Electricity liberalization.

GREENWOOD, J.

2002

This it the author's accepted manuscript, the final published version is available from https://www.palgrave.com/gp/book/9780333971529. This pre-copyedited version is made available under the Springer terms of reuse for AAMs of subscription books and chapters: https://www.palgrave.com/gp/journal-authors/aam-terms-v1



This document was downloaded from https://openair.rgu.ac.uk



Electricity Liberalisation

Justin Greenwood The Robert Gordon University, Aberdeen <u>j.greenwood@rgu.ac.uk</u>

Paper prepared for European Centre for Public Affairs Workshop 'Lobbying the EU: Changes in the Arena', 24-5 January 2001, Leuven Electricity was an obvious candidate in the renewed drive to complete a European single market in the Delors years. Despite the energy sector being the first candidate for European integration in 1951, electricity consumption remained, in the mid 1980s, tied to a regional monopoly supplier, resulting, in the opinion of the Commission, in inflated prices and a lack of innovation. As a key factor in production costs in manufacturing industry, and a contributory factor to every household bill, the electricity supply industry, wholly untouched by market logic, presented a ripe apple for a (then) confident European Commission keen to progress the frontiers of project Europe, and demonstrate tangible results in European integration by the promise of lower prices arising from the introduction of competition.

Today, less than 13 years since the Commission started the ball of electricity liberalisation rolling, almost two thirds of the European electricity supply industry is subject to competition, resulting in real terms price reductions for consumers, with the prospect of complete market opening within the next five years. All of this has come about despite the opposition, at the outset at least, of most member states, and some of the largest producer organisations in Europe. How can this stark outcome be explained? What role did producer and public interests play in this outcome, and which factors explain this pattern? What lessons can be learnt about the role of private interests in European integration from this case?

The first part of the story of electricity liberalisation, accounting for events up to a 1996 Directive leading to partial market opening, has been extensively undertaken elsewhere (Conant, 1999; Eberlein, 2000; Eising, 1999; Eising and Jabko, 1999; Schmidt, 1997; 1998), and is summarised in the section that follows. Some of the analysis is however contestable, and here some rival explanations are offered. Some analysis is also provided of events up to a second Directive, due to appear in draft form in January 2001, for acceleration of the process of liberalisation providing a quicker route to full market opening than the 1996 Directive had envisaged. The second question - the role of producer and public interests in EU electricity liberalisation - has never been comprehensively undertaken, despite the presence of some partial accounts included within analysis of a number of sectors (Bartle, 1999; Sietses, 2000). The third endeavour, the generalisability requirement of any case study, leads to analysis of the circumstances under which private interests are not in the forefront of European integration in particular policy sectors. This latter task remains under theorised (Grande, 1996), notwithstanding well recognised foci in the established 'interest group' literature upon private interest division and disorganisation. Despite the recent explosion of institutional analysis in political science, relatively little of this has been directed at understanding the conditions under which political institutions remain relatively insulated from private and public interest pressures.

The Story of Electricity Liberalisation

Ironically, one of the triggers to EU electricity liberalisation was initiated by the organisation which has since been the largest obstacle to it – Electricité de France (EdF), responsible for 95% of French electricity generation and distribution, and virtually all the transmission grid (Klom, 1997). EdF's production capacity of electricity is around 250% that of its nearest counterpart in another member state (Electrabel, 1999), and in 1994 was the largest exporter of electricity in Europe (Klom, 1997). It initially (1986-8) saw the single European market as an opportunity to use its excess capacity to export to other markets in Europe, and filed a state-aid complaint with the Commission against the German government subsidisation of its coal industry (Schmidt, 1998). It had also been frustrated by Spain's refusal to allow it to use the Spanish grid to transport excess capacity in response to the request of a Portuguese consumer, which had been a contributory factor to a Council resolution of 1986 calling the Commission to action (Eising and Jabko, 1999). Later, EdF was to regret helping to open the Pandora's box of electricity liberalisation, and by 1989 it

had come to appreciate the threat to its position that requirements to liberalise its home market might bring.

It would, however, be mistaken to see EdF as the principal trigger to EU electricity liberalisation. The industry was always a likely candidate for liberalisation, and the main thrust was provided by the broader climate of single market completion generated by the Delors years, and a Commission on the march. The window of opportunity was widened by the UK experiment in privatisation, which was about to demonstrate (1989) the feasibility of devising a system of competition whilst still using a single transmission infrastructure. That is, the activities involved in delivering electricity to the factory or domestic doorstep, could be segregated into the activities of generation; transmission to major centres for subsequent distribution; and traded supply to individual points of consumption. The combination of ideas, circumstances, bandwagon, and policy entrepreneur selling a solution, foretold by Kingdon's insightful analysis of the creation of policy agendas, were there. A potential support constituency interested in cheaper electricity prices could be mobilised. With a choice of legislative instruments to achieve its goal, the prospects seemed good. Based on resolutions dating from the Energy Council in 1986 and 1987 (EURELECTRIC and Lyons, 2000), the Commission issued its consultative Green Paper in 1988 with substantive plans to liberalise the sector (Commission, 1998), followed by separate, first step Directives in 1990 on transit (90/547/EEC) and an uncontroversial set of measures on price transparency (91/296/EEC).

The Commission initially favoured use of an Article 90 procedure to achieve liberalisation, granting it the independent competence to address directives to Member States in order to ensure application of the Treaty rules for European competition law to state enterprises. This controversial procedure had already been used in another public sector monopoly area, telecommunications, with some success in the form of a 1988 Directive. When Article 90 was proposed as the preferred instrument in conjunction with infringement procedures under competition law, a bullish path to liberalisation seemed possible, and until the Autumn of 1991, was the chosen path of the Commission. In July 1991, the Commission circulated a draft Article 90 Directive, and initiated infringement procedures against import and export monopolies in electricity in nine member states (Conant, 1999). Yet by October 1991, the Commission had decided to abandon its use of an Article 90 Directive in favour of a more consensual approach, an Article 100a directive (published in 1992) requiring a qualified majority and enabling the input of the Parliament with its newly strengthened powers under co-decision. In fact, so contentious was the concept of liberalisation in electricity proving that it required de facto unanimity in the Council, in that a Franco-German summit on the matter, with longer term considerations for their relationship in mind, had ended with agreement not to leave each-other isolated on the matter. The path was set for a highly compromised directive with somewhat watered down proposals for liberalisation.

The opposition to the liberalisation proposals was mainly Member State led. At the outset, only the UK (in the process of delivering its own liberalisation), Ireland (with liberalisation under consideration, although later to switch sides) and Portugal (with inadequate production capacity) supported it among the then member states. A number were implacably opposed, including France, and, at the outset, Germany. With these most basic of calculations, the Commission would have been unwise to press ahead with an Article 90 Directive. This opposition was also expressed in debates and public hearings in the European Parliament, and in the decision of national electricity utilities to establish a European wide trade association, EURELECTRIC, to oppose the initiatives – although the ability of the latter to do so effectively would always be restrained by differing views.

Certainly, the Commission would have needed more time and nerve to press ahead with the use of Article 1990 in 1991. Whilst the government of the Netherlands was soon to join the coalition in favour, it was not until the German Presidency of 1995 that the German

position has switched to being fully supportive of electricity liberalisation, following incremental adjustment from 1993, and, critically, following the conversion of most of the German utilities to the idea by 1994. Undoubtedly, Germany's conversion proved a major landmark in finally delivering liberalisation, and has been explained by Eising and Jakbo as a gradual switch based on 'policy learning' by the German government, both from the UK experience and from acclimatisation to the liberalisation proposals within the Council of Ministers. Whilst carrying some degree of plausibility, the two years volte-face is too short a time period for policy learning to produce such a dramatic effect. In addition, it somewhat underplays the role of German electricity prices, at that time the highest in Europe, and 50% higher than those in the US (Financial Times, 1996), and the interests of its domestic manufacturing industry in lower input costs. As is evident later, most of the firms active in pursuing electricity liberalisation at the EU level in the 'ENERG8' coalition were German. Of all countries, German industry has also been among the loudest voices seeking, recently, an accelerated programme of liberalisation.

Just as crucial to the final achievement of a Directive was the final decision of the French to compromise. The 1992 draft directive was a direct threat to the French public service tradition, causing a strike amongst EdF workers in 1992 organised by the Communist CGT (Confédération Général du Travail) Union. Three years later, a wave of more strikes among public sector workers in general about issues of public sector job security crippled the French economy. Whilst the use of an Article 100a procedure only required a qualified majority, there was never a question of a vote being used because of the basic principle of vital national interest was at stake (EURELECTRIC and Lyons, 2000). In this context, the French willingness to compromise seems remarkable. The EU Electricity Liberalisation Directive (96/92/EC) finally approved at the end of 1996 took intensive efforts from four Presidencies involving significant compromises and trading of drafts, a Franco-German intergovernmental summit, and some fast footwork from the Commission to achieve. Among the latter, one strategy involved the maintenance of pressure by the use of infringement proceedings, leading to French fears of an outcome from European Court of Justice decisions (expected in 1998) which might be worse than a liberalisation Directive. In short, French interests faced the classic dilemma of whether they would be better off on the inside trying to limit the damage, or outright opposition. They chose the former strategy. Whilst French anxieties over ECJ decisions had been partly relieved by some surprisingly favourable 1994 decisions (the Corbeau and Almelo cases; see Conant, 1999), some senior French civil servants were already finding the progressive loss of support (particularly Germany) in the Council uncomfortable, and had started to seek a solution. Almost as an exercise in damage limitation, France proposed an alternative ('Single Buyer' model, below) to the model proposed in the Commission's draft Directive, under the rhetoric of 'liberalisation', yet in reality aimed at watering it down as much as possible. The Commission's skill in adapting and extending this to include it within the embrace of a compromise re-drafted Directive helped achieve the outcome they wanted, not least because the Commission also were uncertain of where future ECJ decisions would leave the project.

The Commission also showed itself adept at responding to the concerns of the Parliament and environmental NGOs by changing the detail of those proposals which could be conceded without too much difficulty, and to Trade Unions by rhetoric to take initiatives to mitigate the effects on employment of liberalisation. These factors apart, a number of other events proved favourable to the Commission's cause, including the accession of Sweden and Finland, both enthusiastic to the electricity liberalisation dossier, and the increasing warmth of Spain and Italy to the idea.

The initial 1992 draft Directive had proposed a system of 'regulated third party access' (rTPA) as a key mechanism to achieve competition in electricity supply. This was part of a broader set of principles involving the separation of the process of electricity supply into generation, transmission, distribution and supply to the consumer using principles first

adopted in the UK. Third Party Access (TPA) involves the latter of these activities, and is so called because it involves enabling a party other than the electricity generator and transmitter to 'enter' the grid to purchase electricity from these other parties, and to sell it on to consumers. It is the quickest route to liberalisation, because it does not require new market entrants to make long term investments in capital intensive equipment, such as generating stations or transmission wires/pylons. Indeed, until now electricity liberalisation has left alone the monopoly positions of the national grid transmission networks, while in theory allowing complete competition in generation without expecting this to yield significant new market entrants as a result of the capital intensive nature involved in market entry.

The solution to France's dilemma (outright opposition, or damage limitation on the inside) was to propose a rival system, the 'Single Buyer' model, on which a very limited model of liberalisation could be based. In this, the generator/producer (such as EdF) could also act as the 'buyer' of all the electricity purchased by its consumers from other sources, using published tariffs, with the purchaser pocketing any profit between the price it paid to source the electricity, and the sell on price to the single buyer. The initial version of this was sent for scrutiny by the Commission to an independent team of analysts in Germany, who concluded that, whilst the initial proposal was inconsistent with internal market rules, it could be adapted to be consistent and for use in the Directive. Once the model had been proposed as a route to liberalisation, France could hardly revert to outright opposition, and the adapted version was used as a compromise. Hence, the final 1996 Directive enabled member states to choose between regulatory schemes - a negotiated Third Party Access (nTPA) system favoured by Germany and the European Parliament, a regulated Third Party Access favoured by other countries supportive of liberalisation, and a Single Buyer model then favoured by France and allied countries with liberalisation concerns (Greece; Belgium). The menu of choice was extended by enabling Member States to choose between a system of legal, management, or accountancy separation of generation, transmission, distribution and supply systems. A further important feature was that the Directive was based upon an incremental system of market opening, starting with a requirement to subject 25% of electricity demand to competition from the time the Directive came into force in February 1999 (Belgium and Ireland were given one year extensions, Greece two), to 33% by 2003. Consistent with the choice menu nature of the Directive, those member states who wished to open their markets further were free to do so at any time.

In practice, by the time the Directive came into force, most of northern Europe had already fully opened up their electricity markets to competition, while some others (most notably Spain) have exceeded the requirements laid out by the 1996 Directive. The Single Buyer model, designed to forestall liberalisation, was eroding into disuse everywhere including its country of origin, France (Commission, 2000). Most countries have made the choice, from the menu available in the 1996 Directive, of the scheme most consistent with liberalisation, i.e. regulated Third Party Access together with a licensing procedure for generation, and most countries had liberalised at a faster pace than the Directive timescale. Market forces have matured, with most of the UK regional electricity companies by now bought up by American firms. American firms such as ENRON have become aggressive market entrants to electricity trading, and very active at the European level in pursuing further liberalisation. Spanish utilities have enthusiastically sought opportunities to raid capacities in the French market, while the once reluctant Belgians did not use the full extension they were given to put the directive into effect. Some of the original reluctants in the south of Europe have identified electricity liberalisation as a means of pursuing lower inflation targets, and in gaining access to the grid for renewable sources. There are even stories circulating that the top executives of EdF, whilst avoiding public differences from their government, are now looking forward to some of the opportunities liberalisation brings.

The principle of liberalisation had clearly been conceded, the liberalising tide had turned, and European industry had started to reap the benefits of lower electricity prices. As

the Commission had correctly predicted at the conclusion of the 1996 Directive, 'this deal partially opens the door. We hope the partially opened door will be kicked open by market forces' (Financial Times, 1996, p.23). Electricity prices did fall significantly in response to liberalisation, and more so in those countries opting for complete market opening (Commission, 2000). At a time when electricity consumption is forecast to increase by 40% over the next 20 years (Matthes and Timpe, 2000), there seemed no turning back, and the logical thing to do was to extend the benefits to all Europe's consumers, domestic and industrial. Whilst pressures for more liberalisation emerged from national governments, customers, and electricity companies, it is the European Commission that has taken the driving seat, with President Prodi proposing to the March 2000 Lisbon summit that a new programme should be put in place which would produce 100% liberalisation by 2004. Whilst this was not adopted, it was decided that an acceleration of liberalisation should be launched so as to create a fully operational internal energy market, and that the Commission should bring forward proposals to accelerate liberalisation, with a draft Directive expected from January 2001. At the public hearings on the detail of the new Directive, hosted in September 2000 by DG TREN (Transport and Energy) of the European Commission, EdF opposition to the pace and quantity of liberalisation was somewhat isolated. Indeed, such has been the pace and momentum of liberalisation that the French position has shifted to supporting the rhetoric of liberalisation but opposing the detail. Prediction is a dangerous activity, but writing at the turn of 2000/1, it looks very much like the Commission drive to achieve electricity liberalisation is about to be realised.

Electricity Liberalisation – The Role of Producer and Public Interests

The story told above indicates the role of producer interests in informing the positions of national governments in preference formation, and the subsequent transfer of these to intergovernmental negotiations. German industrial consumers of electricity, subject to the highest prices in Europe, played a significant role in changing the position of their government towards electricity liberalisation to a favourable one. The actions of the French government, on the other hand, were largely explicable by reference to their position as owner-shareholder of Electricité de France. But what of the role of producer, and other types of interests, organised at the European level? Given the somewhat patchy coverage of this question in public literature, additional methods used in answering this question range from 'grey' literature available from a range of interest organisations, to the use of focused, semistructured interviews. Where an assessment has been made of the impact of any one type of interest or organisation, each assessment has involved conducting interviews with multiple sources. These span the producer industry, consumer industrial interests, public interest groups, and policy officials, as well as sources from the literature in conjunction with established tools of analysis. In total, some 18 interviews were conducted in this way, supported by wide distribution of draft text.

European level organised interests have not been decisive to any of the outcomes described above. Taken together, differences among key producer utilities mean they have played a reactive role, following rather than driving agreements reached in the political institutions. EURELECTRIC had been formed to oppose the proposals for liberalisation, and did so consistently until 1995, including a somewhat aggressively hostile approach in the early 1990s. This approach yielded changes to details, but not to the core principle of liberalisation. The electricity supply industry, through EURELECTRIC and its regular dialogue with the Commission, had managed to tone down some of the more radical ambitions of the Commission in 1991, and had a major input into an influential European Parliament Opinion of November 1993, which, prompted the Commission to publish revised proposals including, inter alia, introduced the concept of negotiated Third Party Access (EURELECTRIC and Lyons, 2000). A key turning point in the approach of EURELECTRIC towards liberalisation was the accession of Scandinavian members into full membership in

1995, which changed the balance of internal opinion, causing the organisation to publicly admit that different views existed within its membership on the internal electricity market debate (ibid.). EURELECTRIC's most positive role was finally to support the final draft of the Commission's 1996 Directive, and to call upon the Parliament (whose Energy Committee had been seeking to use its new co-decision powers to issue amendments) and Council to do so without amendment. Indeed, this was the outcome. EURELECTRIC's role in the years following the Directive shifted to one of behind the scenes technical co-operation with the Commission (including a move from Paris to Brussels), whilst the electricity supply industry in national contexts focused attention to the requirements for transposing the Directive. It is presently seeking to adopt a position on accelerated liberalisation, although the realities of member differences, centred around EdF, mean that it is difficult for it to do so in detail, other than a position that it 'firmly believes that it is realistic to aim for a faster opening of the market' (EURELECTRIC and Lyons, 2000, p. 98).

European level trade unions, whilst active throughout the debate in opposing liberalisation on the grounds of its anticipated impact on employment, had little to fight with and seemingly no impact upon the outcome. Public interest groups, including consumers (with interests in lower electricity prices) and environmental NGOs, have supported the historic process to differing degrees, and both sets of interests broadly support the acceleration of liberalisation, with some significant derogation of detail. Public consumer groups wanted the benefits to be delivered to domestic consumers much quicker than the 1996 Directive envisaged, though concerns about the universality, quality and safety could at that stage be reassured (BEUC, 1994; 1995a, b, c; 1996). For some environmental public interest groups, liberalisation offered the prospect of more environmentally friendly forms of generation, such as natural gas instead of coal and nuclear, as a result of pressures for cheaper and more energy efficient forms of generation. In this, they found allies in a growing, though still small, segment of the producer sector, where recent technologies enable the production of combined heat and power simultaneously (co-generation), often using gas, resulting in a new sector association (Cogen Europe) representing equipment manufacturers and industrial users. The Commission has been receptive to these inputs, though not to the extent that environmental NGOs, and Cogen Europe would have wished. Other environmental groups, such as Greenpeace, have been more critical, drawing attention to the way in which electricity liberalisation produces certain trends detrimental to the environment, such as increased consumption arising from downward pressure on costs (Greenpeace, 2000). Environmental public interest groups may have influenced some of the detail accompanying the debate (Table 1, below), sometimes through separate policy initiatives (such as transparency pricing to prevent hidden subsidies, or the present Renewables Directive), though have not been central in delivering the outcome of liberalisation. A recent report for the WorldWide Fund for Nature concluded that 'it can be expected that environmental considerations will play only a minor role in the (acceleration) process' (Matthes and Timpe, 2000, p.8). Whilst EU environmental lobbies benefit from co-ordination of campaigning (including the 'good cop/bad cop' team approach which embraces networks involving Greenpeace and WWF), liberalisation in principle and practice can produce tensions within environmental movements. Firstly, in principle activists are not always persuaded by market principles. Secondly, in practice, market induced downward pressures on costs can have positive environmental effects through the introduction of co-generation, and negative effects through increased consumption. Tensions can also arise in seeking to incorporate arguments that state aid be denied from one sector of industry (such as nuclear and fossil fuel production), and yet be granted to another (renewables), particularly in areas such as energy where there is no Treaty base other than through internal market measures.

A somewhat greater role has been played by industrial large-scale electricity consumers, although this should not be exaggerated. Their role has been a supporting one to the Commission, and even had they not been active at the European level, it is hard to imagine a different outcome to the one described above. The two most significant organisations in this limited contribution appear to have been the European section of the International Federation of Industrial Energy Consumers (IFIEC), an association of associations with 13 members representing 75-80% of industrial energy consumption in Europe, and ENERG8, an issue network of large electricity consumption firms. IFIEC is highly regarded by the Commission, and is noted for delivering thoughtful responses to Commission consultation papers. A number of interview informants who have been on the inside of the process from industry have indicated that, of all producer interests, IFIEC played the greatest role. Despite these, there are a number of reasons to proceed with caution. Firstly, its work with the Commission has stretched its somewhat limited resources, and tends to have been reactive rather than proactive in nature. Secondly, some commentators have drawn attention to divisions within IFIEC, themselves not untypical for a federation of federation structure (Bartle, 1999; Sietses, 2000). Some of these are centred around French members (ibid.), who already benefited from some of the lowest electricity prices in Europe and saw no reason for change. A third factor is what Schmidt refers to as the ability of the industry to 'buy off' its opposition. Everytime a consumer complained about its inability to access cheaper sources of electricity, industry could make arrangements to match the better bargain the consumer had found, and consequently only a trickle of cases reached the ECJ from producer interests (Schmidt, 1998).

Sietses links the formation of ENERG8 directly to the classic collective action problems of associations, and particularly to those of IFIEC, and to CEFIC, the European Chemical Industry Council (Sietses, 1988). In his analysis, the latter organisation reportedly had problems until around 1995 in arriving at common positions because of the interests of oil and gas companies, themselves affected by attempts at gas liberalisation, although how the blockage in CEFIC became lifted c.1995 is unclear. The downstream trade association of the oil industry, EUROPIA (European Petrochemicals Industry Association), has never had any position on electricity liberalisation, despite its position on the producer section of the EU Energy Consultative Committee (ECC). Sietses also refers to the collective action difficulties experienced by UNICE (Union of Industrial and Employers' Confederations of Europe), although this may be more a reference to its generally wide constituency and consequent tendency towards lowest common denominator positions than to the specific case of electricity liberalisation. Its former General Secretary, Zygmunt Tyszkiewicz, reports no difficulty at all throughout the process of electricity liberalisation in UNICE taking a supportive role, because the public sector monopoly utilities were not in membership of UNICE member organisations prior to the 1996 Directive. Nonetheless, Sietses is dismissive of the role of associations in the debate, and instead builds up a model of company interest representation at the EU level in electricity liberalisation, starting with the European Round Table of Industrialists (ERT) c. 1991.

Electricity liberalisation represented the kind of high politics attractive to the ERT. It commented on the process in a number of reports between 1990-3, including some of its most famous commentaries on the climate for European business (e.g. Rebuilding Confidence, 1992; Beating the Crisis, 1993) (ERT, 1992; 1993), pressing the case for liberalisation on the basis of price comparisons with the USA. Once the issue had emerged fully onto the European agenda and was clearly heading for action, the ERT, true to its role as a 'big issue' agenda setter', withdrew from the issue. Some of its most affected members, as intensive energy users, took the issue on in the form of the ENERG8 coalition, so called because of the number of large firms involved at one time, including Bayer, BASF, ICI, Dow Europe, Thyssen, Pilkington, Akzo Nobel, and Mercedes Benz. Whilst the network followed the ERT format of invited direct membership and Chief Executive Officer (CEO) representation in an attempt to avoid classic collective action problems, it too became subject to lowest common denominator issues itself when membership grew in number and sectoral diversity. It first met in 1992, largely prompted by the European Commission in need of constituencies of support, who told large industrial consumers that 'no one whistles your tune in the corridors of the Commission' (Sietses, 2000, p. 77). This helps explain its ability to get high

level access to the Commission, including Presidential level. ENERG8 supported the process until the Directive came into force, and has since withered to inactivity. Indeed, one reason for exercising caution as to the role of ENERG8 is that a number of key figures in the debate have little recollection as to its role, whilst more recent industry leaders have not even heard of it. It was a supporter of the process rather than a leader.

The following is an assessment of the role of all industrial interests and interest organisations with a role in the liberalisation process:

Table 1: Private and Public (non-state) Interests in Electricity Liberalisation

Organisation	Description	Historic Relationship to Liberalisation (+, -, active?)
EURELECTRIC – Union of the Electricity Industry	Members (national associations, or where absent, utilities) involved with the generation, transmission, distribution, and supply of electricity.	Originally established to oppose liberalisation, and did so through its continental members until mid 1990s. In regular dialogue with Commission throughout liberalisation process. Now reflects the 1996 directive position, and the activities and different views of internal active members (see below). Well connected & involved with Commission, highly involved at a technical level, and acts to the limits of its member architecture. Presently working on a position on the extent and speed of liberalisation (EURELECTRIC and Lyons, 2000), though articulates general support for accelerated liberalisation. ECC
'Northern Group'	Northern members of <i>EURELECTRIC</i> (minus Ireland), informal grouping, active from c. 1995. Core members are, D, Fin, NL, S, UK. Dk a background member; I and E late converts.	industry member. First wave of liberalisers, still active in taking forward liberalisation agenda. Now the dominant coalition within EURELECTRIC, the latter's positions are now pro liberalisation in rhetoric, though the detail and ability to be proactive of EURELECTRIC reflects the input of 'Reluctants' below.
'Reluctants'	Edf plus Belgian, Irish (changed from pro during very early stages), Greek, Luxembourg members of <i>EURELECTRIC</i> , France and Belgium are particularly reliant upon nuclear electricity generation.	Opposed. Original response to liberalisation was the single buyer model. Interests drawn from countries often last to implement directive. As the liberalisation agenda has progressed, so the positions of this group have also progressed in public rhetoric - e.g. progression from single buyer model to regulated TPA, and claims to support accelerated liberalisation

1. EU level Producer Associations/Collective Fora

(European Association for Renewables)	Now a grouping <i>inside</i> <i>Eurelectric</i> , once outside	 though at a slower rate for % and timescale than 'Northern' group. EdF remains well connected in EU high politics arenas, and with some shareholdings in privatised companies, the potential (as yet, unrealised) to influence the positions of some actors in the 'pro' camp. Active to secure own position issues, e.g. with DG Envt interests on bio fuels, large combustion plant directive etc, though not a major liberalisation player
EFET – Electricity and Gas Traders	Now a grouping established outside <i>Eurelectric</i> after a period (of dissatisfaction at their representation) within, though with membership for supply interest purposes. Encouraged by DG (then) XVII. The US firm ENRON is a significant member, and voice for liberalisation.	Created at time of early Florence regulatory conferences, c. 1998; raison d'être possible as a result of liberalisation.
European Heat and Power Association	Overlapping membership with EURELECTRIC, plus municipal members. Formed 1994.	Closely aligned with EURELECTRIC, though never anti liberalisation. Enjoys good Commission links. ECC industry member.
CEDEC – European Federation of Local Public Energy Distribution Companies	Municipal Members from D, F, I, B, A, claiming a 20% market share of supply. Estab. 1992.	Traditional, public sector view of liberalisation where focus is more on threats. Opposed 1992. Still active, broadly opposed, though never central. In 1999, issued a joint statement of opposition with the trade union organisation EPSU (see below). Recent position paper (CEDEC, 2000) focuses on damaging employment effects of liberalisation, seeking more gradual introduction (i.e. against accelerated liberalisation), but to enable local distributors to compete with dominant producers. ECC industry member.
Energie Cités	Wide network, formed c. 1997, based around local and regional	ECC industry member. Not significant in recent liberalisation.

	authorities in western, central and eastern Europe, and representative organisations. 87 full (western European) members. Producer (municipality as producer and distributor) and consumer interests.	
Cogen Europe - European Association for the Promotion of co-generation	Co- (often, gas) generators & industrial users interested in their own generation needs, and equipment producers. Reflects some recent technological innovations whereby heat and power can be produced simultaneously. Established 1993.	Pro liberalisation, and, consistent with its members business interests, promotes energy efficiency measures through co-generation with environmental NGOs such as WWF. ECC industry member.
FORATOM (European Atomic Forum)	Nuclear industry association. France and Belgium are most reliant on nuclear electricity generation, with 75% and 58% of electricity respectively in these countries generated by nuclear capacities (Matthes and Timpe, 2000).	State ownership meant never in forefront of political activity at any stage, though some large members pro and increasingly active since Directive.
IFIEC (International Federation of Industrial Energy Consumers) - IFIEC Europe	Association of Associations. IFIEC Europe has 13 federations representing 75-80% of industrial energy consumption in Europe - steel & alloys, chemicals, non-ferrous metals, cement, pulp & paper, food & packaging, automobile etc.	IFIEC originally contained diverse views on liberalisation (French members esp. satisfied with electricity prices), though has generally managed a supportive line. Rated by a number of players as central to the liberalisation debate and for the Commission in building a consensus. Noted for delivering well thought of responses to Commission consultation papers – which have stretched its limited resources. Seeking separation of responsibilities in supply chain

		(IFIEC-Europe, 2000). ECC consumer section member .
ENERG8	Formed 1992, partly in response to Commission prompting, though also in response to the difficulties of broad sector associations in reaching common positions. Large scale user firms – Bayer, BASF, ICI, Dow Europe, Thyssen, Pilkington, DSM*, Akzo Nobel, Mercedes Benz, Ford (associate member)*, Enron*, KNP, BT*. Involves CEOs. * - not founding member	Pro, some impact on original liberalisation debate leading to Directive, and on positions of Associations representing these members, e.g. CEFIC, UNICE (though see CEFIC below). Worked closely with 'Northern' group inside EURELECTRIC. Inactive as a collective entity now, partly as a response to its growth in diversity, though original members individually remain active.
CEFIC (European Chemicals Industry Federation), CEMBUREAU (European Cement Association), UNICE (Union of Industrial and Employers' Confederations of Europe), UEAPME (European Association of Craft, Small and Medium Sized Enterprises), EUROFER (European Confederation of Iron and Steel Industries)	Traditional EU sector or cross-industry associations	Members of consumer section of ECC. UNICE had no difficulty in being pro liberalisation prior to 1996 Directive as public sector utilities were not in its membership constituency. CEFIC became responsive over time to member demands (e.g. ENERG8 dual members) for liberalisation as consumers, with some reports of early collective action difficulties in member agreement.
EUROPIA (European Petroleum Industry Association)	EU downstream petroleum sector association	Member of industry section of ECC. Not historically active or significant in liberalisation debate - no public positions.
ERT – European Round Table of Industrialists	By invite only, Chief Executive Officers (CEO) of Europe's largest companies; fluctuating over time around 45 members, more of an 'agenda setting' think tank than an operational lobby	Active c. 1991-3 in supporting the case for liberalisation as part of wider agenda for competitiveness of European industry.

	organisation.	
EETC – European Energy and Telecom Consulting, and its conference format EEMF – European Energy Millennium Forum	Consultant led forum group of producers formed December 1998. Brussels based, now operated from offices of public affairs consultancy Edelman.	Pro, though not involved in detail of debate.
UCTE, formerly UCPTE - Union for the Co- ordination of the Production and Transmission of Electricity	Grid operators formed 1951, then concerned with non competitive cross border continental distribution, focusing post liberalisation on switching and metering issues of exchange.	Originally opposed to liberalisation and then aligned with 'reluctants' group position. Not a significant player in political debate on liberalisation. ECC industry member.
ETSO – European Association of Transmission System Operators	Formed 1999 as a result of the liberalisation directive requirement for the independence of transmission system operators. Network grid company users, whose formation encouraged by Commission. Aimed at solving problems such as congestion management, bottlenecks, transit costing of transmission - i.e. the technical requirements of single market creation.	Post liberalisation organisation which, whilst technical in nature focusing on the regulatory issues of implementation of the internal energy market, is company driven.
CIGRE - International Conference on Electrical Cabling	Cables specialist technical organisation, with European and non European members.	Not significant in liberalisation
CIRED – International Conference on Electricity Distribution	Formed 1971 for information exchange between parties active in electrical distribution, from utilities, low volume transmitters, to electrical engineers – knowledge, technical information, etc.	Not significant in liberalisation
EUROGAS (European Union of the Natural Gas	Gas generators. Possible future merger with	Broadly pro, though not central in electricity liberalisation - mainly

Industry)	EURELECTIC into mega energy wide trade association. Already some overlapping membership, though competitive interests with electricity restrict extent.	focused on gas liberalisation, with significant member reservations on upstream gas liberalisation. ECC industry member.
EWEA - European Wind Energy Association.	Formed 1982, focused on wind renewables.	Not central in liberalisation.
GEODE - European Group of Enterprises and Organisations of Energy Distribution	Barcelona based. Independent municipal distributors, e.g. Grenoble. Company based.	Very pro, differences in view as to how central a role they have played - well connected with regulators. ECC industry member.
Brussels Energy Round Table	Commissioner van Miert creation – network industry club formed c. 1995 to assist with support for the liberalisation agenda.	Created to boost support for liberalisation.
CEEP - European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest	Public Sector Employers - though also active on wider public sector issues.	Originally anti liberalisation with employment related concerns. An avenue for concerns of the 'reluctants' group. Member, consumer section of Energy Consultative Committee
EPSU - European Federation of Public Service Unions; EMCEF - European Mine, Chemical and Energy Workers' Federation; ETUC – European Trade Union Confederation	EU level Trade Unions most affected by liberalisation	Anti liberalisation, based on concerns about job & membership losses. ESPU organised 'European Action Day' in May 1999 and a large protest demonstration (20,000 energy workers claimed) in Berlin, and issued joint statement of opposition to liberalisation with CEDEC. Literature reflects that concerns to mitigate job losses have not been taken into account by any measures in EU legislation, despite Commission statement to European Parliament in 1996 for specific measures (EPSU, 1999). EMCEF, EPSU and EURELECTRIC have recently (7 November 2000) concluded a joint declaration on the social implications of the Internal Electricity Market as part of their broader social dialogue,

emphasising consultation, re- training and structural employment adjustment, information dissemination (EPSU, 2000). Recent activities of Trade Unions have been based upon achieving such initiatives, and gaining consultative status in regulatory activities. EPSU, EMCEF and ETUC are all represented on the
Energy Consultative Committee.

2. Firms very Active at the EU level in Electricity Liberalisation

Electricité de France	active in Brussels c. 1989. Most reluctant party throughout,	
(F)	though some claims that there are more liberal pockets within EdF	
	than the present public position of the French govt. See also	
	'Reluctants/EURELECTRIC' above.	
Electrabel (B)	Always Brussels based. Reluctants group, recently more detached.	
RWE (D)	active in Brussels c. 1989. Initially reluctant, later pro.	
Preussen Elektra (D)	active in Brussels c. 1989. Initially reluctant, later pro.	
Bayernwerke (D)	active in Brussels c. 1989. Initially reluctant, later pro.	
National Power (UK)	active in Brussels c. 1989. Pro from start.	
PowerGen (UK)	active in Brussels c. 1989. Pro from start.	
SydKraft (S)	active in Brussels c. 1989. Pro from start.	
Vattenfall (S)	active in Brussels c. 1989. Pro from start.	
Endessa (E)	Recently (c. 1998) active in Brussels. Pro.	
Redelectrica (E)	Recently (c. 1998) active in Brussels. Pro.	
Enron (US)	Electricity trader. Active in Brussels during liberalisation. Pro,	
	frustrated with progress of TPA, pursuing published price tariffs	
	agenda.	
Enel (I)	Recently (c. 1998) active in Brussels; positions not always	
	historically clear	
SEP (common Dutch	Active in Brussels	
generators organisation)		
/TenneT (NL - joint		
grid ownership by state		
& largest producers)		

<u>3. National Business Interest Associations Historically very Active at the EU level in</u> <u>Electricity Liberalisation</u>

Association of Electricity Producers – UK	Founded 1997, yet to spread out beyond UK. Pro liberalisation, includes gas generators.
Electricity Association – UK	Brussels based since c. 1993
VDEW – Germany	Brussels based.
EnergieNed – NL	Brussels based.

4. Public Interest Groups

Consumer Organisations	BEUC (Bureau Européen des Unions de Consommateurs), COFACE (Confederation of Family Organisations in the EC), EUROCOOP, IEIC (Institut Européen Interégional de la Consommateur) were supportive of liberalisation, though to differing degrees. Some had concerns about the pedestrian speed at which price reductions were likely to come to domestic consumers, and about public service obligations (safety; quality; universality) in the early stages of debate prior to the 1996 Directive (BEUC, op.cit). Not all consumer organisations were active campaigners and none were central, though BEUC, COFACE, and EUROCOOP are members of the
	consumer section of the Energy Consultative Committee.
Environmental Non Governmental Organisations (NGOs)	Four of the environmental 'G8' ¹ EU public interest environmental organisations have been active on EU Electricity Liberalisation. Climate Network Europe (CNE; lead organisation); WorldWide Fund for Nature (WWF); Greenpeace; and Friends of the Earth (FoE), have issued joint statements on the subject. Whilst recognising at an early stage in the (pre 1996) process the opportunities which liberalisation might bring for environmental improvement (such as the development of natural gas combined heat and power stations rather than fossil fuels or nuclear, an outcome of liberalisation in the UK), these organisations have pressed the case with the Commission for specific actions. Whilst environmental considerations are not expected by play a significant role in the Acceleration Directive draft ² , many have found outlets in other policy initiatives, such as the May 2000 Directive on Renewables, transparency pricing, carbon tax, and emission trading. Some alliances with industry have emerged, eg joint statements from WWF with COGEN Europe (Matthes and Timpe, 2000; WWF & GOCGEN Europe, 2000). Some Greenpeace personnel are well linked with the Commission as former employees. CNE is represented on the Energy Consultative
Others	Committee. Never a central campaign issue for the European
Ouldis	Citizens' Action Service (ECAS) or other NGOs.

¹ A network comprising European Environmental Bureau (EEB); World Wide Fund for Nature (WWF); Transport & Environment (T&E); Birdlife International; Greenpeace; Friends of the Earth; Climate Network Europe; World Conservation Union (IUCN)

² Whilst it is not possible to know whether issues have been incorporated until a draft appears, representations have been made by environmental NGOs on measures to address state aid and subsidies; provision of information on source of provision; sources of funding for connection charges for renewable energy sources; and targets for co-generation supply.

ECC – Electricity Consultative Cttee	Formed 1998 post liberalisation, with sections for representation of producer (industry, trade union) and consumer (industry, household consumers). Has not been significant in liberalisation debate.
Council of European Energy Regulators	No EU regulator or uniform national model of regulation, hence a forum for regulators from national environments; 'acceleration directive' places pressures for harmonisation of national systems of regulation, so likely to expand scope – though a 'European Regulator' not formally part of the agenda, most countries have positions on the concept.
Florence Regulatory Forum	Council of Regulators, plus other central players in regulatory discussion & information exchange forum. Established in 1998, two meetings per year, focused on the problems of cross border trade, such as tariffs, and congestion management.

5. Other EU formally constituted (non industry) organisations

Conclusion: What does Electricity Liberalisation Tell Us About EU Interest Representation?

Interest intermediation is not in the forefront of the story of EU electricity liberalisation. EU level interest representation played nothing more than a supporting role for events that would have happened anyway, and do not appear to have influenced the main character of legislation that emerged. Only certain, largely non central, details have been influenced by public and private interest actors. The key factors which explain the outcomes of electricity liberalisation concern:

- the role of the Commission in driving the single market agenda forward;
- the presence of a recent workable model in the UK;
- the Commission's skilful use of competition policy powers to bring France/EdF to work within the scope of a Directive which interests in that country might otherwise not want;
- the Commission's fleetness of foot in turning the 'single buyer' model to its advantage, and willingness to compromise with a 'menu of choice' Directive, and to accommodate a variety of outside inputs, so as to achieve a foot in the door, which other forces would later throw open;
- the march of the liberalisation tide, and the accession of 'pro' countries;
- the impact of German domestic interests, in seeking cheaper electricity prices in the most expensive European market, in changing the position of the German government to pro liberalisation.

Interest intermediation therefore played a role mainly at the domestic level, and through France's position as owner-shareholder of EdF, in shaping the character of the first Directive. The interesting task is to try to identify the conditions under which interest intermediation is likely to take a back seat in European integration. Grande (1996) rightly draws attention to the ways in which the multi-level architecture of the EU limits the role of outside interests in

the EU political systems, generating pressures for pluralistic outcomes because of the ways in which multiple entry points creates a 'lobbying free for all'. Political systems can help insulate themselves from outside interest pressures through this multiple architecture, knowing that bargains struck in one setting cannot be made for other arenas, and by playing 'two level games'. Tendencies over time to disperse power between and within political institutions, through procedures such as QMV and co-decision, provide for greater levels of insulation through complexity. Yet these are largely factors that do not vary across single market policy arenas. Integration in some sectors has been driven by outside interests, whereas in others such interests have taken a back seat. What features about the electricity sector, which may well be present in other sectors, predict the latter outcome?

The first contributory factor concerns the nature of the debate under question. The issue of electricity liberalisation was high politics, because it involved the delivering of an essential commodity to every enterprise and household in Europe, national systems of essential commodity delivery, and challenges to national champions. It also involved challenging national principles, such as the French tradition of public service, through the alternative system of liberalisation. This is quite different from technical issues of widget harmonisation which might safely be left to trade associations to undertake. No matter how fuzzy the formulation appears in concept, the original distinction of Hoffman between 'High' and 'Low' politics retains considerable utility of a rough and ready character in practice (Hoffman, 1966). High politics are dominated by member states and political institutions, whereas low politics are dominated by largely private interests and their representative organisations, in conjunction with political institutions.

The second contributory set of factors concerns the nature of the product and the characteristics of the industry sector. Where the interest concerned is already involved in substantial trading on a transnational basis, colonised by firms used to operating in different national environments, so there is likely to be a prior history of transnational organisation. Unlike telecommunications, electricity has yet to become a global market because of the difficulties involved in transporting, trading and exchanging electricity on a global basis. At best, it can only be a product exchanged within a regional basis in the globe (e.g. Europe), because it is limited by the distance it is possible to construct physical infrastructure for transporting electricity across high voltage wires. Telecommunications, on the other hand, can become a global industry because of satellite technology. These realities, together with the absence of liberalisation and the presence of regional and national monopoly suppliers, meant that transnational organisation has historically been weak, and, where it has existed, tends to have been focused on technical issues of exchanges rather than political representation (Bartle, 1999). Interest organisation within the industry varied across European in national settings, because of differences in the way the industry was constructed, making transnational interest organisation difficult. In France, for instance, the presence of monopoly suppliers owned by the state meant that there was no need for significant political organisation. In Germany, on the other hand, the industry has historically been populated by a large number of distributors, including a number of dominant regional monopoly utilities, which has meant that there has been an interest organisation (VDEW) of long standing for the industry. Such a mixed ownership pattern across Europe, ranging from large monopolies to small municipal suppliers, is not conducive to transnational interest organisation. Indeed today, at the European level the electricity supply industry includes separate associations for large utilities (EURELECTRIC), and smaller municipal suppliers who are themselves differentiated in interest organisation (CEDEC, GEODE).

A third set of explanations for the lack of interest dynamics concern the lack of regulation, the absence of a 'common enemy', and the ways in which differences in interests to regulation condition associational capacities. Where there is a history of regulatory competencies invested in transnational authorities, so the industry is likely to have some degree of transnational organisation. None of these factors were present in the electricity

sector prior to the 1988 Green Paper. Until the Commission proposed liberalisation, interest organisation of the business sector at the European level was either non-existent, or at the margins and focused on technical exchanges of electricity and know-how. The Commission Green Paper changed these dynamics, and prompted the electricity supply industry to create a European level organisation to oppose the proposals (EURELECTRIC). Yet once organisations that were favourable to liberalisation participated, so the capacity of the industry to deliver common positions was completely undermined. There was no 'common enemy' in regulation, nor in the position of industry consumers whose organisation required the assistance of Commission stimulation and which lacked substance where electricity prices could be kept low. These are not favourable conditions for trade associations to operate in. For trade associations to be effective, they need as a basis to exist in a climate of trust between members, which enables a high degree of autonomy to be provided to the association secretariat to engage with political institutions. Without these factors, and in the circumstances of fundamentally opposed member interests, interest representation is likely to be channelled through national routes.

A final factor that took the arena beyond private interest politics at the EU level was the strong position of the Commission from which to take liberalisation forward. They did so as part of the wider drive to complete the single market, which in the wake of the passage of the Single European Act and 'project 1992' had unstoppable momentum, and widespread support among big business interests as whole. Historically, the Commission of the late 1980s was a confident one on the march, led by a visionary. Even when the Commission ran into the turbulence of the early 1990s, it could still rely upon a choice of regulatory instruments, including the opportunity to apply pressure through the European Court of Justice. The competent units within DG XVII/DG TREN were of sufficient size, while the issues were large enough to attract patronage within the Commission at the highest level throughout. From 1989, a working model for the scheme was provided by the UK, regulatory and scientific expertise was always available, while the prospect of Nordic accession always promised to enlarge the constituency of support. Large firms could be mobilised and stimulated to collective action in support by the prospect of cheaper electricity (EFET, ENERG8), and the utilities themselves were divided. Amongst non-business interests, only trade unions, hardly equipped to stop the process at the European level, expressed outright opposition to the proposals, whilst consumer and environmental organisations were broadly supportive on the thrust, if not always the detail. In these circumstances, it seems, the Commission had little to fear from taking the agenda forward, and adapting to accommodate the diversions it met en route.

Taken together, a combination of circumstances made the issue unlikely to be one in which private and public interests were able to take a front seat. These were: a 'high politics' issue and the intergovernmental nature of the politics which underlay these; a climate driven by ideas; the unfavourable circumstances for transnational collective action provided by the characteristics of the industry, the structure of private business producer interests, and the nature of regulation; the factors disabling concerted industrial consumer pressures; the plurality of interests within private, and among private and public interests; and the favourable circumstances for the Commission to drive the issue forward independently. Ideas, and institutions, it seems, triumph over private interest intermediation as explanations for EU electricity liberalisation.

References

Bartle, I (1999) 'Transnational Interests in the European Union: Globalization and Changing Organization in Telecommunications and Electricity', <u>Journal of Common Market Studies</u>, September, 37, 3, pp 363-383

BEUC (Bureau Européen des Unions de Consommateurs), Brussels

- (1994) BEUC in BRIEF, no. 9, April, p.4
- (1995a) Annual Report 1994, p 26
- (1995b) BEUC in BRIEF, no.13, April, p.3
- (1995c) BEUC in BRIEF, no. 14, July, p.3
- (1996) BEUC in BRIEF, no. 18, July, p.2

CEDEC (European Federation of Local Public Utilities) (2000) Submission to Public Hearing on the Completion of the Internal Energy Market, 14 September 2000, http://www.cedec.com/index-en.html

Commission of the European Communities (1988) The Internal Energy Market, COM(88) 238 final of 2 May 1988, Luxembourg, Office for Official Publications of the European Communities

Commission of the European Communities (2000) Second Report on the State of Liberalisation of the Energy Markets, COM (2000) 297 final, Luxembourg, Office for Official Publications of the European Communities

Conant, L (1999) 'Law and Politics in the European Union: The Europeanization of Market Regulation and its Discontents', paper prepared for the Biennial Conference of the European Community Studies Association, Pittsburgh, June 2-6 1999

Eberlein, B (2000) 'Configurations of Economic Regulation in the European Union: The Case of Electricity in Comparative Perspective', <u>Current Politics and Economics of Europe</u>, 9, 4, pp 407-426

Eising, R (1999) 'Reshuffling power: the liberalisation of the EU electricity markets and its impact on the German governance regime', in Kohler-Koch, B and Eising, R (1999) *The Transformation of Governance in the European Union*, London, Routledge

Eising, R and Jabko, N (1999) 'Moving Targets: Institutional Embeddedness and Domestic Politics in the Liberalization of EU Electricity Markets', outlet?

Electrabel (1999) Annual Report 1998, Brussels, Electrabel

EURELECTRIC (2000) and Lyons, P (2000) 75 Years of Cooperation in the Electricity Industry, London, Atalink

European Federation of Public Services Unions (EPSU) (1999) Internal Market for Electricity in Europe; 'A New Era or a Dark Age'?, www.epsu.org/Campaigns/sumstudyen.efm

European Federation of Public Services Unions (EPSU) (2000) Joint Declaration of EURELECTRIC, EMCEF and EPSU on the social implications of the internal electricity market,

http://www.epsu.org/structures/StandingCommittees/PublicUtilities/socdialog/Eurelectric/Joi ntstatEN.cfm

European Round Table of Industrialists (ERT) (1992) Rebuilding Confidence: An Action Plan for Europe, Brussels, ERT

European Round Table of Industrialists (ERT) (1992) Beating the Crisis, Brussels, ERT

Financial Times (1996) 'Comment and Analysis: Plug for the generation gap: Power generators fear the new EU agreement on energy liberalisation unduly favours the monopolies', London, <u>Financial Times</u> 26 June, p.23

Grande, E (1996) 'The State and Interest Groups in a Framework of Multi-Level Decision Making: the case of the European Union', <u>Journal of European Public Policy</u>, 3: 3, September, pp 318-38

Greenpeace (2000) The Liberalisation of Europe's Electricity Markets - is the environment paying the price for cheap power? http://www.greenpeace.org/search.shtml

Hoffman, S (1966) 'Obstinate or Obsolete? The Fate of the Nation-State and the Case of Western Europe', <u>Daedelus</u>, 95, pp 862-915

International Federation of Industrial Energy Consumers (IFIEC-Europe) (2000) 'Public Hearing on the Completion of the Internal Energy Market', www.ifiec-europe.be/Elec5.htm

Kingdon, J (1984) Agendas, Alternative and Public Policy, Boston, Little Brown

Klom, A (1997) Effects of Deregulation Policies on Electricity Competition in the EU, Journal of Energy and Natural Resources Law, 15, pp 1-22

Matthes, F and Timpe, C (2000) Sustainability and the Future of European Electricity Policy, Freiburg, Institute for Applied Ecology - Report Commissioned by the Heinrich Böll Foundation and the WorldWide Fund for Nature (WWF), http://panda.org/epo/publications/cepub.cfm

Schmidt, S (1997) 'Sterile Debates and Dubious Generalisations: European Integration Theory Tested by Telecommunications and Electricity', <u>Journal of Public Policy</u>, 16, 3, pp 233-271

Schmidt, S (1998) 'Commission activism: subsuming telecommunications and electricity under European competition law', <u>Journal of European Public Policy</u>, 5, 1, March, pp 169-184

Siestses, H (2000) 'The Interest Representation of Big Dutch Business at the European Union: An Inquiry into the Logic of EU Business Interest Representation', MA Thesis, Erasmus University Rotterdam

WorldWide Fund for Nature (WWF) and COGEN EUROPE (2000) Electricity Liberalisation - A Disaster for Clean Energy, http://panda.org/epo/publications/cepub.cfm