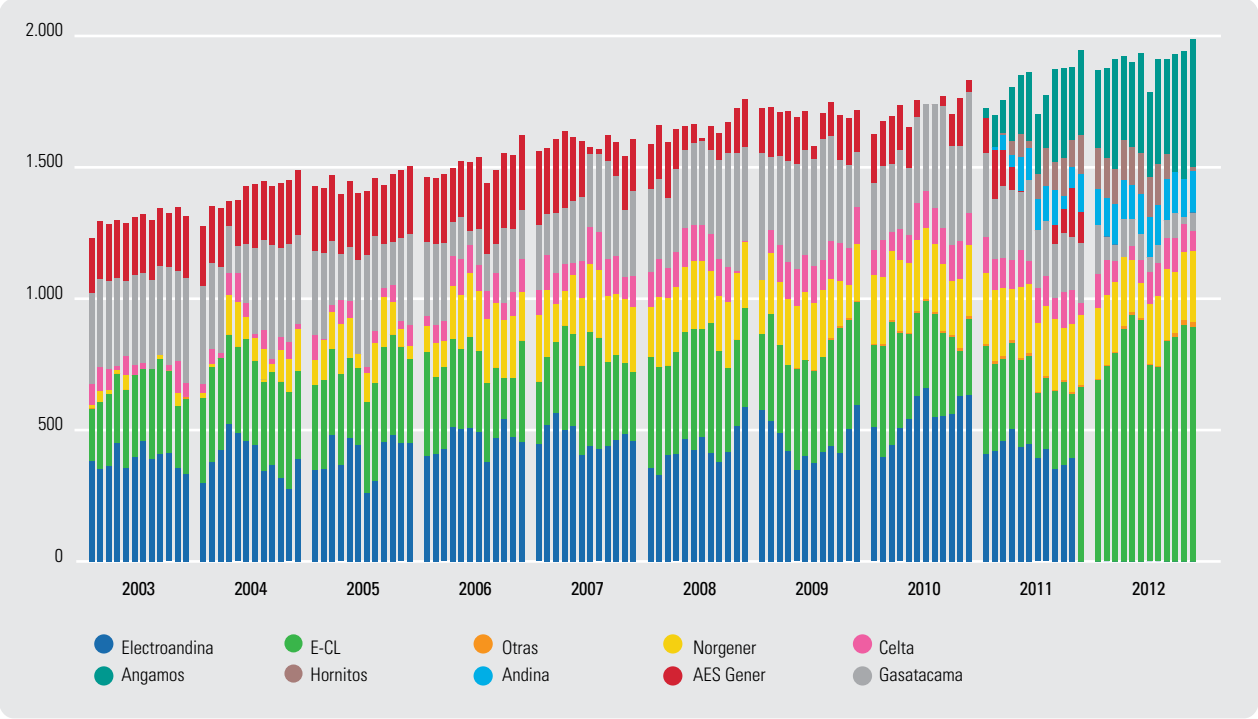
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CAVANCHA (2)										
CAVA								2	15	15
Total Gross Generation								**2**	**15**	**15**
Own Consumption								**0**	**0**	**0**
Total Net Generation								**2**	**15**	**15**
INACAL										
CD Inacal							13	44	24	8
Total Gross Generation							**13**	**44**	**24**	**8**
Own Consumption							**0**	**0**	**0**	**0**
Total Net Generation							**13**	**44**	**24**	**8**
ENORCHILE										
Central Estandartes							6	17	6	1
ZOFRI_1-6									1	3
ZOFRI_2-5									4	4
Total Gross Generation							**6**	**17**	**11**	**8**
Own Consumption							**0**	**0**	**0**	**0**
Total Net Generation							**6**	**17**	**10**	**8**
ANDINA										
CTA								1	756	1.312
Total Gross Generation								**1**	**756**	**1.312**
Own Consumption								**0**	**63**	**132**
Total Net Generation								**1**	**692**	**1.180**
ANGAMOS										
ANG1								0	1.280	1.480
ANG2									708	1.879
Total Gross Generation								**0**	**1.988**	**3.359**
Own Consumption								**0**	**201**	**371**
Total Net Generation								**0**	**1.787**	**2.988**
ENERNUEVAS										
MHAH - MHT2								3	17	18
Total Gross Generation								**3**	**17**	**18**
Own Consumption								**0**	**0**	**0**
Total Net Generation								**3**	**17**	**18**
HORNITOS										
CTH1									668,96	969
Total Gross Generation									**668,96**	**969**
Own Consumption									**70,73**	**99**
Total Net Generation									**598,23**	**871**
NORACID										
PAM										25
Total Gross Generation										**25**
Own Consumption										**4**
Total Net Generation										**21**
SELRAY										
HUAYCA1										0
Total Gross Generation										**0**
Own Consumption										**0**
Total Net Generation										**0**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TOTAL SING										
Gross Generation	**11.424**	**12.330**	**12.657**	**13.236**	**13.946**	**14.502**	**14.907**	**15.104**	**15.889**	**16.756**
Own Consumption	492	587	594	692	790	804	792	818	1.066	1.331
Net Generation	**10.932**	**11.743**	**12.063**	**12.544**	**13.156**	**13.698**	**14.115**	**14.286**	**14.824**	**15.424**
Transmission losses	452	503	503	515	481	479	459	493	561	
Sales to free clients	9.433	10.164	10.401	10.774	11.343	11.832	12.240	12.297	12.703	13.132
Sales to regulated clients	1.047	1.075	1.159	1.256	1.332	1.387	1.417	1.496	1.560	1.699
Total Sales	**10.480**	**11.240**	**11.560**	**12.029**	**12.674**	**13.219**	**13.656**	**13.792**	**14.263**	**14.831**
TOTAL SING (%)										
Gross Generation	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Own Consumption	4%	5%	5%	5%	6%	6%	5%	5%	7%	8%
Net Generation	**96%**	**95%**	**95%**	**95%**	**94%**	**94%**	**95%**	**95%**	**93%**	**92%**
Transmission losses	4%	4%	4%	4%	3%	3%	3%	3%	4%	4%
Sales to free clients	83%	82%	82%	81%	81%	82%	82%	81%	80%	78%
Sales to regulated clients	9%	9%	9%	9%	10%	10%	10%	10%	10%	10%
Total Sales	**92%**	**91%**	**91%**	**91%**	**91%**	**91%**	**92%**	**91%**	**90%**	**89%**

(1) Until November 3, 2010 Cavancha is represented at the CDEC-SING by E-CL.
(2) Since November 3, 2010 Cavancha corresponds to PMGD.
(3) Units represented at the CDEC-SING by Electroandina until December 1, 2011; after such date they are represented by E-CL:

MONTHLY HOURLY MEDIUM GENERATION

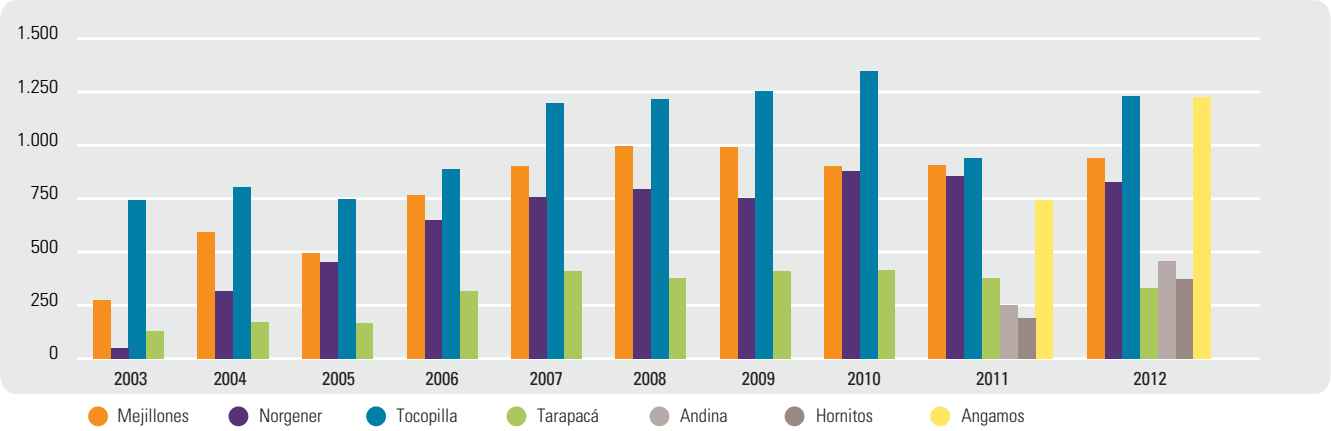
Power (MW) 2003 -2012



III. Fuels: Consumption and Prices

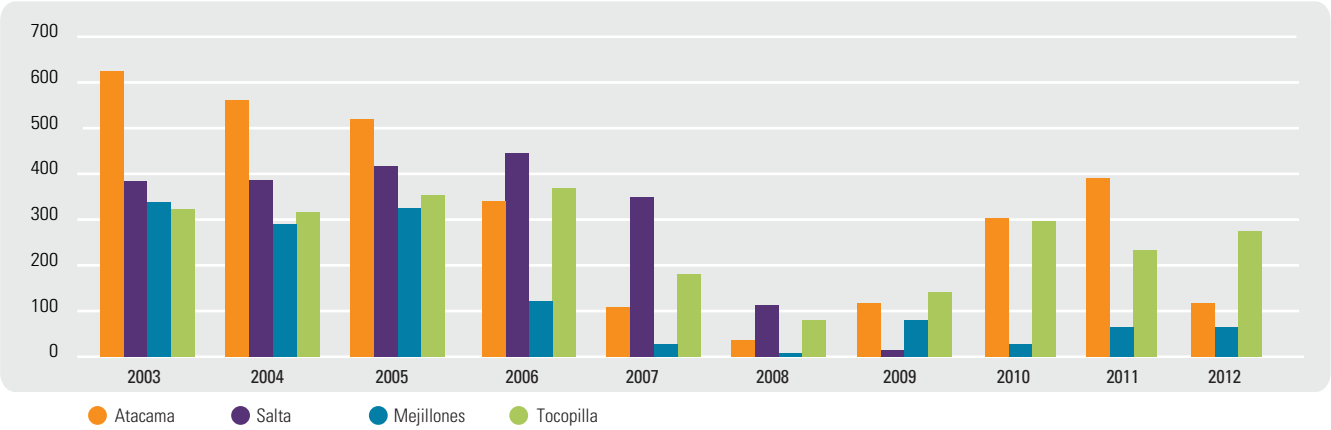
ANNUAL COAL CONSUMPTION AS PER STATION

Thousands of Tons



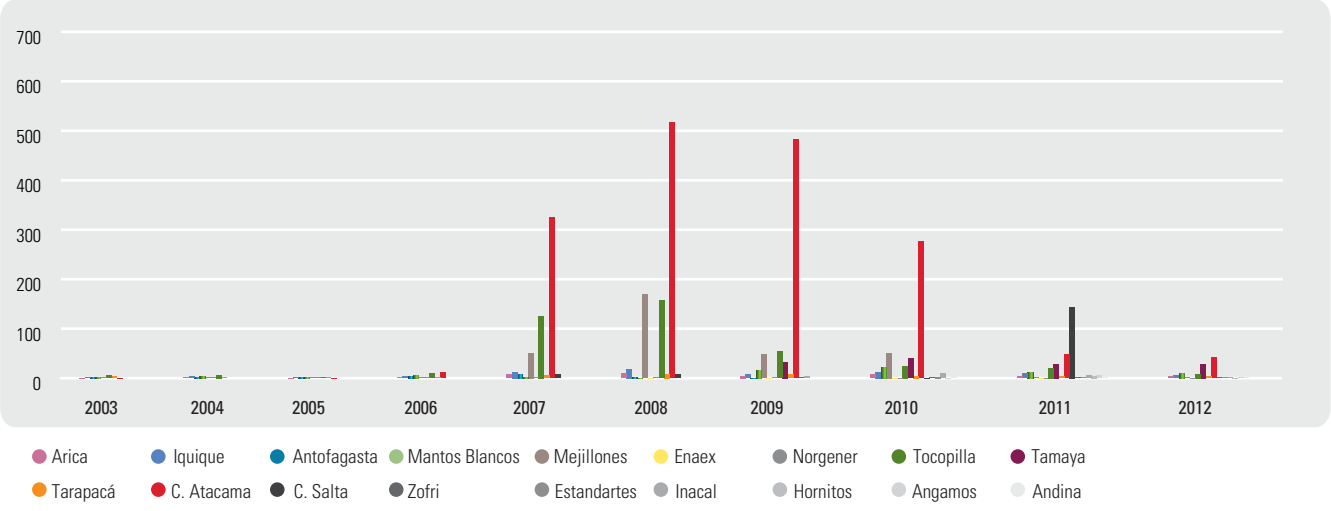
NATURAL GAS ANNUAL CONSUMPTION AS PER STATION

Millions of m^3

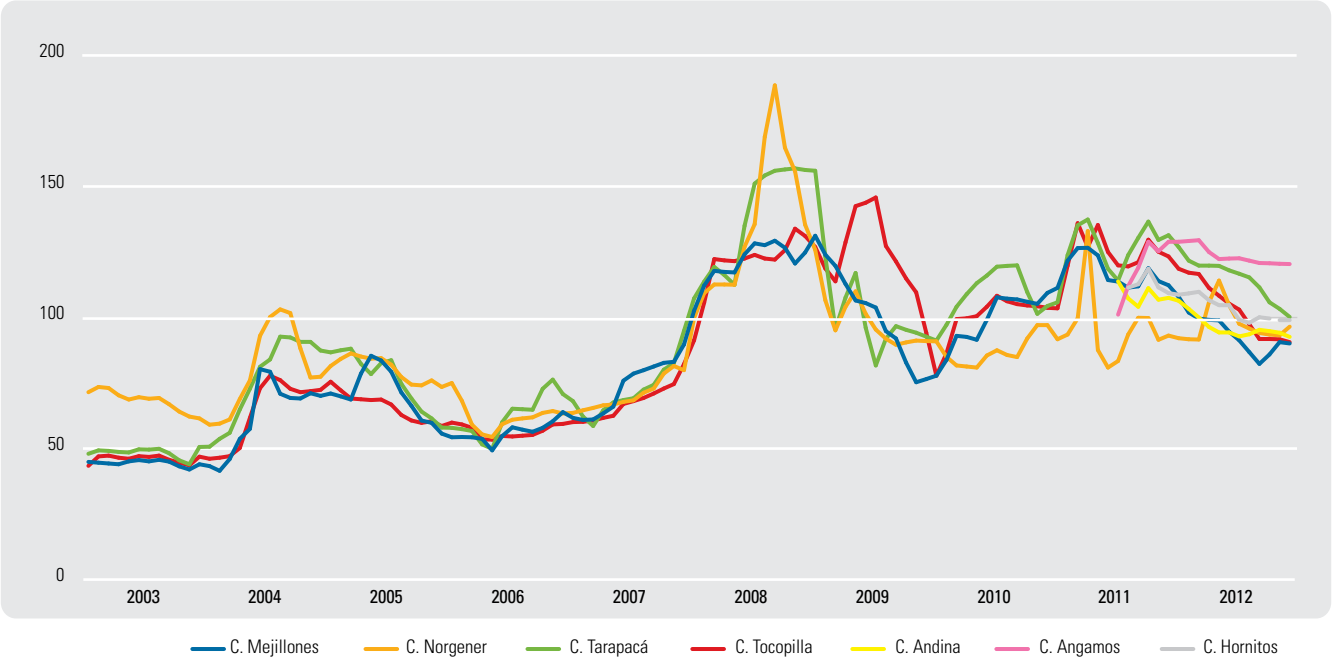


LIQUID FUELS ANNUAL CONSUMPTION AS PER STATION

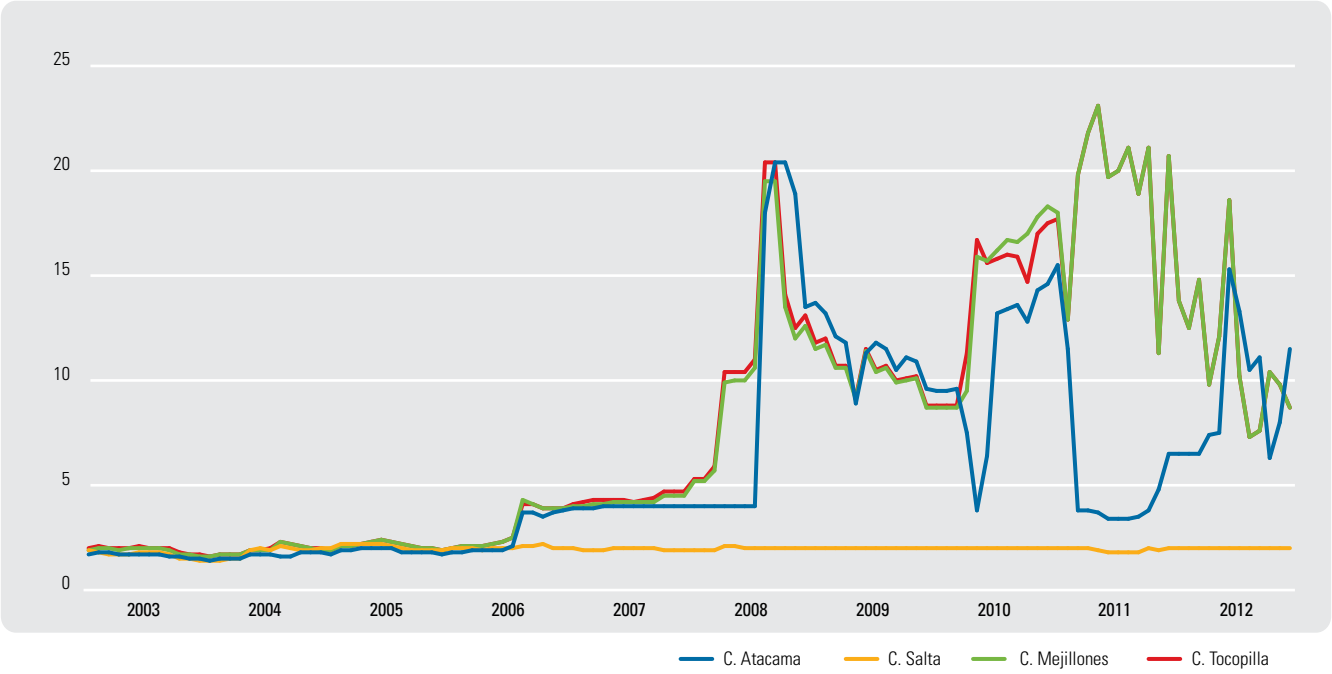
Thousands of Tons



COAL PRICE
US$ / TON

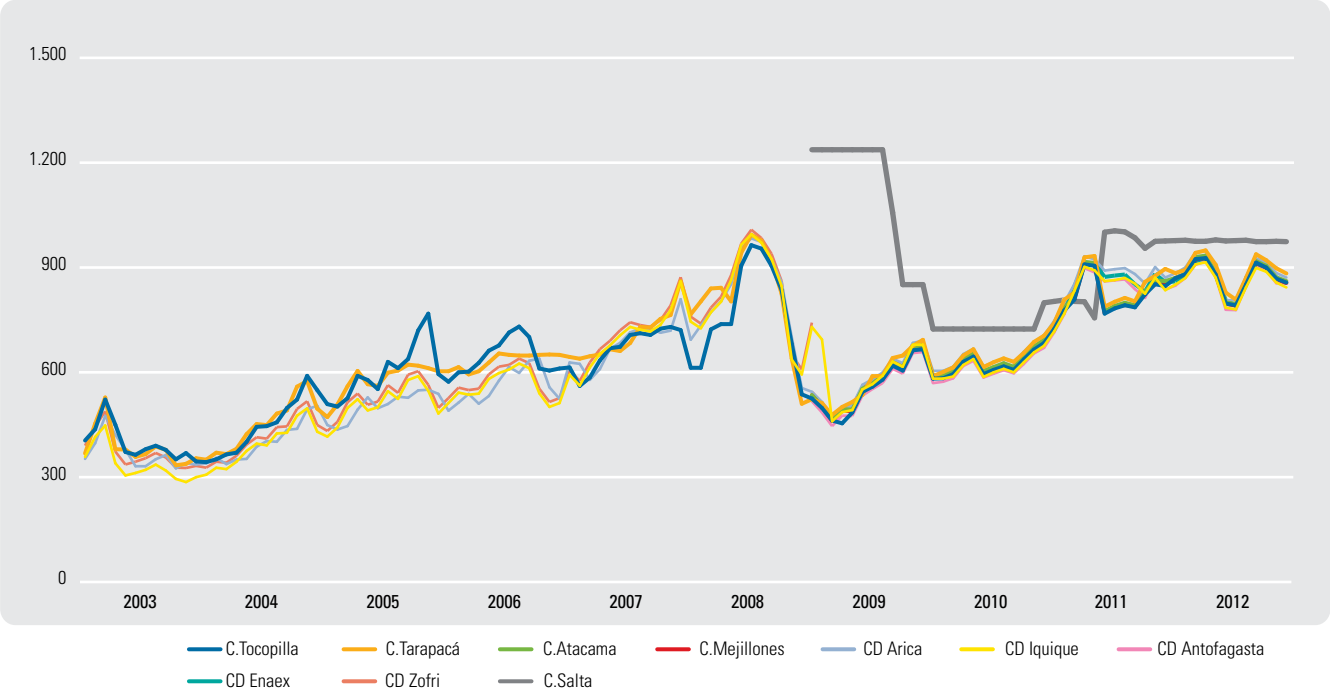


NATURAL GAS PRICE
US$ / MMBTU



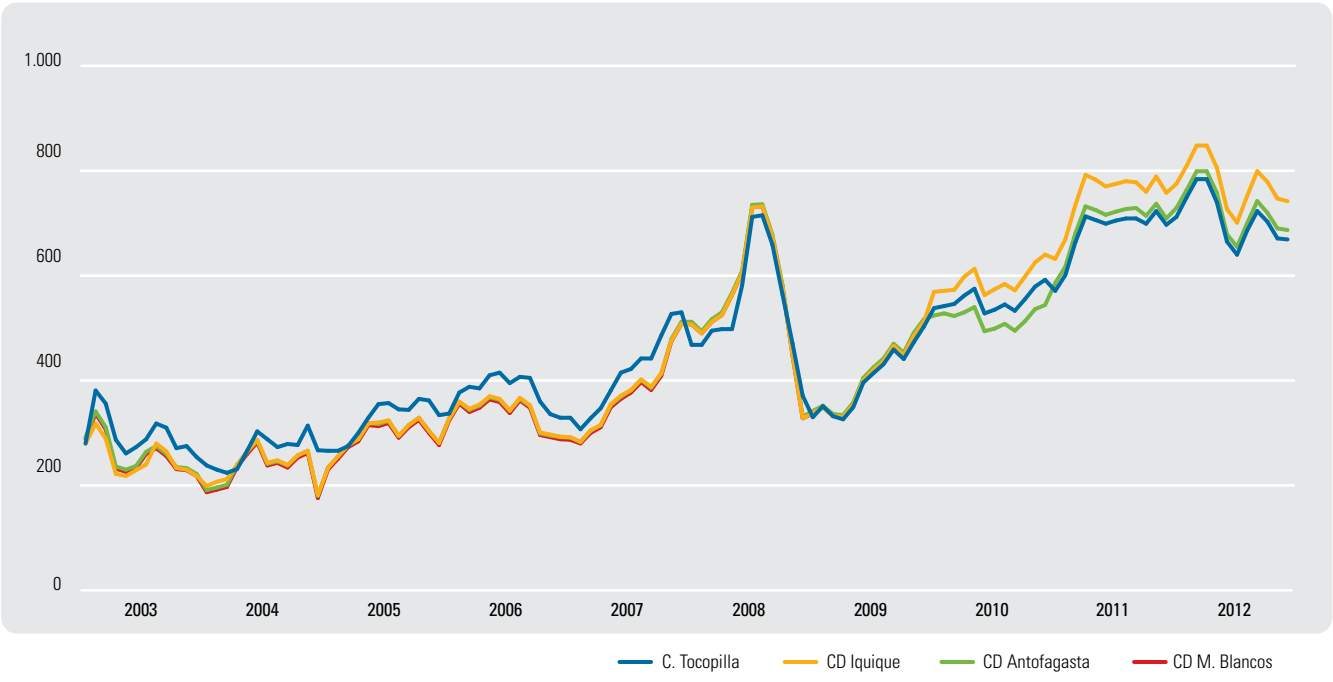
DIESEL OIL PRICE

US$ / m3



FUEL OIL N°6 PRICE

US$ / Ton



IV. Energy and Power Prices

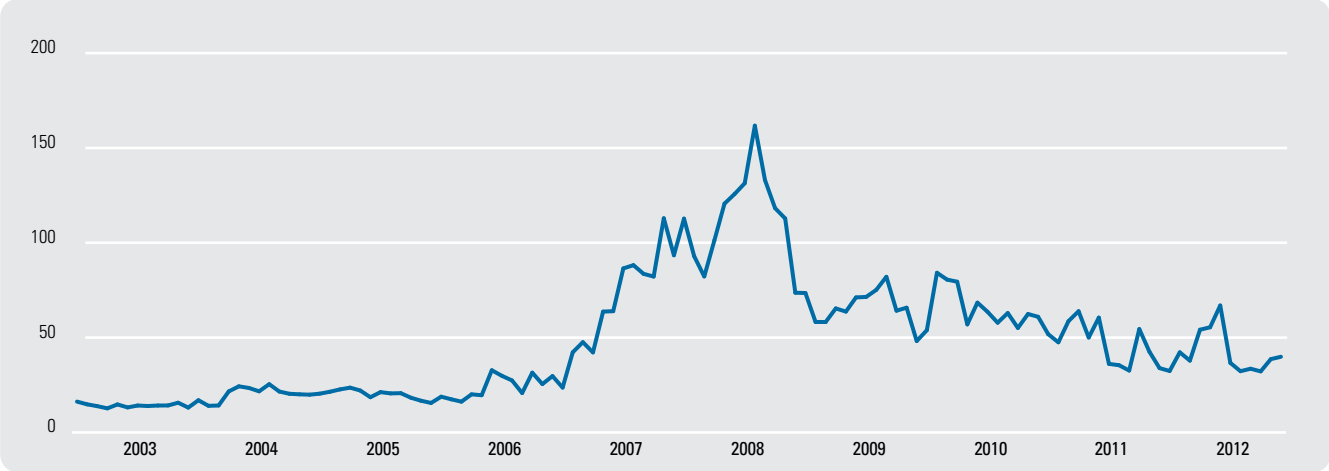
MARGINAL COSTS OF ENERGY CRUCERO NODE 220 KV 2003 – 2012 TERM

Month / Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	12,0	12,6	15,5	14,8	19,2	98,3	69,6	50,4	49,7	32,4
February	11,0	10,4	16,3	13,8	34,2	81,4	54,5	78,9	45,7	42,4
March	10,4	10,6	17,3	12,9	38,7	72,6	54,4	75,6	56,9	38,1
April	9,5	16,2	18,2	16,0	34,5	89,8	61,1	74,9	62,2	54,5
May	11,0	18,3	17,1	15,7	52,5	108,2	59,4	53,9	48,9	55,8
June	9,8	17,7	14,4	26,4	53,1	114,4	66,6	64,7	59,2	67,2
July	10,6	16,4	16,6	24,2	72,7	120,9	66,5	60,5	35,4	36,8
August	10,4	19,3	16,1	22,2	74,9	150,3	69,6	55,0	34,8	32,5
September	10,6	16,4	16,4	16,9	71,9	125,0	76,9	60,1	32,2	34,1
October	10,6	15,5	14,5	25,5	70,8	112,0	60,2	52,6	54,0	32,8
November	11,7	15,3	13,2	20,6	98,3	106,7	61,4	59,7	42,3	39,2
December	9,7	15,1	12,3	24,0	81,5	68,9	44,8	58,4	33,9	40,5
Average	**10,6**	**15,3**	**15,6**	**19,4**	**58,5**	**104,0**	**62,1**	**62,1**	**46,3**	**42,2**

Notes: Monthly averages in $/kWh.

MONTHLY AVERAGE MARGINAL COSTS OF ENERGY CRUCERO NODE

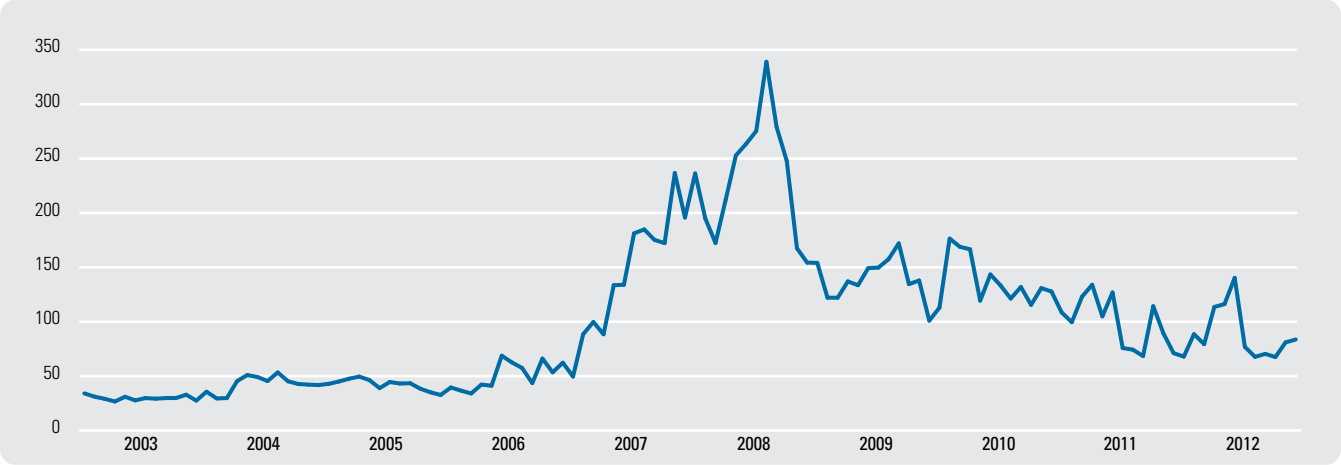
$ / kWh



Note: Marginal costs updated according to IPC as of Decmeber, 2012

MONTHLY AVERAGE MARGINAL COSTS OF ENERGY CRUCERO NODE

US$/MWh



Note: Marginal costs updated according to IPC as of December, 2012 and converted to US dollars at the observed exchange rate of December 31, 2012

MARGINAL COSTS OF ENERGY CRUCERO NODE 220 KV – YEAR 2012

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	31,5	32,3	30,7	64,4	70,9	61,9	69,2	41,1	27,7	32,5	43,1	38,8
2	31,8	35,1	30,9	58,6	45,3	57,8	45,8	28,6	28,6	31,6	36,9	64,1
3	31,4	38,1	30,8	69,0	28,7	52,1	31,2	28,4	28,9	33,0	33,2	56,0
4	29,2	31,0	30,2	45,1	29,0	74,7	31,5	28,9	29,6	28,6	32,6	29,0
5	33,3	30,1	53,2	34,6	28,7	81,9	30,3	29,0	28,7	28,2	31,3	28,8
6	33,2	30,1	37,6	48,5	28,6	82,4	36,7	28,9	44,1	31,2	30,3	29,3
7	30,1	31,0	30,4	101,4	46,1	83,9	70,8	29,2	29,3	32,6	27,4	33,3
8	30,2	31,2	39,0	43,4	42,3	64,4	41,4	29,5	28,0	29,7	31,5	41,0
9	57,0	29,4	53,0	30,9	28,1	68,8	45,6	30,1	28,3	28,1	31,7	42,1
10	49,3	30,3	39,2	30,0	33,4	82,2	55,0	29,3	35,6	27,8	32,9	37,5
11	30,7	45,8	37,6	42,0	44,2	78,5	45,4	31,7	33,6	36,4	33,4	29,4
12	31,4	54,4	32,9	42,6	60,4	51,1	29,2	66,3	82,1	52,4	33,4	33,0
13	31,0	31,8	31,6	65,4	78,4	73,6	29,7	60,7	28,3	35,9	28,4	31,0
14	31,7	59,0	31,9	82,7	83,2	72,4	29,6	28,0	26,7	29,8	28,4	47,5
15	31,8	34,0	46,2	60,7	94,1	76,8	40,6	25,5	27,5	41,1	29,1	31,1
16	31,2	62,8	33,4	58,5	52,6	64,0	35,7	28,2	27,2	33,3	30,4	30,7
17	31,6	44,8	31,7	29,7	40,9	71,9	48,0	27,7	27,6	29,0	66,4	38,7
18	30,0	37,3	30,5	29,8	69,6	71,2	30,2	27,2	27,1	36,0	55,0	48,6
19	29,2	60,1	29,9	44,2	43,9	63,6	30,5	28,1	42,1	41,6	62,2	63,0
20	30,2	88,1	31,3	56,2	44,6	64,4	32,8	27,3	30,7	50,6	35,0	38,3
21	28,6	48,2	78,1	65,1	42,4	68,4	28,8	25,8	55,2	28,8	52,1	84,2
22	29,8	78,3	59,0	49,2	86,8	49,9	28,8	32,4	29,1	27,5	85,7	49,7
23	30,2	38,4	40,2	50,1	74,1	47,0	29,3	34,8	28,4	28,2	34,6	30,1
24	31,3	61,4	31,2	81,6	67,9	61,5	28,4	32,1	34,2	32,9	32,6	51,3
25	30,2	35,6	31,5	50,9	65,5	48,6	28,4	55,4	34,1	28,3	30,8	66,6
26	31,1	31,0	38,7	49,6	66,9	63,7	29,2	33,3	31,9	28,7	32,1	32,3
27	30,1	31,1	26,3	64,9	76,1	68,0	29,2	28,8	31,9	28,9	32,4	30,9
28	32,0	37,9	31,1	46,8	73,3	69,1	41,6	28,8	29,6	28,2	48,2	29,1
29	32,0	32,1	32,0	81,8	66,2	72,9	29,1	28,6	31,8	32,1	45,9	28,2
30	31,9		63,9	58,6	54,4	70,0	30,6	28,2	53,9	34,8	49,9	30,2
31	32,1		37,2		64,8		29,0	25,5		30,4		31,6
Promedio	**32,4**	**42,4**	**38,1**	**54,5**	**55,8**	**67,2**	**36,8**	**32,5**	**34,1**	**32,8**	**39,2**	**40,5**

Note: Daily averages in $/KWh for each day

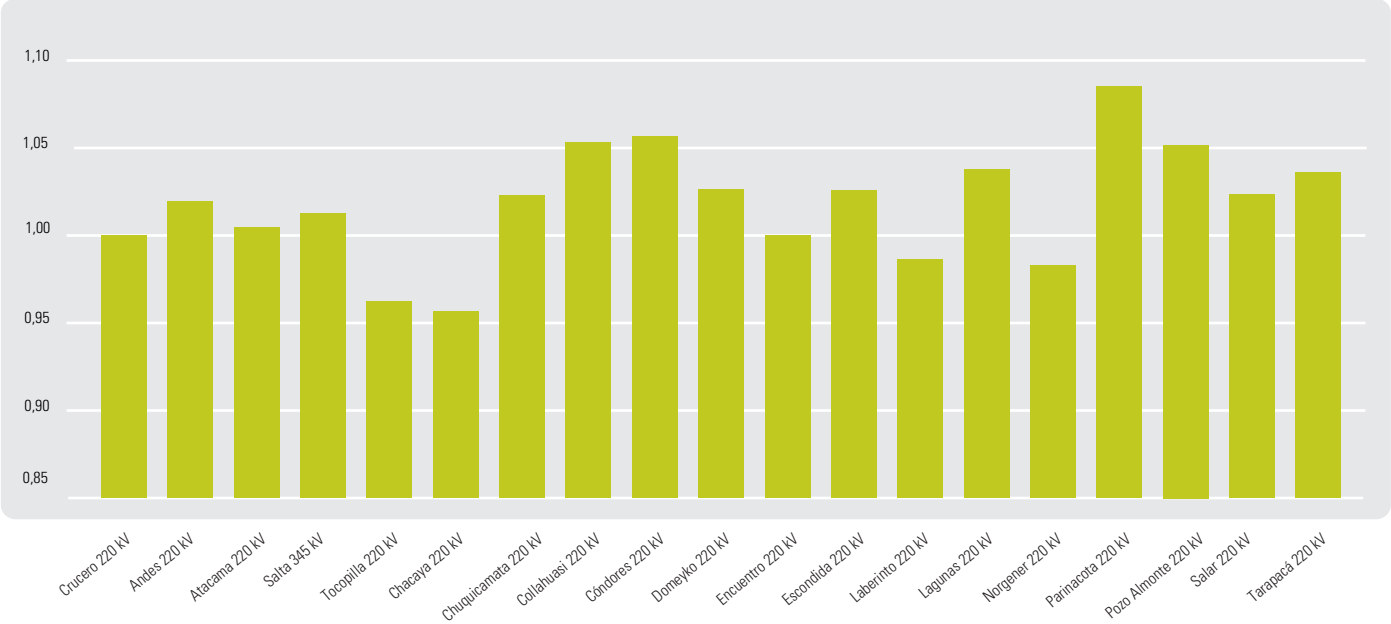
ENERGY PUNISHMENT FACTORS – YEAR 2012

Bar	Average	Maximum	Minimum
Crucero 220 kV	1,0000	1,0000	1,0000
Andes 220 kV	1,0197	1,0298	1,0079
Atacama 220 kV	1,0046	1,0132	0,9939
Salta 345 kV	1,0128	1,0222	1,0040
Tocopilla 220 kV	0,9623	0,9779	0,9542
Chacaya 220 kV	0,9564	0,9716	0,9340
Chuquicamata 220 kV	1,0229	1,0379	1,0176
Collahuasi 220 kV	1,0529	1,0760	1,0368
Cóndores 220 kV	1,0564	1,0903	1,0386
Domeyko 220 kV	1,0264	1,0366	1,0153
Encuentro 220 kV	1,0000	1,0000	1,0000
Escondida 220 kV	1,0255	1,0357	1,0140
Laberinto 220 kV	0,9864	0,9962	0,9726
Lagunas 220 kV	1,0378	1,0649	1,0230
Norgener 220 kV	0,9826	0,9886	0,9806
Parinacota 220 kV	1,0849	1,1199	1,0655
Pozo Almonte 220 kV	1,0517	1,0784	1,0389
Salar 220 kV	1,0233	1,0359	1,0182
Tarapacá 220 kV	1,0362	1,0697	1,0190

Note: Average values correspond to weekly schedule.

ENERGY PUNISHMENT FACTORS - YEAR 2012

Average



PEAK POWER CRUCERO NODE 220 KV PRICE

Year	Rates Setting	Validity		Power Price [$/kW-month]
		Since	To	
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
	apr-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
	abr-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	04/30/11	4.373,28
	apr-11	05/01/11	10/31/11	4.319,82
	oct-11	11/01/11	12/31/11	4.451,54
2012	oct-11	01/01/12	04/30/12	4.451,54
	apr-12	05/01/12	10/31/12	4.170,82
	oct-12	11/01/12	12/31/12	4.186,75

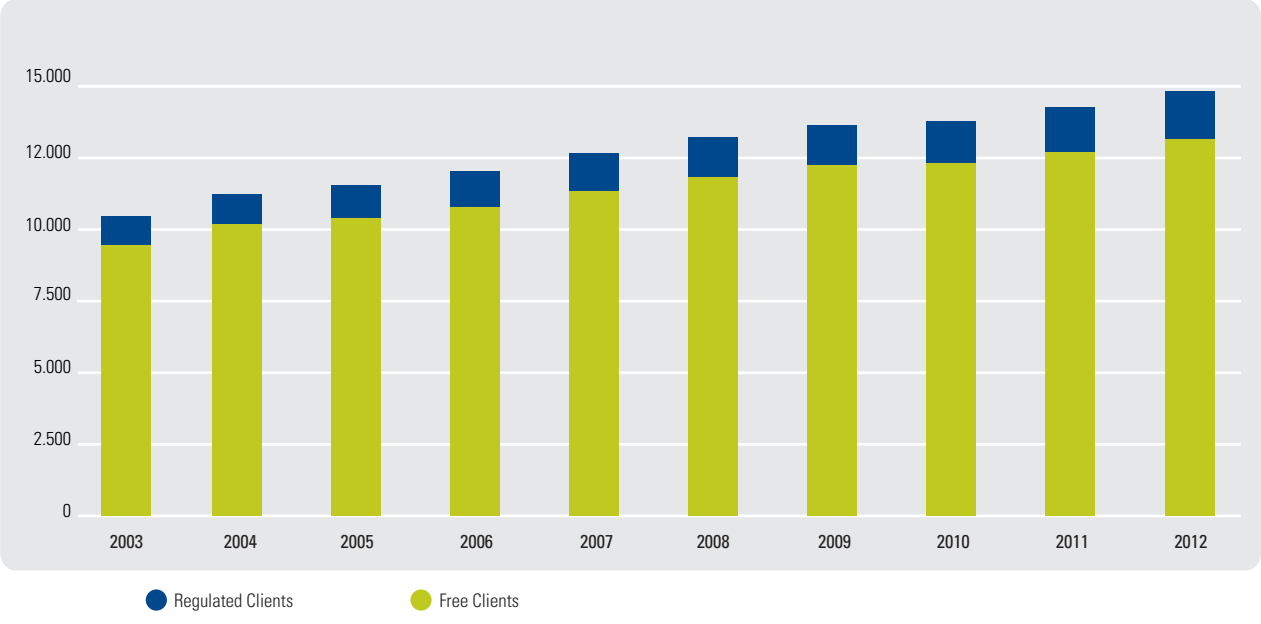
V. 2003-2012 SING Energy Annual Sales

SING's ANNUAL SALES 2003-2012 TERM

Year	Sales [GWh]			Growth		
	Free Clients	Regulated Clients	Total	Annual	Average Accrued	Accrued
2003	9.433	1.047	10.480	0,0%	0,0%	0,0%
2004	10.164	1.075	11.240	7,2%	3,6%	7,2%
2005	10.401	1.159	11.560	2,8%	3,4%	10,3%
2006	10.774	1.256	12.029	4,1%	3,5%	14,8%
2007	11.343	1.332	12.674	5,4%	3,9%	20,9%
2008	11.832	1.387	13.219	4,3%	4,0%	26,1%
2009	12.240	1.417	13.656	3,3%	3,9%	30,3%
2010	12.297	1.496	13.792	1,0%	3,5%	31,6%
2011	12.703	1.560	14.263	3,4%	3,5%	36,1%
2012	13.132	1.699	14.831	4,0%	3,6%	41,5%

Note: Accrued percentage growth refers to year 2003 sales (10,480 GWh)
Annual sales correspond to net generation less transmission losses.

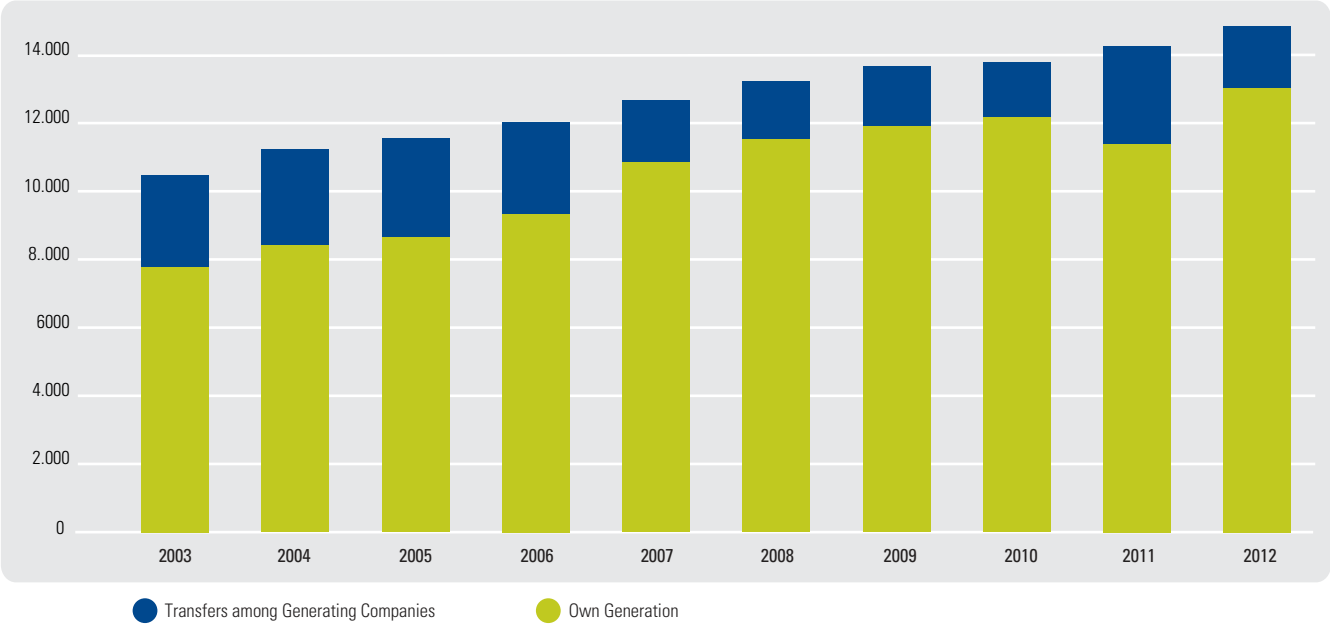
SING's ANNUAL SALES EVOLUTION (GWh)



SING's ANNUAL SALES COMPOSITION 2003 – 2012 TERM

Year	Energy Sales (GWh)	Own Generation (GWh)	Transfers among Generating Companies (GWh)	Transfer Percentage/Sales (%)
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%
2012	14.831	13.026	1.805	12%

SING's ANNUAL SALES COMPOSITION (GWh)



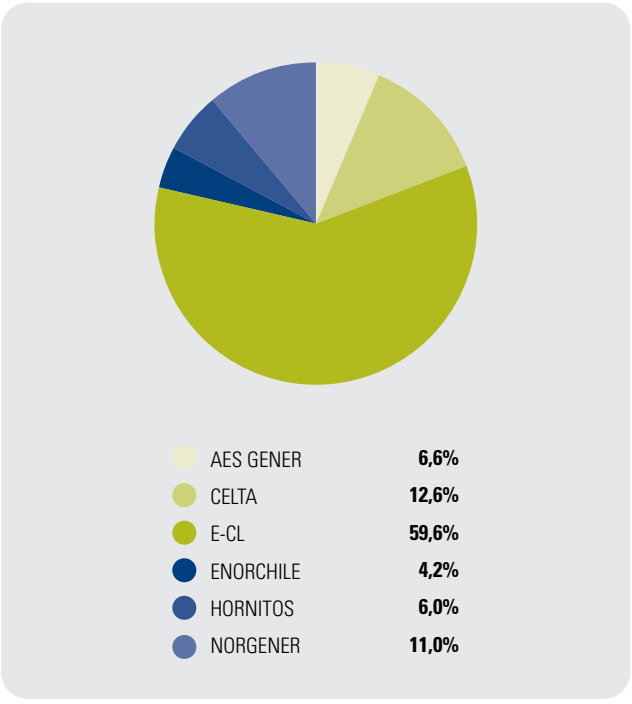
VI. 2003-2012 SING Energy and Power Transfers

ENERGY TRANSFERS AMONG CDEC-SING GENERATING COMPANIES (GWh) YEAR 2012

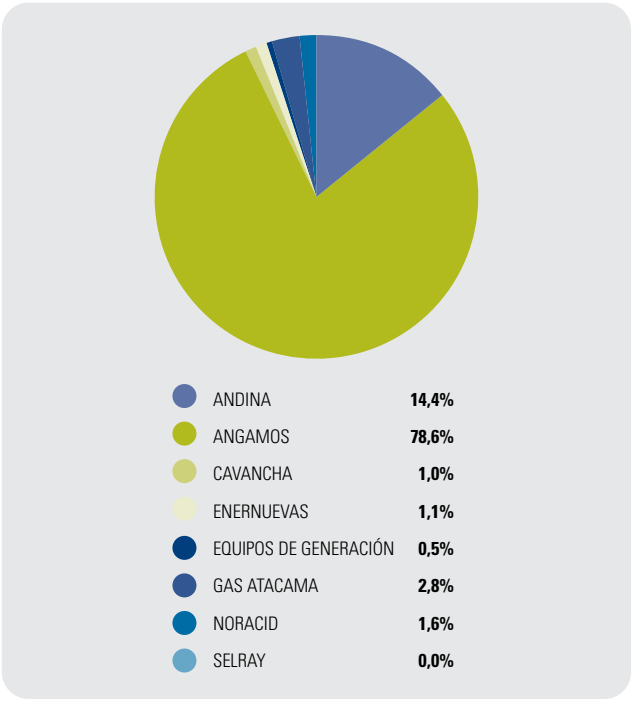
COMPANY		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	NET
AES GENER	Purchases	7,7	8,8	9,8	8,2	8,5	8,7	8,5	8,9	8,7	7,8	7,8	9,0	102,4	102,4
	Sales														
ANDINA	Purchases														
	Sales	22,1	17,1	18,2	17,0	8,7	17,2	22,0	31,5	27,0	13,4	8,4	19,7	222,3	222,3
ANGAMOS	Purchases														
	Sales	119,3	59,9	112,3	46,6	48,2	90,4	91,9	104,5	82,6	146,6	163,1	150,4	1.215,8	1.215,8
CAVANCHA	Purchases														
	Sales	1,3	1,2	1,3	1,2	1,3	1,2	1,2	1,2	1,2	1,3	1,3	1,3	15,0	15,0
CELTA	Purchases			22,4	85,3	41,0	20,7					12,0	36,7	218,1	194,7
	Sales	1,2	5,9					1,6	4,7	1,0	9,0			23,4	
E-CL	Purchases	163,2	114,5	99,8	27,6		6,8	107,4	136,2	79,8	71,4	51,2	70,3	928,2	921,5
	Sales					6,7								6,7	
ENERNUEVAS	Purchases														
	Sales	1,5	1,4	1,5	1,4	1,5	1,4	1,5	1,5	1,4	1,5	1,5	1,5	17,6	17,6
ENORCHILE	Purchases	5,8	4,2	4,5	3,5	4,6	6,7	7,2	8,1	7,5	4,9	3,8	4,2	65,0	65,0
	Sales														
EQUIPOS DE GENERACION S.A.	Purchases														
	Sales	0,3	0,5	0,7	2,1	1,5	0,7	0,1		0,2	0,3	0,4	0,6	7,4	7,4
GASATACAMA	Purchases	19,2	11,3	4,7				7,5				29,3	2,6	74,6	
	Sales				50,8	28,4	24,0		2,0	1,6	11,2			118,0	43,4
HORNITOS	Purchases									10,4	82,2	78,1	56,9	227,6	93,5
	Sales	34,4	51,0	7,8	11,6	3,0	6,4	15,0	4,9					134,1	
NORGENER	Purchases			0,7	6,3	45,3	98,6	2,7		8,8	22,4	1,8	3,5	190,1	169,9
	Sales	15,9	1,7						2,6					20,2	
NORACID	Purchases														
	Sales									0,2	5,1	9,2	9,5	24,0	24,0
SELRAY	Purchases														
	Sales										0,1	0,2	0,1	0,4	0,4

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

ENERGY NET PURCHASES AT THE CDEC-SING



ENERGY NET SALES AT THE CDEC-SING



ENERGY TRANSFERS AMONG THE CDEC-SING GENERATING COMPANIES (GWh) 2003 – 2012 TERM

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CELTA	Purchases	601,4	663,2	628,5	343,1	160,0	162,0	102,0	64,7	138,8	218,1
	Sales	0,0	0,0	0,0	0,2	45,2	162,0	119,8	85,1	62,6	23,4
E-CL	Purchases	0,0	0,0	0,0	26,2	0,0	115,0	189,2	548,6	433,9	928,2
	Sales	1.263,8	1.637,3	1.522,8	1.057,6	714,9	695,0	193,5	75,4	18,6	6,7
ELECTROANDINA	Purchases	831,7	1.000,1	968,1	540,8	382,3	740,0	663,6	158,5	473,9	
	Sales	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	121,0	13,0	0,0	17,5	46,5	102,4
	Sales	1.088,9	1.050,3	1.335,6	1.357,0	812,2	676,0	1.201,4	836,0	643,3	0,0
GASATACAMA	Purchases	3,5	430,2	806,1	1.638,1	1.126,2	617,0	594,0	795,0	1.517,6	74,6
	Sales	350,1	126,3	36,1	0,0	0,0	29,0	66,9	19,9	0,0	118,0
NORGENER	Purchases	1.266,1	739,2	503,1	150,3	104,4	60,0	217,3	40,6	75,6	190,1
	Sales	0,0	0,0	11,3	260,7	251,7	103,0	82,7	150,2	219,0	20,2
EQUIPOS DE GENERACION S.A.	Purchases							0,0	0,0	0,0	0,0
	Sales							12,1	42,4	23,1	7,4
ANGAMOS	Purchases								1,5	0,0	0,0
	Sales								0,0	1.476,4	1.215,8
ENORCHILE	Purchases								12,2	46,7	65,0
	Sales								5,5	0,0	0,0
CAVANCHA	Purchases								0,0	0,0	0,0
	Sales								2,5	14,5	15,0
ANDINA	Purchases								0,0	81,7	0,0
	Sales								0,4	282,6	222,3
ENERNUEVAS	Purchases								0,0	0,0	0,0
	Sales								2,9	16,6	17,6
HORNITOS	Purchases									63,1	227,6
	Sales									101,4	134,1
NORACID	Purchases									63,1	0,0
	Sales									101,4	24,0
SELRAY	Purchases									63,1	0,0
	Sales									101,4	0,4

FIRM POWER AND PEAK HOURS POWER DEMAND AS PER COMPANY - YEAR 2012

FIRM POWER	TOTAL SING	AES GENER	ANGAMOS	C.T. ANDINA	C.T. HORNITOS	CAVANCHA	CELTA	E_GENERACION (**)	E-CL (*)	ENERNUEVAS	ENORCHILE	GASATACAMA	NORGENER	NORACID	SELRAY
Firm Power - Inyecciones [MW]	2.016,3	0,0	263,7	81,3	75,9	1,9	81,9	3,8	906,7	1,5	6,9	450,1	141,2	1,5	0,0
Net Demand HP [MW]	1.938,7	10,4	223,2	125,1	122,5		119,5		982,8		11,3	88,8	253,7	1,4	
Losses [MW]	77,6	-10,4	40,6	-43,8	-46,6	1,9	-37,6	3,8	-76,2	1,5	-4,5	361,4	-112,5	0,1	0,0

FIRM POWER BALANCE	AES GENER	ANGAMOS	C.T. ANDINA	C.T. HORNITOS	CAVANCHA	CELTA	E_GENERACION (**)	E-CL (*)	ENERNUEVAS	ENORCHILE	GASATACAMA	NORGENER	NORACID	SELRAY
Purchases [MW]	12,7		46,2	49,0		42,9		120,9		4,7		119,1		
Sales [MW]		33,6			1,9		3,8		1,5		354,7		0,1	0,0

(*) Based on the calculation of 2001 Firm Final Power, Electroandina is considered as an E-CL wholly-owned company.
(**) Based on the calculation of 2001 Firm Final Power, INACAL is considered as an E-GENERACION wholly-owned company.

POWER TRANSFERS AMONG THE CDEC-SING GENERATING COMPANIES (MW) 2003 – 2012 TERM

	E-CL (*)		ELECTROANDINA (*)		NORGENER		CELTA		GASATACAMA		AES GENER		E_GENERACION (**)		ENORCHILE		CAVANCHA		ENERNUEVAS		C.T. ANDINA		C.T. HORNITOS		ANGAMOS		NORACID		SELRAY	
	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	Purchases	Sales	Purchases	Sales
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	84,92			106,7	96,02		11,64		27,66			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				
2012	120,9				119,1		42,9			354,7	12,7			3,8	4,7			1,9		1,5	46,2		49,0			33,6		0,1		0,0

(*) Based on the calculation of 2001 Firm Final Power, Electroandina is considered as an E-CL wholly-owned company.
(**) 1, INACAL is considered as E-GENERACION.

VII. Tolls: Payment for the use of SING's Transmission Systems

TOLLS FOR TRUNK SYSTEM – YEAR 2012
PAYMENTS FROM GENERATING COMPANIES TO TRUNK COMPANIES
[THOUSANDS OF CH$] – YEAR 2012

From / to	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	0	20	65	0	0	409	0	1.393	837	2.724
ANDINA	1.819	419	0	0	0	0	45.856	26.041	0	74.135
ANGAMOS	5.560	3.527	0	0	0	0	169.646	125.134	0	303.868
CELTA	16.949	94.137	-7.090	0	36.876	-2.834	1.393.491	321.979	-17.514	1.835.994
E-CL	35.008	200.305	4.574	0	76.539	-684	1.416.650	1.143.719	6.866	2.882.977
ENORCHILE	5	40	658	0	0	518	363	2.365	2.075	6.024
GASATACAMA	5.658	41.524	-306	0	16.074	218	389.927	157.647	-156	610.586
HORNITOS	1.823	903	133	0	0	841	45.299	34.028	1.719	84.747
INACAL	18	0	0	0	0	0	257	0	0	276
NORACID	43	1	55	0	0	17	347	49	127	639
NORGENER	17.488	3.417	1.912	0	0	1.513	704.467	178.184	6.046	913.028
TOTAL	**84.372**	**344.293**	**0**	**0**	**129.489**	**0**	**4.166.304**	**1.990.539**	**0**	**6.714.997**

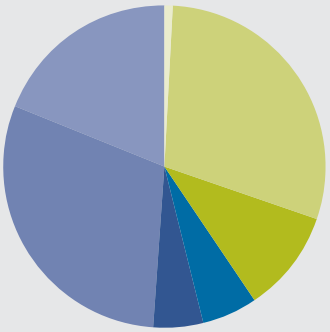
(*) PUB: Unit Toll per Bar, CUE: Unique Expected Charge

2012 SUB-TRANSMISSION SYSTEM TOLLS
VASTX PAYMENTS FROM GENERATING COMPANIES TO SUB-TRANSMITTERS
[THOUSANDS OF CH$] – YEAR 2012

From / to	ANGAMOS	E-CL	ENORCHILE	GASATACAMA	NORACID	NORGENER	Total general
ALTO NORTE	18	164.673	10.110	1.254	19	15	176.089
CODELCO NORTE	1	7.412	455	56	1	1	7.925
E-CL	550	4.958.136	304.397	37.771	564	439	5.301.857
ELECDA	189	1.705.026	104.677	12.989	194	151	1.823.226
ELIQSA	106	953.184	58.519	7.261	108	84	1.019.264
EMELARI	92	832.763	51.126	6.344	95	74	890.494
TRANSELEC NORTE	559	5.045.273	309.747	38.435	574	447	5.395.035
TRANSEMEL	352	3.178.118	195.116	24.211	361	282	3.398.440
Total	**1.868**	**16.844.584**	**1.034.147**	**128.323**	**1.915**	**1.493**	**18.012.330**

The detailed payments are temporary. They will be restated pursuant to Decree N° 14 of the Ministry of Energy which sets Sub-transmission rates for the 2011-2014 term.

COLLECTION AS PER VASTX – YEAR 2012



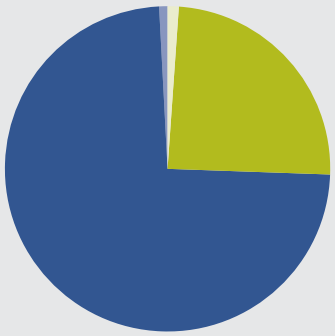
ALTO NORTE	0,98%	ELIQSA	5,66%
CODELCO NORTE	0,04%	EMELARI	4,94%
E-CL	29,43%	TRANSELEC NORTE	29,95%
ELECDA	10,12%	TRANSEMEL	18,87%

PAYMENTS FROM SUB-TRANSMITTERS TO GENERATING COMPANIES DUE TO ENERGY AND POWER LOSSES [THOUSANDS OF CH$] – YEAR 2012

From / to	E-CL	ENORCHILE	GASATACAMA	NORGENER	ANGAMOS	NORACID	Total general
ALTO NORTE	13.123	477	701	217	318	3	14.839
E-CL	267.546	9.294	14.950	4.031	6.559	164	302.544
TRANSELEC NORTE	814.553	29.223	45.418	13.171	20.981	351	923.695
TRANSEMEL	8.271	235	431	39	214	30	9.220
Total	**1.103.493**	**39.230**	**61.499**	**17.458**	**28.072**	**547**	**1.250.299**

The detailed payments are temporary. They will be restated pursuant to Decree N° 14 of the Ministry of Energy which sets Sub-transmission rates for the 2011-2014 term.

PAYMENTS DUE TO ENERGY AND POWER LOSSES – YEAR 2012



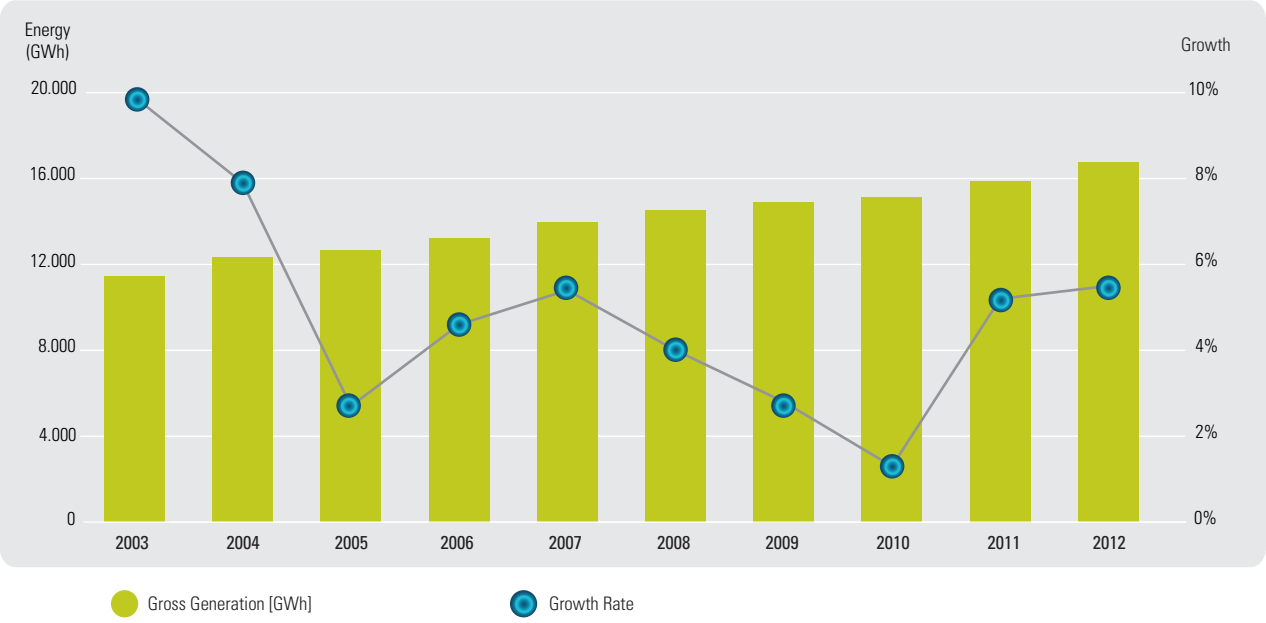
ALTO NORTE	1,19%
E-CL	24,20%
TRANSELEC NORTE	73,88%
TRANSEMEL	0,74%

VIII. Energy and Power Demand SING 2003-2012

SING's GROSS ENERGY DEMAND

Year	Gross Generation [GWh]	Growth Rate
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%
2012	16.755,7	5,5%

SING's GROSS ENERGY DEMAND 2003 – 2012 TERM

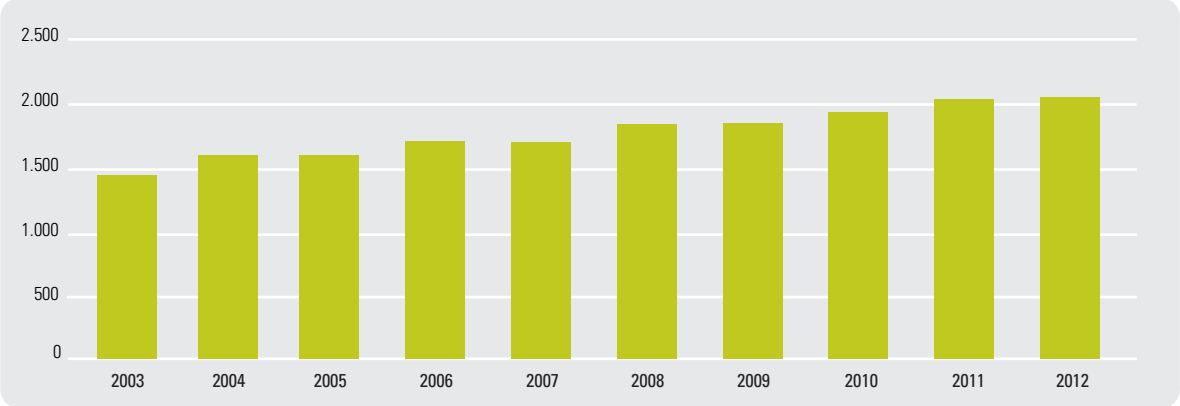


SING's POWER MAXIMUM ANNUAL DEMAND 2003-2012 TERM

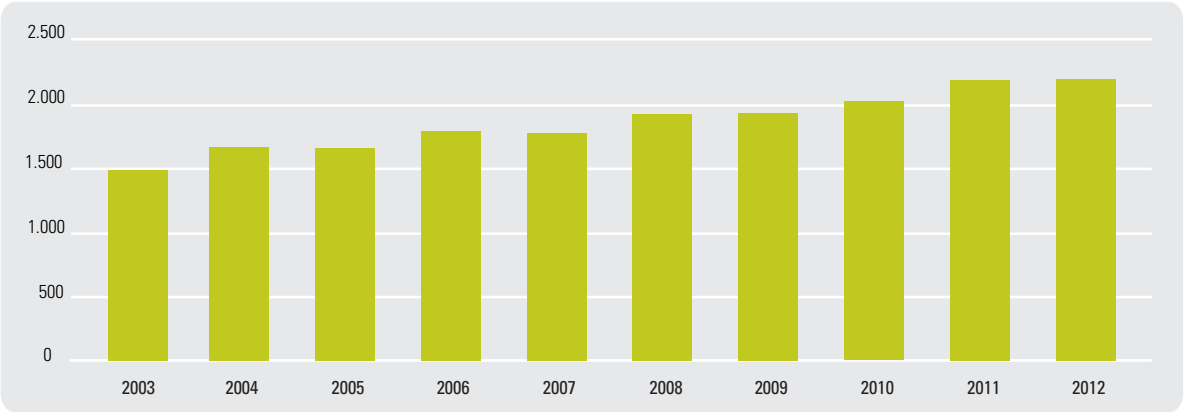
Year	Day	Time	Gross Maximum Generation (MW)	Net Maximum Demand (MW)
2003	14-dec-03	22	1.467	1.416
2004	19-dec-04	23	1.644	1.567
2005	27-nov-05	22	1.635	1.566
2006	15-dec-06	23	1.770	1.676
2007	24-apr-07	22	1.751	1.665
2008	21-dec-08	22	1.897	1.805
2009	27-sep-09	22	1.907	1.816
2010	26-dec-10	23	1.995	1.900
2011	23-dec-11	22	2.160	2.001
2012	25-dec-12	22	2.169	2.013

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

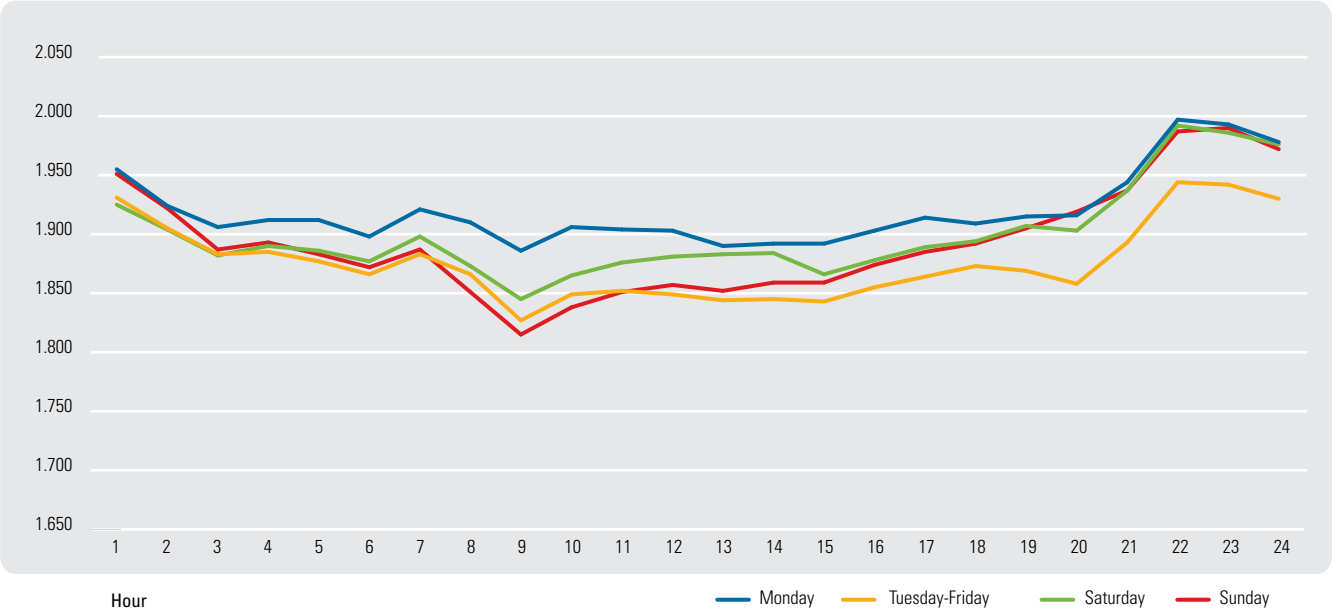
NET MAXIMUM DEMAND (MW)



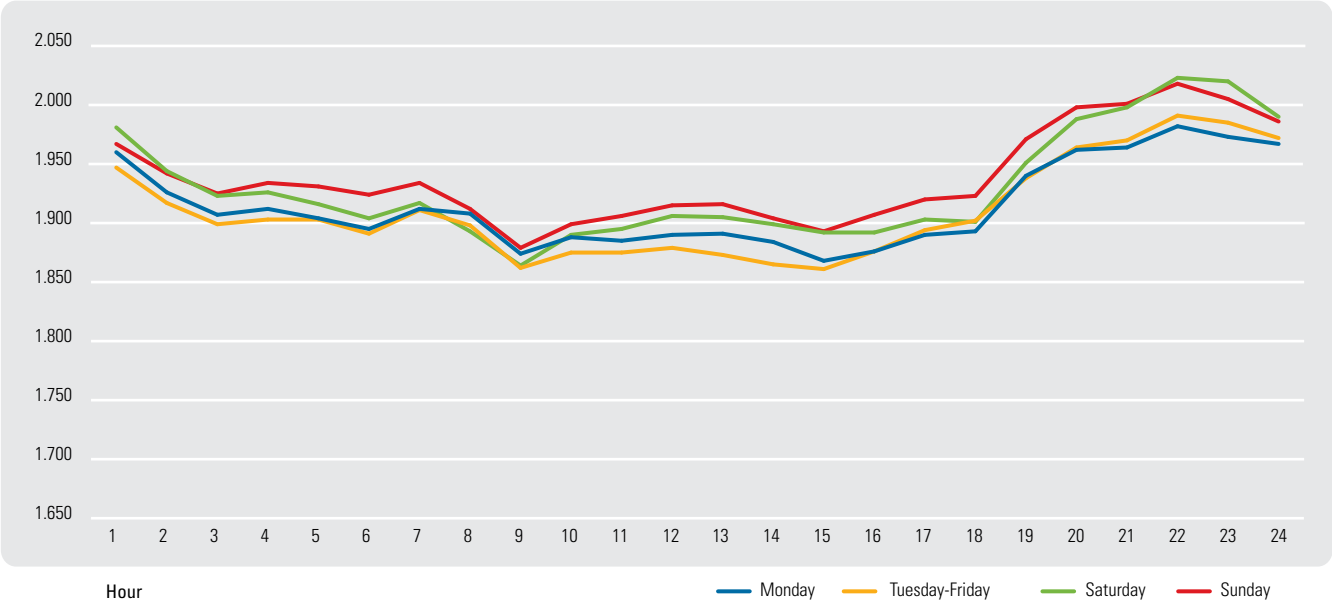
MAXIMUM GROSS ANNUAL GENERATION (MW)



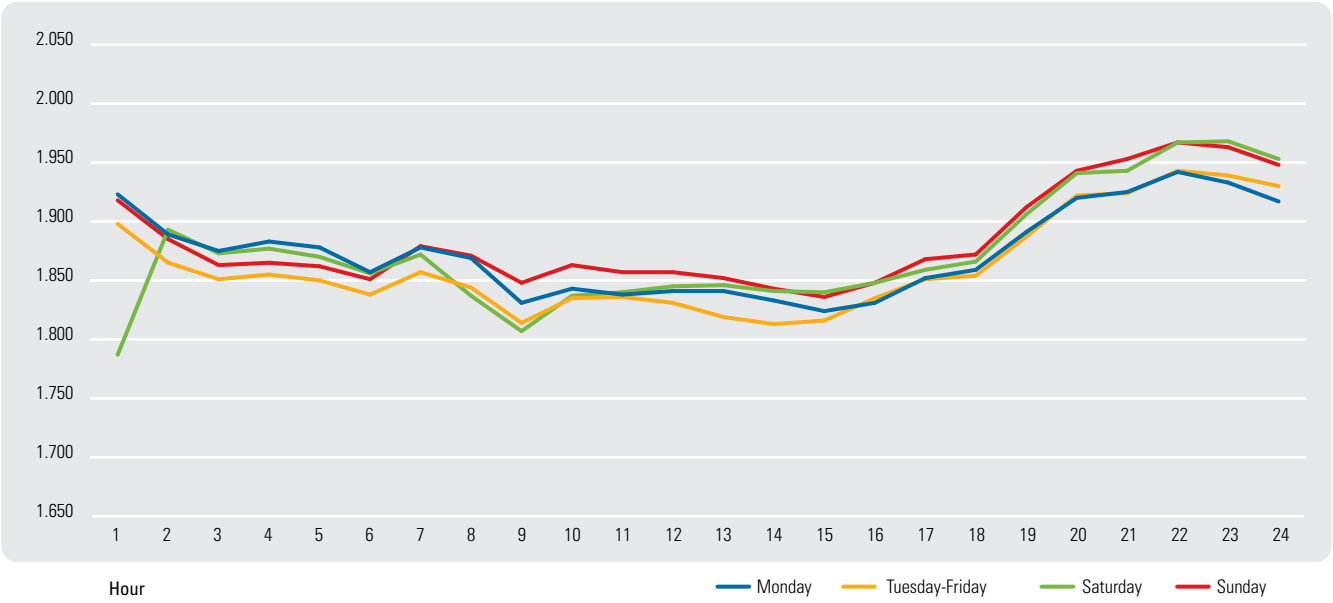
HOURLY AVERAGE GROSS GENERATION 2012 JANUARY - MARCH (MW)



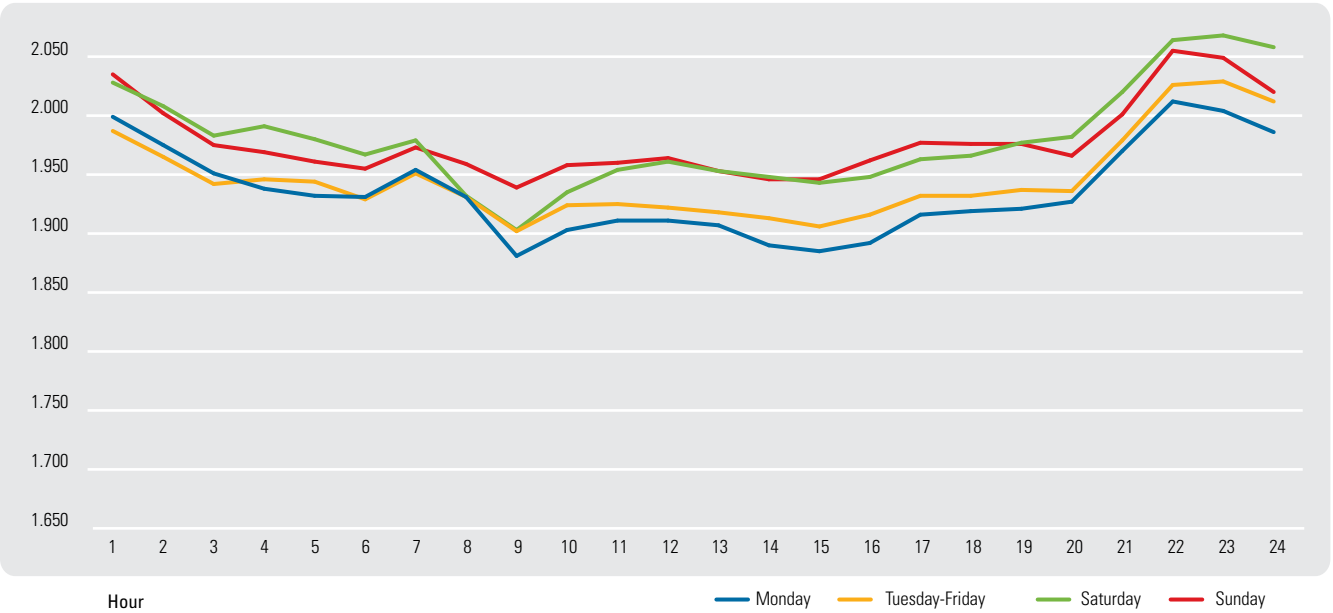
HOURLY AVERAGE GROSS GENERATION 2012 APRIL - JUNE (MW)



HOURLY AVERAGE GROSS GENERATION 2012 JULY - SEPTEMBER (MW)



HOURLY AVERAGE GROSS GENERATION 2012 OCTOBER - DECEMBER (MW)



IX. Non-Conventional Renewable Energies (NCRE)



BALANCE 2012 – CUMPLIANCE WITH LAW 20.257

Withdrawals subjet to obligation	
System	**Energy [GWh]**
SIC	24.645,1
SING	6.782,8
Total	**31.427,9**

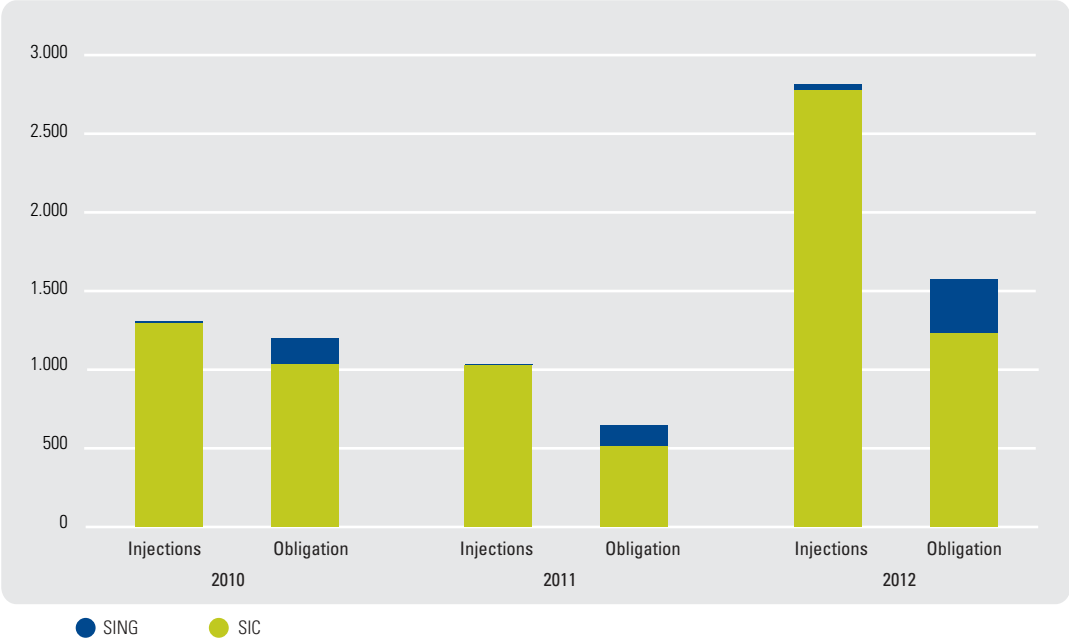
NCRE acknowledged injections	
System	**Energy [GWh]**
SIC	2.777,6
SING	34,8
Total	**2.812,4**

NCRE obligation (5% subjet withdrawals)	
System	**Energy [GWh]**
SIC	1.232,3
SING	339,1
Total	**1.571,4**

NCRE Net Surplus / Shortage	
System	**Energy [GWh]**
SIC	1.545,3
SING	-304,3
Total	**1.241,0**

BALANCE NCRE 2010 - 2012

Energy (GWh)

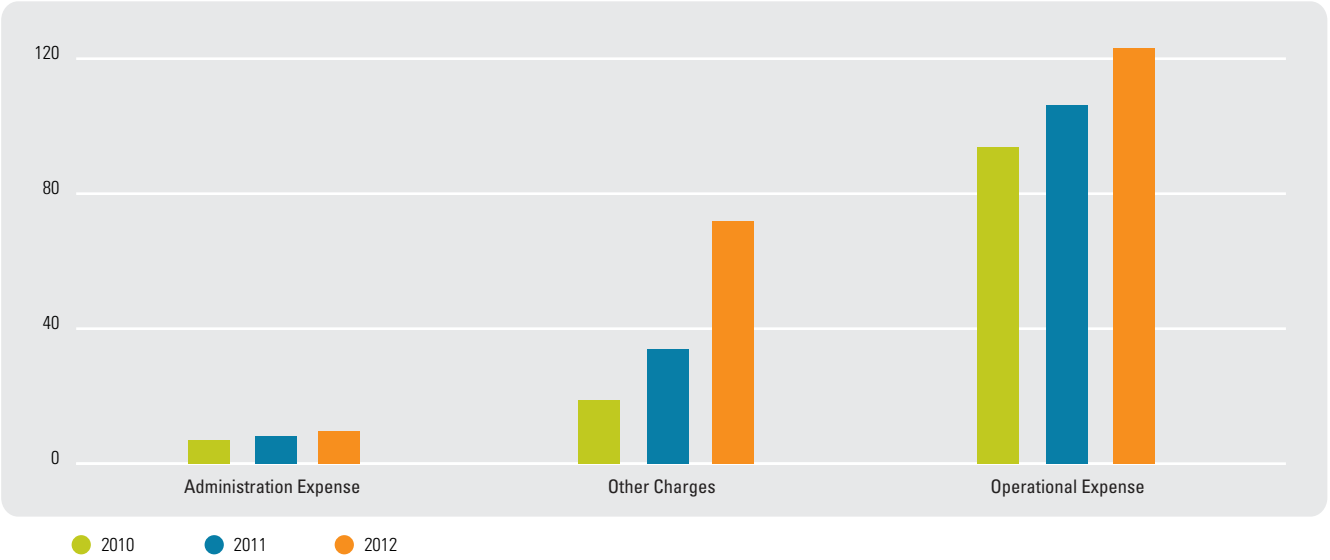


X. CDEC-SING Budget

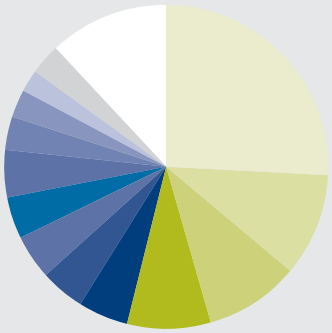
CDEC-SING BUDGET

CDEC-SING Budget [thousand UF]	2010	2011	2012	Variation (Thousands UF)	Variation % [Last year]
Administration expense	**7,1**	8,1	**9,7**	1,6	**20,0%**
Other charges	**18,8**	33,9	**72,0**	38,1	**112,5%**
Operational costs	**93,8**	106,2	**123,1**	16,9	**16,0%**
Remuneration and Other related	63,2	72,5	86,9	14,4	19,9%
Office lease and related expense	7,8	10,4	10,5	0,1	1,3%
External Services and Advising	2,7	2,9	3,7	0,8	26,1%
Equipment, Software and Services lease	20,1	20,4	21,8	1,4	6,8%
Total	**120**	**148**	**205**	**57**	**38,28%**

CDEC-SING BUDGET
(thousands of UF)



BUDGET PARTICIPATION OF CDEC-SING'S MEMBERS



E-CL	**26%**	TRANSELEC	**4%**
NORGENER	**10%**	CODELCO NORTE	**5%**
ESCONDIDA	**10%**	ANDINA	**3%**
GASATACAMA	**8%**	HORNITOS	**3%**
ANGAMOS	**5%**	ESPERANZA	**2%**
CELTA	**5%**	COLLAHUASI	**3%**
AES GENER	**4%**	OTROS	**12%**

Note: Only CDEC-SING's members with an interest higher than 2% are individually listed.

CDEC-SING

Apoquindo Ave. 4501, 6 Floor, Las Condes, Santiago, Chile, Telephone: 56 (2) 2 367 2400, Fax: 2 378 9296
Visit us at: www.cdec-sing.cl