



Internal Market For Electricity in Europe

“A New Era or a Dark Age?”

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***EUROPEAN FEDERATION OF PUBLIC SERVICE UNIONS
For Jobs and Public Services***

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Enron president Jeffrey Skilling was quoted at an industry conference as saying electric companies must "cut costs ruthlessly by 50 or 60 percent." "Get rid of people", Skilling was quoted as advising. "They gum up the works."

"Nobody knows the consequences of competition on the electricity markets exactly. Neither does the consumer. Maybe the government should demand (temporarily) a minimum standard for the protection of electricity, to protect the consumers against themselves". R.J.Pridde, director of the International Energy Agency

"Do advocates of liberalisation in industrialised countries, hoping to benefit from falling prices, always realise that for consumers in developing countries and economies in transition, liberalisation more often than not has exactly the opposite effect because of the removal of taxpayer or cross subsidies". Report for the World Energy Council, Price Waterhouse.

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SUMMARY

The main findings of the study are:

On Employment

- A confirmation of the significant loss of jobs in the electricity and gas sector in the European Union. Based on European and national statistics over 250.000 jobs have been lost between 1990 and 1998.
- Based on company reports and announcements by companies a further reduction of jobs can be expected: 25% over a 4-5 year period. Several companies have adjusted earlier job-reduction projections upwards. These estimation might be conservative if one looks at the experience of the UK where 40-50% of employment has been cut.
- France is a notable exception. Limited opening of the electricity market is foreseen. Electricité de France, a public company seen by many in the industry as efficient and delivering a service at a very competitive price, has been able to improve working conditions through a 35 hour deal including employment prospects as part of that deal. It is also noticeable that French legislation to introduce the electricity market will ensure that the existing collective agreement will apply to all companies, including the new-comers.
- No positive effects on employment in other areas such as energy-intensive industries could be found. Any competitive effects will be outdone by similar developments elsewhere (mainly in the US). Positive effects on renewables are possible but only if the regulator plays a strong role and ensures investment in renewables, energy savings and energy efficiency. Some employment will be created in IPP's although this will add to existing over-capacity. Further employment opportunities exist in trading companies. These numbers will be very small however.
- Despite announcements by the Commission, our study could not find any specific measures addressed to the electricity sector to "mitigate" the negative impact of the Directives even though this was announced to the European Parliament.
- Employment is decreasing in electricity in Central and Eastern European Countries (CEEC) as well. This is on top of a sharp fall in employment in the coal sector.
- Regional implications of closures of power-plants can be significant where whole communities rely on the electricity companies being an important or even sole employer.
- Employers are reported as initiating labour cost-comparisons between companies in an attempt to put pressure on trade unions for wage reductions.
- A general trend towards out-sourcing of services is seen.
- Union officers have also noticed that companies aim to break out of sectoral agreements.
- Some new entrants in the market do not have a positive record of industrial relations.

On Domestic Consumers

Remarkable points include:

- There are companies that announced that savings are to be made on equipment and maintenance. Others reported that they will reorganise to concentrate on buying and selling as the core-business. The rest of their activities, including even transmission, are seen as supportive. Risk management and energy derivatives are new phenomena. This means a larger element of risk will be introduced.
- Concentration takes place leaving fewer and more dominant players in the market.
- Companies become multi-utilities providing more services.

- Europe's energy companies will go global, while US companies in particular will enter European markets.
- Together these points indicate that the opening of the electricity markets will put pressure on the public service (security of supply, access at affordable price) and the possibilities for regulation. Market failure will become more common.
- It will take a long time for prices to be reduced for domestic consumers.
- Strong regulation is needed to protect Europe's citizens. The scale of the task involved in regulating the competitive market is underestimated. Based on developments in the US and UK, this will quickly lead to regulatory bodies that are under-staffed and not prepared for there task.
- Civil society is largely absent from the regulatory bodies. Consumer groups, environmental organisations and trade unions are not reported as being involved with the boards of the regulatory bodies (with the exception of Belgium and Sweden) and often do not even have advisory or consultative capacity. The right to information and the right to participation do not seem to be guaranteed.

Conclusions

The often heard argument that the liberalisation will have positive general effects on employment could not be conclusively proven. What is true is that jobs are lost in the electricity sector and that this is not addressed by the European Commission.

Regulation appears too weak to prevent excessive profits, to ensure the public service and to protect citizens and business against market failure. It is a neglected issue. We also note that the regulation put in place appears to be un-democratic. Right to information and right to use the information and participate in the regulation are not mentioned.

Our recommendations

Employment measures

- Most governments have implemented the Directive. Priority is to be given to addressing the employment situation of workers who are losing their jobs. This priority is in line with the European Employment Guidelines. Social measures need to be taken based on the use of Structural Funds, Adapt Programme etc. These measures are to be aimed at maintaining and creating employment and, where this is not possible, the focus should be on training and retraining, re-employment, early retirement...
- EPSU suggests the establishment of an Electricity Employment Fund that would assist employers and trade unions in taking initiatives to open new areas of employment, or to support re-training and re-employment measures. The Fund should be managed with the social partners in the electricity industry. They can evaluate the proposals and ensure a broad application of positive experience.
- The situation in Central and Eastern Europe deserves special attention. Long transition periods will be needed for the implementation. The European Commission and the World Bank (which is involved in providing so-called technical assistance) are to demand of CEEC governments that the trade unions be involved in discussions to restructure the electricity sector. Social measures need to accompany this process. Otherwise the support for European integration will weaken and it will merely be associated with job loss. As prices are likely to go up for domestic consumers coupled with a deteriorating employment situation, an explosive mixture will be created, which needs to be addressed by involving sections of society in CEEC
- European institutions providing financial support for the restructuring of the sector such

as the EIB and the EBRD are to evaluate if unions and other groups in society have been consulted.

Regulation

- The second priority is regulation of the Internal Market for Electricity. The present framework and regulatory bodies are lacking in broad societal support. In several cases consumer groups, environmental organisations, or trade unions are not involved. The Commission must take initiatives to ensure that *right to information* from the regulator and the companies, as well as the *right to participation* in the regulation, are safeguarded. Without appropriate regulation security of supply, environmental protection, quality of the service, and affordable prices will be jeopardised in a liberalised market.
- Regulation is also a weak point in Central and Eastern Europe. The systems in countries in the European Union are regarded as models when they might not fit the specific situation of the CEEC. Several governments in CEEC are known to consider the UK model as an example, without being aware of its negative aspects and the review that is being undertaken at present in the UK. The Commission is to bring together the parties involved in regulation such as the industry, the large and small consumers, trade unions and environmental organisations, to consider the situation and the initiatives needed.
- The use of energy derivatives is to be explored. We believe a case can be made to limit their use altogether as these instruments bring more risk into the energy systems. Risk and speculation do not go well with the idea of security of supply. The Commission has to explore this.

Public service obligations

- Regulation is needed to guarantee the public service in a competitive market. We argue that public service obligations that have a direct meaning for citizens need to be further defined at European level. This can be done by reference to article 16 of the Treaty of Amsterdam. For the electricity sector these obligations should ensure that citizens have access to electricity to guarantee adequate warmth (definition of the World Health Organisation), a sufficient electricity current that can not be cut off and affordable prices. What needs to be prevented is fuel poverty. The Commission should define a European Public Service Charter and monitor these developments.

INTRODUCTION

This report is the first European overview of the employment consequences of the Internal Market for Electricity Directive of the European Union. This is an aspect that has been neglected. While researching we have looked at other developments that can affect the public service.

Internal market for electricity

The aim of the Internal Market for Electricity Directive of the European Union is to create an open and competitive electricity market in Europe. This should lead to lower electricity prices. The theory is that lower electricity prices will improve the competitive situation of Europe's energy intensive industries in particular, could free up extra demand and thus create room for investment and thereby jobs.

The Directive stipulates that Member States open their markets for competition as of 19 February 1999. The opening is to take place in a gradual manner. The first step 19 February 1999 (26.48%), the second step 19 February 2000 (around 28%) and the third step in February 2003 (around 33%). Member States are free to open more of their markets to liberalisation. Several have done so up to 100% such as the UK, Germany, Finland and Sweden.

Dangers

The European Federation of Public Service Unions has warned on several occasions that the Directive could have the following negative impact:

- Direct and negative employment consequences for those working in the sector while possible positive effects are negligible as deregulation also takes place in other regions of the world.
- Pressure on the existing social standards and collective agreements leading to a decline in living and working conditions.
- Difficulty in maintaining environmental protection as renewable energy sources would be less promoted.
- Narrow definition of public service obligations putting the energy systems at risk as well as making it hard to deliver at affordable prices for citizens.

Basic Points for a European Energy Policy (1995) and Follow-up to the Internal market for Electricity and Gas (1997)

The authors of this study believe that the reasoning behind the Electricity Directive is flawed. The European Commission and several of Europe's governments have been taken hostage by the narrow interests of a small group of large industrial electricity consumers of electricity (UNICE, IFIEC, Ener-8) and neo-liberal wishful thinking.

We are not aware of a recent study by the European Commission justifying the job potential of the Internal Market for Electricity. Otherwise we would not have undertaken this first effort to assess what is going on.

What we did expect to find and indeed found, is that workers in the electricity industry will go through a rough period, seeing many changes for themselves and their families.

The first chapter attempts to demonstrate these effects. It addresses the direct impact, possible multi-plier effects, electricity and coal in Central and Eastern Europe, job-creation in energy-intensive industries and in renewables and energy services.

The second chapter considers a number of related issues which have not been central to our study but which we believe are important to note.

1. Employment and the internal market for electricity

Trade Unionist, EPSU Deputy General Secretary Jan Willem Goudriaan ran into Dutch Economic Affairs Minister Wijers and senior civil servants at the central square of Bologna, Italy, 3 February 1996. The Minister was there to consider the Directive with colleagues. He was seen as somewhat of a hard-liner expressing the view that the markets should be opened for competition. EPSU was present to draw attention to the possible employment effects. Italian, Austrian, French and German trade unions attended a rally in Bologna to protest against the lack of a social dimension in the Electricity Directives. A delegation also met with the Italian Minister Clo.

The trade unionist had been a student of the Minister and they briefly exchanged views on their respective positions in the debate. That exchange states in a nutshell what are supposed to be the employment effects of the Directive. While the trade unionist expressed his concerns about the consequences for the people working in the industry and their families and the need to address this, the Minister argued that the macro-economic benefits and the possibility that jobs would be maintained in high-intensity industries facing a severe competitive situation, justified opening the markets.

We aim to look at these arguments in this chapter.

1.1 Clear and drastic direct effects

The direct consequences on employment have been noticeable in the EU. And these are dramatic.

The following gives an overview of developments in individual countries.

Austria

- Employment declined by over 1058 jobs between December 1995 and October 1998 or 3,4%
- The number of companies in the energy sector is decreasing from 171 (1995) to 153 (1998)
- Austrian electrical producers will have to increase efficiency and reduce costs to be able to compete. It is expected that 600 jobs could go (Salzburger Nachrichten 24/10/97)
- Wienstrom, the municipal electricity company is going through a programme of restructuring to prepare for the internal market. The number of employees will be reduced, by 10-15% (Der Standard 98.05.26)
- Verbundgesellschaft will reduce its number of employees by 25%, and that represents 1000 workers. Again: to prepare for the internal market. (Der Standard 98.0519/30/31, 06.01). Between 1993 and 1997 the number of employees has already been reduced by

19% (960 workers). A Recent report suggests that the reduction might be of 700 workers in 3 years (Standard 98.11.03)

- Energie-versorgung Niederosterreich reduced employment from 1996 to 1997 by 151 (-5.9%) and now employs 2413 people; Der Standard 06.07.98
- The Austrian employers have compared costs of Austrian staff with for example staff costs in EDF, Bayernwerke, RWE. While this comparison shows that Austrian staff is expensive, trade union representatives at a meeting in Paris November 1998 told similar stories in which the fact that their employers compared costs with other countries would be hilarious if it were not so sad. Employers now always find their staff to be more expensive than those of others.

Belgium

- Electrabel has reduced staff from 16.554 (indeterminate contracts) in 1991 to 13.534 in 1998 (July) or 3020 employees (18%)
- Electrabel is part of the holding Tractebel. Tractebel in its turn has as majority shareholder: Lyonnaise des Eaux -Suez. This company is known to seek to increase its rate of return from investment in its companies. Tractebel is major investor in non-European markets.

Denmark

- Employment in electricity dropped from 11.688 in 1991 to 10.488 in 1997. (1200 workers or over 10%)
- The above figure does not cover gas, heat, biomass, wind, solar. It is estimated that more than 13.000 people are active in the wind turbine industry.
- Elsam, the Danish energy co-operative of 6 semi public power companies (operating in Jutland/ Funen) will suspend production in 5 power stations in 2000. This is said to be linked to adaptation to stricter environmental demands. They will remain as a reserve capacity.

Finland

- There are several statistics for Finland. They all indicate significant job losses. The Confederation of Finnish Industry and Employers gives the following figures for personnel in energy industry in Finland. The change: 1987 - 1995 for salary earners is -19.03%. For wage earners it has been 44,21 % less jobs. Overall change is 33.59% reduction in jobs or 8.643 jobs lost. Finland joined the Nordic energy market. From 1995 to 1996 there was a slight increase in employment (3 persons). Blue-collar workers continue to be the worse affected while additional jobs are reported in the white-collar areas.

France:

- Employment went from 121.794 in EDF in 1989 to 114.380 in 1998.
- In GDF (gas) the decline was from 27.650 in 1989 to 24.733 in 1998 with an increase in temporary work.
- The overall decline between 1991 and 1998 was almost 7000 jobs or 5%.
- Most remarkable in France is that the employer and the trade unions have concluded a 35-hour working week agreement with the expressed intention to create 2000 -5000 new jobs by 2001. It is the only such agreement known.
- A further labour-market innovation is that the proposed French legislation to implement the Internal Market for Electricity Directive stipulates that new producers will have to apply the collective agreement as it applies to workers in EDF/GDF. This prevents distortion of competition as independent power producers (IPP) are part of large conglomerates claim that their labour costs are 50% cheaper than EDF/GDFs.

Germany

- Jobs in West Germany in electricity dropped from 241.300 in 1990 to 185.200 in 1997. This is a job loss of 56.100 or almost 23%.
- If East-German figures are added the job losses from 1991 to 1997 are of 78200 or 26%.
- Jobs losses are due to amongst others rationalisation and new technologies, but also to preparations for the internal market in electricity and gas. If the structures that emerge are not balanced, this could lead to a “cold” restructuring, especially in the municipal companies.
- Dresdner Bank predicts that only 1/3 of local municipal companies will survive. It foresees negative consequences for employment especially in the early phase.
- Die Welt, 31/3/98. German electricity companies have reduced the number of employees by 4% in 1997. That is 7000 out of 171.000 according to VDEW. Reasons: increased competition, mergers, co-operations and out-sourcing (disinvestments).
- Neckarwerke Stuttgart AG announced that in the merger with TWS there would be a reduction of employment of 20% till 2005. (1150 out of a total of 5000). Already 300 jobs have been axed since the merger (1 Jan 1997).
- President Gerhard Poll, EBW, Energie Baden-Wurttemberg has stated that the liberalisation of the electricity market in Germany is going to be accompanied by a considerable reduction in employment. In production and distribution the number of workers can be reduced by as much as 20%. There will be some new jobs in customer relations. EBW has announced it will shed 1000 jobs in the long term. (Handelsblatt 98.02.20/21).
- The Betriebsrate of the large energy companies in Germany issued a press release in which they indicate their fear for jobs losses. A loss of 10.000 jobs is expected and a loss of 20% jobs considered minimum, according to Ingo Gramsch, vice-president of the Betriebsrat Bewag. Alwin Fitting “We are opposed to the liberalisation, it destroys our social norms”. The works council demand an energy policy which supports jobs. (Handelbaltt 98.03.12/ Die Welt 98.03.13).
- VEAG (former East Germany) reduces employment by 1000 to 8200, 1997. (Handelsblatt 14.4.98).
- ISAR-Amperwerke will reduce employment from 2000 to around 1400 in 2002;
- EnBW Kraftwerke a merged company will reduce employment from 1920 to 1350 (-570)
- And jobs also are lost in transborder co-operation deals. Laufenburg (Switzerland) and Rheinfelden (Germany) create a new company EnergieDienst gmbh. with 600 workers. 60-80 jobs will be lost. Both companies are part of WATT.
- RWE has announced to cut 2.500 jobs as competition increases. These job cuts will be at regional level. Reduction from 7.900 to 5.400. Networks will be split from sales operations the 12 regional suppliers will become 4 regional nets and 4 distribution regions. RWE and VEW have agreed a joint approach to planning to further improve cost efficiency. (FT 23/10/98)
- VEW Energie wants to reduce the costs that affect employment. Foreseen employment: 1997: 5329; 1998: 4700 workers and in 2003: 4040.
- Bewag, the Berlin electricity utility will reduce the workforce by more then the foreseen 1000 job losses. This will be increased to 2.200 by 2003. To withstand competition, costs in labour and equipment/ materials need to be reduced. It loses clients to others. Present workforce is 8.600, so this is a cut by more than 25% in 4 years. (Enerpresse 7239 99.01.12 and others)

Greece

- Greece is the country in the European Union that has seen an increase in employment in the sector. From 28.970 in 1992 to 33.999 in 1997

- Note that these figures concern the electric energy and mining sector. Greece has the most integrated structure of all given the fact that Public Power Corporation also owns its own mines.

Ireland

- Ireland has seen one of the more dramatic declines in employment. In 1990 there were still 12.000 people working in ESB. In 1998 this was reduced to 8.800. It is foreseen this will decline further. (3.200 jobs or close to 27%).

Italy

- Significant reductions are also reported from Italy. In 1990 there were still 10562 persons employed in the electricity sector. This declined to 83.400 in 1998. (- 27.152 or 24.5%).
- Employment in the gas sector increased from 14.000 in 1990 to 18.000 in 1998. Between 1997 and 1998 there was a reduction in employment in the gas sector by 707 people.

Netherlands

- Employment decline by 6,4% from 34.400 (1991) to 32.200 (1995). Other figures show a decline of 2000 between 1995 and 1996.
- Eneco, energy and telecom company in Rotterdam wants to reduce employment from 3500 to 2600 (-900) for the coming years. Problems had arisen with workers over a collective arrangement for severance packages. (Aaneen, 15/8/98).
- Production company EPZ and energy distributors Pnem/Mega will form an alliance to improve their competitive position in the European energy market (scale advantage). A reorganisation in EPZ will lead to a loss of 400 of the 1500 jobs. (NRC Handelsblad, 6/10/98) This should contribute to a cost reduction of 30% in a few years. This co-operation has been extended to include Edon They announced a possible merger. It would be Europe's 11th company in terms of turnover. Energy distribution companies Pnem/Mega are active in North Brabant and Limburg while Edon is active in Groningen, Drenthe and Overijssel. The group would be the largest Dutch provider of electricity and gas (8 billion Dutch guilders). The number of workers is close to 8000. The Southern Electricity producer EPZ will be linked to this combination via PNEM as will the EPON, the electricity producer for North and East Netherlands. Edon has an alliance with PreussenElektra.
- To be cost competitive on the free market, the number of staff in the new group will be gradually reduced. (If compared with the Nuon, ENW, EWR and Gamog merger. combination where from 7000 people 2000 had to go, this will be at least a similar number) The new company is a multi-utility. It is active in the waste and telecom markets as well (EDON has an agreement with United Utilities and Nortel to do a trial of the telcomline service in the Netherlands). EDON works with Stadtwerke Bremen in Waste and is talking with the Dutch state to buy the shares of VAM, a waste company. If Edon acquires these shares it will be the 3rd waste company with a market share of 23%.
- The Dutch railways will buy half their electricity from PreussenElektra as that is 10% cheaper than the Dutch companies. The European electricity sector knows a lot of over capacity. These contracts could force a "cold restructuring".
- Dutch energy companies are seen as too small, not aggressive and little market orientated. Problems will arise on facing the competition on the liberalised market. Companies themselves see stagnation of growth in turnover by the arrival of new companies/ entrants and price reductions. But Moret Ernst & Young believe that a strong reduction in turnover is a more realistic scenario (in their Trends in Energy). Of the 161 big consumers of energy questioned by the firm, 50% expect that within 2 years they will have a different supplier of gas. 60% see a different electricity provider. It noted that 10 foreign companies want to enter the Dutch market. 40% of the companies believe in

mergers, joint ventures with a foreign company. Within 5-10 years around 6000 jobs in distribution (25%) and around 1200 jobs in production will be lost (15%). Source: NRC Handelsblad 19.1.1999.

- Dutch gas transmission and distribution company Gasunie reorganises. Within 2 years the number of workers will be brought down from 1630 to 1500. Partly because more elderly workers will retire and leave, partly because of concentration on core business (NRC Handelsblad end Jan 1999). Shell owns shares in the company and aims to increase its return on investment. Gasunie is reorganising and concentrating on selling and buying. Transmission is now seen as primary support while environment and health and safety are general support functions.

Portugal

- The Portuguese workforce in electricity knows one of the more dramatic reductions. Between 1990 and 1996 almost 4000 jobs or 20% of the work force was cut. This was mainly due to the restructuring of EDP as it is preparing for the open market.
- This situation is compounded by job reductions in Petrogal (the oil company) and Gas de Portugal SA. Thirty percent of the workforce will be cut at the Portuguese utility (2/1/99) *Diario Economico*. This will amount to the loss of 146 jobs. Petrogal and Gas de Portugal intend to merge. Further job reductions are foreseen.

Spain

- Workforce went from 52639 in 1990 to 47384 in 1995 or 5255 job losses (10%). Spain has seen an increase in the workers employed in gas. Between 1990 and 1995 an increase of almost 1500 jobs. This comes from a very low number though (3070 in 1990 and 4500 in 1995).
- The Catalonian company FECSA, a subsidiary of Endesa, will see 800 workers go in early retirement (out of 2700), voluntary basis, replaced with 300 young workers, in framework of restructuring and rejuvenating the age pyramid.
- One of Spain's power company's announced a cut of nearly a thousand jobs (3/2/98) Iberdrola SA expects to cut 980 jobs by 2001, which will bring its workforce down to 10,500. It's part of a larger plan to cut staff costs by 17.2 percent, while making major investments this year in Latin America, according to *El Mundo*.
- *El Pais* (1/4/98) writes that Endesa will cut the number of employees by 8.200 by the year 2002 (It has reserved 274 billion pesetas for this). This is to be done through early retirement, voluntary redundancy schemes for employees 52 and older. Endesa already went from 26.074 employees in 1994 to 23.336 in 1997.
- The *Financial Times* 13.5.98 reported that CEO Rafael Miranda says that "Corporate efficiency and shareholder value are now our twin priorities". 7 electricity generation & distribution units form a single organisation to eliminate duplication. The workforce shake out will represent 36% of the workforce.
- Figures for Union Fenosa 5550 in 1993 to 4600 in 1997 (- 940) and for Iberdrola 15861 in 1993 to 13900 in 1997 (-1961).

Sweden

- Sweden was one of Europe's early liberalisers. Work force reductions follow similar patterns. From 38000 in 1990 to 28000 in 1996 according to the Swedish Statistical Bureau. The trend continued according to figures of *BranschFakta*. The 10.000 job losses represent over a quarter of the workforce. The continuing trend seems to confirm the situation in the UK.
- Vattenfall planned a reduction of employment from 7800 to 6800 (1000 jobs lost) Argument: competitiveness. Union action prevented this. There is a guarantee for 2 years. (In these two years 235 jobs will disappear through natural process).

Switzerland

- According to the Federal Department for Statistics, the number of workers in electricity and gas declined from 23565 in 1990 to 22500. Given the many local distributors the prospect is that employment will continue to decline as more companies merger.

United Kingdom

- The effects on employment of the liberalisation of the UK markets can be called devastating. These effects took largely place before the opening of the European markets. Liberalisation and privatisation took place together in the UK.
- The Cambridge Econometrics study that was part of the Eresco report speaks of 40.000 jobs lost (in 1994) but thinks this might be an underestimate. In British Gas 25.000-30.000 jobs were lost between 1994-1996; 33.000 in electricity since 1990. A UK Friends of the Earth document put the job losses in the 12 regional electricity companies (excluding National Power; Powergen and Scottish Power) at 18.000 in 5 years (20-25% of existing work force). National Power has lost 17.000 jobs or 2/3 of work force and further decline foreseen.
- In Gas, 79.000 jobs in 1990 and less than 1/2 in 1996 (35000). While in electricity the jobs decline from 144.200 in 1990 to 88.857 in 1996 (- 55.343 or ~ -40%) Source annual reports of the companies. It is expected that at least another 10.000 jobs will be lost due to take-overs in the next 2-3 years. An example is British Nuclear Fuels taking over Magnox Electric. Total 16.000 jobs of which it is said several hundreds will be axed.

Central and Eastern European countries

The data suggest a similar trend.

- In Estonia Eesti Gas, which is jointly controlled by Gazprom and Ruhrgas (now 34%), has announced that it will cut the number of employees from 720 to 500 jobs by the end of 1999, a cut of 30%. This is partly achieved by merging divisions.
- In the Czech Republic a demand for cost reductions from foreign shareholders (National Power, UK) persuaded Prazska Teplarenska to reduce the number of employees in the first quarter of 1998 by 180. Now PT employs about 1,500 people and this number will decrease by the end of the year by another 180 or so, (20%). Company JCE says competition means 20% job cuts by 2004 and company ZCE plans to release more than 250 of its 1509 employees by the end of 1999, a 17 percent cut in its workforce. The total workforce went from 45000 workers in 1992 to 33000 in 1998 or 26%.
- And in Hungary the number of workers in the electricity industry went down from 33700 in 1995 to 22600 in 1998, nearly 33% in 4 years. And foreign investors such as Bayernwerk Hungaria say plans include 'cost-cutting'.
- In Latvia the workforce was reduced by 700 jobs between 1992 and 1998, while in Lithuania the workforce went up from 18996 in 1992 to 23022 in 1996 and now stands at 14222 in 1998.

1.2 Some general statistics

The above country reports are supported by more general studies. One of the more renowned is a study done by ERECO, a consortium of research institutes in Europe. Its prediction in 1994 was that 250.000 jobs could be lost or 35% of employment in the long-term because of privatisation and liberalisation of the energy sector in EU and EFTA countries.¹

Another general source of data is the European Commission's *Employment in Europe* reports. The 1995 report showed that between 1985 and 1990 there had still been job growth in the electricity, gas and water sectors. (0.4% per year). In the period 1990-1994 this turned into a job loss of more than 3% per year.

The 1996 report defined electricity and gas as low growth or declining sectors. These figures also confirmed that women have been hardest hit and in particular women and men with a lower education. Almost 10% of women with a lower education lost their jobs in 1994. For men this was 5%

The 1997 study found that the trend of a decline in employment in electricity and gas continued. Employment declines by an average of 3.5% per year for every year from 1990 to 1996. Employment share of total employment has fallen below 1% (total employment in 1996 was 148.249.000 in the EU). Less than 1 million people are employed in the sector.

The 1998 report split water, gas and electricity. It now shows that electricity is amongst the hardest hit sectors in Europe. It is the only (recent) sector to feel the involvement of European Commission action.

The ILO study on *Labour and social dimensions of privatisation and restructuring (public utilities: water, gas, electricity)* 1998 comes to similar results using data from the European Federation of Public Service Unions, Public Services International Research Unit² and EuroStat.

1.3 Indirect jobs - the multiplier effect

The employment impact is understated by the absence of any proper calculation of the multiplier effect or assessment of trigger effects - such as the dash for gas, which was sparked by the deregulation. If power plants close and their activities are reduced or reorganised then local communities and other industries will be affected. This is especially true if a power plant in a remote area is the only significant employer. The UK Department of Trade and Industry used a ratio of 1.2 for every job lost. Several ten thousands additional jobs have been lost then.

¹ European Economic Research and Advisory Consortium, Europe in 1998, Economic analysis and forecasts (Cambridge Econometrics, NEI, Bipe Conseil, IFO Institute, WIFO, Prometeia), May 1994

² PSPRU, Privatisation News nr.42, December 1996

1.4 Past and present losses: on technological change and competition

The reason for job loss in the sector in the past was related to the rapid technological change. The change from coal fired to gas-fired power stations is one of the most significant while automation also contributed to job losses.

The present job losses are unequivocally linked to the liberalisation of the market however. Companies prepare for competition. Mergers and acquisitions take place leading to concentration and labour shedding. Shareholders want higher rates of return than in the past. Most of the company announcements cited preparation for competition as the reason for reorganisation and the need to cut jobs.

1.5 Which groups of workers will be affected?

It might be that it is easier for younger workers to find new employment, although this is often in the insecure labour market. Older workers can often retire with enhanced pensions and lump sum payments. The group that will suffer most are those over 40 years old, for many of them will not find it easy to find permanent employment again. They might drop out of the labour market without adequate compensation.

Some figures from EuroStat have shown that women were more affected than men, the relative share of women employed declined from 19.6% in 1993 to 18.6% in 1995. Recent figures from ECOTEC give a more differentiated picture but concluded that there is little evidence of additional jobs being created for women as a result of restructuring. Restructuring does seem to affect chances for equality policies in the electricity industry.³

1.6 On electricity and coal: Central and Eastern Europe

One of the (un-wanted ?) side effects of the liberalisation of the markets in the UK has been the change from coal-fired to gas-fired power stations (Combined cycle gas turbines). Investment cycles are shorter and profits can start coming in earlier. In the UK this is called the "dash for gas". Technological change and liberalisation are intertwined. The coal industry in the UK has been significantly affected. And this effect will be repeated in Central and Eastern Europe.

The European Commission is screening the CEEC for accession. The screening includes the electricity sector. The first workshop on the implementation of the Electricity Directive in CEEC took place 4-5 February 1999 in Brussels. It was organised by DG-XVII and the World Bank. CEEC that want to become member of the EU will have to implement the Directive. Markets are to open to competition.

The future of coal will depend to a large extent on electricity (survey of the coal situation in the ECE region in 1995/1996, the United Nations Economic Commission for Europe (UN/ECE). In the ECE region and in the world, the future of coal will increasingly depend on the electricity industry, as demand from other user sectors such as coke making, is expected to continue declining. About 85% of the hard coal and virtually all of the brown coal consumed in the ECE region was used for heat and electricity generation and only about 12% of ECE hard coal output was used for coke-making in 1995. Currently, coal is the

³ The impact of restructuring on women in the electricity industry, report for EPSU/EMCEF and Eurelectric, 1999 (forth-coming)

dominant fuel for electricity, providing close to 45% of the world's electricity and 40% in the ECE region. Coal is the second most important source of primary energy after oil in the world. In the ECE region, coal lost this position to natural gas. It is estimated that this will continue in Europe.

The UN Economic Commission for Europe has said that Europe cannot do without coal as an energy source for the foreseeable future. The degree of coal consumption will depend on how fast clean coal technologies are being applied and how the price of natural gas will develop in the European and world energy markets.

The points we wish to underline here are:

- that the job losses in the electricity industry should also be seen against the background of **other** job losses such as in the coal industry. These job losses will be most significant in CEEC. If local mines and power plants close, whole communities can be without work, without hope. Nearly half a million mining jobs are already lost and another 400,000 miners face the sack in Europe (5 November 1996, UN/ECE Working Party on Coal⁴).
- Competition will lead to a change in use of fuels. Gas will be used more thus exacerbating the situation for workers in the coal industry.

[We are obviously aware that European coal also faces a competitive climate. European coal finds it difficult to compete. That is another significant factor that contributes to the decline in the use of European coal. Further, it is argued that a change from coal to gas as fuel might be welcome for environmental reasons, certainly as long as clean coal technologies are not installed on a massive scale. Our concerns are with the employment situation here.]

1.7 No positive effect found for employment in high-energy intensive industries

It has not been possible to determine if there any positive effects of the Directive yet for maintaining, let alone creating, employment in high-energy intensive industries that are related to the fact that their competitive position has improved because of the Internal Market for Electricity. Neither can it be shown that the freed up funds have been invested in Europe to create new capacity.

It can be argued that any positive effects the Directive might have on prices of industrial consumers will at least partly be outdone by price decreases for large industrial users in other markets such as Australia, United States and countries in Latin America. A similar process of deregulation and opening of markets takes place there. Comparisons of international electricity prices suggest prices for large industrial consumers decline elsewhere as well.

Data of the *Employment in Europe reports* of the European Commission show a mixed picture. The employment trend in many energy-intensive industries is probably more determined by the general economic climate (recession or growth) and developments in South-East-Asia than by the relative price of electricity. This would need to be explored further.

1.8 Positive effects on renewables possible only because of

⁴ New research on employment trends has been presented to the Committee on sustainable development, ECE/UN, 6-8 October 1998 which demonstrate the continuation of the trends.

regulation

It has also not been possible to indicate if the Directive has had positive effects on employment in renewable energy sources that are generally labour intensive. One indication that this might not be the case is that the Commission has found it necessary to propose a Directive on access to electricity produced from renewables to the grid. Renewables have to be protected in the competitive markets. Investments in renewables need to be imposed by governments as a public service obligation otherwise they will not be made. Almost all EU governments have therefore imposed investments in renewable schemes by the companies as a public service obligation.

Although it is argued that competition will stimulate the development of energy related services such as in energy savings- and energy efficiency consultancy and advisory services, these effects are not noticeable. US research shows that rather the contrary takes place in deregulated markets where companies aim for profits and slash investments in energy efficiency programmes and thus employment.⁵ If this effect takes place, energy efficiency programmes in Europe will depend to a large extent on the role of the regulators.

1.9 Newcomers in the market

It is often argued that newcomers in the market will create employment and thus offset employment losses elsewhere. We note the following:

- The newcomers in the market will come in areas where there is low investment and quick returns. This will be mainly in trading. Several trading companies have been set up. The power exchange markets will also create employment. The numbers of people employed are very low however.
- In the area of independent power producers it is also likely that employment will be created. The power produced will add however to an existing over-capacity and might trigger further reductions in employment.
- Newcomers can buy existing companies to establish themselves in the markets. This does not create new employment, it is rather an incentive to reduce employment as companies will have to make up for the premiums they have paid.

1.10 Collective agreements

The French government is proposing in its law to liberalise the French market that newcomers in the market follow the collective agreement of EDF-GDF. The newcomers will thus be prevented from under-cutting each other on the basis of labour costs and can concentrate on the quality of their services. Some newcomers claim they can save up to 50% on labour costs through lower wages and reduced pensions.

Apart from the pressure on jobs, competition will put pressure on the working conditions of workers in the industry. During a meeting of European trade unionists 18-20 November 1998 in Paris, France, Belgium, French, Austrian and other representatives testified that the employers compare wage costs across the different countries with the aim to obtain concessions. If it were not sad, it would be hilarious, as each employer indicates that the workers in their company are the most expensive.⁶

⁵ See appendix 2, Environmental Working Group and World Wildlife Fund 1998

⁶ See appendix 3 for a comparison based on the Austrian situation

Other pressures reported include contracting-out/ out-sourcing and attempts by companies to break-out of national agreements and set up company agreements. This has happened in the UK and is discussed in other countries.⁷

Trade unions are developing alternatives to these pressures. EPSU has started the development of a collective bargaining agenda that compares collective agreements of major companies. Structures are established in companies and in the electricity and gas sector. EPSU and PSI, the international sister organisation of EPSU, commission major research to PSIRU on developments in the energy sector in Europe (www.psiru.org). They monitor the transnational companies active in the sector. Their data-base is probably one of the largest non-commercial data-bases in the world on energy companies.

This tracking of companies will be important as US companies such as Enron and Houston Industries do not have the best of reputations on trade union rights.⁸ But also European companies abroad act brutally as is shown by the 40% staff reduction in 18 months in Rio de Janeiro's Light which is partly owned by French company EDF.

1.11 Workers and share-holders

UK utilities have been among those companies influenced by USA doctrines to buy back shares in their companies. This has cost approximately 6 Billion UK pounds since 1994. This translates in 275 UK pounds per household. This money has neither been used to invest in the company, nor as a rebate to customers, nor to invest in human resources or employee sharing in the profits. It has solely be used to boost the value of share holding.

Similarly, the earlier mentioned ILO study refers to UK research which indicates that the payments in dividends to share-holders in the UK would have been enough to maintain the level of employment.

"A study by accountants suggests that this is the result of a conscious strategy of providing increased dividends to shareholders by reducing the workforce. The study, which covered all UK privatised utilities, including BT, shows that the combined privatised utilities "sacked nearly 25% of its workforce, some 100,000 workers, since privatisation. All of these jobs could have been sustained if the cash distributed as dividends had instead been applied to paying wages at the average rate prevailing inside the companies" (Karel Williams et al, Guardian 20.11.95)."

1.12 Unfulfilled promises by the European Commission

The Commission has written in its report on the *State of Liberalisation of the energy markets (Com 212/98 April 1998)*

"Finally, the close examination of the social consequences of the new market rules and increased competition is vital. The Commission is concerned with regard to the effects of liberalisation of the electricity and gas markets on employment in the European Union.

⁷ A major study on deregulation, employment and industrial relations is being undertaken in Germany by Prof. Dr. Wolfgang Pfaffenberger of Bremer-Energie-Institut for the Hans-Bockler Stiftung. (forth-coming)

⁸ Unpublished EPSU report on Enron. Human Rights Watch has published research aiming to demonstrate how Enron was complicit in violating human rights in India. See also NRC Handelsblad 17 February 1999.

Therefore the Commission plans to launch a study on the effects of electricity and gas liberalisation on employment and to examine carefully which accompanying measures and programmes to assist re-employment might be taken."

Members of the European Parliament Nel van Dijk and Susan Waddington raised questions on the employment consequences of the Electricity Directives. In his response of 5 May 1998 Commissioner Papoutsis wrote:

"It is clear that the liberalisation of the electricity and gas sectors will bring about structural changes in these industries. These changes can have consequences for the ex-monopolies operating in these sectors, in particular with regard to employment.

The Commission is concerned by the effects of liberalisation on employment and is considering what actions might be taken on this issue. In this respect, the Commission considers that it is important to study the social effects of liberalisation in the electricity and gas sectors and, if and where possible, to take the necessary accompanying measures to mitigate these effects. Whilst a full picture regarding the employment effect of this process will necessarily need to take account of the employment enhancing effects of liberalisation – creating new jobs in energy intensive industries and with new entrants into the electricity sector – the Commission is determined to monitor the social effects of liberalisation in the electricity industry.

The Commission plans to launch a study on the effects of electricity and gas liberalisation on employment in the Community. The objective of the study will be to present, in qualitative and quantitative terms, the employment effects of the directives including the consequences for women employed in the sector. Furthermore, the Commission will examine the possibility of encouraging the adoption of accompanying measures and programmes to assist re-employment, including the reorientation of employees, and retraining and facilitating the cross-border exchange of information with regard to employment opportunities. The specific needs of women employees will be taken into account in this exercise."

When questions on this were asked to representatives of the Commission during a Round Table on Restructuring of the Electricity Industry and the impact on workers and companies (organised by the trade unions and Eurelectric, 18 January 1999), this study was still not undertaken, let alone that measures had been proposed.

An EPSU Delegation raised the employment situation with the Commissioner on 16 February 1999. He promised a constructive approach. Commissioner services are exploring the possibilities for an employment study. They also consider which measures will be available. Much depends on the political will of the Member States however to recognise that employment is a problem. The study is too little, too late for the workers and their families about to lose their jobs.

Conclusion

The trade unionist had reason for his concerns. Workers were and are going to lose their job. The Minister can not prove (yet ?) that there is something that speaks for his and many of his colleagues views.

We have reason to doubt the employment creating effects of the Internal market for Electricity in other areas. We did not find an empirical underpinning of the Commission and Council's views that was based on a comprehensive study. The trade union side has

repeatedly asked for such a study but it is not there. The Internal Market for Electricity is based on neo-liberal doctrine. It lacks sound economic justification based on anything else than economic theory.

The job effects are dramatic. No social measures are taken. This will undermine the credibility and support for the European Commission and European policies.

It is known that the single most important group that has lobbied and argued for the Internal Market has been the large industrial consumers. (UNICE, Ener-8 and IFIEC). Similar groups argue for liberalisation elsewhere in the world. They have been powerful enough to move the interests of government. Electricity deregulation has not been an issue for the larger public, apart from France. Thus, it could happen that the present situation is geared towards the narrow interests of a small group of businesses and not to those of the wider public.

We believe that electricity is so intimately tied up with our daily lives, so essential, that the reform can not be left to specialists alone.

We aim to underpin the need for a wider debate in the second chapter.

2. On the Public Interest in the electricity sector

Governments lose influence over their energy policy to transnational energy companies, independent regulators and the European institutions. Cohesive and coherent energy policies will be more difficult in the European power market. The public loses its possibilities to influence, unless regulators are made more open and democratic. We notice a naïve belief that regulation is a minor issue. Based on the experience of the US and the UK that is certainly not true. We expect that there will be many trends undermining the public service obligation.

2.1 Concentration

The electricity sector will see a reduced number of players over the next few years. Large scale concentration will take place.

As the following table shows, there is a clear discrepancy between the major players on the European electricity market. A further concentration of companies is taking place at national level, such as in Germany, the Netherlands and the Nordic countries. Cross border alliances are made, such as between the Dutch group EDON/PNEM/Mega and PreussenElektra or between Spanish and UK groups. EDF has bought London Electricity and started the process of Europe's energy concentration. Tractebel already owns 1/3 of electricity generation in Hungary.

Company	Sales of Billions of Kwh
EDF (FR)	435
ENEL (It)	236
RWE (Ger)	132
PreussenElektra (Ger)	105
Vattenfall (Sw)	73
Electrabel (B)	70
National Power (UK)	69
Endesa (Sp)	69
Bayernwerke (Ger)	63
SEP (Netherl)	59

Many municipal distributors will be forced to enter alliances or to seek powerful protectors. Dresdner Bank predicts that only 1/3 of local municipal companies in Germany will survive. It foresees negative consequences for employment especially in the early phase (see also section 2.4). Concentration raises questions for the regulator and influence of citizens. Market power is not the only issue. Large companies aim to influence the public debate and have the resources to do so.

2.2 Multi-utilities

A key finding of our research⁹ is that one of the most likely developments in Europe's energy sector will be the emergence of so-called multi-utilities. These are utilities providing more public services such as drinking water, waste management, gas, electricity,

⁹ PSIRU prepared a paper on developments in the European energy sector for a PSI Conference, Vilnius 28 June 1998

telecommunications and cable communications. This merely confirms what many others have found.¹⁰

It does raise issues of public interest. Companies like Vivendi or Lyonnaise des Eaux operate on such a vast scale in Europe that they easily escape government control. The French Cour des Comptes sees this as a major problem.¹¹

Lyonnaise des Eaux – Suez

- This holding company operates the first waste management company in Europe called SITA.
- It is the world's first waste management company if we exclude the US market.
- It has a near monopoly on electricity (Electrabel) and gas distribution (Distrigaz) in Belgium through Tractebel.
- Tractebel also has the half of the Belgian market for cable communication (Coditel) and is a big player in the industrial waste market through Watco.
- Tractebel operates large generation capacity outside of Belgium most notably in Brazil, US, Hungary, Ireland and Italy
- Lyonnaise des Eaux is one of the few players in the world's water industry. Together with Vivendi and SAUR it dominates 80% of the drinking water market in France

2.3 Changes in the character of the companies

An article in *Utility Week*, 16 October 1998, p.56-60 referred to much research being done on how companies will change in the deregulated market and how they will survive. Some of the early research conclusions show that public service interests will not be at the core of the companies' interests. For the UK, soon to be fully open allowing all consumers to change supplier, the following has been noted:

- The market will be dynamic. A large number of customers will switch energy supplier – studies show that 55 per cent of customers are already open to the idea. Loyalty to existing suppliers will weaken further as the switching processes are simplified and bundled offers are made. Experience in the insurance market shows how quickly very dynamic markets can be created;
- Customers will react positively to companies offering the right combination of brand, bundle and price – ie a known and trusted brand, an attractive bundle of products and services, and a competitive price
- Fewer than half of the regional electricity companies (Recs) in the UK will survive more than five years of open competition

These are dire predictions for Europe's energy companies. The same article continues that other surveys show that a loss of 15% of customer base will mean that the supply of electricity will become unprofitable and will lead to mergers and takeovers. The market survivors are identified as British Gas (Centrica), Scottish Power, Eastern Group, PowerGen/East Midlands, Southern/Scottish Hydro and Norweb. The prediction is that 8 to 11 companies will disappear in the UK.

All major German companies such as RWE, PreussenElektra and Bayernwerke have restructured their activities.

¹⁰ The emergence of multi-utilities and the potential impact on the Dutch Market, Ministry for Economic Affairs Netherlands, November 1998

¹¹ La gestion des services publics locaux d'eau et d'assainissement, Cour des Comptes, Janvier 1997

A study for the Netherlands¹² indicated that only 3 multi-utility groups could survive and that possibly one could be in Dutch ownership. The same studies indicated the changes companies will go through.

2.4 Companies go global

The 16 October 1998 Utility week was a gold mine on insights in recent UK developments. Nearly two-thirds of Britain's utilities would like to sell their services outside the UK by 2001. New research by IT services group CMG suggests that 67 per cent of utilities view the 'lack of internal resources' as the biggest barrier between them and expansion into large global markets.

The next most important factor seems to be limiting utilities' exploitation of deregulating electricity and gas markets, is regulatory restrictions (58 per cent). This is followed by lack of information on the potential customer base (33 per cent) and inability to integrate IT systems such as customer services (33 per cent).

In response to questions on what will be your major business issues over the next five years?

85%	Mergers and acquisitions
54%	Changing customer base
46%	Demand for one-stop shops
46%	Increasing regulatory pressure
31%	Integration of information with partners
31%	Implementation of new, integrated technologies
8%	Geographical expansion

Little or nothing in the companies behaviour will be orientated towards upholding the public service while powerful forces are at work to undermine that service.

In the global market the big players are Tokyo Electric Power, French EDF, German's RWE, Italy's ENEL, Kansai and Chubu Electric Power, Korea Electric Power and US companies Duke Energy, PG&E Corporation, Southern. This based on turn-over. Aggressive players are however Enron, Southern Company, Endesa, EDF as well as Vivendi (Sithé Energies) and Lyonnaise des Eaux-Suez-Tractebel which all have now important non-European activities.

EPSU and its international sister organisation Public Services International work together with the Public Services International Research Unit (www.psiru.org) to monitor the developments of transnational companies in the energy, water and waste area.

2.5 Europe's governments gamble: a complete re-orientation of the energy sector

FT Andersen Consulting's Gill Rider, head of Andersen's North European utility practice, mentioned the following developments:

- Within 20 years EU will have a single power market dominated by gas-fired electricity generation;

¹² The emergence of multi-utilities and the potential impact on the Dutch Market, Ministry for Economic Affairs Netherlands, November 1998

- There will be a switch to small, clean, natural gas-fired stations producing local heat and electricity;
- A reduction in the need for large power plants based on coal is foreseen. This reduces the need for large national transmission networks;
- Liberalisation encourages cross-border power trading. Here one can think of future contracts, other derivatives to protect against volatile electricity price movements. The style is that of the Enron –Scottish power deal (based on weather features)
- The power trading markets are working or developed in: UK, Scandinavia, Spain, Netherlands, Switzerland. These will reduce the relevance of national borders;
- Protection of indigenous energy industries (coal) is a large obstacle to competition. Demand for lower prices will undermine the protection. And this pressure for cheaper and cleaner power will encourage small gas-fired power stations;
- Partnerships between industrial companies and power producers to develop co-generation will take off. Andersen expects 30-40% of European power to be produced by gas in 2015 compared to 7.5% in 1992¹³.

A recent book by energy specialist Walter Patterson, working for the UK Royal Institute for International Affairs, supports many of the above insights. It draws attention to the fact that the AC (alternating current) synchronised centralised network is challenged by liberalisation. Access to the national grids and local distribution systems is broken open. The system becomes more difficult to handle, as more sources need to be synchronised. He notes that unsynchronised alternating current is chronically inefficient, referring to ex-soviet and developing world utilities. His book points to a trend for more decentralised power systems. The FT Energy World article reviewing his book points to a number of prudent questions such as who is going to pay for the upgrading of the grid ? Management easily opts for delay.¹⁴ Mr. Patterson is now working on a book with the telling title: Keeping the lights on. Public Service in Liberalised Electricity. It will deal with the challenges to the public service in a competitive environment.

R.J. Priddle, the director of the International Energy Agency has stated in an interview with Dutch NRC Handelsblad “The liberalisation of the electricity market can have consequences for the security of the electricity supply. The drive to diversify fuels can be endangered.” This confirms what has been said earlier and what has happened in the UK and is called the Dash for Gas.

Governments are experimenting with business, workers and citizens on a massive scale. Caroline Varley, head of diversification of the IEA said in the same article that different hospitals in the UK have negotiated a contract that stipulates that the supply can be terminated during a certain period. “They do that to cut costs, but it can have annoying consequences if they receive none or less electricity”. Indeed ! Priddle added: “Nobody knows the consequences of competition on the electricity markets exactly. Neither does the consumer. Maybe the government should demand (temporarily) a minimum standard for the protection of electricity, to protect the consumers against themselves”.

2.6 Market failure

The changes in Europe’s energy markets are rapid, ill understood by governments and the public. Risk is introduced on a massive scale in the industry and thus in society that relies largely on electricity for many of its functions (schools, offices, hospitals, industries...).

¹³ FT 03 December 1998

¹⁴ FT Energy World, 11, December 1998

Several examples of these risks have been noted over the past years.

- An important one was the black out in Auckland, New Zealand where whole districts came without power for weeks on end.¹⁵ The company had, due to competitive pressure, saved on the maintenance of its cables. An inquiry found that Mercury the company involved failed to react to the diminishing reliability of the cables. The company had conveniently decreased the chances of failure, thus saving on maintenance. And management of the company was further focused on a long drawn-out take over fight for neighbour Power New Zealand.
- Another much reported failure was the black-out in Rio de Janeiro, 23 December 1998.¹⁶ The recently privatised electric utility, Light Servicos de Eletricidade SA which serves three million customers in and around Rio, was bought for \$2.2 billion by a consortium of foreign and local heavyweights: Houston Industries Corp., AES Corp., based in Arlington, Va., Electricite de France SA and Brazilian steel giant Companhia Siderurgica Nacional SA. Light demonstrates that privatization is often moved forward more to generate quick cash than to upgrade public services. The foreign owners had limited experience in developing countries and focused on the bottom line for investors rather than on better service for consumers, according to the Wall Street Journal.
 - Two other important points we wish to make. First, that regulation is neglected while it plays such an immensely important role, especially in the early days of privatisation and market openings. For Light a “newly chartered regulatory body that, until recently, didn't have offices, let alone the know-how to serve as an aggressive watchdog” was set up. Bills for consumers went up. Government allowed Light's new owners to pass many operating-cost increases to consumers for a grace period of eight years And as a result the Wall Street Journal article said: “One thing that hasn't disappointed the new managers is Light's profit performance: Net income nearly doubled to around \$300 million in 1997.”
 - And our second point: workers pay the price of these developments. “The new owners wasted no time in addressing a top priority: staff cuts. In the first 18 months after the privatization, Light slashed its 11,300-strong work force by 40%” And so there was no way in which Light could deal with the emergencies and the threatening black out.
- A third case of market failure occurred in the United States¹⁷. During a week in June 1998 prices per Mwh sky-rocketed to more than 3500 US Dollars. This shows in the extreme that prices are volatile (see also the section on regulation and energy derivatives). Companies such as PacifiCorp said they lost some \$13 million in trading at the end of June, and will see additional losses in the third quarter as some traders defaulted on contracts. Ohio's FirstEnergy lost \$25 million after a trader, First Energy Sales, defaulted on contracts. Cincinnati's Cinergy Corp., also acknowledged that it will take trading losses. Citizens groups have complained about these losses for which consumers or workers will be paying. Ohio Citizen Action has asked the Public Utilities Commission of Ohio (the regulator) to make utilities responsible for costs related to the power shortfall, which resulted in some factory shut-downs and blackouts around the state. “It is the job of the utilities to provide reliable service for all customers,” said Shari Weir of Citizen

¹⁵ Agence France-Presse (via ClariNet) / Tue, 21 Jul 1998 "The likelihood of a double fault was 10 to 12 times higher than that assessed in the Mercury Energy report," the report said. "Where, over 30 months, one cable has been unusable for 17 percent of its time and the other for 70 percent, a planning, risk management and operational response was required."

¹⁶ Utility Privatization Leaves Many in Rio Cursing the Dark, by Matt Moffett, Staff Reporter of The Wall Street Journal., 27 April 1998

¹⁷ Mid-West in the US Copyright 1998 Elsevier Science, the electricity daily, July 7, 1998, Tuesday, SECTION: Vol. 11, No. 4, Power Price Spikes Bring Losses, Critics;

Action. "The failure of utilities to keep plants in working order and to make solid arrangements for providing electricity during normal summer conditions such as 90-degree temperatures proves that the utilities don't take this mandate seriously." The point underlines the need for a strong role of regulators to guarantee European citizens will continue to have reliable sources of power. As the Citizens group is quoted as saying: utilities will need to absorb "all costs resulting from inadequate planning and equipment failures."

- And we are warned that all this will be a normal part of how the markets will work. Illinois Power approached the US Federal Electricity Commission to investigate what happened as it suffered "market power abuse" when it was forced to pay as much as \$3,000 per megawatt-hour, while in previous years "prices between \$100 and \$150 per MWh were considered high during periods of peak summer demand". However, the Electric Power Supply Association has pointed out that the system worked and that price peaks are inevitable in an open market. Part of the problem seems however that the market does work. There had been a growth cycle on the power side of 2-3 % per year. No investments were made with regard to generation. And not much new transmission capacity was built. And additional stress comes from industrial customers that want cheaper interruptible tariffs. On peak days however companies are committed to firm loads. When people have shorted the market across these peak periods and they expect to go back into this market the megawatts are committed.¹⁸

And as market failure becomes more apparent, strong regulation is needed.

2.7. Regulation

- The public service is threatened by pressures generated by the Internal Market for Electricity. Companies aim to compete and to survive in the brutal market place. Their shareholders care about profits, about high rates of return on investment. Strong regulation is needed in the interest of citizens. We believe that the present regulatory bodies are more technocratic focused to ensure that the competition will work. That is the wrong recipe. Regulation needs to be focused on improving the quality of the service to citizens and business. The examples of market failure are all linked to weak regulation and companies that go their own way.

¹⁸ Copyright 1998 King Communications Group, Inc. The Energy Daily July 6, 1998 : Pressure Builds On FERC To Investigate Price Spikes

Regulation: battle for democracy

"The only means of insuring that utilities put the public interest above profit is to remove the profit motive. Within the US, government-owned systems and consumer cooperatives remain superior to the privatized companies by every measure of price, service and efficiency. This is true in other nations as well. (...). America's experience with private ownership demonstrates the importance of bringing democratic rights to utility regulation. However, there is as yet no system of regulation which is superior to democratic ownership, i.e. public ownership, of public services"¹⁹

- For regulation to function, it needs to be based on openness and transparency. The US provides a model that is based on the right to (all) information and the right to use that information and participate in the regulatory process. While a rate of returns on investment in the UK of 20% were seen as normal the US knows more modest rates of return of around effectively 3-4%. US regulator Greg Palast has pointed out that a strong regulator that regulates profits is in a better position to drive down prices and prevent excessive gains for companies. This is more effective than introducing the possibility to choose supplier with the intention of having lower prices as happens in the UK. Palast calls it a con, a cheat, a lie²⁰.
- Again compared to the UK and most other EU countries the US model allows for trade unions, consumer groups and others to seek information and to challenge decisions of companies on prices and investments.
- Only the trade unions in Belgium are directly part of the regulatory body, the Committee to Control Electricity and Gas. They also represent the consumers. The need for community groups to be part of the regulator was also one of the demands of the trade unions in Italy 19 February 1999.
- A much neglected issue is the role of electricity trading instruments.²¹ Little is known on how these instruments are best regulated. There has been much discussion on currency, interest rate and other financial derivatives. They can trigger unforeseen events and lead to near collapse of financial markets. Anthony Baldo wrote that "energy derivatives in general are more complex than financial ones." Utility companies will lack qualified people to master this new art while the nature of electricity adds an extra burden. "Enron, PanEnergy and other natural gas marketers breaking into electricity all theorise that they can market and deliver electricity as easily as they do natural gas. Don't believe them. It's no walk in the park. You can't store electricity. It's harder to transport than gas. And there are vast differences in supply and demand peaks and valleys." Delivery is crucial. US company Enron had its first weather features deal with Scottish Power. "The use of derivatives will be more far-reaching as we move through deregulation and utilities will be forced to trade on the open market," says Hyman Schoenblum, the treasurer at \$7 billion Consolidated Edison in New York City, which already buys roughly half its power from other electricity producers. "You'll see change in utility finance. [Utilities have] financed with 25- to 30-year bonds, or used first mortgage bonds. Now you'll see short-term financing and different techniques we've seen in other industries."²²

Regulation: Battle for Quality, Employment and Low Prices

¹⁹ What the privateers don't want you to know: How American unions and consumers won their rights, Gregory Palast, PSI Focus, September 1997

²⁰ The power game, column of US regulator Greg Palast written for the Guardian, 3 September 1998

²¹ Power struggle, How electricity deregulation will change the way companies purchase and hedge energy. Anthony Baldo 1998 Pasha Publications Inc

²² Quoted in Baldo 1998

“ (...) In the US, by contrast, stringent regulation of service quality is the key to employment security. US regulators do not let the free market determine the level of service, rather, regulators provide detailed standards for operations. For example, US law determines the method and frequency of reading, cleaning and replacing meters. The result of strict, detailed regulation has been a relatively high level of job security for the American utility worker, who enjoys the highest industry wages in the US - and the highest level of unionization. Due to both regulation and public ownership, 70 per cent of the utility industry workforce is unionized, whereas, in other industries, only one in ten American workers now belongs to a trade union.

How can utility corporations in the US charge low prices while paying relatively high wages? The answer is that US regulators force most operating costs onto shareholders by limiting private utility profits. A typical US utility earns a 3 per cent return on capital after deducting for taxes and inflation. Britain's privatized water utilities have garnered an astonishing 30 per cent return - ten times the profit allowed in the US. (...) ²³

Capturing the regulator

A recognised danger with weak regulation is that the regulator will be 'captured' by the regulated. US energy company Enron, the most aggressively active energy trader, has taken this literally; in the USA, the UK and Norway.

- Wendy Gramm was appointed to the board of Enron in 1993, five weeks after resigning as chairwomen of the Commodity Futures Trading Commission, where she had supported Enron proposals to relax regulations on trading of energy futures.
- Claire Spottiswoode, former gas regulator in UK, joined the board of Enron in 1998. Enron and she say that she will only be involved with the water business (FT Bus Rep 25 Sept. 1998)
- The trading manager of the Nord Pool, Preben Richter, resigned in September 1998 to start working for Enron in November 1998 (Reuters 21 Sept. 1998).

2.8. Prices

It will take a long time for prices to go down for domestic consumers.

- Statistics in the *International Electricity Prices* survey show that the prices for domestic consumers are rising in 1998 compared to 1997 while they are falling for large industrial companies.²⁴ This is a general trends across the world. It also demonstrates that possible competitive advantages of the large industrial consumers of electricity in Europe will be reduced by similar developments elsewhere. This could trigger a further race to the bottom;
- Privatisation is a continuing trend in Europe. US research reported in a publication of the OECD-IEA suggests that this does not lead to a lower price for domestic consumers. A consistent gap prevails between publicly and privately owned utilities. The former sell their power 16 to 20 per cent cheaper on average than Investor owned utilities.²⁵

²³ What the privateers don't want you to know: How American unions and consumers won their rights, Gregory Palast, PSI Focus, September 1997

²⁴ Price Trends diverge, Power in Europe, February 1999, 292/7

²⁵ The United States 1998 Energy Policy Review (International Energy Agency), 1998, p78. (footnote on the same page) Considerable controversy exists as to whether this gap can be fully explained by preferential access to cheap federal hydropower, tax-exempt financing and other government interventions which effectively amount to subsidies, or whether it reveals a real difference in efficiency. It appears that the advantages enjoyed by publicly-owned utilities may not explain all of the gap. A recent empirical study, using a large data base covering some 98 per cent of all IOU power sales and 83 per cent of all power sales by publicly owned utilities finds that publicly owned utilities have sales

The Commission and Europe's governments better held the warnings of the distinguished World Energy Council. It warns for the risks of liberalisation. Governments seeking to liberalise energy markets to make them more competitive must be careful not to damage social aims in the process according to a report by the World Energy Council.

- The study, produced in co-operation with Price Waterhouse Coopers, says liberalisation of energy markets will contribute to economic growth and social improvements. It warned, however, that there was a fine line between relaxing government controls and leaving the energy sector totally exposed to market forces "which risks eroding the social aims of liberalisation".
- The report says: "Do advocates of liberalisation in industrialised countries, hoping to benefit from falling prices, always realise that for consumers in developing countries and economies in transition, liberalisation more often than not has exactly the opposite effect because of the removal of taxpayer or cross subsidies".

We also note that prices for domestic consumers in CEEC are often lower than those for large industrial consumers. Very often they do not reflect all costs either. Prices for electricity will go up in CEEC rather than down. This will be exacerbated by the ending cross-subsidising of domestic consumers by large consumers. This is an explosive mixture in continuation with the employment situation.

Prices will become more volatile as is also shown in the example of market failure in the US. See also the section on regulation and the point on energy derivatives.

prices 2.5 per cent lower than IOUs, holding constant other factors including costs and taxes. The effects on costs and prices of public versus private ownership as well as the effects of competition are tested in the study. The results confirm that public ownership lowers prices by 2.7 per cent compared to private ownership for equal cost. The effect is particularly pronounced for residential customers: their prices lie on average 15.4 per cent lower if their suppliers are publicly owned utilities. Competition lowers prices by 7.8 per cent on average, in a balanced manner across all consumer groups. See Kwoka, John: *Power Structure: Ownership, Integration, and Competition in the US Electricity Industry*, Boston, Mass., 1996

Appendix 1: Employment Figures

Country	Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998
Austria	Energie (total)						31026	30445	30074	29966
Belgium	Electrabel		14911	14356	14047	13800	13441	13156	12898	12126
Croatia	Electricity			15170	14410	14492	14878	15508	15910	
Czech Rep.	Electricity	45000	45000	45000	43000	42000	41000	36000	34500	33000
	Gas			10500	10000	8500	8300	8300	8300	8300
Denmark	Total	11750	11688	11595	11471	11242	10959	10774	10488	
Finland	Total	24411	23176	22347	20003	18634	17089	17092		
France	EDF	120263	119589	118551	118395	117965	116909	116919	116462	114380
	GDF	26965	26509	26087	25801	25620	25269	24977	24944	24733
	Total	147228	146098	144638	144196	143685	142178	141896	141406	139113
Germany	Gas west	26300	31100	29300	26400	27200	26800	26700	26200	
	Gas east		5800	8600	9000	8100	6800	6800	6100	
	Electricity west	241300	236600	235600	212500	205200	199400	193400	185200	
	Electricity east		56200	48800	37300	38000	37700	35600	34100	
Greece	Electricity	29200	28975	28970	29587	29344	30383	35000	33999	33505
Hungary	Electr without mines						33700	31800	29400	22600
Ireland	Electricity	12000	11500	11200	10800	10500	10300	9800	9200	8800
Italy	Electricity	110562	107976	105732	104234	100312	94561	90606	85939	83400
Latvia	Electricity			8102	8024	7594	7481	7954	7371	7402
Lithuania	Electricity			18996	20217	21851	22522	23022	18727	14222
Netherlands	Energy / Water					45000	44000	42.000	41.000	40.000
Norway	Energy / Water	23000	21000	21000	22000	22000	22000	21000	21000	20000
Portugal	EDP	20165	18920	18082	17034	16826	16472	16182		
Romania	Electricity									95000
Spain	Electricity	52639	51960	51662	48143	47951	47384			
Sweden	Electricity	38000	35000	32000	29000	29000	29000	28000	27000	25500
Switzerland	Gas / Electricity	23565	24852	24338	24185	23885	23735	22200	22500	
United Kingdom	Electricity	144200	140200	134100	121900	111000	102200	88857	84445	

Sources: Central Statistical Agencies, company reports, trade union reports

Appendix 2: US study on effects of deregulation on energy efficiency and energy savings programmes

By cutting energy efficiency programs almost in half, electric utilities are sticking consumers with bigger electric bills and dirty air, concludes Unplugged, a new study by the Environmental Working Group and World Wildlife Fund. (1998) (US study)

To raise profits in a deregulated energy market, utilities are eliminating or drastically cutting these programs which save consumers money and reduce air pollution and greenhouse gas emissions. As a result, consumers paid an extra \$1 billion each year for the next decade due to cuts in energy efficiency investments, concludes the report.

The report ranked the nation's largest utilities on their commitment to energy efficiency programs and found a wide variation between power companies and regions of the country. For example, the City of Eugene, OR, whose utility serves some 73,000 customers, invested more in energy efficiency than the combined outlay of Southern Company, Entergy, Commonwealth Edison, and American Electric Power, which serve more than 12 million customers. Forty-two of the largest electric utilities completely eliminated their investments in energy efficiency.

"Utilities are putting profits ahead of their customers' interests," said John Coequyt of EWG, author of the report, "and to keep up with soaring demand, utilities have turned to antiquated, dirty power plants. Competition among electric utilities should not come at the cost of higher bills for consumers and dirty air."

Unplugged is based on documents utilities must file with the U.S. Department of Energy and finds that cuts in energy efficiency programs totaled \$736 million between 1993 and 1997. The cuts have also meant dirtier air across the U.S. According to the study, if energy efficiency programs had been fully funded in 1997 utilities would have avoided emitting 11 million tons of global warming gases and 79,000 tons of soot and smog-forming pollutants.

"Consumers are getting more than they bargained for from their utility companies -- more pollution, and more greenhouse gases," said Adam Markham, director of WWF's Climate Change Campaign. "Consumers want more energy efficiency and cleaner air, but our utilities, which should be on the front lines of America's effort to halt global warming, are letting us down."

The utilities have eliminated a range of energy efficiency programs including home energy efficiency audits and rebates for new energy efficient appliances, such as water heaters, light bulbs, showerheads, and refrigerators. These strategies are proven to cut energy usage and pollution. For example, compact fluorescent light bulbs use one-quarter the electricity of incandescent bulbs. Replacing just one incandescent light bulb will save a consumer \$50 and reduce carbon emissions by 1,000 pounds over the life of the bulb.

The report recommends all states create a public benefits fund in which a small percentage of consumers' bills is set aside for energy efficiency programs. Although the most immediate consumer benefit of energy efficiency programs is economic, "far more than electric bills are at stake," noted Markham. "Global warming is a pervasive and ever growing threat to all life on Earth and the ecosystems that support it. Utility companies can and must play a role in reducing that threat," he said.

Appendix 3: Democratic regulation

DEMOCRATIC REGULATION AND THE PUBLIC INTEREST

Many governments are privatising and selling off their public services in both West and East Europe. Regulatory frameworks are often inadequate. Regulation should have the interests of citizens and workers at heart. It should not allow transnational greed.

- Democratic Regulation is based on the Workers and Citizens Right to know and question;
- It ensures accountability to those effected;
- And contributes to the development of infra-structure necessary for the development of a dynamic economy and for the needs of citizens

Elements of Democratic Regulation include:

- Public access to utility records and accounts;
- Open and unrestricted government and regulator records;
- No exclusions for "commercial secrets" for monopolies';
- Open investigation in public hearing;
- Right to question the utility executives and the regular;
- Representation of consumers and trade unions on the regulatory bodies;
- Expert assistance for unions and citizen groups funded by government and the utilities;
- Full disclosure of financial relations between utilities and elected officials. No corruption