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ELECTRICITY SECTOR RESTRUCTURING IN BELGIUM

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Introduction

In the first part of the paper we offer a survey of the organisation of the Belgian Electricity Sector. This part starts with the main characteristics of the Belgian Electricity Sector establishing data concerning electricity generation, consumption and distribution as well as a figure of the fuel mix. We then depict the regulatory framework prior to the adoption of the EU Directive 96/92 and the implementing Federal Electricity Act of 29 April 1999 (hereinafter the Electricity Act). Special attention is devoted to the scattered energy competencies among the federal, regional and local public authorities. Finally, we conclude part one with the structure, ownership and supervision of the electricity supply sector.

In the second part we describe and assess the new regulatory framework . The main issues of the Electricity Act are discussed and critically commented on. They encompass regulation; generation planning, investment and licensing for new construction plans; transmission network operator; network access and eligibility; unbundling of accounts; public service obligations and stranded costs. To a great extent the December 1999 report and recommendations of the Working Group of Experts on Electricity Liberalisation reflect these comments while adding others. On its turn, the Report and Recommendations have been incorporated in the Federal Government's Guidelines for finalising liberalisation of the electricity market.

Finally, the headlines of the recent Flemish draft electricity law are briefly mentioned.

1 ORGANISATION OF THE BELGIAN ELECTRICITY SECTOR

1.1 Main characteristics of the Belgian Electricity Sector

Belgium is a parliamentary democracy with a constitutional monarch. In consecutive reforms federalisation took place. Since 1993 Belgium is officially a federal state composed of three Regions (the Flemish, Brussels and Walloon) and three Communities (Flemish, French and German-speaking). The Regions have mainly economic competencies and are also endowed with authorithy on energy policy. The General data about Belgium are in table 1. Flanders represents about 58 % of the population with 60 % of the GNP and 63 % of the electricity consumption. Brussels houses about 9 % of the population with 14 % of the GNP and 7 % of the electricity consumption. For Wallonia the numbers are 33 %, 26 % and 30 %.

Table 1 *General data about Belgium, 1997*

General data		Indicator	
Area [km^2]	30 527.9		
Population [millions]	10.17	Density [inhabitants/km^2]	333
Gross National Product [billion EUR] [1]	218.6	GNP per capita [thousands EUR]	21.5
Work force [millions]	4.34	Working population	42.7 %
Energy consumption [PJ]	2 352	Energy per capita [GJ]	231.3
Electricity consumption [TWh]	73.3	Electricity per capita [kWh]	7 207.5

Source: BFE, NIS, MEZ, MTA.

[1] The conversion rate is: 1 EUR = 40.3399 BEF.

The Federal State and the three Regions and Communities elect their own parliaments directly, which constitute own governments. Most coalitions were composed of Christian Democrats and Social Democrats (the largest party in Wallonia). However, in June 1999 the Liberal and Green Parties won the elections and formed a tripartite government with the Social Democrats.

An overview of the Belgian electricity consumers is provided in table 2. Consumers are here defined as units that are connected to the grid. As in most nations the number of connections has augmented over the period 1970-1998. For low-voltage connections, the number of customers has grown by 33 %, due partly to the reduced family size. The total consumption grew by 315 %.The increase in number of high-voltage customers was 107 %. The electricity end-use itself rose by 134 %. (Since 1999 on the number of customers are no longer published by the power board).

Table 2 *Number of low- and high-voltage customers and end-use by type*

Year	low-voltage		High-voltage			
	Customers (#)	end-use (GWh)	Customers (#)	End-use (GWh)	of which industry (%)	of which services (%)
1970	3 724 978	5 923	21 984	21 786	87.6	12.4
1975	4 103 434	9 780	29 435	25 832	83.8	16.2
1980	4 480 410	13 779	34 361	31 141	81.8	18.2
1985	4 699 472	16 163	35 411	33 565	80.4	19.6
1990	4 835 038	19 132	37 773	39 976	79.2	20.8
1995	4 773 276	23 259	42 289	46 570	77.1	22.9
1996	4 852 283	24 432	43 034	46 973	76.5	23.5
1997	4 915 872	24 133	44 846	49 188	77.0	23.0
1998	4 964 610	24 591	45 530	50 937	76.5	23.5
1999	-	24 656	-	51 394	76,2	23,8
2000	-	24 990	-	53 820	76,6	23,4

Source BFE (1998; 2000)

In Belgium, three categories of generators supply power: private and public generators and autoproducers. In 1990, the three remaining private generators (Unerg, Intercom and Ebes) merged into a new company: Electrabel. This is the only private generator of distributed power nowadays. Electrabel produces most of the electricity in Belgium (see table 3: private generators). In 1978, the public generators established co-operation in SPE. Their market share is small: only 3.1% in 1994. In 1995, an agreement was reached between Electrabel, SPE and the government. One of the outcomes was that the SPE market share should rise to 15 per cent of the electricity generation in Belgium by the year 2010. A similar agreement has been signed earlier in 1981, with the 15% target established for the year 1995. This shows that the target is not felt as a strong obligation. Auto-generation is not widespread in Belgium. In 2000, the market share of the auto-generators was only 2.0%.

Table 3 *Electricity generation in Belgium by categories of generators*

year	Total		Private		public		auto-generators	
	GWh	%	GWh	%	GWh	%	GWh	%
1970	28 960	100.0	19 216	66.3	720	2.5	9 025	31.2
1975[1]	38 933	100.0	33 926	87.2	907	2.3	4 100	10.5
1980	51 015	100.0	45 735	89.7	1 753	3.4	3 527	6.9
1985	54 184	100.0	50 107	92.5	1 343	2.5	2 734	5.0
1990	67 162	100.0	63 036	93.8	1 660	2.5	2 466	3.7
1994	68 563	100.0	63 748	93.0	2 137	3.1	2 678	3.9

	Total		Public service		Independent		auto-generators	
	GWh	%	GWh	%	GWh	%	GWh	%
1995[2]	70 631	100.0	67 745	95.9	222	0.3	2 664	3.8
1996	72 359	100.0	69 444	96.0	239	0.3	2 676	3.7
1997	75 079	100.0	72 594	96.7	259	0.3	2 226	3.0
1998	79 492	100.0	76 747	96.5	317	0.4	2 428	3.1
1999	80 851	100.0	78 216	96.7	287	0.4	2 348	2.9
2000	80 160	100.0	78 243	97.6	344	0.4	1 572	2.0

[1] The classification of the generating units was changed in 1975: a number of units moved from "auto-generators" to "private generators".
[2] The classification of the generating units was altered in 1995: instead of "public" and "private" generators they are now divided into companies for "public utility" and "independent" generators; auto-generators remained unchanged.
Source: BFE (1998; 2000)

Table 3 shows total generation has grown by about 277 per cent during the period 1970-2000. Also the fuel mix has been changing drastically. Table 4 shows the installed capacity and the generation by type of fuel, distinguishing nuclear, fossil and hydro resources. The generation (not the capacity) based on fossil fuels is further divided in production based on solid, liquid and gaseous fuels. The generation by type of fuel is also shown in figure 1.

Table 4 *Installed capacity and electricity production in Belgium by type of fuel*

Year	Nuclear		fossil fuels				hydro[1]	
	MW	GWh	MW	GWh solid[2]	GWh Liquid	GWh Gaseous	MW	GWh
1970	..	49	..	7 490	14 642	6 537	..	244
1975	1 666	6 322	7 682	6 269	14 946	10 971	459	426
1980	1 666	11 909	8 211	12 464	17 283	8 540	1 128	820
1985	5 426	32 692	7 361	11 919	3 459	4 780	1 326	1 334
1990	5 500	40 546	7 235	16 767	1 132	7 822	1 405	896
1995	5 632	39 192	7 879	16 661	1 103	12 443	1 407	1 231
1996	5 693	41 150	7 751	15 756	1 019	13 235	1 407	1 200
1997	5 713	45 097	7 572	13 972	1 213	13 519	1 403	1 278
1998	5 713	43 889	8 272	13 613	2 235	18 254	1 404	1 501
1999	-	46 662	-	9 283	798	21 686	-	1 496
2000	-	45 746	-	11 055	560	19 988	-	1 707

[1] wind turbines (5.2 MW) and pumped storage included
[2] production based on recuperation of steam included
Source: BFE (1998; 2000)

Table 5 shows the number of distributors and their respective sales.

Table 5 *Electricity distribution: number of organisations and sales by type of organisation*

Year	private producers and distributors		Municipal departments		mixed intermunicipalities		public intermunicipalities	
	#	GWh	#	GWh	#	GWh	#	GWh
1970	5	8 544	54	1 040	35	9 318	10	1 646
1975	4	14 002	27	841	35	14 094	12	2 957
1980	3	17 608	19	1 048	30	18 853	11	4 068
1985	2	18 824	14	660	22	22 974	10	4 615
1990	1	22 322	13	804	20	28 042	9	5 838
1995	1	25 330	9	878	19	33 914	9	7 348
1996	1	25 180	9	915	19	34 938	9	7 954
1997	1	27 075	8	765	19	34 990	9	8 406
1998	1	27 914	8	795	19	36 168	9	8 465

Source: BFE (1998)

1.2 Regulatory framework

The law regulating the generation and distribution of electricity dates back from 1925. The liberal Electricity Supply Act[1] of 10 March 1925 constituted the legal foundation for electricity supply. Electricity generation is neither regulated by exclusive rights nor subject to the grant of a licence. Every natural person or legal person has the right to generate electricity to meet its own demand and the right to deliver electricity to natural and legal persons. Likewise, the municipalities and provinces may generate and deliver power to their constituencies. Access to the transmission grid is not provided for by any statutory provision. However, permits for rights-of-way for the construction of transmission lines are granted by regional authorities. No statutory provision requires the unbundling of generation and distribution activities.

The 1925 Act assigns municipalities the monopoly rights on electricity distribution for supplies up to 1000 kW. Supply to customers with a maximum demand in excess of 1000 kW is subject to competition. Every municipality or association of municipalities may grant a supply licence to a natural or legal person. As distribution of electricity became a regional competence under the state reforms, the Walloon region altered the threshold to 10000 kW by Decree of 2 November 1990. Actually are in the Flemish region customers with a demand not exceeding 4000 kW supplied by intermunicipal utilities. Municipalities decide autonomously how to organise their distribution monopoly. They can exercise their exclusive right individually or join with other municipalities in so-called intermunicipal utilities. The interest of the municipalities in intermunicipal utilities is confirmed by the Act[2] of 22 December 1986.

[1] 10 March 1925, *Belgian Official Journal*, 25 April 1925.
[2] 22 December 1986, *Belgian Official Journal*, 26 June 1987.

There are two types of intermunicipal utilities. When there is no private company involved, the public organisation carries out all the distribution related tasks. They are called the pure or public intermunicipal utilities (PIU). When a private company participates in the intermunicipal utility, the former takes care of the management and daily operation. They form the mixed intermunicipal utilities (MIU). There are 19 MIU providing about 80% of electricity distribution and 90% gas distribution and 9 PIU supplying the remaining 20% and 10%. Electrabel, the largest private generator, owns at least 50% of the share capital in every MIU.

In spring 1996 new articles of association for the MIU, the so-called third generation contracts, were agreed upon by Electrabel and the municipal boards. However, the European Commission opposed the new contracts as they contravened articles 85 and 86 of the EC Treaty. The Commission strongly objected to the exclusive right of Electrabel to deliver power, to the 18 year-term of the contracts, and to the 5% participation of the municipalities in Electrabel. After long negotiations, the Commission and Electrabel finally reached an agreement in April 1997. The duration was limited to 15 years. After 10 years in 2006 25% of the electricity demand of the MIU can be supplied by other generators. In 2011 they enjoy freedom of choice and the 5% share holding in Electrabel will end. Given that Electrabel remains majority shareholder in the MIU the freedom of the latter is rather theoretical.

In July 2001, the "Lambermont" agreement between the federal and regional levels assigns more authority on local government to the region. The Flemish region is in the midst of adopting a decree banning the MIV from the scene. Incumbent MIV'S may however phase out untill 2018!

The legal energy sector framework has not been developed in a clear way. This is due to three interwoven factors. Firstly, public authorities generally believed that electricity and gas issues were best taken care of by the Tractebel conglomerate, controlling most of this sector in Belgium. Secondly, independent think-tanks on energy policy in Belgium are weak, and no public utility commission was created to get a firm grip on the sector. Thirdly, the reform of Belgium from a centralised state towards a federal nation has scattered energy competencies among the different public authorities.

The reform of the Belgian State took place in successive waves. National legislative and executive powers were attributed to three regions, Flanders, Wallonia and Brussels, and to three communities, the Flemish community, the French community and the German-speaking community. Regions have powers in the field of energy policy. Each region and community has its own government and parliament. National legislative acts no longer have precedence over regional and community acts. Conflicts have to be decided by the Arbitration Court.

According to the Act[3] of 8 August 1980 regional intervention in energy policy was limited to domains bearing no influence on the global electricity supply. Only electricity distribution through low-voltage networks not exceeding 30 kV became a regional competence. Statutory provision 6 VII of the Act[4] of 8 August 1988 significantly reinforced the regional competences. With regard to electricity and gas, the regional aspects now comprise: the distribution and local

[3] 8 August 1980, *Belgian Official Journal*, 15 August 1980.
[4] 8 August 1988, *Belgian Official Journal*, 13 August 1988.

transport of electricity via networks not exceeding 70 kV, public gas distribution, new energy sources, energy recovery and energy conservation. Four areas requiring technical and economic indivisibility remain under federal authority: investment planning; nuclear fuel cycle; infrastructures of storage, transport and generation of energy and tariffs.

The federal parliament has not intervened very often in the energy sector. In 1981 the Belgian government presented its policy reaction to the 1973 energy crisis to the parliament that failed to present any global conclusions either to the government or to the public. The latest debate was announced for 1989 but never took place.

1.3 Structure, ownership and supervision

In 1990 the three remaining private producers, Unerg, Intercom and Ebes, merged into Electrabel. Although electricity production is free in Belgium, this merger resulted in a quasi private monopoly for Electrabel. Following the agreement in 1981, confirmed by a protocol in 1990, Electrabel and SPE concluded a major convention in 1995. Since the agreement in 1981, SPE has joined the three private producers in organising a modern central dispatch system for merit order loading of all their plants and in specific organisations for:

- investment planning, tariff and general policy in BCEO-CGEE
- central dispatch of the power system in CPTE
- grid investments and maintenance in Gecoli
- research in Laborelec
- nuclear issues in Synatom
- fossil fuel transactions in “Pool des Calories”.

The new structure of 1995 of the electricity sector is shown in figure 2.1. The central position is taken by a new “Participative Association”, a non-incorporated body. The association has no societal goals but is limited to the object of handling power and money. It has a capital of about 10.51 billion Euro of € (415.2 billion BEF) of which 0.13 billion Euro (5.2 billion BEF) are reserved profit shares for SPE. Of the remaining 10.38 billion Euro (410 billion BEF) 91.5 % belongs to Electrabel and 8.5 % to SPE. The convention states that SPE can increase its share gradually up to 15 % by 2005.

The real centre of operation of the electricity system remains CPTE, a restructured CPTE however. In the convention, the two previous daughter companies of Electrabel and SPE, viz. Gécoli and CPTE were restructured (figure 2). A new CPTE was formed by grouping the previous CPTE, owner of the national dispatching centre in Linkebeek, and the previous Gécoli, owner of the national transmission network of 380, 220 and 150 kV. The transport on lower voltage levels (70, 36 and 30 kV) will from now on also be under the authority of CPTE. As agreed in the 1995 convention, Electrabel and SPE have given their production plants and transport network in property or in usufruct to the new CPTE. All new power plants, built by Electrabel and SPE, will be property of CPTE. However, CPTE has assigned the management of

the power plants to Electrabel and SPE, and of the transport network to Electrabel. The new CPTE is responsible for the activities of the previous CPTE and Gécoli (Electrabel, 1997a).The new CPTE will now work through six committees as mentioned in figure 3. Also the electricity board BCEO / CGEE remains the common board to deal with the control committee CCEG and with public authorities mainly about investment planning, tariffs and accounting.

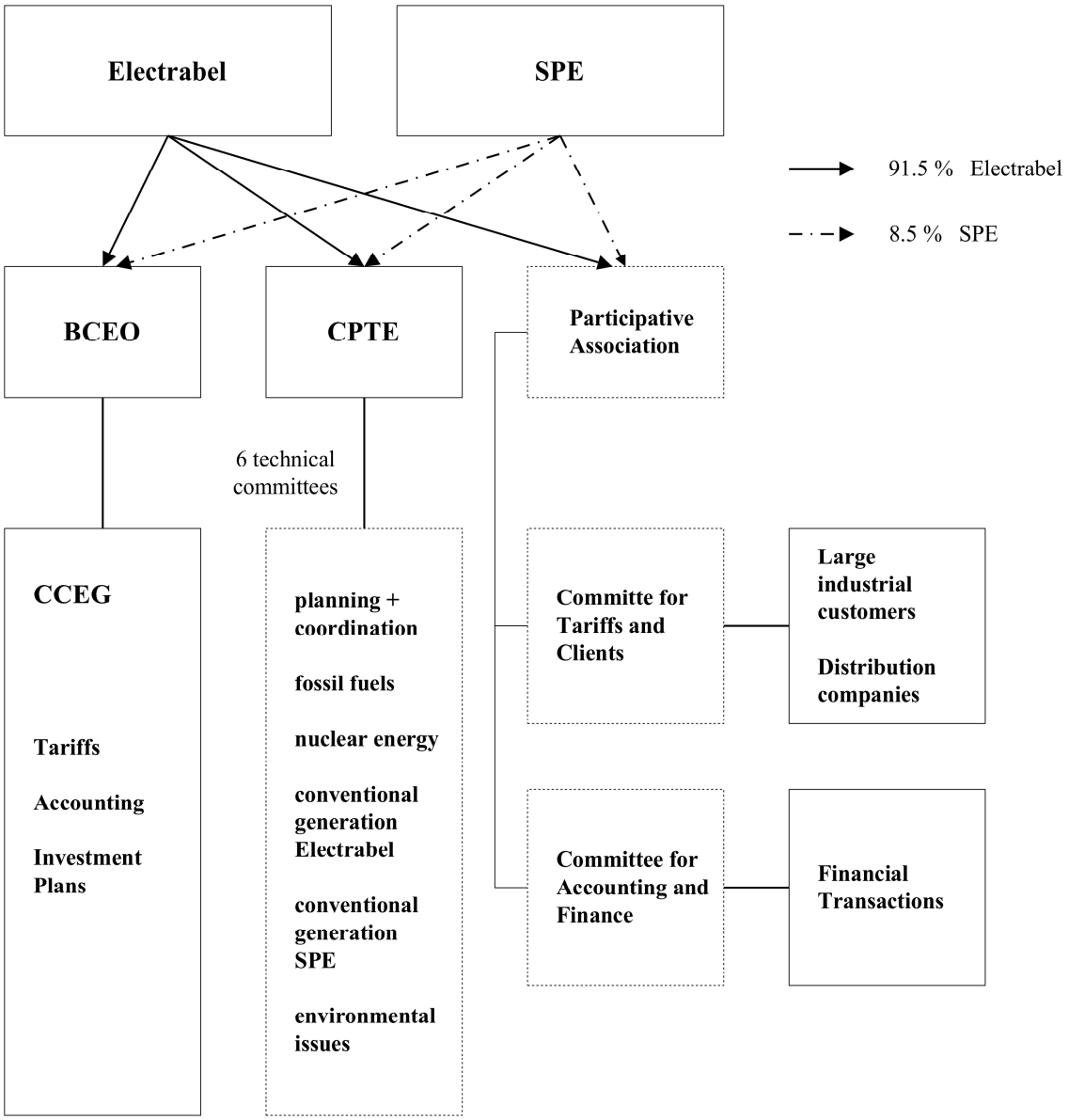
The January 1995 convention was a quasi-merger between Electrabel and SPE, which has fenced the Belgian electricity market for other companies and exterminated the last spurs of competition in the bulk power supply market in Belgium. It also linked the ownership and management of the production plants and of the transmission network in a tight and opaque structure.

In winter 1988-89 the take-over raid on the Société Générale de Belgique (SGB), parent company of Tractebel, resulted in the financial control position by the French holding Suez. Over the past years the control structure of Tractebel and SGB has been subject to considerable changes. In October 1996 the Belgian investor Mr. Albert Frère sold his minority stake of about 25% in Tractebel to SGB and used the cash to buy a share in Suez. SGB increased its stake in Tractebel from 40 to 65%. Tractebel reacted to this by merging with Powerfin in May 1997. In June 1997 Suez merged with another French utility holding company, Lyonnaise des Eaux. At that time, Frère holds a 11% stake via Electrafina in the Group Suez-Lyonnaise des Eaux (SLE). Tractebel's stake in Electrabel is equal to 39,9%. 1,93% is owned by the banking group Fortis AG. 53,16% is in free float.

In spring 1994, the government decided to sell out its 50% share in the gas import and transport company Distrigas. The PIU and MIU concluded an agreement to acquire 16,62% of the Distrigas' shares via Publigas, the latter controling a 50% - 1 share in Distrihold. The remaining 50% + 1 share is hold by Tractebel. Distrihold has a 16,75% stake in Distrigas. This means that the muncipalities own about 25% (16,62% + about ½ of Distrihold) of the Distrigas' shares. Tractebel's total stake amounts to 41,6%. 16,67% is owned by Belgian Shell and the remaining shares are under free float. Next to electricity and gas, Tractebel also plays a growing role in other utility sectors e.g. cable networks, water supply, waste collection and processing, communication technologies. It owns the dominant engineering department in Belgium and controls a variety of contracting firms, real estate projects and development aid projects.

In summer 1998 the SLE Group further strengthened its decision-making power over Tractebel in which its holds the majority through its 99,4% stake in the Société Générale de Belgique. The Group appointed Tractebel to its leading energy pool. All previous steps undertaken to guarantee the Belgian autonomy of Tractebel (its articles of association have been modified in June 1997 to prevent the controlling shareholder from obtaining the majority at the board of directors; an independent strategic committee of managers has been set up) have failed.

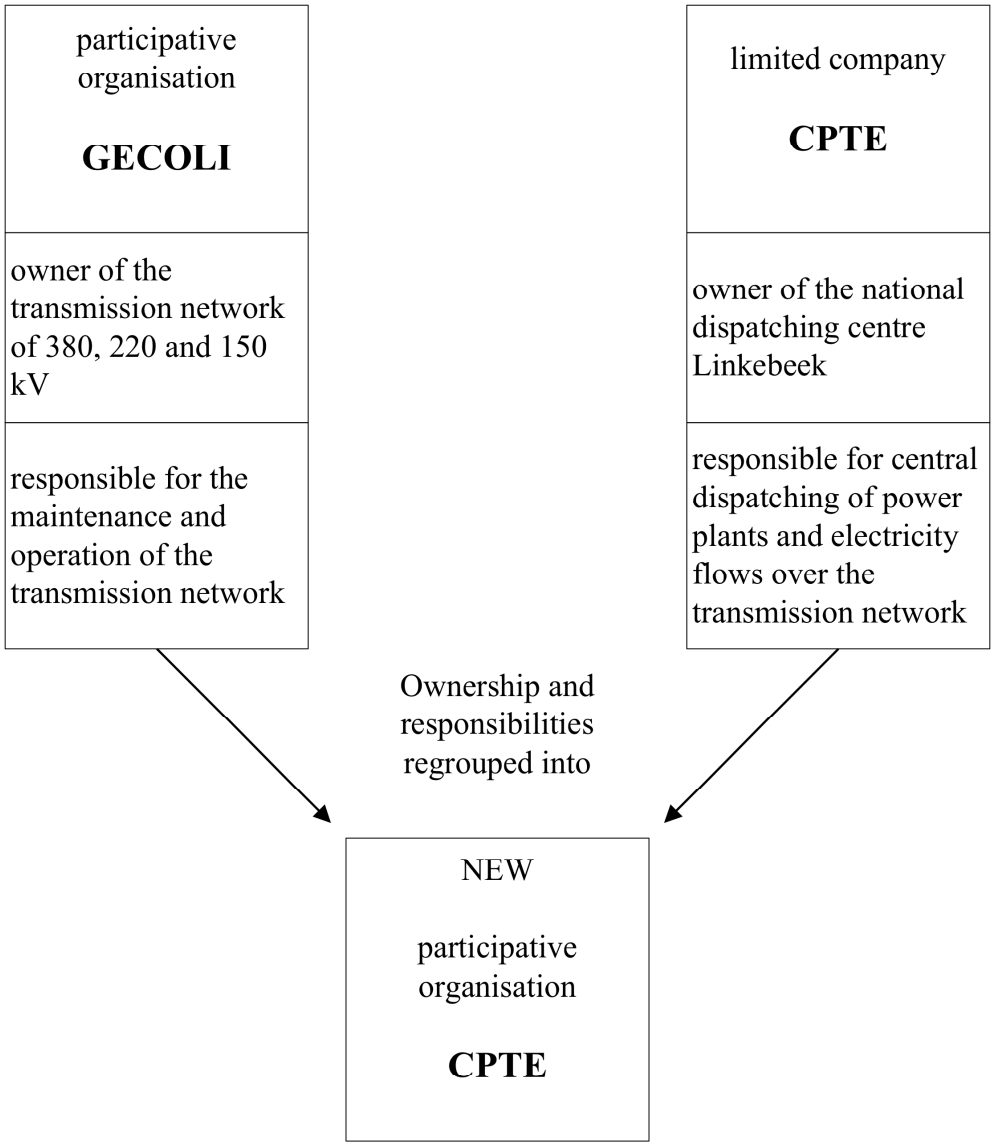
Figure 2: Structure of electricity generation and transmission in Belgium (since January 1995).



= new structures (January 1995)

BCEO = Board of the Electricity Companies
CCEG = Control Committee for Electricity and Gas
CPTE = Coordination of Production and Transport of Electricity
SPE = Public Power Producers

Figure 3: The grouping of Gécoli and former CPTE in the new CPTE.



Source: Electrabel (1997a and b).

At the end of February 1999, the strategic committee advised the board to appoint Mr. Jean-Pierre Hansen, Electrabel's CEO, as president of Tractebel and to dismiss Mr. Philippe Bodson who developed Tractebel in an international group. In March 1999 SGB took over the French energy company Elyo. In August 1999 the SLE Group launched a bid on the remaining 49% shares of Tractebel. Early November 1999 SLE announced the acquisition of 96% and realised its goal of full control. As a result, the Group also obtains the control of Electrabel and Distrigas. That same month Electrabel took over EPON, the biggest of the four Dutch electricity generators.

The supervision of the electricity sector has been conferred upon the Control Committee for Electricity and Gas (CCEG). The CCEG is a very special organisation, resulting out of the Cupertino in the 1950's between trade unions and employer organisations in order to increase productivity and prosperity in the country. It is a clear example of the functioning of a corporative economy, where different private parties and not the elected government take initiative. First, the Control Committee for Electricity was established in 1955, and in 1964 the gas distribution sector was added to form the CCEG. Figure 4 shows the composition of the CCEG. The control is carried out by the social partners, while the government has only a limited observatory role.

As a first clear example of a corporative economy, the agreement for CCEG started a tradition of conventions, characterising and controlling the oligopolistic structure of the electricity and gas supply industry in Belgium at present (Suetens en Billiet, 1986, p.41). After the parliamentary debates concerning energy policy and the role of the government, an executive decree provided the transformation of the CCEG into a department of public utility, with maximum autonomy. It was confirmed by a convention between employers and trade unions of the sector. Despite the legal recognition of its objectives and authorities, the CCEG remains basically a convention. The basis for submitting the controlled organisations to the authority of the CCEG is still a private agreement, voluntary signed by the controlled parties (Suetens en Billiet, 1986, p.52). The statute remains unclear: it is not a government institution, but a private organisation, that wants to gain the prestige of an institution of public utility, though its objectives and activities are not corresponding.

In their study Suetens and Billiet (1986) conclude:

"As a conclusion to the previous questions it must be stated that the CCEG is, in the present situation and in juridical and technical aspect, an actual organisation without legal personality, that has a legal assignment" (p.63)

"It is by law an unseen phenomenon that an institution, which has the legal assignment to supervise the general interests and benefits prerogatives, has on the obligations side a no man's land. It does not correspond to the principles of rationality, legal security and precision." (p. 63-64).

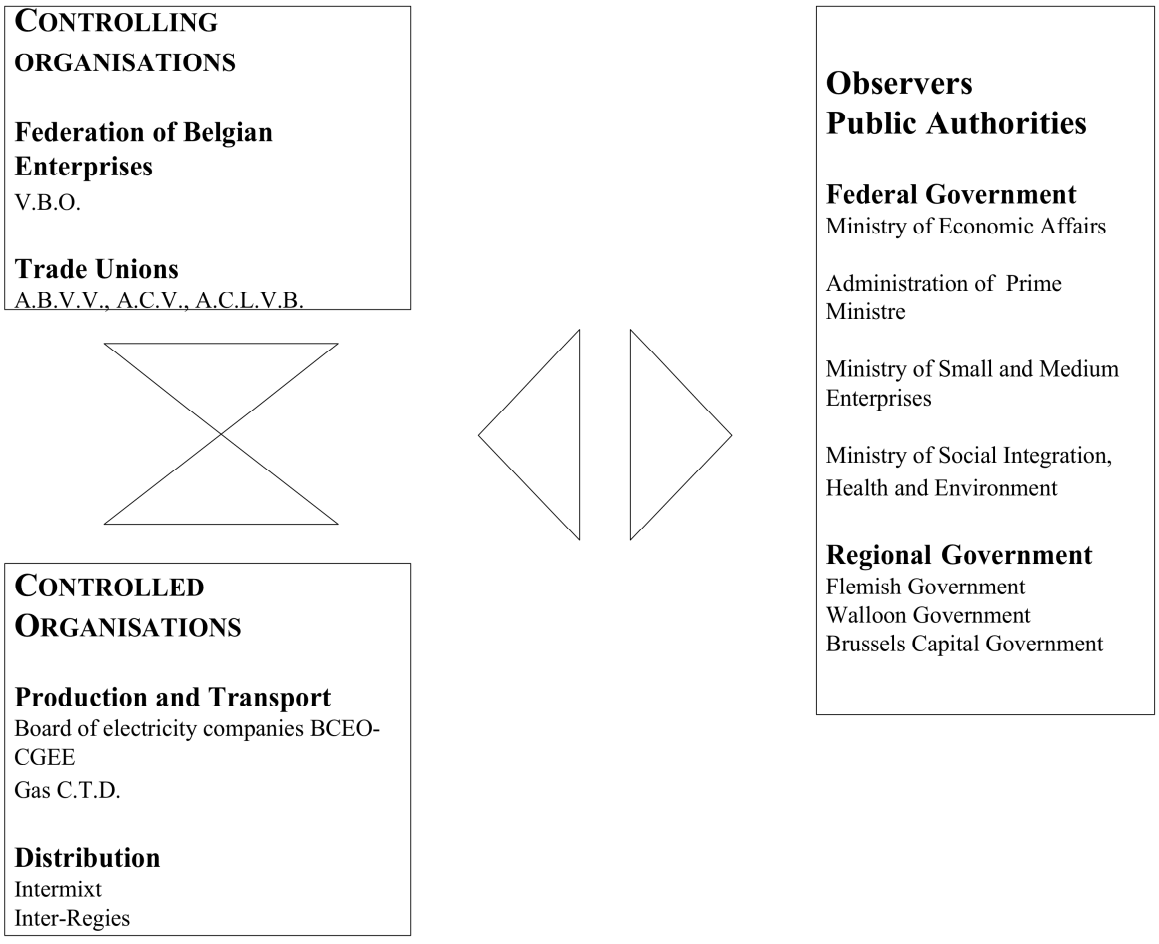
According to the Royal Order (NR. 147 of 30 December 1982)[5] the objective of the CCEG is to ensure that the technical, economic situation and tariffs in the gas and electricity sector, as well as its evolution, correspond to the general interest and the general energy policy goals. The tasks of the CCEG are outlined as follows:

[5] Royal Order n° 147 of 30 December 1982 modifying articles 170, 171 and 172 of the law of 8 August 1980 concerning budget propositions 1979-1980, *Belgian Official Journal*, 19 January 1983.

- to give recommendations or advises concerning the application of the electricity and gas policy and related matters;
- concerning management of the sector the CCEG has authority concerning :
    - the destination of receipts between parties
    - the tariffs
    - the investment plans proposed by the companies concerned and their financing, and particularly the national power system expansion plans for the generation and transmission of electric energy
    - technical co-operation and normalisation
- to give recommendation on the national power system expansion plan for the generation and transmission of electric energy.

In practice, the CCEG works with a small secretariat, housed in the Tractebel-Electrabel office buildings. The secretariat is paid by the electricity sector and benefits from the same statutes and salaries as management staff in the power sector. The secretariat owns but a limited expert capacity and depends on the supply of documents through the BCEO-CGEE.

Figure 4: Composition of the CCEG.



The CCEG has been successful in realising the 1955-goals (rationalising the sector, streamlining procedures and tariffs, raising productivity, etc…). Due to this success the CCEG had gained a quasi exclusive position as 'public voice' in the electricity sector in Belgium. It is only in the last years that this position has been challenged by the important changes that are coming up in the world-wide electricity markets.

2 THE NEW REGULATORY FRAMEWORK

2.1 The 1999 Federal Electricity Act

The EU Directive 96/92 was implemented in Belgian law by the 1999 Federal Electricity Act[6] (hereinafter the Electricity Act), adopted on 29 April 1999. The Electricity Act only copes with the federal energy competencies. As distribution and supply of electricity are regional powers, the provisions of the Directive relating to those issues need to be implemented by the Regions. The Flemish Region has drawn up a decree by July 17, 2000. The Walloon Region followed on April 12, 2001 and Brussels law giving passed the council on July 4, 2000. The main issues of the federal Electricity Act encompass: regulation; generation planning, investment and licensing for new construction plans; transmission network operator; network access and eligibility; unbundling of accounts; public service obligations and stranded costs.

Regulation

The Electricity Act installs a new regulator, the Commission for Regulation of Electricity and Gas (CREG), charged with the advisory task vis-à-vis the authorities regarding the organisation and operation of the electricity and gas market. It also supervises and controls the application of the electricity and gas laws and their executive orders. CREG is responsible for the eligible market. The CCEG continues to control the non-eligible or captive market. The CREG consists of a Management Board and a General Council. The Management Board became operational on January 10, 2000, and is responsible for taking the measures necessary to perform the tasks entrusted to the CREG. It is composed of a chairman and five members each heading a section. The six sections encompass market disputes, technical operation of the electricity and gas market, control over prices and accounts on the electricity and gas market, administration and finance. The General Council supervises the Management Board. The former determines guidelines for the application of the laws and orders, evaluates the tasks performed by the Management Committee and supervises the co-ordination of the activities of CREG and CCEG.

The CREG may request the electricity undertakings on the Belgian market to provide all relevant information and to control their accounts on the spot. Belgian electricity companies covering a market share larger than 25% of the electricity market or a segment of it, must integrate in their internal decisionmaking process appropriate mechanisms to avoid conflicts of interest by allied or associated undertakings leading to the adoption of decisions or strategies that might harm the essential interests of the consumers or the good performance of public

[6] *Belgian Official Journal*, 11 May 1999.

service obligations. The CREG makes non-binding recommendations inspired by the rules of corporate governance.

The CREG establishes a conciliation and arbitration service to settle in the electricity sector disputes concerning transmission network access, application of the grid code and tariffs for regulated access. By Royal Order the transmission network operator can be obliged to be subjected to this service. At the CREG an "Appeal Chamber" decides upon pre-contractual disputes between the network operator and the network users relating transmission network access. Its competence is limited to pre-contractual disputes. This chamber takes administrative decisions. To ensure compliance, the CREG is competent to impose administrative fines. Disputes about contractual rights have to be brought before the courts. Compliance with the 1991 Competition Act continues to be the prerogative of the competition bodies. A Royal Order will outline co-operation between them and CREG.

The General Council is a clone of the CCEG. It comprises[7] representatives of the federal government, employers (FBE), employees (trade unions) and SME organisations, generators, distribution companies (Intermixt and Inter-Regies) and consumers. The regional governments are also invited to send representatives. However, contrary to the composition of the CCEG, the CREG constitutes a larger platform as it expressly includes representatives of SME and consumers, and there is a proposal to add representatives of the environmental NGO's.

Generation planning, investment and licensing for new construction plants

An indicative program for power generation replaces the national investment plan. Accordingly the National Committee on Energy will be dissolved. In collaboration with the Administration for Energy the CREG will draw up this program having no binding character. For the construction of new generating capacity, the 1999 Federal Electricity Act has opted for an authorisation procedure. A Royal Order lays down criteria for the granting of constructing licences. These criteria relate to :

- the safety and security of the electricity system installations and associated equipment;
- energy efficiency;
- the nature of primary sources;
- the characteristics of the applicant such as technical, economic and financial capabilities.

The individual licence is granted by the Federal Minister for Energy on the advice of CREG, but the regional authorities may impose licences relating to their competencies in environmental protection and spatial planning. The government determines the procedure, the circumstances for review or withdrawal, and the effects of transfer of installations, change of control, merger or scission on the licence.

[7] The composition in detail of the CREG is dealt with by Royal Order of 3 May 1999, *Belgian Official Journal*, 15 June 1999.

In order to streamline procedures for obtaining a licence, co-operation agreements will be concluded between the State and the Regions. Moreover, a legal framework is created for assigning domain licences for constructions gaining electricity via water, flows or wind in maritime areas. The construction of new direct lines, not forming part of the distribution grid, is subject to an individual licence granted by the Minister. On the advice of CREG, a Royal Order determines criteria and procedure for the granting of the licence, which can be made dependent on the refusal of access to the transmission network. The CREG investigates the applications of licences for constructing new electricity generation plants and new direct lines and controls the observance of the criteria and terms of the granted authorisations.

Transmission network operator

The operation of the transmission network is taken care of by one network operator also responsible for ensuring the maintenance and development of the transmission network in a given area and its interconnections with other networks in order to guarantee security of supply. The operation of the distribution network is a regional competence requiring implementation by decree. The transmission network operator must be established in the form of a private company, being a separate legal entity. It must refrain from electricity generating and supplying activities except for accessory activities necessary to guarantee the technical maintenance. Besides, it may not have direct or indirect shareholdings in generators, distributors or agents.

The government determines more precise provisions to ensure the operator's independence. These provisions deal with the composition and operation of the management boards , "corporate governance" rules, the financial independence of the personnel, the insurance of confidentiality of commercial data regarding network users and the prevention from any discrimination between (categories of) network users in favour of associated companies.

Royal Order of 3 May 1999 concerning the administration of the national transmission network for electricity[8] designed several "corporate governance" mechanisms. They relate to the presence of non-executive[9] and independent directors at the board of directors, and the creation of a corporate governance committee, audit committee, remuneration committee and management committee. In particular, the corporate governance committee will propose the independent directors and, even more important, investigate each conflict of interests between the network operator on the one hand and a dominating[10] shareholder or a company associated or connected with a dominating shareholder. Because of democratic participation these essential aspects better should have been determined by statutory provision or by an ordinary act[11] of the federal parliament.

The Minister for energy designates the network operator proposed by the network owners possessing individually or globally a part of the system covering at least 75% of the national

[8] *Belgian Official Journal*, 2 June 1999.
[9] They may not be a director of the network operator or of one of its subsidiaries.
[10] Every natural or legal person and every group of persons adhering to the same line of action, who directly or indirectly own at least 10 % of the of the operator's capital or of the voting rights attached to the shares issued.

territory and two thirds of the territory of each Region. In practice, this cannot be anyone but the CPTE . The designation lasts for an extendable time-period of 20 years. The government also draws up the grid code as well as the overall structure of the tariffs for interconnection. The tariffs are determined in accordance with basic principles like non-discrimination, transparency, unbundling, cost accounting, and reasonable remuneration for network investment, geographical uniformity. The transmission network operator also designs a plan for developing the network and its personnel is bound by professional secrecy. The designation of the distribution network operators is a regional competence and requires implementation by regional decree.

June 28, 2001 CPTE founded a new daughter company ELIA Ltd., owning all activities related to the high voltage grid from 380kV to 20 kV. ELIA has three main tasks: operating the system, maintaining and developing the high voltage grid.

The founding ELIA shareholders are CPTE and Electrabel (1 share) and Publi-T (1 share). The latter is the co-operative company representing the Belgian municipalities (now working through PIU and MIU – see part 1).

ELIA's shareholders and the federal government reached an agreement on the desired shareholder structure: Publi-T will take a 30 % stake in ELIA, with 40 % of the shares being sold on the stock exchange. ELIA's board will consist of 6 independent directors, 3 representatives of Electrabel and 3 representatives of Publi-T. The present management team of 7 staff members are Electrabel-SPE alumni.

Network access and eligibility

The basic formula for access to the electricity transmission network is the system of regulated third party access based on published tariffs for use of the network. Access may be denied on the grounds of insufficient capacity and non-compliance with criteria laid down in the network code. Every refusal must be reasonably motivated. The Electricity Act also states that system of negotiated access remains applicable to cross-boarder transport. Besides, a royal order may apply the latter system to certain categories of transactions implying huge quantities meeting the criteria pertaining quantities of electricity, duration and continuity of obligations set by the government on advice of the CREG. A Royal order may authorise the minister to restrict or prohibit import of electricity destined for eligible consumers in Belgium from other EU Member States where the level of market opening is lower than the Belgian (approximately 35%) or when the consumer is non-eligible according to the law of those Member States. This is the principle of reciprocity.

The definition of eligible consumers was first limited to final consumers of more than 100 GWh per year on a consumption site basis including autogeneration. Since July 2000 the threshold is 20 GWh. The government is authorised to lower the eligibility threshold to final consumers connected to the transmission grid to ensure their entire eligibility at least by the end of 2006. Similarly, the distribution utilities are not eligible before January 2007 except for the volume of electricity consumed by the final consumers designated as eligible within their distribution

[11] Amendment No. 26 of the MP's Clerfayt and Hotermans.

system, in order to supply them. The regions may advance eligibility by declaring butions compansies, eligible particular final consumers within the distribution grid. Nevertheless, the extent of the distribution companies' freedom of choice depends on their contractual obligations, in particular the third generation contracts, vis-à-vis Electrabel. The transmission network operator will submit tariffs for interconnection and use of the grid to the CREG for approval each year. The tariffs should take into account certain guidelines such as non-discrimination, transparency, cost-related, optimisation and uniformity. The Royal Order determines the rules relating to the procedure for submission and approval, publication, reports and data, basic accounting principles and cost-controlling objectives. The CREG must be notified of any negotiated contracts.

ELIA wants to register and approve the companies demanding grid access. Approval is obtained by concluding a framework agreement with ELIA. The access responsible party must ensure quarter-hourly balancing between total power injections and off takes by the grid users for which it is responsible. It also undertakes to comply with ELIA's access procedures, e.g. it must submit to ELIA before 12 noon on the day prior to transmission a schedule of the next-day power that will be injected or offtaken per injection point, per offtake point and per time period.

Price regulation

On the recommendation of the CCEG, the Federal Minister for Economic Affairs determines the maximum prices for supplying electricity to non-eligible final consumers. The CCEG remains competent for price control in the captive segment of the electricity market. The minister can also set maximum prices, on the recommendation of the CREG, for the supply of eligible final consumers. Prices are composed of costs of service and a rate of return. The Electricity Act justifies maximum prices as necessary to avoid cross-subsidisation, to guarantee that non-eligible consumers receive a reasonable part of the generation cost improvements resulting from liberalisation. Maximum prices will also allow the Minister to tune prices to those faced by customers in the same market segment in other EU Member States, while taking into account the special characteristics of the distribution sector.

The Flemish region is challenging the price setting monopoly of the CCEG, mainly by according free power to its households. The Flemish government on July 13, 2001 decided that every household yearly gets its first 100 kWh consumption for free, augmented by an additional free 100 kWh for every member of the household. So the "standard" 2 kid – 2 parent household enjoys a free 500 kWh every year. The (green) federal secretary of energy opposed this proposal, but the Flemish government argues that this free supply to domestic customers is a social public service obligation guaranteeing domestic customers a fair share in the benefits of liberalisation.

ELIA announced a provisional scale of tariffs for grid access (valid until September 30, 2001). There is a choice between power subscription for a period of one year or of one month (handling charges per contract are invoiced at 1000 € for a 1-year contract and 250 € for a 1-month contract). The tariff scale differs along the voltage level and there are terms added for additional power, ancillary services and reactive power supply.

For financing the CREG a levy of 125 euro/GWh is imposed on all used energy, including selfproduction.

Because the CREG does not accept the propositions set forward by ELIA, the latter was not designated at its founding as the formal grid operator.

Unbundling of accounts

To avoid discrimination, cross-subsidisation and distortion of competition, vertically and horizontally integrated electricity and gas undertakings shall keep in their internal accounting separate accounts for their generation, transmission and distribution activities, and where appropriate, consolidated accounts for non-electricity or non-gas activities as if they were carried out by separate undertakings. The explanations in the annual accounts shall also mention significant transactions with allied and associated undertakings.

Public service obligations and stranded costs

The Electricity Act empowers the federal government to impose, on the advice of the CREG, public service obligations relating to regularity, quality of supply, and supply of non-eligible consumers. It may also create a fund monitored by CREG to cover the real net cost of these obligations and the stranded costs. This fund will be fully or partly financed by extra charges on network tariffs or by levies imposed on all or objectively determined categories of consumers. The Royal Order regulating this financing needs to be confirmed within six months by statutory instrument.

2.2 An assessment of the Act and its implementation

The necessary implementation of EU-directive 96/92 offered a unique opportunity to set up a legal framework establishing a real competitive electricity sector. However, the weakness of the directive, the quite different initial structures of the industry in the member states, as well as the attitudes of some governments towards the restructuring process may have set back this opportunity. The final outcome remains uncertain. In Belgium, the extreme urgency of the reform process in Spring 1999 and the strong interests of SLE-Tractebel have been weighing on the liberalisation process.

Relating to the composition of the CREG, the splitting of the CREG into a Management Board and a General Council is not the best choice . Three entities (CCEG, the General Council and the Management Board within the CREG) are involved in regulation putting the Management Board in a difficult position. The General Council supervises the Management Board. The establishment of the General Council hinders the functioning of the CREG as an independent and specialised regulator. The presence of the power generators within the Council supervising the Committee, that on its turn controls the generators, confirms their self-controlling role as in the CCEG. So, power generators are controller and controlled at the same time. Accordingly, the

CREG should be restricted to the Management Board[12]. This restriction has been adopted e.g. in the VREG.

Moreover, the competencies and responsibilities of the CCEG[13] and CREG, exclusive of the General Council, are not clearly drawn up and tuned. The CCEG and CREG will, for instance, co-operate to verify the absence of cross-subsidisation between categories of consumers. However, the Act does not stipulate which of the organs holds the final decisionmaking power. For reasons of transparency, efficient control and good regulation it is to be preferred to have one single regulator, the CREG. The 1999 Electricity Act does not mention any form of agreement with the regions e.g. for establishing a single regulatory body of the electricity sector, distribution of electricity included, or for safeguarding smooth tuning among the regulatory bodies.

For reasons of democratic control it would be better to organise the CREG as an agent of the legislative power. The agent should receive guidelines from and be controlled by the legislative power. He should also submit an annual report. The regulating and controlling functions of the CREG should be restricted to the Management Board. The authority of the General Council being to a large extent a face-lift of the CCEG, the "captured regulator", goes back to the post-war period when the employers' federation and trade unions were favouring an 'economy of deliberation' over nationalisation of the electricity supply industry. Besides, the government being the 'agent' of the legislative power merely performs an observing role.

Control over the transmission network by owners of generation assets provides a serious impediment to the development of a competitive electricity market (Della Valle, 1997). The concern is that owners of generation assets influence generation prices by determining the way the transmission system is used, operated, maintained or expanded. Most observers of the electricity restructuring process prefer separating or unbunding transmission from generation assets. Belgium has opted for operational unbundling by means of an independent network operator. How independent ELIA will operate from its 30 % shareholder Electrabel, is undear.

Although the Royal Order of 3 May 1999 enumerates various "corporate governance" provisions for guaranteeing the operator's independence, one may doubt its truly independence in practice and effective control over the system. To ensure more independence, we have advocated handing over the entire share capital[14] of the transmission network operator to the state, i.e. the federal and the three regional governments. Prior to 1995 the balance among generators and between generators and the network was efficiently administered by the pre-CPTE. Therefore, operation of the network might have been easily attributed to the pre-1995 CPTE, prescinded from the Electrabel-SPE construction. Besides, if one intends to implement the 'spirit' of Directive 96/92 and to create a transparent and efficient ISO one should have

[12] See amendment No. 5 of the MP's Van Dienderen and Deleuze.
[13] In amendments Nos 20 to 23 MP De Grauwe even argued to abolish the CCEG as the regulator for the 'captured market'.
[14] Like the Swedish Svenska Kräftnet.

isolated the maintenance and development of the network from the actual CPTE and again have conferred these functions upon the pre-1995 Gecoli. With regard to the calculation of transmission tariffs we regret that standards of efficiency and benchmarking are not embedded in the Electricity Act.

With regard to the indicative program for power generation, CREG should not publish its estimation of the evolution of the electricity demand and the corresponding need for means of production. The equilibrium between electricity demand and supply of production capacity should be realised by the market. Therefore, governmental intervention by publishing this indicative program may disturb the market, and result in a liability position for the government.

For the construction of new generating capacity, Belgium has opted for an authorisation procedure. By generally stating that the construction of new power plants is subjected to a federal licence, the Act de facto infringes the competency of the Regions on granting licences for generating capacity based on rational use of energy or renewable energy sources. The construction of new direct lines, not forming part of the distribution network, is also subjected to a ministerial licence. The granting may be made dependent on the refusal of network access. Again, the Electricity Act implicitly erodes the regional competence by not defining the level of voltage of the direct lines.

The basic formula used for transmission network access is the system of regulated third party access. Suppliers and eligible customers have a right of access on the basis of published tariffs for use of the network. Access can be denied on grounds of insufficient capacity and non-compliance with the criteria laid down in the network code. However, the Electricity Act also states that the formula of negotiated access remains applicable to cross-border transport. Moreover, a royal order may apply the latter formula to bulk transactions. We argue that one should stick to one[15] system of network access: either negotiated or regulated access. Regulated access is to be preferred assuming that it is accompanied with good regulation. A mixture of two systems inevitably brings about discrimination and cross-subsidisation between categories of consumers.

The definition of eligible consumer is limited to final[16] consumers consuming more than 20 GWh per year on a consumption site basis and including autoproduction according to criteria established by royal order. However, the notion consumption site is not defined so that it may apply to undertakings forming part of the same industrial group or consumers forming a consortium or living in the same industrial area. This interpretation is compatible with the opinion of European Commission allowing cumulative calculation. In this regard we regret the lack of the notion consumption site in the electricity bill itself.

[15] See amendment No. 2 of the green MP's Van Dienderen and Deleuze and amendment No. 15 of the liberal democratic MP's Van den Abeelen, Lano and De Grauwe.

[16] In amendment No. 17 the MP De Grauwe suggested to replace "final consumer" by "consumer", so that distribution companies are included. Simultaneously, the threshold of 100 GWh annual consumption is to be replaced by 1 GWh. In amendment No. 3 the MP's Van Dienderen and Deleuze also advocate the inclusion of the distribution companies.

The distribution companies are not eligible before 2007 except for the volume of electricity consumed by the final consumers designated as eligible within their distribution network in order to supply those customers. However, the extent of their freedom of choice depends on their contractual obligations vis-à-vis Electrabel. The regions may however advance their eligibility by declaring their final consumer within the distribution network to be eligible. To avoid that generators seated in other Member States with a lower level of market opening than the Belgian are given a "free ride", the principle of reciprocity has been integrated.

Distribution companies should be regarded as eligible consumers. In other EU Member States, except for France and Italy where there are big national public generators, distribution companies are already eligible. Distribution companies should also be treated equally like other final consumers in order to reduce cross-subsidisation. Electrabel maintains its competitive position by charging low tariffs to large industrial consumers, while maintaining high tariffs for small consumers and SME's. According to its 1996 annual report Electrabel realised a gross profit of 932 million Euro of which 94% (878 million Euro) out of the MIU. The sales through the MIU represent 60% of the electricity sales. 1 kWh sold through a MIU provides approximately a net profit amounting to ten times the net profit resulting out of a direct sale to large consumers. Because of the more irregular demand pattern of non-industrial consumption, it is normal that non-industrial prices contain a larger mark-up above costs than industrial ones, but the difference applied in Belgium is excessive. If the distribution companies or small consumers are not directly eligible, the small consumers and SME's will probably be 'captured' for a long time within an electricity supply industry charging tariffs at the higher end in Europe. On the contrary, tariffs charged on large industrial consumers are at the lower end in Europe.

The 1000 kW threshold in the 1925 Act is relevant for defining eligibility. It does not require institutional changes and distribution companies are automatically included. Later on then, the non-eligible or 'captured consumers' can have free choice in a phased way, starting immediately with consumers above 1000 kW and from spring 2003 onwards consumers above 100 kW. By the end of 2003 all consumers should be free. The Flemish Region has adopted this faster pace and guarantees full eligibility by July 2003.

The transition to an open and liberalised electricity supply industry justifies the imposition of public service obligations. In this regard the Act empowers the government to impose obligations relating to regularity and quality of supply and the supply of non-eligible consumers. It may also create a fund, monitored by the regulator, to cover fully or partly the real net cost of the public service obligations and the stranded costs. The fund will be fully or partly financed by extra charges on network tariffs or by levies imposed on all or some categories of consumers. The order regulating the financing of this fund needs to be confirmed within six months by statutory ruling.

Public service obligations will be a necessary measure in Belgium because of the long tradition of trade union commitment, e.g. regarding social tariffs. But public service obligations money should not be reserved for continuing the system of national uniform tariffs. All categories of final consumers should be required to contribute to the fund since extra charges on network

tariffs might hinder competition between market participants. In the bulk market of electricity we find it difficult to imagine any public service obligations requiring the establishment of a special fund. On the contrary, in the retail market the public service obligations encompass social obligations, such as the obligation to be connected, the minimum service for small consumers, special tariffs for special consumers, and environmental obligations, such as promotion of rational use of energy at the energy-demand side and promotion of renewable energy sources and energy efficient generation at the energy-supply side. In the bulk market they merely seem to be disguised stranded costs. Although stranded costs should be restricted to the initial construction of the nuclear sector in the 80's and not to cover the costs relating to retirement of personnel, it is finally up to the European Commission to decide what is to be understood by stranded costs.

2.3 Working Group Report

In 1999 a Working Group of Experts in Electricity Sector Liberalisation was established (hereinafter the Working Group) and presented its Report and Recommendations by mid December 1999. The Recommendations relate in particular to supervision, transmission, market opening, distribution, CHP and nuclear generation.

Supervision

The Working Group recognises that power prices in Belgium are much higher than in other European countries, in particular those for households and SME's. This is due to an insufficient control of costs by the CCEG and because amortisation of infrastructure has been driven faster and at a higher rate than real economic depreciation of the generation and transmission equipment. Moreover, the independence of the CCEG is questioned in the report. Therefore, the report makes the following remarks towards the CCEG:

- to add representatives of the industrial consumers, the SME's and the households to the controlling organisations;
- not to ground tarification on a price-cap system, taking into account the important source of savings that result from accelerated depreciations;
- to base future tariffs on a detailed evaluation and efficient control over all cost categories, including the cost of capital.

In addition, the Working Group recommends that if the CCEG has not begun to implement reform within three months and are not effective within a year, then the regulation of captive consumers should go to the CREG. With regard to the composition of the CREG, the Working Group argues for avoiding the market operators – generators, distributors and transmission network operator – to have voting power in the General Council and for fortifying its investigation and intervention powers.

Transmission

To ensure the actual independence of the transmission network operator, the report recommends the following:

- to confer the operation of the transmission network upon a new undertaking in which the CPTE brings in the right of usufruct over the corresponding activity;
- to involve the public sector (intermunicipal utilities, Regions and Federal State) in taking shares in this undertaking, while ensuring that no single or group of private shareholders together acquires more than 50% of the capital or more than 20% of the voting rights attached to the shares;
- to determine the rent in Belgian francs in exchange of the contribution in usufruct in such a way that this figure does not exceed the compensation received by the undertaking being member of the BCEO-CGEE for the planning and co-ordination activity.
- to ensure the control over tariffs by means of the cost-plus method, at least during a transitional time-period of 3 to 5 years.

Market opening

The majority of the Working Group recommends a revised market opening:

- The following categories of consumers should become eligible on the following dates:
  - July 2000 : >= 20 GWh per location.
  - January 2002 : >= 10 GWh per location.
  - January 2003 : >= 1 GWh per location.
  - January 2006 : all consumers.
- Distribution companies are eligible for the volume of electricity consumed by final consumers designated as eligible within their distribution network in order to supply those consumers:
  - immediately for those consuming more than 20 GWh.
  - January 2005 for all other consumers.
- With regard to small customers particularly households:
  - to endow the CREG with the controlling power over tariffs, if by the end of 2000 prices charged to most representative classes of customers are much higher than in neighbouring countries.
  - to make distribution companies eligible if, in spite of this, by the end of 2001 electricity prices exceed those in neighbouring countries.
- To render eligible CHP and renewables generators and the customers purchasing significant amounts of these types of power.

Distribution

The report advises to split off the sale/resale of power to eligible consumers and the actual network operation into two separate legal entities, to confirm the role of the municipalities as distribution network operator and power supplier to captive consumers, and to have the Regions decide about which legal entity will be responsible for supplying the captive consumers. With regard to eligible consumers, they recommend the intermunicipal utilities to create either commercial agencies or to participate in the capital of supply companies, to offer every

interested public or private supplier the possibility to supply on the basis of licences and to submit all these suppliers to corporate taxing.

The Regions should appoint the distribution network operators upon binding advice of the municipalities. The distribution network operators have to be legal entities operating "at arm's length" from electricity generators and suppliers to eligible consumers. They should also perform the strategic management functions themselves and should not necessarily have the entire ownership but at least the usufruct of the existing networks. Independent regional regulators are to be erected having the possibility to control exploitation costs, to determine the tariffs for transport of electricity over the distribution networks and to ensure that these tariffs are the same in the entire Region.

Moreover, the Working Group plea for the creation of a system of green certificates as well for a Rational Use of Energy (RUE) and social fund, to be financed by a levy upon the tariffs for transmission and distribution or by levy upon all electricity consumers. Finally, the municipalities are encouraged to take stakes in the transmission and network operators and to raise their part in the ownership of the networks. The municipalities are also offered the possiblity to take shares in the companies that will become involved in sale/resale of power.

CHP (combined Heat & Power; cogeneration)
The report supports CHP, which had been hindered by current tariff conditions. The potential is estimated between 3000 and 4000 MW of which only 1000 MW was operational by end 1998. The report recommends a guarantee for purchasing excess cogen-derived power plus a premium for CO2 abatement.

Nuclear generation
The Working Group requires Electrabel to establish separate accounts for nuclear reactors. The provisional funds foreseen for decommissioning should be managed by the CREG instead of by Electrabel.

2.4. The Federal Government's Guidelines

On April 5, 2000 the Federal Government presented guidelines for finalising liberalisation of the electricity market. It looks as if the government will adopt most of the Working Group's recommendations.

As recommended by the Working Group, the CCEG has been asked to base tariffs on a detailed cost-plus system, rather than on a price-cap system in order to prevent cross-subsidisation. The cost structures will have to be identical for both eligible and captive consumers. Besides, the CCEG should reduce by half the price differential for captive consumers between Belgium and its neighbouring countries. By June 30, 2001 a new reduction of 50% of the remaining price differential should be undertaken. A year later, tariffs for the captive market should be aligned with the ones in the neighbouring countries. From that moment, captive consumers must see a

drop of their annual bills by at least 75 Euro, excluding fuel costs. With regard to the composition of the CREG's General Council, the government will modify the Royal Order of 3 May 1999 in such a way that representatives of generators will not have voting rights. Moreover, of the four generation representatives one will represent cogeneration and another renewable power. There will also be two representatives of large consumers, two representatives of small consumers and two environmental NGO representatives. The latter, however, lack voting power.

The government has decided to appoint a temporary transmission network operator for a transitional period of 2 years. The CREG has been asked to investigate methods for the valuation of the network so that the transfer of the network to the network operator may be achieved correctly from a legal and economic perspective. The CREG will also have to approve the transmission tariffs and comment the option of leasing the network. To ensure the independence of the network operator, half of the board of directors will be independent from the electricity industry. The operator's corporate governance committee will be composed entirely of independent directors.

From July 1, 2000 final customers consuming more than 20 GWh per site are eligible. By end 2002 the eligibility threshold is lowered to 10 GWh. As a majority of these customers are supplied via the distribution networks the government will consult the Regions. The eligibility of distributors will be speeded up conform the European Commission's proposals pursuant to the Lisbon European Council Summit of March 23 and March 24, 2000. Auto-generators of efficient cogeneration or renewables must gradually become eligible. All customers purchasing significant – to be defined later – amounts of green or cogeneration power will become eligible after investigation and advice from the CREG.

In April 2000 Electrabel announced that it considers customers consuming more than 40 GWh to be eligible from May 1, 2000 onwards. This brings the level of market opening to 38%. All customers below the 40 GWh threshold are in principle supplied by intermunicipal utilities.

The governments avoid taking measures which would result into a sudden and unexpected reduction of the municipalities revenues from electricity distribution. Therefore, the municipalities are encouraged to take stakes in the transmission network operator. The State Secretary for Energy will be charged with the establishment of a "task force" to forge links between the federal, regional and local level. The so-called third generation supply contracts will also be assessed. The compensation fund for Public Service Obligations, mainly social measures and RUE, will be financed by means of a extra levy on the transmission tariff. Green power support measures are justified during a transition period, when economic viability of investments is uncertain. A green certificates' procedure is installed and all suppliers must offer 3% green power by 2004. In case of non-compliance they will have to pay a penalty. Energy from waste incineration will not benefit from support measures.

Suppliers will be obligated to purchase excess power from cogenerators at published and reasonable tariffs. The minimum price will be the average price paid to the network plus a

transaction fee. This guaranteed price is reserved for qualitative cogeneration in accordance with efficiency and emission standards. Finally, Electrabel should establish separate accounts for its nuclear plants. The CREG will be charged with examining provisions for the nuclear sector and with monitoring various operational parameters.

These guidelines are very much welcomed, except for the still too slow market opening and the price reduction that is not going far enough as it represents only 15% of the average residential consumption. As Belgian electricity prices are 30% higher than in neighbouring countries the effective reduction should be a drop of the annual electricity bills by 6000 Belgian francs.

2.5. Flemish electricity law

On July 17, 2000 the Flemish region adopted a Flemish electricity law. Customers consuming more than 20 GWh per site per year become eligible immediately. They represent 45% of the electricity market. This will also be the case for customers using power generated from cogeneration and renewables.

To avoid discrimination distribution network operators will be independent from generators and suppliers. The draft law foresees a legal unbundling of generation, distribution and sales. However, network owners (the municipalities) will still be able to sell power to captive customers. Like this, they are assured of an important source of income. If they wish to be more active on the market, they may in the future take part in companies which offer energy and services. In practice the municipalities continue to operate the network. Green power will also be encouraged. By 2004 at least 3% of the distributed supply must forthcome from renewables. The lax establishes of an independent Flemish regulator to monitor the issues of concern regarding its distribution networks.

On July 6, 2001 a twin decree on the organisation of the gas market is adopted. The Flemish regulator is called VREG, covering electricity and gas issues. The staff of one president and 5 directors is being recruited during summer 2001.

In June and July 2001 the laws are made operational through executive guidelines. One of these imposes the strict unbundling between the pipe and wire companies on the one hand and the sales companies on the other hand. In flanders, the PIU have reacted proactively on this forthcoming lawgiving and established the LUMINUS Ltd. Commercial company. In June 2001 the private UK utility CENTRICA entered LUMINUS Ltd with capital (50% of the shares of LUMINUS) and expertise.

2.6. Conclusion

In conclusion, the federal Electricity Act (April 1999) is confined to establishing a legal framework necessitating implementation by royal executive orders. These abundant delegations jeopardise democratic control. Belgium needs another system of public intervention with regard to public service obligations. The regulator CREG should be the agent of the Parliament. An

increase of governmental or royal powers should be balanced by a fortification of parliamentary control on regulation. Important issues must be precisely defined and dealt with by statutory instruments and important delegations to the government, such as the creation, operation and independence of the transmission network operator, should a posteriori be confirmed by statutory instruments.

The Act also neglects the competencies of the Regions. They are deemed to play an ancillary role. Co-operation with the Regions in overlapping matters should be intensified. Accordingly, the Belgian electricity market will be opened formally. A true opening requires a much more independent transmission network operator, an efficient and quick-witted regulator and free access for suppliers and consumers. In this regard the Royal Orders of the new liberal-socialist-green government incorporating the recommendations of Working Group of Experts in Electricity Sector Liberalisation as well as its own guidelines open new perspectives. Also the progressive role played by the Flemish Region puts pressure on the traditional approach and vested interests of SLE-Tractebel in the sector. The absolute unbundling of pipe and wires from business activities imposed on the distribution utilities in Flanders is shaping a new landscape for energy entrepreneurs . Also the yearly free supply of 100 kWh per household augmented by 100 kWh per person is a significant signal that monopoly pricing for captive domestic customers should stop.

In the transmission network, summer 2001 started with an armed peace between the regulator CREG and the new established transport company ELIA Ltd controlled by the SLE-Tractebel – Electrabel concern. CREG does not agree with the terms set out (and applied in the meantime) by ELIA. In the coming years the opening of the power and gas markets in Belgium will heavily depends on the outcome of this stalemate between the regulator and the main player SLE-Tractebel.

Abbreviations and namelist

BCEO-CGEE = management board of the electricity companies (Electrabel - SPE)
CCEG = Control Committee for Electricity and Gas (established in 1955 as a result of negotiations between employers' and employees' federations; little own expertise but dependant on the power companies' information)
CPTE = Coordination of Production and Transport of Electricity (System Operator up to 1995; enlarged mission since January '95)
CREG = Commission for Regulation of Electricity and Gas (created by law in 1999)
Electrabel = major power company (investor owned by Tractebel)
ELIA (Ltd, established June 28, 2001 by CPTE) = single grid company and system operator
Gécoli = former (until 1995) grid company (developing and maintaining the transmission grid)
MIU = Mixed Intermunicipal Utilities (Electrabel is the private-majority-shareholder)
PIU = Public Intermunicipal Utilities (only public owners)
SLE = Suez-Lyonnaise des Eaux (French holding company focusing on the utility sector and controling the Belgian electricity and gas sector – through Tractebel)
SPE= Public Power Producers

Tractebel = major energy holding company (fully owned by SLE), parent company of Electrabel
VREG = Flemish regulator for electricity and gas distribution (establishment going on in 2001)

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