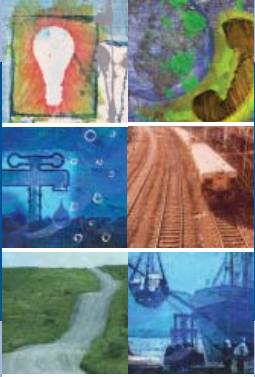


WORKING PAPER
NO. 2



Experts Panels in Regulation of Infrastructure in Chile

Alejandro Jadresic

HELPING TO ELIMINATE
POVERTY THROUGH
PRIVATE INVOLVEMENT
IN INFRASTRUCTURE

WORKING PAPER NO. 2, 2007

Experts Panels in Regulation of Infrastructure in Chile

Alejandro Jadresic

Public-Private Infrastructure Advisory Facility

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FOREWORD

This publication is the fruit of the collaboration and support to the **African Forum for Utility Regulators (AFUR)** by the **Public-Private Infrastructure Advisory Facility (PPIAF)**. Since the formal launch of AFUR in 2002, it has become the practice that the PPIAF along with the World Bank commission regulatory studies that are based on AFUR's Annual Conference theme. This current collection is based on papers jointly commissioned and sponsored by both PPIAF and AFUR for the 3rd Annual Conference and General Assembly of AFUR. The theme for this conference is- **Regulatory Governance: Exploring Innovative and Hybrid Models**.

The AFUR Conference took place from 15 – 16 March 2006, in the midst of other AFUR activities organized from 11 – 17 March 2006, in Windhoek, Namibia.

During the Conference, Panelists, whose presentations could be found on the AFUR website (www.afurnet.org), enriched the debates, with country and sector experiences on the issues and challenges of regulating the telecommunications, water and electricity industries. In essence, regulation in Africa remains relatively very young, and is an effective instrument, if applied correctly for advancing affordable access to quality service from the utilities by the vast majority of the continent's people, whilst ensuring that the investor gets a fair return on investments. This collection is a first in the series of publications that AFUR intends to publish. In this regard, I must extend my appreciation to the PPIAF for making this possible. In the same vein, AFUR appreciates the contributions of the consultants whose papers feature in this collection.

AFUR aims to establish and foster co-operation amongst utility regulators on the African continent in support of Africa's growth and socio-economic development. AFUR's primary focus is on issues pertaining to the regulation of infrastructure (energy, communications, water and sanitation as well as transport sectors). The participants at the 3rd AFUR Conference were Chairpersons, Commissioners, CEOs and Senior Executives of African Regulatory organizations. Also present at this conference were policy makers, development partners and utility operators, consumer groups and large consumers as well as consultants. In the quest to further develop and strengthen regulatory institutions on the continent, I hope regulators will find this collection very useful.

Smunda Mokoena

AFUR Chairperson

1.

Introduction

Regulatory conflicts are common in the infrastructure sector.¹ Typically they involve disputes between government authorities or regulators and companies, and concern topics such as tariff reviews, award of concessions and permits, enforcement of service obligations, or compensation for past investment. They may also entail conflicts among regulated companies themselves or between these companies and their customers, for instance, in matters related to interconnection charges, transmission fees, or service standards.

The mechanisms used to solve regulatory conflicts are a key element of a regulatory regime and a major determinant of regulatory risks borne by private investors. A standard model of conflict resolution is to trust that a government official—or ideally an independent regulator—will make the right decision, guided by the will to promote the social good or by provisions stated in the law or the regulatory contracts. Improvements can be made in this model by allowing the regulated party to request a review of regulatory decisions, establishing rules for due process, and creating norms aiming for the independence and accountability of the regulators. However, if the regulator’s objectivity cannot be trusted, either because of its reputation or the written codes, then regulatory risks will likely remain high and sector performance poor.

An alternative model is to allow a third party, different from the government or the regulator, to serve as a body of appeal and solve the regulatory conflicts. For instance, it is possible to rely on the judicial system for conflict resolution, on the basis of the provisions stated in commercial, administrative, or sectoral law. Although this is a widespread solution, it is seldom adequate when technically complex regulatory conflicts, such as tariff reviews, are involved, especially in developing countries. Judges with specialized knowledge may not be available, courts may lack of independence, and legal procedures may be inefficient and time consuming.

Another option is to enlist a specialized, independent, ad hoc entity as a third-party expert or arbitrator on the regulatory issue. This can be one person or several people (a panel or a commission), hereafter called a “panel of experts.” This kind of solution has long been used to solve disputes regarding interpretation of commercial contracts among private parties

¹ This paper is a revised version of a paper presented at the 3rd AFUR Annual Conference held in Windhoek, Namibia, in March 2006. The author, Alejandro Jadresic, is an independent consultant and President of the permanent Panel of Experts of the electricity sector in Chile. He has chaired or been a member of several panels of experts set up to solve regulatory disputes in power, telecommunications, water supply and sanitation, and toll roads. He was the Minister of Energy of Chile in 1994–97

and conflicts regarding foreign investment and international trade, but its usage in economic regulation is less frequent and less known.²

Chile has ample experience in using panels of experts to solve regulatory disputes in its infrastructure sectors. Such mechanisms were established in the regulatory regimes created in the last three decades to promote private participation in several regulated industries, including power, telecommunications, water and sanitation, and “concessions of public works,” which involve sectors such as toll roads, airports, irrigation, and jails.³ In fact, as summarized in Table 1, starting in the 1980s Chile underwent legal reforms that established new regulatory regimes in these areas and later led to massive privatization. At present all the companies in the electricity and telecommunications sectors are privately owned, as well as most of the water utilities. Similarly, most of the larger highways and airports, and many other infrastructure facilities, were upgraded or built starting in the 1990s and are currently run by private operators.

Table 1. Regulatory Reforms in Chilean Infrastructure

<i>Sector</i>	<i>Legal reform</i>	<i>Privatization</i>	<i>percent Private (2006)</i>
Power	1982, 2004	1985–97	Total
Telecom	1982, 1987	1985–90	Total
Water and sanitation	1989, 1997	1998–2004	Most
Public works (toll roads)	1991	1993–present	Increasing

Panels of experts in these four sectors share some common features. Their functions are defined narrowly by law and normally involve the solution of regulatory disputes between government regulators and private companies and, in the case of the power sector, among electricity companies. They coexist with other bodies that also serve as appeal bodies, including the General Comptrollers’ Office (Contraloría General de la República), whose role is to ensure that government acts according to the law, and the judiciary courts.

Overall the reform process in Chile can be termed as successful since it has allowed infrastructure supply to keep up with rapid economic growth primarily on the basis of private investment. Success could be attributed to several causes, including macroeconomic and political stability, existence of clear rules, solid institutions, and sound regulations. The mechanisms used to solve regulatory disputes have also played a role in reducing regulatory risk and hence in making it more attractive for domestic and foreign investors to participate in the infrastructure sectors.

² A review of some experiences on expert panels in regulation of water utilities and other sectors are provided in Shugart and Ballance (2005).

³ An overview of the reforms introduced in the Chilean infrastructure sectors can be found in Jadresic (1997).

This paper sheds some light on the Chilean experience and presents some conclusions that could eventually inspire regulatory improvements in Chile and other developing countries. The paper deals with the role of panels of experts in the four areas that were identified in Table 1. Following a brief conceptual taxonomy of panels of experts, the specific experiences are presented in broad chronological order, according to the time the institutions were established as law.

2.

Taxonomy of Regulatory Conflicts and Panels of Experts

Based on the Chilean experience, panels of experts can be classified according to four variables: (i) the kind of regulatory conflicts they deal with, (ii) the composition and scope of the panel, (iii) the kind of decisions they make, and (iv) their operation rules. Such matters are normally defined in the law, in Presidential Decrees (“rulings”), in the contract, or in the agreement among the parties that originated the panel.

Kind of Regulatory Conflicts

In the case of public utilities, which are normally regulated by statute, a distinction can be made between conflicts that arise from tariff reviews and conflicts related to other regulatory matters. Regarding tariff reviews, conflicts may be about the tariff level itself or about specific procedures or assumptions required for calculating tariffs. Nontariff conflicts may be about the award of concessions or permits, the imposition of fines or other sanctions by the regulator, or the dictation of nontariff regulations, such as quality standards or investment obligations.

In regulated industries conflicts may also arise from disputes between two or more regulated companies. For instance, in the power sector, conflicts may involve electricity transfer payments among generation companies in the pool or transmission fees charged by the transmission company. In telecommunications, disputes may arise from access or interconnection fees charged by the network operators.

In the case of concessions of public works, which are typically based on specific contracts regulated by a general legal framework, regulatory conflicts may be about a wide variety of issues, such as financial compensation for additional works not included in the contract, delays in providing access to expropriated land, review of user charges, sanctions imposed for unfilled obligations, or the financial implications of events not anticipated in the law or the contract.

Composition and Scope of the Panel

The composition and scope of the panel includes the following variables:

- The number of members: There may be a single arbitrator or several people, ideally an odd number to make it easier to achieve a majority vote in case of disagreement and to choose a chairperson or coordinator of the panel.
- The professional profile of the members of the panel: There may be no requirements for the panel membership; alternatively, some or all of the members may be required to have specific qualifications, such as a university or professional degree in engineering, economics, or law.

- The selection mechanism: Some or all of the members may be chosen by the parties involved in the regulatory dispute, by a third independent party, or according to some explicit and objective criteria.
- The duration of the panel: The panel may last just for the time needed to solve a specific dispute, have a finite lifetime, or have an undetermined time horizon, although periodic rotation of members could be considered.
- The scope of the panel: The panel's role may be to resolve a specific dispute involving two or more parties, or to deal with several regulatory disputes, either for specific parties or contracts or for a whole infrastructure sector.
- Constraints on panel members: No specific constraints may be imposed or ineligibilities established regarding present affiliation or past experience of the panel members. This condition exists in order to promote the panel's independence and expertise.

Kind of Decisions

The nature of the decisions made by the panel may differ depending on the sector or conflict involved. Some alternatives are the following:

- The panel may be constrained to make recommendations or proposals to the regulator or to the parties that are entitled to make the final decisions.
- Alternatively, the panel may be required to adopt the final decisions, although an appeals mechanism could eventually be allowed for specific matters (for example, if a due process was not followed) or to clarify aspects of the decisions that remain vague.
- The panel may be allowed to make any decision regarding the dispute, be constrained to choose among the alternatives proposed by the parties, or be required to refer strictly to issues raised by the parties or indicated in the law or the contract.

Rules and Procedures

The operation of the panel of experts is normally subject to regulations that promote the equal rights of the parties, the transparency of processes, and the promptness of decisions. Such regulations typically address the following aspects:

- the way the conflict can be presented by the parties and the possible outcomes that they can propose
- the way the parties in the conflict and other interested agents can participate in the process

- the deadline the panel must meet when arriving at a decision and the intermediate steps that must be taken
- the need to justify the decisions made by the panel
- the mechanism used to finance the costs of the panel, which can rely on contributions from the parties, the regulated companies, or the state budget

3.

The Power Sector before 2004

The Electricity Law that regulates the Chilean power sector was enacted in 1982.⁴ Like other modern electricity regulatory frameworks, it envisages industry unbundling, competition in power generation, a mechanism to coordinate load dispatch, and the regulation of distribution tariffs and transmission fees. The law has undergone a few amendments, including the addition of articles in 1990 aimed at regulating transmission fees. These and other articles were replaced in 2004 by way of the “Ley Corta” (the “short law”), which modified the norms regarding power transmission and improved the mechanisms used to solve regulatory disputes.

Before the amendments were passed in 2004, the Electricity Law contemplated expert panels in two regulatory procedures: (i) calculation of the asset base for the review of distribution tariffs, and (ii) calculation of transmission fees. The Ley Corta modified these procedures and created a new dispute resolution mechanism, which will be analyzed in section 7 of this paper. The next section describes expert panels as they operated before the 2004 reform.

Calculation of the Distribution Asset Base

Kind of conflicts

According to the Electricity Law, consumer tariffs are reset every four years for all the distribution companies in the industry. The new tariffs are calculated on the basis of the replacement value of “model companies,” which assume that services are provided efficiently in the market by companies that earn a 10 percent rate of return. Both the regulator (the National Energy Commission) and the companies hire consultants to prepare cost studies and their results are averaged, giving two-thirds weight to the study of the regulator and one-third weight to the study of the companies. A “profitability check” is done to ensure that the actual rate of return of the companies (taken as a whole) with the new tariffs are in the 6–14 percent range. If not, the final tariffs are proportionally adjusted so that the actual rates of return of the companies remain within the indicated range.⁵

Key variables in the profitability check are the replacement value (Valor Nuevo de Reemplazo—VNR) or asset base of each of the distribution companies. The VNR values the cost of replacing all the assets of an existing company at market prices. It includes investment costs associated with transmission lines, equipment, buildings, land, rights of way, working capital, and intangible assets. The VNR is calculated every four years by each distribution company and presented to the Superintendency of Electricity and Fuels

⁴ DFL N° 1 de 1982 Ley General de Servicios Eléctricos del Ministerio de Minería.

⁵ A more detailed description of the distribution tariff review process can be found in the Jadresic (2002).

together with an audited report. The Superintendency reviews the calculations and sets the value of the VNR. Prior to the Ley Corta, if the company disagreed, it could request a panel of experts (a “Comisión de Peritos”) to determine the final value of the VNR.

Composition of the panel

The panel of experts was composed of three engineers: (i) the dean of an engineering school of a state university that had longest held his position, (ii) an engineer named by the company, and (iii) an engineer named by the government. The latter was proposed by the Superintendency and named by the Chilean president. One panel had to be created for each disagreeing company, although the same engineers could be named in more than one panel. The dean of the engineering school had to be in all the panels and in practice acted as president of them all. The panels ceased to exist once the final values of the VNR were set.

Kind of decisions

Each panel of experts had to determine the final value of the VNR of the company that requested its creation. The decision was binding and could not be appealed by the parties. There was no constraint requiring the final VNR or its components to be equal to the values proposed by either party.

Rules and procedures

The law did not impose constraints about how the disagreement should be presented by the parties or the procedures that had to be followed by the panel, except that it stated that the final decision had to be made by December 31st of the year before the tariffs were set, leaving less than two months for the analysis of the panel. Nevertheless the Superintendency could dictate the methodology to be used by the companies when making the initial calculation of the VNR. If the companies believed that the methodology was illegal, they could appeal to the General Comptrollers’ Office or the judiciary courts.⁶ Neither did the law require the panels to justify their decisions, although the standard practice was to have written reports explaining the methodology used to calculate the final values of the VNR.

The law did not define who would pay for the costs of the panel. In practice, each company (or group of companies) privately negotiated the honorarium with the engineer they named at the panel. Similarly, the Superintendency agreed a fee with its own engineers, typically external consultants who had participated in the calculation of the VNR set by the regulator. On the other hand, the dean of the school of engineering was left without remuneration, as it was assumed that being in the panels was part of his job as a dean in a state university.⁷ Other operational costs of the panel had to be paid by its members,

⁶ No such appeals have been presented so far regarding the methodology used to calculate the VNR. However several companies did appeal to the General Comptrollers’ Office in 2003 regarding the methodology set by the Superintendency to calculate the operational costs (costos de explotación) of the companies, which is another variable used in the consistency check.

⁷ In 1999 an explicit statement by the General Comptrollers’ Office indicated the dean of the school of engineering could not earn any additional remuneration from the parties.

although they had the right to ask the parties for all the information and assistance that they deemed necessary.

Actual experience

Panels of experts to solve disputes regarding the value of the VNR were set up in 1991, after the privatization process was almost finalized. Since then panels have been established every four years, for every tariff review process, at the request of most of the distribution companies. The VNRs were last fixed in 2003, before the Ley Corta was approved. The process involved 35 companies, most of which belong or are controlled by five large investment holdings.⁸

The 35 panels of experts established in 2003 were comprised of the dean of the School of Engineering of the University of Santiago, who was a member in all of them; two engineers named by the government, who actually had been hired as consultants by the Superintendency to review the VNR calculations; and six engineers named by the companies. Close coordination among the panel members was required for them to reach their decision in about one month and therefore meet the final deadline.

A summary of the decisions made by the panel of experts is presented in Table 2. It shows the values of the VNR proposed by the company, set by the Superintendency, and decided by the panel for each of the largest 15 distribution companies and for the industry as a whole. Table 2 shows that the regulator made major discounts on the VNR that the companies proposed, ranging from 21.5 percent to 63.5 percent for individual companies and equal to 38.6 percent for the whole industry. The final VNR calculated by the panels also implied a reduction of the values proposed by the companies, but ranging from just 4.6 to 34.9 percent and equal to 16.2 percent for the whole industry. The assumptions made by each panel to determine the final value of the VNR, as well as the position of the panel members on each dispute, were explained in a written report signed by all its members that was presented to the parties at the end of the assignment. The final VNRs were accepted both by the Superintendency and the companies, none of which filed any appeal or complaint at the courts.

⁸ At present the main investors in electricity distribution in Chile are Empresa Nacional de Electricidad S.A. (Endesa) from Spain; Compañía General de Electricidad (CGE) from Chile; and three U.S.-based companies—Public Service Enterprise Group (PSEG), Pennsylvania Power & Light Global (PPL Global), and Sempra.

Table 2. Asset Base of Power Distribution Utilities (2002)

N°	Name	Asset base (million pesos) (1)				% Reduction
		Company	Regulator	% Reduction	Panel	
1	Chilectra	422,565	252,640	- 40	345,269	- 18
2	CGE	155,875	113,175	- 27	139,888	- 10
3	Chilquinta	110,956	69,866	- 37	94,976	- 14
4	Saesa	80,176	50,787	- 37	74,566	- 7
5	Frontel	79,792	49,031	- 39	76,112	- 5
6	Emelectric	77,406	32,908	- 57	50,409	- 35
7	Emec	61,307	45,120	- 26	56,369	- 8
8	Conafe	52,147	38,531	- 26	45,786	- 12
9	Rio Maipo	51,957	39,544	- 24	43,121	- 17
10	Elecda	36,988	19,731	- 47	33,969	- 8
11	Emelat	22,702	9,582	- 58	18,488	- 19
12	Copelec	20,686	7,552	- 63	11,692	- 43
13	Eliqsa	18,138	11,274	- 38	16,128	- 11
14	Emelari	14,216	8,345	- 41	12,955	- 9
15	Edelmag	13,940	10,948	- 21	12,855	- 8
16	Other companies (2)	118,578	61,895	- 48	87,148	- 27
	Total	1,337,429	820,929	- 39	1,119,731	- 16

(1) New replacement value of company assets in million pesos (december 2002).
(2) It includes 24 smaller companies.
Source: based on information provided by Superintendency of Electricity and Fuels.

Calculation of Transmission Fees

Kind of conflicts

Before the Electricity Law was amended in 2004, transmission fees had to be agreed between the owner of the transmission facilities and the company interested in interconnecting to them. The law established the technical and economic criteria and the procedures that had to be used by the two parties to determine the transmission fees, which had to be renegotiated each five years. If an agreement was not achieved on the amount of the fees or other conditions of the interconnection, any of the parties could request that a panel of experts (a “tribunal arbitral”) be created. Its sole role was to solve the dispute between the owner and the user of the transmission facilities.

Composition of the panel

The panel of experts had three members. One of them was named by the owner of the transmission facility and another one by the user of the facility. The name of the third member, who had to be a lawyer, was agreed by the two parties or selected by the judiciary, if an agreement was not reached.

Kind of decisions

In solving the dispute about transmission fees, the panel of experts acted as a final arbitrator and had no constraints on the values or conditions imposed on the parties. The panel's decision could not be appealed to other bodies, although the parties could file for recourse with the judiciary if they believed that the procedures stated in the law were not followed. The decision of the panel had to be based on the technical and economic criteria defined in the Electricity Law.

Rules and procedures

According to the law, at any time during the negotiation stage, either party had the right to notify the other of its decision to start an arbitration. The panel had 180 days to reach a decision once a third of its members was nominated, but additional 30 days were allowed if required. Although the Electricity Law did not establish specific procedures, it stated that the panel had to abide itself by the rules set for arbitrators in the Courts Code (Código Orgánico de Tribunales); such rules define the basic steps that have to be followed during an arbitration and impose obligations on the arbitrators for a due process. The law required that each of the parties paid half of the costs of the arbitration procedure.

Actual experience

The performance of panels of experts was hindered by the shortcomings of the regulations regarding electricity transmission. Such regulations set vague technical criteria to calculate the fees, allowed the parties to delay the process, did not ensure that the owner of the transmission facilities would cover all its costs, and made it difficult to new generators to enter the market. This latter problem was exacerbated by the fact that until 2000 the main transmission facilities were owned by the largest generation company.⁹ The need to solve the problems related to transmission regulation was a major motivation to amend the electricity law in 2004.

Nevertheless, panels of experts did play an active role in solving disputes regarding transmission fees. As indicated in Table 3, 14 panels were set up between 1990 and 2004, before the law was modified. Twelve of those cases involved suits of the main transmission company (Endesa and later Transelec) against independent generation companies. The remaining two cases involved disputes between a generation company (Colbun) and a distribution company (Chilectra), although in these an agreement among the parties was reached before the panel members met. In most of the other twelve cases the panel had to decide the final value of the transmission fees: in four of these one of the parties appealed to the judiciary, leaving three cases still unsolved.

⁹ The main high voltage lines were owned by Endesa, the largest generation company. In 1993 it transferred those facilities to Transelec, a subsidiary fully owned by Endesa. Later in 2000 Transelec was sold to Hydro Quebec.

Table 3. Arbitrations regarding Power Transmission Fees

N°	CLAIMANT	DEFENDANT	YEAR	TOPIC	OUTCOME
1	ENDESA	COLBUN	1990-91	Area of influence	Decision
2	COLBUN	CHILECTRA	1996-97	Distribution fee - El Metro	Did not operate (global agreement)
3	COLBUN	CHILECTRA	1996	Distribution fee - EE. P. Alto	Did not operate (global agreement)
4	TRANSELEC	GENER	1997-98	Basic fee - generation plants	Decision
5	TRANSELEC	GUACOLDA	1997-98	Basic fee - Guacolda plant	Decision
6	TRANSELEC	S.E. SANTIAGO	1997-98	Basic fee - Nueva Renca plant	Decision
7	TRANSELEC	ENERGIA VERDE	1997-98	Basic fee - Constitución and Laja	Decision
8	TRANSELEC	ARAUCO GEN.	1997-98	Basic fee - Arauco and Celco	Decision
9	TRANSELEC	COLBUN	1998-99	Basic fee - several plants	Decision
10	TRANSELEC	GUACOLDA	2002-04	Basic & additional fees - Guacolda	Agreement was reached
11	TRANSELEC	ENDESA	2003	Additional fees - several clients	Decision (upheld by judiciary court)
12	TRANSELEC	SAESA	2003	Additional fees - power supplies	Decision (pending appeal to judiciary)
13	TRANSELEC	PULLINQUE	2003-04	Transmission fees - Pullinque plant	Decision (pending appeal to judiciary)
14	TRANSELEC	PUYEHUE	2003-04	Transmission fees - Puyehue plant	Decision (pending appeal to judiciary)

4.

Telecommunications

The Telecommunications Law was enacted in 1982, but tariff regulations were introduced later in 1987. According to these regulations, tariffs are set freely in the market except when access charges are involved or when the Competition Tribunal (Tribunal de Defensa de la Libre Competencia) states that specific tariffs have to be regulated. In practice this tribunal has ruled that consumer tariffs only should be regulated in the case of dominant fixed-line telephone companies, that is, Telefonica CTC in most of the country, and Telsur and Telcoy in cities in southern Chile. The agency in charge of reviewing tariffs and access charges is the Undersecretariat of Telecommunications.

Tariff reviews of regulated tariffs and access charges are done every five years on the basis of the “model company approach,” that is, estimating the costs that an efficient company would require to provide the services. The specific criteria and assumptions used in the tariff study are defined in the “technical-economic terms of reference” (bases técnico-económicas), which are set in each opportunity by the regulator, based on a proposal filed by the regulated company. If the company disagrees with the terms of reference set by the regulator, it can request the opinion of a panel of experts on the subject. The final decision is made by the Undersecretary of Telecommunications.

The terms of reference are used by consultants hired by the regulated company to prepare a study proposing the new tariffs. The study has to be presented to the Minister of the Economy and the Minister of Transportation and Telecommunications, by way of the Undersecretary of Telecommunications. These ministers have 120 days to set the new tariffs. If the company disagrees with the proposed tariffs, it can request that a new panel of experts be formed in order to give an opinion about the matter. The final tariffs are then set by the ministers.

The next section contains a more detailed description of the role of the panel of experts in solving disputes over the terms of reference of the tariff studies and the tariffs set by the telecommunications regulator.

Terms of Reference of Tariff Studies

Kind of Conflicts

If the regulated company disagrees with the “technical-economic terms of reference” of the tariff study set by the regulator, it can request the opinion of a panel of experts (“comisión de peritos”). The panel has to cover all the issues (“controversies”) raised by the company, including such issues as the criteria used for estimating future demand, the criteria for designing the network of the model company, the choice of technological solutions, the

sources of the cost figures, the indexation clauses, or any other requirement included in the terms of reference.

Composition of the Panel

The panel of experts is formed by three “experts with acknowledged prestige.” One of them is nominated by the regulated company, another is chosen by the Undersecretary of Telecommunications, and the third one is selected by mutual agreement. A ruling dictated in 1998 defines a procedure to choose this third panel member and imposes some conditions on the operation of the panel.¹⁰ According to this ruling each party has to propose four experts to serve as the third panel member and the other party can accept or reject them. If an agreement is achieved on one name, she will become the panel member. If there is an agreement on several names, one of them will be randomly selected. If there is no agreement at all, the random selection will consider all the proposed names.

Kind of Decisions

The panel of experts provides an opinion about each of the controversies that the regulated company has regarding the terms of reference set by the regulator. Any of the parties may ask for a clarification if it believes that the opinion of the panel is not clear enough. Comments on undisputed issues are not taken into account. The final terms of reference are set by the regulator. The law does not force the regulator to adopt the proposals of the panel, but it is expected to do so unless the proposals are inconsistent with the criteria established in the law or with government policy.

Rules and Procedures

The law does not impose constraints on how the objections are presented by the regulated company, the procedures that have to be followed by the panel, or the deadline for delivering their opinion. However, the ruling dictated in 1998, plus another one dictated in 2003, have set some conditions that promote equity and transparency in the tariff review process.¹¹ Thus, all documents shall be publicly available (in the Web page of the regulator), third parties affected by the tariff review—including consumers or competitors—may file comments about the terms of reference, and the panel is required to justify in writing all its decisions as well as the dissident votes.

The law also deals with the costs of the panel of experts, stating that they have to be divided evenly by the parties.

¹⁰ Decree 381 of 1998 of the Ministry of Transportation and Telecommunications and the Ministry of the Economy, about the commissions of experts.

¹¹ Decree 4 of 2003 of the Ministry of Transportation and Telecommunications and the Ministry of the Economy, about the procedure, publicity, and participation in the tariff review process.

Actual Experience

Panels of experts have seldom been set up to solve disputes regarding the terms of reference of the tariff study. One such case took place in 2003 while tariffs were being set for the largest fixed-line telephone company, Telefonica CTC, for the 2004–09 period.¹² The main reason why regulated companies have normally not relied on panels of experts to solve disputes is that traditionally the regulator set very general terms of reference, not adding much to the technical and economic criteria established for tariff reviews in the Telecommunications Law. Even then, if a conflict arose regarding a specific clause in the terms of reference, the regulator tended to rewrite it in more general terms so as to make it acceptable to the regulated company and to postpone the solution of the conflict to the tariff-setting stage, when the company could request that another panel of experts be formed.

The 2003 experience coincided with a conscious effort by the regulator to write very detailed terms of reference, in order to make the tariff review consistent with government policy and leave less freedom for interpretation by the tariff study. Not surprisingly, Telefonica CTC requested that a panel of experts be formed to state an opinion about 83 specific objections it had regarding the terms of reference. The regulator adopted most of the proposals made by the panel.

TARIFFS OF REGULATED COMPANIES

Kind of Conflicts

Once the company presents its tariff study, the regulating ministries issue a report that includes their objections to the assumptions made in the study and their counterproposals, as well as the new tariffs to be set.¹³ If the company disagrees with the report, it can ask a panel of experts for their opinion. The panel refers to each objection and counterproposal (controversy) not accepted by the company and makes its own recommendation on how the issue should be resolved. Based on these recommendations the final tariffs can be calculated.

Composition of the Panel

The same rules apply as in disputes regarding terms of reference of tariff studies. Therefore, the panel of experts is formed by three “experts with acknowledged prestige.” One expert is nominated by the regulated company, another by the Undersecretary of Telecommunications, and the third is selected by mutual agreement. However, the members need not be the same as the members of the panel that gave an opinion about the terms of reference, if it was ever set up.

¹² A panel of experts was also set up for the 1999 review of access charges of the mobile company Startel.

¹³ This is called the “report of objections and counterproposals” (see Decree 4 of 2003).

Kind of Decisions

As in conflicts about terms of reference, the panel of experts does not make the final decision, but only provides an opinion about each issue that is under dispute. That opinion may differ from the position of either party. Either party may ask for a clarification of the panel's opinion. When setting the final tariffs the ministries will normally follow the proposals of the panel, unless they are inconsistent with the law or government policy.

Rules and Procedures

As in disputes about terms of reference, the law does not define detailed procedures that have to be followed by the panel or the parties to solve the disputes, except that it sets a 30-day deadline for receiving the opinion of the panel. Nevertheless, the rulings dictated in 1998 and 2003 have set conditions that promote equity and transparency in the process. On the other hand, unlike conflicts regarding terms of reference, the law does not regulate how the costs of the panel will be covered, but the rulings stated that those costs had to be paid by the regulated company.

Actual Experience

Panels of experts have often been used to solve disputes regarding tariff reviews in the telecommunications sector. Thus, out of 18 reviews completed in 2004 and 2005, 10 involved panels of experts. These reviews included reviews of consumer tariffs and access charges for the three fixed-line telephone companies defined as dominant by the competition authority, and access charges of the four mobile phone companies that operate in Chile. More information about these seven cases is provided in Table 4. The reviews that did not require panels of experts typically involved access charges of smaller telephone companies, which operate in rural areas or compete with the dominant firms in the larger cities.¹⁴

Table 4. Tariff Reviews in Telecommunications (2004–05)

Company	Service	Date tariff decree	Controversies			Annual long-run total cost per line						
			N°	Unanimity	%	Company		Regulator		Panel		
						Chilean \$	Chilean \$	% reduction	Chilean \$	% reduction		
BellSouth	Mobile	jan. 04	14	12	86	474,989	410,920	-	13	436,261	-	8
Telefónica Móvil	Mobile	jan. 04	17	15	88	505,360	410,920	-	19	436,261	-	14
Entel PCS/Móvil	Mobile	jan. 04	9	8	89	508,883	410,920	-	19	436,261	-	14
Smartcom	Mobile	jan. 04	71	67	94	578,331	410,920	-	29	436,261	-	25
Telefonica CTC	Fixed line	apr. 04	79	62	78	235,172	109,198	-	54	144,969	-	38
Telsur	Fixed line	dec. 04	16	n.a.	n.a.	187,819	153,715	-	18	196,487	-	5
Telcoy	Fixed line	jan. 05	11	9	82	332,500	246,660	-	26	259,997	-	22
Average			31			403,293	307,608	-	25	335,214	-	17
n.a.: not available												
1) % reduction is measured with respect to value proposed by the company												
Source: based on information provided by the Undersecretary of Telecommunications												

Table 4 indicates that the number of issues raised by the regulated companies fluctuated from 9 to 79 and the degree of unanimity amongst members of the panel of experts was

¹⁴ Other tariff reviews with originated expert panels were: Entelphone (04/04), Entel (08/04) and Manquehue (03/05). Tariffs reviews without expert panels included: CTR (02/04), CMET (04/04), RTC (11/04), VTR (12/04), Telesat (03/05), Centenal (08/2005), Multikom (08/2005) and Megacom (10/05).

very significant, since in all cases the panel reached an unanimous opinion for no less than 78 percent of the controversies.

Table 4 also provides information about the impact of the opinion of the panel on the decision of the ministries in charge of tariff reviews. Even though the opinion of the panels is not binding, in most cases there was a significant upward revision in the calculation of the tariff level after the opinion was stated. In fact, whereas initially the regulator made a 25 percent reduction in the annual long run total cost per line (a proxy of the tariff level) proposed by the companies, the final average reduction was just 17 percent.¹⁵

In none of the cases shown in Table 4 did the companies appeal in the courts the final decisions made by the regulator, even though in general those decisions differed from the proposals made by the utilities and did not incorporate all the recommendations of the panel. But it has not always been like this. Following the tariff review of Telefonica CTC in 1999, this company requested the General Comptrollers' Office and the Courts of Appeals of Santiago to invalidate the new tariffs, but both appeals were rejected. The company later filed a suit against the government in the courts to be compensated for financial damages, which has not yet been resolved.

¹⁵ These figures are greatly affected by the review process of Telefonica CTC, where the initial proposals of each party differed the most. If this case is not considered, the average initial and final reduction of the long-run total costs are 21 percent and 13 percent.

5.

Water Supply and Sanitation

The reform of the water supply and sanitation sector involved the enactment of four regulatory laws in the late 1980s regarding: the concession regime, the role of the Superintendency of Sanitation Services, the tariff regime, and the subsidies for poor consumers.

Kind of conflicts

According to the Law of Tariffs of 1988, and its amendment passed in 1997, the tariffs of water supply and sanitation services must be reviewed every five years by means of the model company approach. Technical features of the tariff model are spelled out in a ruling made in 1990.¹⁶ Both the Superintendency and the regulated companies have to prepare tariff studies based on the same terms of reference, which are established for each review by the regulator. The regulated company and other interested parties can file their comments regarding a preliminary version of the terms of reference.

Once the tariff studies are ready, the regulated company has the right to state its objections (“discrepancies”) to the study prepared by the Superintendency. If both parties are not able to reach an agreement regarding the new tariffs after 45 days, the regulator has to appoint a panel of experts whose role is to solve the tariff dispute. For each discrepancy the panel has to make a choice between the values of the parameters considered in the tariff studies of the company and the Superintendency. The final tariffs are then calculated by the regulator and set in a decree by the Minister of the Economy, using the values of the parameters chosen by the panel of experts.

Composition of the Panel

The panel has three experts; one expert is named by the Superintendency, another is named by the regulated company, and the third is selected by the regulator from a list of experts agreed by both parties at the beginning of the review process. A ruling enacted in 2000 stated that the experts must have “acknowledged prestige” and “technical expertise” and shall act with impartiality and objectivity.¹⁷ The ruling also states that the expert chosen by mutual agreement cannot have any contractual relation with the company or the regulator, nor be a shareholder or partner of the regulated company or the consulting firms providing advice to the parties. The ruling also requires that the panel name a secretary who serves as a witness of the decisions made by the experts.

¹⁶ Decree 453 of 1990 of the Ministry of the Economy, about the Law of Tariffs.

¹⁷ Decree 385 of 2000 of the Ministry of the Economy, about the nomination and operation of the Commission of Experts.

Kind of Decisions

For each parameter of the tariff model for which the regulated company stated a discrepancy, the panel has to choose the value adopted either in the tariff study of the Superintendency or in the study of the company. The panel cannot select a different value for those parameters, but it can modify the value of parameters for which there is no discrepancy if that is required for the consistency of the tariff scheme. It is the right of the company to decide what are the parameters of the tariff model and upon which of them it will raise a discrepancy. Parameters may refer to aspects such as the rate of growth of demand, the market rate of return, level of wages, technological variables adopted for the model company, unit cost of inputs, or the indexation indices. The decision of the panel is final and mandatory for both parties.¹⁸

Rules and Procedures

The law does not include specific procedures for the panel except that it states that their costs should be paid by halves by the parties and that other procedures can be established in presidential rulings. The rulings of 1990 and 2000 added some additional constraints, including the following: (i) the deadline for the decision of the panel is 30 days, but if needed it can be extended to 45 days; (ii) the Superintendency and the company must provide to the panel the material supporting their own position and all the information requested by the panel; (iii) the decision of the panel requires a simple majority; (iv) the panel has to include in its files the decisions and arguments presented in internal discussions; (v) the files of the panel will be publicly available once the final decision is reached; (vi) the panel cannot state its opinion about topics that are not related to the discrepancies presented by the company; and (vii) the Superintendency can reject discrepancies that are not consistent with the terms of reference of the tariff studies.

Actual experience

Panels of experts have often been used to solve tariff disputes in the water supply and sanitation sector, especially after the state-owned utilities were privatized. As can be seen in Table 5, six out of 21 tariff reviews that took place between 2000 and 2004 relied on expert panels: four of these had to do with private companies and two with state-owned companies. At the time of these reviews, nine companies were still in state hands, but most of them were subsequently privatized.

¹⁸ The obligation to choose between the values of parameters used in the tariff studies of the regulator and the company was introduced in a legal reform approved in 1997, because it was believed that it would force the parties to adopt more realistic assumptions in their models. Prior to that year, the panel could freely decide the value of the parameter involved in each discrepancy. The mandatory feature of the decision of the panel was also introduced in 1997, since before the legal amendment, the panel stated an opinion and the final decision was made by the Minister of the Economy.

Table 5. Tariff Reviews in Water and Sanitation (Third Process, 2000–04)

Company	Ownership	Discrepancies	Won by company	%	Annual LRTC Regulator	Annual LRTC Company		Annual LRTC Final	
					Million pesos	Million pesos	Differential % (1)	Million pesos	Differential % (1)
Set by Panel of Experts									
Emos	Private	106	46	43	97,500	165,016	69	135,555	39
ESSAL	Private	388	125	32	13,969	20,396	46	16,409	17
ESSAM	State	83	41	49	14,542	18,985	31	16,362	13
ESVAL	Private	407	147	36	29,032	53,947	86	41,643	43
Aguas Quinta	Private	43	13	30	4,478	7,716	72	5,679	27
ESSAT	State	75	42	56	13,472	19,876	48	16,124	20
Average		184	69	41	28,832	47,656	65	38,629	34
Set by mutual agreement									
Aguas Cordillera	Private				13,525	21,064	56	15,238	13
SMAPA	Municipal				9,992	12,530	25	10,715	7
EMSSA	State				2,615	3,586	37	2,821	8
ESMAG	State				5,464	6,494	19	5,955	9
ESSAN	State				19,909	21,833	10	21,067	6
ESSAR	State				15,070	19,180	27	16,877	12
EMSSAT	State				6,231	6,951	12	6,386	2
ESSBIO	Private				39,226	45,061	15	40,976	4
ESSCO	State				13,475	17,229	28	14,514	8
ESSEL	Private				14,461	19,860	37	15,805	9
Los Dominicos	Private				1,053	1,450	38	1,086	3
Manquehue	Private				1,182	1,559	32	1,316	11
Coopagua	Private				623	695	12	642	3
Agua Décima	Private				3,470	4,721	36	4,103	18
Servicomunal	State				1,822	3,112	71	1,838	1
Average					9,875	12,355	25	10,623	8
(1) Differential is measured with respect to long run total cost (LRTC) proposed by the regulator.									
Source: based on information provided by the Superintendency of Sanitary Services.									

Table 5 shows the number of discrepancies raised by the regulated companies that requested the setup of expert panels; the high number of discrepancies, ranging for 43 to 407, shows the complexity and high degree of detail of the models used in tariff reviews.¹⁹ The table also shows that the proportion of discrepancies that were validated by the panel ranged from 30 percent to 65 percent and on average was equal to 41 percent.

Interesting comparisons can be made for the 2000–04 period between tariff reviews where expert panels were involved and reviews where tariffs were agreed among the parties. Agreement with the regulator was more frequent when companies were owned by the state or smaller in size, perhaps because state-owned enterprises are less prone to argue with the regulator and the cost of a panel becomes relatively more expensive for small companies. Differences in tariff proposals made by the parties were substantial. In cases where panels were involved, companies proposed tariffs 65 percent higher than the regulator.²⁰ In cases where parties reached agreement, tariff proposals were just 25 percent higher. The panels tended to validate a greater proportion of the tariff differential involved in the discrepancies (44 percent) than the agreements with the regulator (just 30 percent).

The results seen in the 2000–04 period may change in the future, not only because of further privatization, but because knowledge accumulates over time, for instance, regarding

¹⁹ However, most of the difference in the tariff levels proposed by the parties typically depends just on a few parameters, such as the unit cost of key inputs and wages, the technical features of some productive processes, the rate of growth of demand, the or market rate of return.

²⁰ The annual long run total costs of the model company (LRTC) is used as a proxy of the tariff level.

the criteria used by experts to solve disputes in the past. Thus, the 2005 tariff reviews completed for the two largest private companies had the following results: (i) the initial tariff differential were smaller than in the past (40 percent in the case of Aguas Andinas—formerly EMOS—and 29 percent for ESVAL); (ii) only in the case of Aguas Andinas was a panel required, which validated 54 percent of the tariff differential; (iii) in the case of ESVAL, an agreement among the parties implied that 78 percent of the tariff differential was actually accepted by the regulator.

6.

Concessions of Public Works

The starting point for the massive involvement of the private sector in Chilean toll roads and other public infrastructure was the enactment of the Concessions Law in 1991.²¹ According to this law, concessions can be granted through competitive tenders to private companies willing to invest in constructing, operating, and maintaining public works. The concession holder has the right to recover its investment on the basis of tariffs charged upon the users during a certain period of time indicated in the concession, which cannot be longer than 50 years. The bids have to satisfy the technical, economic, and financial conditions established in detail in the terms of reference of the concession projects. The selection is based on an objective and transparent criteria, such as the minimum tariff, subsidy, period of time, or present value of income requested by the bidder.

The Concessions Law provides a special mechanism to resolve disputes that may arise between the Ministry of Public Works and the holder of the concession contract at any time during the life of the concession. It is based on a panel of experts that has both a conciliatory function, aimed at reaching an agreement among the parties, and an arbitration function, aimed at resolving the dispute if no agreement was achieved. The main features of this mechanism are as follows.

Kind of Conflicts

The concession contract is ruled in detail by a set of documents, including the Concessions Law, the Ruling of Concessions Law, the terms of reference of the concession tender, the bid presented by the concession holder, and the Decree that awarded the concession.²² The contract covers topics such as the technical description of the project to be built and operated, the investment deadlines, the service obligations, the financial guarantees provided by the company, the minimum income guarantee provided by the government, the dates on which expropriated land or rights of way will be available, the level of the user charges, the duration of the concession, the regime of fines and sanctions, and the compensation to be provided by the Ministry if it requests additional works or the conditions of the concession are modified over time.

Any dispute that may arise among the private company and the Ministry of Public Works in the interpretation or application of the concession contract can be presented by either party to the Conciliation Commission (Comisión Conciliadora). This panel proposes an agreement to the parties. While viewing a case, the panel may freeze decisions taken by the Ministry that originated the dispute.

If the parties do not agree on a solution, the private company has the right to request that the Conciliation Commission become an Arbitration Commission (Comisión Arbitral) and

²¹ Decree DFL 164 of the Minister of Public Works, Law of Concessions, which was later rewritten in the Decree 900 of 1996 of the Minister of Public Works.

²² The Ruling of the Concessions Law was established by the Decree 956 of 1999 of the Ministry of Public Works.

resolve the dispute; in such a case the decision of the panel cannot be appealed. Otherwise the company can appeal at the Court of Appeals of Santiago. If neither action is adopted, the initial decision of the Ministry prevails.

Composition of the Panel

The Conciliation Commission has three experts, all of which have to hold professional university degrees. One of the experts is named by the Ministry of Public Works, another by the company, and the third is nominated by mutual agreement. The latter becomes the president of the panel. If an agreement is not reached, the third member is named by the Courts of Appeals of Santiago. For all the three experts a substitute has to be named. The Commission has to be set up within 30 days of the start of the concession period, and its members will remain in office during all the life of the concession, insofar they are not replaced by the parties or voluntarily resign. The president can only be replaced if both parties agree. Once the panel has been named, it selects a legal secretary.

The Conciliation Commission becomes the Arbitration Commission whenever it is requested by the private company, provided that both parties have not reached an agreement on the basis of the conciliation proposal. The Arbitration Commission lasts until the dispute that originated its creation has been resolved.

Kind of Decisions

When acting as the Conciliation Commission and a dispute has been presented, the panel has to seek an agreement between the Ministry and the company, taking into account the concession contract and the interest of the parties. In order to do so, the panel proposes terms for the conciliation, which may contain general negotiation guidelines or very specific clauses or compensations levels.

Another role of the Conciliatory Commission is to approve beforehand some major enforcement decisions that the Ministry can adopt, such as large fines, suspension of the concession, or extinction of the concession.

When acting as the Arbitration Commission, the panel serves as an arbiter and makes the final decision regarding the dispute, based on the law and the contract. In this case, decisions are binding and cannot be appealed.

Rules and Procedures

The Conciliatory Commission sets its own procedures and rules, in a document formally approved by its members. Such rules have to indicate at least how the position of the parties has to be presented, the deadlines for the presentations, the means that the panel will use to notify the parties, and the way the hearings will be held. Once the terms of conciliation have been proposed by the panel, the parties have 30 days to reach an agreement. If no agreement is reached in 30 days, the company has 5 days to request the panel to turn into the Arbitration Commission or to appeal to the Court of Appeals.

The rules and procedures of the Arbitration Commission are set by the parties in accordance with the norms for arbitrators in the Code of Civil Law. They have to include the procedures to present the position of the parties, the stages of the process, and the way hearings and testimonies will be conducted. The panel must make a final decision within 30 days of the end of the proceedings.

Fees of the panel members are set by agreement between the parties. At the conciliation stage they have to be paid by the party that presented the dispute, unless both parties agree otherwise. At the arbitration stage, the panel decides who pays the fees. The same principles apply to the remaining costs of the panel, except for general administrative costs at the conciliation stage, which are divided between the parties.

Actual Experience

Panels of experts are used often to solve disputes regarding concessions of public works. As seen in Table 6, 22 out of 42 companies that were awarded concessions through 2005 presented a total of 66 disputes to the Conciliation Commissions. Most of these claims came from companies operating toll roads, a few from airport operators, and the rest from companies in charge of jails, irrigation dams, and urban roads. In four cases, the disputes were presented by the Ministry of Public Works.

Table 6. Regulatory Disputes in Concessions of Public Works (up to 2005)

Kind of concession	Concessions granted	Concessions with claims	Claims presented	Proposed conciliations	Accepted conciliations	Presented arbitrations	Solved arbitrations
Toll roads	19	15	45	38	14	24	17
Urban roads	6	1	1	1	1	0	0
Airport	8	4	12	12	1	11	5
Jails	8	1	6	4	1	3	0
Irrigation dams	1	1	2	0	0	0	0
Total	42	22	66	55	17	38	22
		52%			31%		58%

(1) 4 of the 66 disputes were presented by the Minister of Public Works and 1 by both parties..

(2) The table only includes disputes presented in the 22 concessions with at least one solved dispute.

Source: based on data provided by the Ministry of Public Works.

At present, 55 conciliations have been proposed to solve disputes arising between the concession holder and the Ministry. The terms proposed by the Conciliatory Commission were accepted in 17 of those cases (31 percent). In the remaining 38 cases, the company requested the panel to turn into an Arbitration Commission. A final decision has already been made in 22 of these arbitrations (58 percent). Companies have not yet chosen to appeal to the judiciary courts.

Table 7 provides some information regarding 48 claims by companies that involve explicit financial compensation from the Ministry; other claims may also involve some kind of economic compensation, but the exact figure has not been stated. The total amount of financial claims in these cases is over UF 31 million (currently about US\$1 billion).²³ Claims already solved either by conciliation or arbitration involved claims for slightly more

²³ UF stands for Unidad de Fomento, a financial unit indexed daily to the domestic Consumer Price Index.

than UF 10 million. Overall, the panels decided that the concession holders had to be compensated for 47 percent of this amount, that is, for about UF 4.7 million. Such compensation need not necessarily be paid all in cash, but may also involve changes in some conditions of the concession, such as user charges or the length of the concession.

Table 7. Financial Claims in Concessions of Public Works (up to 2005)

Kind of concession	Monetary	Amount claimed	Solved claims	Amount granted
	claims	UF	UF	UF
Toll roads	31	24,763,179	7,822,711	4,675,439
Urban roads	1	351	351	-
Airport	11	2,850,051	2,289,891	63,575
Jails	3	4,081,100	-	-
Irrigation dams	2	1,930	-	-
Total	48	31,696,611	10,112,953	4,739,014
	73%			47%

(1) The table only includes disputes with explicit and precise monetary claims

Source: based on data provided by the Ministry of Public Works.

7.

The Power Sector after 2004

One of the main objectives of the amendments introduced in the Electricity Law in 2004 by means of the Ley Corta was to modernize the mechanisms used to solve regulatory disputes that arise between the companies and the regulator and among the companies themselves. For that purpose a permanent and independent body called the Panel of Experts (Panel de Expertos) was created with the explicit objective of resolving a wide range of disputes that normally arise in the power sector. The main features of this panel are now described.

Kind of Conflicts

The kinds of “discrepancies” or “controversies” that can be solved by the Panel of Experts according to the Ley Corta is shown in Table 8. A large number of them (topics 1–7 and 13) are related to the new regulatory regime that was created for power transmission. According to this scheme, every four years an independent consulting firm has to prepare a transmission study that should propose the transmission fees and alternative investment plans for the “trunk transmission system.” Based on that study, the transmission fees and mandatory investments in trunk lines are reviewed every year. Topics 1–4 in Table 8 deal with this regulatory scheme for the trunk transmission system and cover the terms of reference prepared by the National Energy Commission, the results of the transmission study, and the annual review of transmission fees and investment plans.

Table 8. Topics of discrepancies seen by the Panel of Experts

	Topic	Frequency	Year of initial application
✓	1. ToR transmission study	4 years	2004
✓	2. Results of transmission study	4 years	2006
✓	3. Investment in transmission	Annual	2006
✓	4. Annual review transmission fees	annual	2006
✓	5. ToR sub-transmission fees	4 years	2005
✓	6. Value of subtransmission fees	4 years	2006
✓	7. Value of distribution fees	4 years	2005
✓	8. ToR tariffs intermediate systems	4 years	2006
✓	9. Value tariffs intermediate systems	4 years	2005
✓	10. Tariffs of associated services	4 years	2004
✓	11. Operation expenses in distribution	Annual	2007
✓	12. Asset base in distribution	4 years	2007
✓	13. Conflicts in transmission	Occasional	-
✓	14. Conflicts in system operation	Often	2004
✓	15. Other conflicts among companies	Occasional	-

The Ley Corta created special regulatory schemes for transmission installations that do not belong to the trunk system. In the case of the “subtransmission systems,” which transport power to specific distribution areas, tariff reviews are done every four years based on studies done by independent consultants topics 5 and 6 in Table 8 deal with the terms of reference of the study and the tariffs set by the regulator. In the case of “distribution systems,” within the area served by distribution utilities, fees charged to independent suppliers of power are set on the basis of the distribution tariffs, which are reviewed every four years (topic 7). In the case of the “additional transmission systems,” which serve individual suppliers or consumers of power, fees are negotiated between the owner and the user of the lines (topic 13).

Other conflicts that can be presented to the Panel of Experts are related with the review of generation and transmission tariffs of interconnected systems ranging from 1.5 to 200 megawatts of installed capacity, which are called “intermediate systems”. In such cases tariffs are reviewed on the basis of studies done every four years by independent consultants according to terms of reference prepared by the regulator. Topics 8 and 9 deal with this process.

The panel can also solve disputes dealing with the tariffs for services provided by distribution utilities other than power supply.²⁴ The prices of these “associated services” are set every four years by the regulator on the basis of the results of the cost studies prepared by the companies and the National Energy Commission. This issue is considered in topic 10.²⁵

Another role of the Panel of Experts is to resolve conflicts regarding the asset base (every four years) and the operation expenses (annually) of the distribution utilities, both of which are set by the Superintendency of Electricity and Fuels. Topics 11 and 12 deal with these matters.

In addition to the topics that have been described, most of which involve disagreement of the companies with the regulator (except for topic 13), the Ley Corta gave the panel the task of solving regulatory disputes among the power companies. Most important among these are the conflicts that may arise among the generation and transmission companies that belong to the central dispatch centers, which operate the two main interconnected systems: the CDEC-SING and the CDEC-SIC (topic 14).²⁶ Normally the disputes are about transfer payments due to power and capacity exchange among generation companies. Prior to the Ley Corta these conflicts were solved by the Minister of the Economy, on the basis of a

²⁴ Among others, the following services are included: lease, maintenance, and replacement of meters; disconnection and connection of consumers with unpaid bills; connection of private substations; charges for late payments; and support of telephone wires in electricity posts.

²⁵ The Ley Corta bill initially proposed to modify the procedures to review distribution tariffs (which were described briefly in the section of this paper titled “Calculation of the Distribution Asset Base”) so as to rely on the Panel of Experts instead of averaging the results of the studies done by the companies and the regulator. Lack of support in congress and the hurry to get the bill approved led the government to drop this proposal. As a result, the role of the Panel of Experts in solving disputes in distribution covers just the review of tariffs of the “associated services” and the definition of the asset base and operation expenses of the utilities, as explained in the next paragraph of the text.

²⁶ CDEC-SIC and CDEC-SING stand for Central Economic Load Dispatch Center for the Central Interconnected System and for the Great Northern Interconnected System.

technical report prepared by the National Energy Commission and an initial recommendation made by a commission of three independent experts nominated by each dispatch center.

More generally, the Ley Corta stated that power companies could jointly request the Panel of Experts to resolve any other dispute arising among them due to the application of the economic and technical regulations of the electricity sector (topic 15).

Composition of the Panel

The Panel of Experts has seven members, Chileans or foreigners, five of which must hold a professional degree in engineering or economics, and two of which must be lawyers. They must all have “wide professional or academic expertise” and at least three years of experience in the power sector. The panel has a legal secretary who must be a lawyer and have at least two years of experience in the power sector.

The panel members and the legal secretary are nominated for two staggered terms of three years (six years total) by the Competition Tribunal by means of a public and competitive contest.²⁷ The panel selects one of its members as the president, to serve for three years. Strict ineligibilities apply to ensure the members are not affiliated with the government or power companies until one year after they leave office, and do not participate in the ownership of such companies. Panel members are also subject to integrity rules defined in the administrative and penal law and they cannot intervene in disputes related to topics in which they were directly involved before becoming panel members.

Kind of Decisions

The panel has to choose among the positions of the parties, taking into account the existing regulations and the technical and economic criteria established in the law. Its decisions are final and mandatory for all the parties that intervened in a dispute. Appeals do not exist, but the Council of Ministers of the National Energy Commission can declare that the decision cannot be applied if it does not deal with topics presented in Table 8.

Rules and Procedures

The law and a ruling dictated in 2004 establish detail procedures for the presentation and resolution of disputes.²⁸ There are specific deadlines for the parties to present their discrepancies (normally 15 working days after the problem arises) and for the panel to start seeing the case (5 days) and making its final decision (normally 30 days after the presentation was made). The discrepancies must be presented in writing with all their supporting material. A public hearing must be held with the participation of all the interested parties, including the regulator. The decision made by the panel and its

²⁷ The Competition Tribunal (Tribunal de Defensa de la Libre Competencia) is also an independent body whose members are selected by means of a competitive contest by the Board of the (independent) Central Bank.

²⁸ Decree 181 of 2004, about the Panel of Experts of the Electricity Law.

justification, as well as all material presented by the parties, is made public at the end of the process.

The costs of the panel are paid by all the companies in the power sector in proportion to their fixed assets. Such costs include the honorary fees set in the law for the panel members and the legal secretary, the salaries of the administrative staff, and the general operating expenses. The annual budget is proposed by the panel and approved by the Council of Ministers of the National Energy Commission, taking into account the comments made by the companies.

Actual Experience

The Panel of Experts was set up in July 2004 after its members were selected by means of a public contest in which there were 98 applicants. Since then it has resolved 22 disputes dealing with the topics indicated in Table 9.

Table 9. Disputes Resolved by the Panel of Experts (2004–05)

Topic	N° of disputes	Nature of the dispute
ToR transmission study	2	Several companies disagreed with ToR set by regulator
ToR subtransmission fees	1	Several companies disagreed with ToR set by regulator
Tariff of associated services	1	Disputes regarding tariffs of services provided by utilities
Conflicts in SIC system	11	Conflicts among companies due to energy transfer payments
Conflicts in SING system	7	Conflicts among companies due to energy transfer payments
Total	22	

Source: Based on information provided by the Panel of Experts of the electricity sector.

Two disputes had to do with the preparation of the terms of reference for the transmission study, which is required to review the transmission fees and to establish the investment obligations of the “trunk transmission system.” Another dispute was related to the definition of the terms of reference for the studies required to set the fees to the users of the “subtransmission systems.” In all these cases, owners and users of transmission installations presented disagreements with the proposal made by the regulator, which were finally resolved by the panel. At present, independent consultants are preparing the tariff studies on the basis of the terms of reference as set by the panel.

A fourth dispute had to do with the review of the tariffs for “associated services” provided by the distribution companies. In this case the panel had to choose among the values of the final tariffs proposed by the regulator and the utilities for six “associated services”.²⁹

The remaining 18 cases seen by the panel have dealt with conflicts among generation companies both in the SIC and the SING systems, related to energy and capacity transfer payments. Decisions of the panel settled longstanding disputes that could not have been resolved with the older mechanism of conflict resolution, which involved a decision by the Minister of the Economy. In fact, by means of successive recourses, the companies had managed to postpone for several years a final solution to conflicts that mostly originated in the year 2000, after application of new rulings dictated by the regulator. Postponement of decisions was not an available option anymore since the 2004 legal amendment forced the panel to make decisions not open to appeal within a strictly limited period of time.

²⁹ Although the panel solved the dispute, the resulting tariffs have not been implemented because the General Comptrollers accepted a recourse by the utilities arguing that the procedures followed by the regulator to review the associated tariffs were illegal. On the other hand, an appeal of a utility against the decision made by the panel was rejected by the Appeals Court of Santiago, on the basis that such appeals do not apply in this case.

8.

Conclusions

Panels of experts have been an effective mechanism to solve regulatory conflicts between the regulators and private companies and among companies themselves in the Chilean infrastructure sector, in issues such as tariff reviews, energy transfer payments, and interpretation of concession contracts. The performance of these panels has not been the same in all the sectors and has evolved over time, as knowledge has accumulated. Based on the Chilean experience, the following proposals can be made:

- i) The functions of the panels have to be defined very precisely, ideally in the law. Their objective is to solve specific regulatory conflicts based on economic and technical criteria defined in the law, the contract, and other relevant regulations. The panels do not replace the regulators or the judiciary courts, but may overtake some of their traditional duties.
- ii) Panels may differ on the scope of conflicts and areas they deal with, as well as on their lifetime. In general, greater scope and duration of the panels may facilitate the imposition of universal solution criteria for conflicts that tend to repeat over time, and eventually may help prevent the periodic reappearance of such disputes.
- iii) The panels must be independent from the parties. Different schemes can be used to name their members. Nomination of some or all panel members by the parties may provide greater confidence and facilitate conciliation. However it may limit the independence of the panel members and eventually cause the decision to depend on the view of a just part of the panel (for example, just on the president chosen by mutual consent). In any case, independence will be promoted if proper ineligibilities are imposed in the panel members.
- iv) The panel members must be highly qualified in the topics they deal with. Professional and academic requirements may be useful for this purpose. Open competition to name the panel members may be useful too, especially in the case of permanent panels. In any case, competitive fees and the prestige attached to their functions will normally be needed to attract capable experts to the panels.
- v) Conciliation stages may be useful, especially if conflicts are related with complex issues, solution criteria are not precise, and third parties are not involved. Such conditions are more likely to arise when regulation is based in contractual regulation of concessions.
- vi) The binding nature of the decisions and the lack of further appeals to other bodies strengthens the role of the panel in the resolution of conflicts. That role is weakened if the panel is just allowed to state an opinion which is not mandatory for the regulator.

vii) The obligation to choose among the positions of the disputing parties, if that is feasible, may prevent excessive demands by the parties and facilitate the task of the panel, insofar it does not need to identify the exact or optimal solution, but the least bad of them.

viii) In the case of tariff disputes, convergence in the positions of the parties need not occur if the panel has to choose between the value of many parameters used to calculate the tariffs rather than the final values of such tariffs. On the other hand, repetition of criteria used by the panels to solve disputes in the past may promote convergence over time.

ix) Clear rules and procedures are required for due process. Transparency, including the need to justify all decisions and to make public all the material used in the process, strengthens the quality and objectivity of the decisions. Public hearings and other mechanisms to allow public participation are required if third parties are affected by the decision.

x) The definition of explicit deadlines is useful for prompt and effective solutions, but requires clear decision criteria. Otherwise deadlines that are too short may originate decisions that are not properly justified.

xi) It makes sense for the costs of the panel to be paid by the parties or the economic sector where the disputes take place, since they originate such costs. The honorary fees, however, should ideally not be related with the outcome of the panel.

xii) Permanent panels may be a good solution if conflicts take place often, since they allow greater independence and specialization by the members of the panel and tend to yield consistent decisions over time. On the other hand, permanent panels may be too costly, especially if disputes seldom occur.

9.

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