Corporate policies in the EU energy sector

by

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1. Summary

The trend towards concentration noted in our previous report of 2007[1] has continued. The three dominant companies, E.On, EDF and RWE have maintained or strengthened their positions, EDF through its acquisition of British Energy and E.On through the assets it bought from Enel and Endesa. These three companies have been joined by two companies, Enel and GDF Suez, who through a take-over and a merger, respectively, are now of comparable size. The European Union's policy to force EDF, E.On and RWE to sell their transmission networks may, far from increasing competition as it was designed to do, reduce it further. The proceeds from selling these networks will be used to buy up more assets in Europe in the competitive activities in energy.

Without strong backing from government, the major national companies, even those as large as the British companies, will struggle to survive as independent companies as the five major companies continue to try to increase their grip over European energy markets. Some countries, such as Denmark, Luxembourg, Romania and Czech Republic do seem to be supporting the emergence of 'national champions' but this support can only be limited given EU competition law. In some of the countries where large numbers of companies still exist, such as Italy and Switzerland, mergers and takeovers are rapidly reducing the numbers of companies in the market.

The major European international companies are increasingly focusing their investments in markets which connect physically with their core businesses. While the large companies maintain a watching brief in countries on the edge of the EU and which might join the EU, such as Turkey and Ukraine, they appear not to be seeking to expand their position until it is clearer that these countries will become integrated more fully into European markets.

The merger and acquisition activity confirms the trend indicated in our earlier report of consolidation of the European electricity (and gas) market around a limited number of companies. While competition in national markets appears to increase, this is mainly done through large existing companies expanding into new markets, thereby strengthening their hold on the European electricity market.

2. Introduction

In March 2007, we published a review of corporate policies amongst EU energy companies[2]. This report reviews developments in the two years since that report. It focuses mainly on the companies with a significant presence in more than one country but also examines countries/regions, such as Italy, Poland and the Baltic States where there have been major changes in the corporate structure. We also include some developments in Norway and Switzerland because of their important electricity trading links with the European Union.

There have been three dominant trends in corporate policies in the past 2 years:

- Further consolidation around 5 large dominant internationally-based companies and two smaller international companies;
- Consolidation of activities of the dominant companies within EU borders
- The changes in Germany and France (the main countries not to have completed ownership unbundling) required to take account of the EU policy on unbundling of transmission networks.

The five dominant companies are EDF (which has taken over British Energy), Enel (which has taken over Endesa) E.On (which has acquired some of Enel/Endesa's assets in Spain, Italy and France), the newly formed GDF Suez and RWE (see Table 1). Iberdrola and Vattenfall are now lagging significantly behind the other 5 and may need to make further acquisitions if they are to keep pace. Table 2 shows the main companies that are primarily based in just one country. Only three of these, the three British companies, Centrica, Scottish & Southern Energy and National Grid rival even the two smallest of the 'Seven Brothers' in terms of turnover and of these, only Centrica has shown any ambition to expand into mainland Europe. National Grid has, however, made significant energy network acquisitions in the USA.

[1] S Thomas (2007) 'Corporate concentration in the EU energy sector' PSIRU, Greenwich. http://www.psiru.org/
[2] S Thomas (2007) 'Corporate concentration in the EU energy sector' PSIRU, Greenwich. http://www.psiru.org/

The major set-back for the two large German companies, E.On and RWE, was that in November 2008, the German Federal Court of Justice banned them from taking over further municipally owned companies in Germany. Given that these two companies already between them control about 80% of the German energy market and have stakes in 200 municipal companies, it is not clear whether this ruling will significantly restrict them.[3]

Table 1. Financial size of the 'Seven Brothers'

	Turnover 2007 €bn	% annual increase	Worldwide workforce
GDF Suez	74.3	-	198200
E.On	68.7	+7	87815
EDF (British Energy)	59.6 (3.5)	+1(-1)	158640 (4263)
Enel	43.7	+13	85500
RWE	42.5	0	63439
Iberdrola	17.5	+58	26000
Vattenfall	14.4	+6	32396

Sources: Annual reports and accounts
Notes
1. £1=€1.25, €1=Skr9.95
2. Data for EDF, E.On, Enel are for calendar year 2007. Data for British Energy are for fiscal year 2007/08
3. Figures for E.On do not include their acquisitions from Enel and Endesa
4. Figures for Enel include Endesa from October 7, 2007
5. Figures for Iberdrola did not include Scottish Power in 2006

Table 2. Financial size of the major national and regional energy companies

	Turnover 2007 €bn	% annual increase	Worldwide workforce
Centrica	16.3	0	33166
Scottish & Southern	15.3	+29	16892
National Grid	14.2	+31	27577
EDP	11.0	+6	13097
Gas Natural	10.1	-2	6699
Essent	7.4	+15	10687
CEZ	7.0	+17	30094
Union Fenosa	6.0	0	12871
Nuon	5.6	0	9980
DONG	5.6	+14	5127
PPC	5.2	+8	24602
Fortum	4.5	0	8303
Verbund	3.0	+6	2441
EVN	2.2	+8	9388
Statkraft	2.0	+9	2300

Sources: Annual reports and accounts
Notes:
1. CZK1=€0.04, DKK1=€0.134, NOK1=€0.113
2. Figures for EVN are for 2006/07

In March 2007, four major takeovers and mergers were underway:

- A takeover of Scottish Power (UK) by Iberdrola (Spain);
- A merger of Suez (France/Belgium) with GDF (France);
- A takeover of Endesa (Spain) by E.On (Germany); and
- A merger of Essent and Nuon (both Netherlands).

Of these, the first two were completed, but the second two were not. At the last minute, Enel outbid E.On for Endesa and the takeover was completed in October 2007. The merger of Nuon and Essent collapsed in 2007 and both companies are now looking for foreign partners to strengthen their position.

[3] European Spot Gas Markets 'No further acquisitions of Stadtwerke by E.On and RWE - German Federal Court' November 11, 2008.

Of the main primarily national companies, the two British companies, Centrica and Scottish & Southern Energy, stand out as far larger than the other companies. Centrica does have international ambitions with as yet small-scale operations in Belgium, Spain, the USA and Canada.

3. The Seven Brothers

In this section, we examine the large internationally based European electricity companies, GDF Suez, E.ON, EDF, Enel, RWE, Iberdrola and Vattenfall. These have been termed the 'Seven Brothers' as an analogy to the 'Seven Sisters', the large multinational oil companies that dominate the world oil market.

3.1. GDF Suez

The main corporate change, along with the take-over of Endesa by Enel, was the completion of the merger of Suez and GDF on July 22, 2008. The size of this deal and the importance of the companies involved in France, where GDF dominated the gas market, and Belgium, where Suez subsidiaries, Electrabel and Distrigaz dominate the electricity and gas markets respectively, meant that significant changes to shareholdings had to take place and some companies had to be sold to overcome concerns about competition. Its market capitalisation made it the largest energy company in Europe.

The largest individual shareholding remains the French state with 35.7%. The only other shareholder with more than 5% was Groupe Bruxelles Lambert (GBL), with 5.3%. In October 2008, the Belgian government was still considering trying to take a 'golden share' in the company but this would have to be with the agreement of the French government as the largest shareholder. What parts of the group the Golden Share would cover and what powers it would give to the Belgian government are not clear yet.

Suez Environnement was spun off as a separate company on the same day as the GDF Suez merger was completed. 65% of the shares were distributed to Suez shareholders with GDF Suez retaining the rest.

The most important divestment in energy terms will be Distrigaz, which dominates gas distribution and sales in Belgium. In May 2008, Eni Spa (Italy) agreed to purchase Suez's 57% stake in the company for €2.7bn. On 15 October, the deal was approved by the European Commission. Eni will pay for the stake with a number of assets including contracts for gas deliveries in Italy and abroad to Suez for up to 20 years; Italgas' gas distribution network in Rome and surrounding areas; €1.2 billion worth of rights for Suez to draw up to 1,100 megawatts of electricity from Eni's power plants over 20 years; upstream stakes worth €273 million; and a 20-year LNG supply contract into the US Gulf equivalent to 900 million cubic meters (650,000 tons) per year. GDF Suez will retain control of the gas transmission company, Fluxys

Another important sale was Suez's 25.5% stake in SPE for €515m to Centrica (UK) in July 2008. SPE is the second largest generator in Belgium, owning or having access to about 2GW of plant. This sale increases Centrica's share in SPE to 51%.

In December 2008, GDF Suez agreed an asset swap with E.On. European Daily Electricity Markets reported[4]:

> 'According to the terms of the Memorandum of Understanding (MoU) between the companies, E.ON is to get a 556MW coal fired plant and a 385MW gas plant, both in Belgium. Electrabel is also granting E.ON nuclear off-take rights for reactors Doel 1 (150MW, 38%), Doel 2 (166MW, 38%) and Tihange 1 (184MW, 19%). The total off-take rights stand at 700MW, 270MW of which are to be delivered in the Netherlands. Under the deal, E.ON is to hand over stakes in the Farge (350MW) and Zolling (449MW) coal-fired power stations. Electrabel will also acquire 50MW combined-cycle gas turbines and a 50% stake in a 20MW biomass plant at the Zolling site. The agreement also includes the Jansen power plant group (99MW), Trausnitz hydroelectric plant (1.8MW), and Tanzmühle power plant, comprising a pump storage unit (28MW) and a hydroelectric unit (3.3MW).' and Electrabel will also acquire an aggregate of approximately 700MW of power procurement rights from the reactors Kruemmel (1,260MW, Electrabel share 28%), Grundremmingen (2,572MW, Electrabel share 13%) and Unterweser (1,345MW, Electrabel share 7%).

The main holdings inherited from GDF are gas distribution businesses in Germany, Hungary, Portugal, Romania and Slovakia. Electrabel, the Suez subsidiary that dominates the Belgian electricity market has generation holdings amounting to about 13GW mainly in Netherlands, France, Italy, Hungary and Poland.

[4] European Daily Electricity Markets 'E.ON-Electrabel asset swap paves way for companies' expansion in Europe', December 18, 2008.

3.2. E.On

When the E.On was outbid by Enel in its attempt to take over the largest Spanish electricity company, Endesa, E.On agreed to withdraw but as part of the agreement it took a package of assets valued at €11.5bn from Enel/Endesa in France, Italy and Spain. These included: Endesa Italia, the fourth largest generation company in Italy with 7.2GW; 65% of Endesa/SNET France, which owns 2.5GW of generation (the third largest French generator); and EnelViesgo and other Spanish assets (2.5GW plus 580,000 customers).

The UK is E.On's second largest market after Germany and its business there, with over 8 million customers and a large amount of generation (10.5GW) has not changed significantly in the past two years. It has expressed an interest in participating in new nuclear build in the UK, but it did not bid for British Energy, the British nuclear generation company bought by EDF in 2008. In the USA, it continues to own an integrated gas and electricity company in Kentucky, formerly Louisville Gas and Electric

Its Nordic Market Unit is based mainly on its holdings in Sweden where it took over two major integrated electricity companies, Sydkraft and Graninge. It has much smaller businesses, primarily trading, in Finland and Denmark. In October 2007, it took over the 44.3% of E.On Sverige owned by the Norwegian company Statkraft in exchange for one third of E.On Sverige's hydro power assets and some of its heat production assets. Also in the assets taken over by Statkraft will be plants in Germany, UK as well as Sweden.

Most of its Central Europe Market Unit is located in Germany (its Central Europe West division), although it also has a strong presence in Netherlands where it owns generation (1850MW) and gas and electricity retail.

It also has a strong presence in Eastern Europe, which has not changed substantially in the past two years except for some unbundling to comply with EU legislation. It was one of the first Western electricity companies to move into Bulgaria acquiring 67 per cent of the distribution companies, Varna and Gorna Oryahovitsa at the beginning of 2005, which distribute power to more than a million consumers. The Bulgarian government still holds the remaining shares. In the Czech Republic, E.On consolidated all its majority holdings (JME and JCE) into E.On Ceska, E.On Energie and E.On Distribuce. E.On made its first major acquisition in Romania in 2005, when it took 51 per cent stakes in the gas distribution company, Distrigaz Nord, which has over a million customers and the electricity company, Electrica Moldova with about 1.3 million consumers. In both cases, the shares were acquired from the Romanian government. In October 2007, the European Bank for Reconstruction and Development took a 9.8% stake in E.On Energie Romania.

E.On was the first, in February 2008, of the four large German electricity companies to signal its willingness to the European Commission to sell its electricity transmission network, E.On Netz, in Germany[5]. A single holding has been mooted but by January 2009, only Vattenfall had followed E.On's example and the fate of the German transmission network was still not known.[6] However, in October 2008, EnBW, Vattenfall and E.On announced an agreement to cooperate closely on the management of their high-voltage networks (RWE refused to participate).[7] By contrast, it remains committed not to divest its gas grids, which it claims are qualitatively different to electricity networks.[8]

E.On offered at the same time to sell 4.8GW of generation in Germany or swap it for capacity in other countries.[9] The deal on asset swaps with GDF Suez is detailed above. At the same time as the swap with GDF Suez was agreed, E.On agreed to sell about 525MW of generation to EnBW. EnBW will acquire E.On's stakes in the 446-MW Lippendorf lignite and the 79-MW Bexbach hard-coal power plants.[10] The cost of the deal has not been published.

In January 2009, E.On also completed an asset swap with Statkraft, the Norwegian state owned utility. Under the agreement, Statkraft transferred its 44.6% stake in E.On Sverige AB and a Swedish hydropower plant to

[5] European Daily Electricity Markets 'Eon proposes selling off power grid, to settle antitrust cases' February 28, 2008
[6] European Daily Electricity Markets 'Future of the German power grid remains hot topic in industry circles, TSOs disagree' September 22, 2008
[7] Financial Times Deutschland 'Eon, EnBW and Vattenfall to cooperate on high-voltage networks' October 28, 2008.
[8] Global Insight 'E.On to Keep Gas Grids, Proposes National Grid Holding Company for Germany' March 5 2008.
[9] Platts Global Power report 'E.On proffers sale of grid, 4,800 MW of capacity to help settle EC complaints about German market' March 6, 2008.
[10] Platts Global Power Report 'E.ON to sell 2,200 MW of power capacity to EnBW, swap generation with Electrabel' December 25, 2008.

E.On in exchange for power generating assets in Sweden, Germany and the UK, as well as 4.17% of the shares in E.On. The deal was reported to be worth about €4.5bn.[11]

3.3. EDF

EDF remains 84.85% owned by the French government after it sold a further 2.5% of the shares in December 2007 following the initial sell off in October 2005. Of the remaining shares, 1.9% is owned by employees and the remaining 13.25% by individual and institutional shareholders. After a relatively quiet period during which it off-loaded most of its non-European investments, EDF has been more active in the past year. In January 2008, it mooted the possibility of a takeover bid for Iberdrola, but this was met with bitter opposition by Iberdrola and the Spanish government and in September 2008, the matter was closed with EDF acknowledging that it would not pursue its bid.

However, when in May 2008, it was signalled by the British government that it wanted to sell its remaining stake in British Energy and that takeover bids for the company were being encouraged, EDF was quick to express an interest. Other potential bids did not materialise and in September 2008, after an earlier bid had been rejected by British Energy shareholders, British Energy accepted the bid valued at €15.7bn (£12.5bn).

The deal is a complex one and in October 2008, there were regulatory hurdles to clear but there are a number of important points to note.

First, the price is very high given that the privatisation price for British Energy was little more than a tenth of this figure and that in 2002, British Energy collapsed and had to be rescued at huge cost to taxpayers (ca €15bn). The price relates much less to the value of the 8 plants, each of about 1200MW but to the access it gives the owner to sites for new nuclear plants. The plants are seen to be ageing – they are likely to produce about 30% less output than in their peak year (1998) – and their operating costs are rising rapidly – they are nearly double their 2002 level. However, owning the company does give EDF access to most of the major sites for new nuclear development in the UK.

From a competition point of view, the deal does raise serious issues. British Energy has about 20% of the generation market and if that is added to EDF's existing share of about 10%, that would give them a market share that would probably be unacceptable to the regulatory authorities. It would also remove the one large independent power producer left in the UK from the market.

The company is expected to be acquired by a 'vehicle' created by EDF, Lake Acquisitions, a wholly owned UK subsidiary of EDF, which would then sell 25% of its stock to Centrica, which would gain 25% of the output of the existing plants as well as 25% of any new plants. EDF has agreed to sell the land it bought around two other UK nuclear sites earlier in 2008, plus some land owned by BE, to 'facilitate the entry of other new nuclear power generators into the UK'. Lake Acquisitions would be financed largely by a syndicated loan of €13.9bn with the rest as cash from EDF. EDF plans to build at least four new nuclear reactors at British Energy sites (probably Sizewell and Hinkley Point).

The deal to sell 25% of British Energy to Centrica has been delayed several times and by March 2009, there was increasing resistance from Centrica shareholders to the deal[12] and it was not clear whether it would be completed.

EDF's first significant entry into the USA was in 2005 through the creation of the Unistar 50-50 joint venture with the US utility, Constellation. Unistar would build new nuclear plants using the EPR design, which, in December 2008, had a target date for certification by the NRC of February 2012. Constellation owns about 3.9GW of existing nuclear power plants at three sites (Calvert Cliffs, Nine Mile Point and Ginna)[13].

In September 2008, EDF made a takeover bid for a US utility, Constellation Energy, in which it had acquired 9.5% of the stock at nearly $60 per share, which intends to build new nuclear power plants in the USA. However, it withdrew its offer citing global financial pressures. The company was expected to be bought by MidAmerican Energy Holdings, a company owned by Warren Buffet at $26.50 per share. It was reported that this rival bid for Constellation could derail EDF's nuclear ambitions in the USA if MidAmerican did not

[11] Nordic Business Report, 2009. 'Norway's Statkraft AS and E.ON AG complete EUR4.5bn asset swap deal' January 2, 2009.
[12] The Times, 2009 'Commission raids EDF in price-fixing investigation' March 12, 2009 p 49
[13] Constellation Energy Nuclear Group, undated 'Fact Sheet'. Accessed on January 27, 2009 at http://www.constellation.com/vcmfiles/Constellation/Files/Press-Kit_Corp_NuclearGrp_2008-09-17.pdf

support new nuclear build. However, in December, EDF announced an agreement with Constellation to take a 49.99% holding in Constellation's nuclear subsidiary, Constellation Energy Nuclear Group. The deal was done through the EDF subsidiary, EDF Development Inc, and will cost US$4.5bn.[14] Mid American Holdings amicably withdrew its offer.

While the French government has accepted in principle that EDF will reduce its holding from 100% to less than 50% in the French transmission company, RTE, it is not clear when this will take place.

EDF's third largest market after France and UK is Germany, where it controls EnBW (with 46% of the shares) which is the incumbent utility in Baden-Wurtenberg and one of the four large regional companies that control most of the German power market including the transmission network. Unlike E.On and Vattenfall but in common with RWE, EnBW has yet to commit to sell its electricity transmission network EnBW Netze.[15] In December 2008, EnBW agreed to buy about 525MW of generation from E.On (see above).

Its fourth largest market is Italy where it owns 49% of Edison, which has 12.5GW of plant making it the second largest generator behind Enel and has 187,000 customers including gas customers.

Elsewhere in Europe, it has stakes in generation plants in Belgium (419MW from its 50% holding in Tihange 1 nuclear plant), Netherlands (50% of an 870MW gas fired plant under construction), Spain (335MW), Poland (3172MW), Switzerland (3714MW) through Atel. EDF has a 55.6% stake in Motor-Columbus, which in turn has a 58.5% stake in Atel. It has district heating plants in Hungary, Poland and Switzerland

In Hungary, its Demasz subsidiary distributes electricity to 770,800 consumers. It owned 60.9% of Demasz but in June 2008, it received approval from the Hungarian authorities to take over the remaining shares. In Slovakia, EDF owns 49% of SSE, a distribution and retail, and district heating company with 699,000 consumers.

In March 2009, the European Commission, along with the French Competition Authority raided EDF's headquarters in Paris. The Commission said that it suspected EDF of manipulating prices in the wholesale electricity market.[16]

3.4. Enel

The acquisition of Endesa places Enel on a comparable footing with the other 4 internationally-based energy companies (EDF, GDF Suez, E.On and RWE). The Italian government retains 31.2% of the shares, 21.1% directly and 10.1% through the state-run lender, Cassa Depositi e Prestiti. Enel's holdings in Europe, apart from Endesa, are relatively small and dispersed with generation assets in France and Bulgaria. In 2005, it took over 66% of the largest Slovak generation company Slovenské elektrárne (SE), with 6GW of plant. In Romania, it controls (51 per cent) of Electrica Banat and Electrica Dobrogea, electricity distributors with 1.4 m customers.

Enel is unique amongst the Seven Brothers in having major holdings in Russia. It entered the Russian market in 2004 taking a 49.5% stake in a Russian trader, Res. It managed a 450MW combined cycle plant in St Petersburg from 2004-07. In April 2007, it acquired stakes in promising gas fields, through SeverEnergia, a consortium 40% Enel - 60% Eni. Enel also owns 55.7% of the JCS Fifth Generation Company of the Wholesale Electricity Market ('OGK-5'). OGK-5 runs 4 thermal power plants in Russia with a capacity of 8.7GW.

In October 2007, Enel and Acciona, a Spanish engineering company, completed the takeover of Endesa, Spain's largest utility. Enel (67%) and Acciona (25%) hold 92% of Endesa's shares. Endesa's main assets outside Spain are in Latin America, where it owns 14,317MW of generating capacity. In December 2008, there was speculation that Enel would buy Acciona's stake for €12bn. Under the terms of the Endesa takeover, Acciona has the option (a 'put' option) to sell its stake any time between 27 March 2010 and 26 March 2016. Selling its stake would allow Acciona to reduce its debts of over €17bn but would increase Enel's debts. There were also reports that there were disagreements between Enel and Acciona about representation of Acciona on the Endesa board and, more the policy of Enel and Endesa on renewables. In

[14] Nucleonics Week, 2008. 'EDF to acquire nearly half of Constellation's nuclear business' December 18, 2008, p 1.
[15] European Daily Electricity Markets 'Future of the German power grid remains hot topic in industry circles, TSOs disagree' September 22, 2008
[16] The Times, 2009 'Commission raids EDF in price-fixing investigation' March 12, 2009 p 49.

January 2009, there were reports that the sale of Acciona's stake in Endesa was imminent.[17] Reflecting the strain that the acquisition of Endesa had put on Enel and the potential additional strain the acquisition of Acciona's shares would put on Enel, Standard & Poors placed Enel's long-term rating on CreditWatch Negative and affirmed its 'A-2' short-term rating. Standard & Poors stated 'The CreditWatch placement reflects our concerns about Enel's weak capital structure; delays in its asset disposal program; significant refinancing risk; tight liquidity position; and ability to achieve credit metrics in line with its 'A-' rating by year-end 2009--namely, funds from operations (FFO) to debt of about 18% and FFO interest coverage of about 4x.'[18] In February 2009, the deal was finally agreed with ENEL paying €11bn for Acciona's stake in Endesa. Acciona SA will pay ENEL €2.9bn for some Endesa renewable energy assets. The agreement gives ENEL 92% of Endesa

3.5. RWE

Like E.On and EDF, RWE's main base outside its home market (Germany) is the UK. It continues to have important holdings mainly in Eastern Europe, in Poland (distribution), the Czech Republic (6 regional distributors and the gas transmission company) and Hungary (2 distributors and generation). RWE was still voicing its opposition to unbundling its electricity transmission network, RWE Transportnetz Strom, in September 2008.[19] However, again in contrast to E.On, it offered in June 2008 to sell its gas transmission network, RWE Transportnetz Gas.[20]

Its professed strategy is to expand its operations from Germany, UK, Benelux and Central and Eastern Europe to South East Europe and Turkey, although it failed to bid in the recent Turkish distribution company privatisations. On technology, it expects a 'massive expansion of the share of renewable energies in our generating mix' and, for example, it has been notably less aggressive than E.On in the UK in advocating new coal and nuclear plants.

In January 2009, RWE beat reported opposition from EDF, DONG and Vattenfall to win the contest, to buy the Dutch utility Essent for €9.3bn.[21] Essent's distribution networks and waste management operations were not included in the deal.

3.6. Iberdrola

Iberdrola completed the takeover of Scottish Power in 2007 but its activities in Europe remain concentrated in UK and Spain. An attempted takeover of Iberdrola by EDF in 2008 was strongly resisted and was abandoned in September 2008.

3.7. Vattenfall

Vattenfall is the main Swedish energy company and is 100 per cent owned by the Swedish state. Its main activities outside Sweden are in Germany (these are larger than its Swedish operations) where it is the incumbent electricity company in Berlin, Hamburg and the former East Germany. In Denmark, a failed attempt to take over a large electricity company, Elsam, led to it acquiring generation capacity of approximately 2500MW (e) and 2100 MW heat from Elsam and E2 (both taken over by DONG (see below). It also has assets in Finland and Poland. Vattenfall followed E.On's example in offering to sell of its German grid in June 2008[22].

In December 2008, Vattenfall announced that from January 1, 2009, it would create a new business unit, Wind, Nuclear and Engineering, and the 'Trading' would get 'a more marked placing' in the new organisation.[23]

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[17] European Daily Electricity Market, 2009. 'Enel takeover of Acciona's Enel stake imminent – report' January 20, 2009.
[18] Market News Publishing, 2009. 'Italian Utility Enel SpA 'A-' Long-Term Rating Placed On CreditWatch Negative; 'A-2' Short-Term Rating Affirmed' January 15, 2009.
[19] European Daily Electricity Markets 'Future of the German power grid remains hot topic in industry circles, TSOs disagree' September 22, 2008
[20] Utility Week 'GASRWE confirms plans to sell gas network', June 6, 2008.
[21] Agence France Press, 2009 'German power group agrees 9.3-bln-eur takeover of Dutch peer' January 12, 2009
[22] Utility Week 'energyVattenfall Europe to divest power network' June 13, 2008.
[23] Vattenfall, 2008 'Vattenfall develops its organisation' Press Release, 17 December 2008. http://www.vattenfall.com/www/vf_com/vf_com/370103press/370135press/385357press/index.jsp?pmid=96433

However, their main strategic move was the takeover of the Dutch energy company, Nuon in February 2009.[24] It was reportedly outbid by RWE for the comparable company, Essent, only a month earlier. It will pay a total of €8.5bn in cash for the company. It will initially take 49% of the shares and its stake will build up to 100% over the following 6 years. As with the sale of Essent to RWE, Nuon's networks were not included in the deal. The deal will give Vattenfall a better connection between its main Swedish and German businesses.

4. The national companies

Of the predominantly national companies, only Centrica and CEZ seem to have significant international expansion ambitions. Essent and Nuon, following their failed merger attempt are looking for international partners. Verbund is often mentioned in international markets but it has few assets outside Austria. Gas Natural is in the process of taking over one of the significant Spanish electricity companies, Union Fenosa but it is not clear yet how the new company is expected to develop.

4.1. Centrica

Centrica's turnover is still dominated by its UK gas and electricity businesses, which account for 75% of their turnover. Most of the remainder is accounted for by their US Business, Direct Energy (23%) while the European operations account for only 2%. The increase in holding in SPE from 25.5% to 51% will somewhat strengthen their Belgian operation, SPE-Luminus but it will still be a very small player compared to GDF Suez's Electrabel and Eni's Distrigaz.

4.2. CEZ

CEZ has a very strong agenda to expand into Central and South Eastern Europe. It is still largely publicly owned with the Czech Ministry of Finance holding 64.3% of the shares and a further 10% is owned by itself. Its Czech business was formed in 2003, when CEZ, which up till then had been a generation and transmission company, took over several distribution companies.

In Bulgaria, it took over 67% of three distribution companies (Sofia, Stolichno and Pleven) with a total of 1.9m consumers in 2005 from the Bulgarian government. In October 2006, it took over the Varna (1260MW) coal-fired power plant It has small businesses in Poland and Romania. In late 2008, it was negotiating to take a 76% stake in the sole Albanian electricity distribution company, OSSH. CEZ will pay €102m for the stake and repay €124m of its debts. The deal was agreed in March 2009.[25]

4.3. Nuon and Essent

The proposed merger between these companies collapsed in 2007. In addition, the Dutch government has been trying to impose a requirement that their distribution networks be ownership unbundled by 2011 with the networks going into national public ownership. There is also pressure on the owners of these companies (and other large Dutch energy companies such as Eneco and Delta), Dutch local authorities, to part privatise them by selling at least some of the shares in an Initial Public Offering (IPO)[26]. This leaves the companies in a very uncertain and unstable position and both are looking for international partners to strengthen the position of the commercial businesses they will be left with when the networks are unbundled. However, despite the apparent attractiveness of these companies, no solid approaches have been made.

In November 2008, it was reported that Citigroup was running an auction of Essent (estimated at €10bn) and Goldman Sachs was selling a partial stake in Nuon (estimated value €6bn). Companies mentioned as possible bidders included EDF, RWE, DONG and Vattenfall. In January 2009, it was announced that RWE had won the contest, buying Essent for €9.3bn.[27] Vattenfall took over the other large Dutch energy company, Nuon only a month later in February 2009.[28] Vattenfall will pay €8.5bn for the company. It will initially take 49% of the shares and its stake will build up to 100% over the following 6 years. As with the sale of Essent to RWE, Nuon's networks were not included in the deal.

[24] Agence France Presse, 2009 'Sweden's Vattenfall to buy Dutch Nuon for 8.5 billion euros' February 23, 2009.
[25] Associated Press, 2009 'Czech firm to buy Albania's power distributor' March 11, 2009
[26] Thomson Financial News 'Euronext tries to lure Essent, Nuon IPOs –paper' September 4, 2008
[27] Agence France Press, 2009 'German power group agrees 9.3-bln-eur takeover of Dutch peer' January 12, 2009
[28] Agence France Presse, 2009 'Sweden's Vattenfall to buy Dutch Nuon for 8.5 billion euros' February 23, 2009.

These deals will put the spotlight on the remaining Dutch companies, which are now seen as prime take-over targets.

4.4. DONG

DONG became an important electricity company when it took over a number of Danish electricity generation and distribution companies in 2005. The company is still 100% publicly owned and attempts to privatise it through an IPO have been postponed several times and will not now take place before 2009. The company is an unusual mixture of upstream international oil and gas exploration and production, national electricity generation, and national gas and electricity distribution. It has some international generation interests, for example, it is a 50% stake-holder in the London Array project to build an off-shore wind farm with a total capacity of 1000MW.

In March 2009, DONG made some small acquisitions in the UK from Welsh Power, a small generation company. These included a 800MW gas-fired station due on-line in 2010. The deal was worth about €630m.[29]

4.5. Gas Natural and Union Fenosa

Gas Natural (GN), co-owned by Repsol (Spanish oil company) and La Caixa (Spanish bank), was outbid by E.On in its attempt to take over Endesa but it continues to have ambitions to become a major presence in electricity markets, at least in Spain. In July 2008, it agreed to buy the 45.3% holding by ACS, a Spanish construction and services group, in Union Fenosa, Spain's fourth largest electricity company. GN expects to complete the full takeover in 2009. ACS hopes to use the proceeds to increase its stake in Iberdrola to 30%, although this is a move that Iberdrola would be expected to resist[30]. Gas Natural said after it bought ACS' stake in Fenosa that it planned to sell off around €3.0bn of its non-core assets, for example, its LNG regasification facility, to generate cash to complete the purchase.

4.6. Fortum

In June 2008, Fortum concluded a deal with a Norwegian electricity distribution/retailer, Hafslund, which is based mainly in Oslo and was owned largely by the Oslo local authority. Under the deal, Hafslund Infratek, Hafslund's technical services business in which Hafslund owned 63% of the shares, was to be merged with Fortum's technical services division. The new company, in which Hafslund would hold 43.3% of the shares and Fortum 33%, would be called Infratek and would have 2500 employees.

4.7. Statkraft

In October 2007, E.On took over the 44.3% of E.On Sverige owned by the Statkraft in exchange for one third of E.On Sverige's hydro power assets and some of its heat production assets. Also in the assets taken over by Statkraft will be plants in Germany, UK as well as Sweden (see section on E.On for further details).

4.8. Atel

Atel is Switzerland's largest electricity company. Its shareholder structure is complex but its largest shareholder is Motor-Columbus with 58.5% of the shares. EDF through its shares in Motor Columbus and directly owns 26% of the shares in Atel, while EOS (Energie Ouest Suisse Holding) is the other major shareholder with 18%. It plans to merge with EOS in 2009 and this deal might include EDF's other Swiss assets. Atel has also increased its holding in Edipower, the power generation arm of Edison of Italy from 16% to 20% (the other shareholders are Edison, 50%, A2A (see below) 20% and an Italian utility, IRIDE (a municipal utility based mainly in Genoa and Turin)' 10%.

4.9. Italian municipal utilities

A2A was formed in January 2008 from the merger of the former municipal companies of Milan (AEM) and Brescia). The municipal authorities of Brescia and Milan own over 50% of the shares of A2A, although there has been some tension between Brescia and Milan because the Brescian authorities do not believe they are adequately represented on the board. It describes itself as a 'multi-utility' but its main activities are in

[29] Nordic Business Report, 2009 'Danish DONG acquires UK assets in DKK5bn deal' March 6, 2009
[30] Expansion 'Gas Natural takeover of Union Fenosa could take place as soon as January' October 11, 2008.

energy. It claims it is the second largest Italian company in electricity generation and sales, the third largest in terms of gas sales and the largest in terms of district heating. In June 2008, it agreed that as part of the deal for E.On to divest Endesa Italia (this was part of the deal that allowed E.On to withdraw from its bid to take over Endesa), A2A would exchange its 20% stake in Endesa Italia for 1460MW of generating capacity. It owns 20% of Edipower.

Iride, based in Turin and Genoa, merged with ENIA, based in Parma, Piacenza and Reggio Emilia in October 2008. The new company would have 51% shareholding from the constituent municipalities. There have been discussions with Hera (based in Bologna) about joining the merged company.

4.10. National Grid

National Grid is the privatised company created to own the electricity transmission network of England & Wales. In 2002, it took over the equivalent company in gas and now owns the high pressure transmission gas network and much of the low pressure gas distribution network. It has major electricity network assets in the USA, mainly in New England. Its only significant businesses are in the USA, where 62% of its employees are located and 58% of its turnover takes place and the UK. Because in UK, National Grid is not allowed to operate in commercial energy markets, it is of limited interest from a competition point of view and is highly unlikely to be a take-over target by the main European energy companies. It remains to be seen whether National Grid will seek to expand its network activities into Europe.

5. National/Regional markets

5.1. Poland

The Polish electricity market is dominated by four state-owned, integrated companies, Polska Grupa Energetyczna (PGE), Tauron Polska Energia, Enea and Energa, created in December 2006. These companies control about 75% of generation and retail and were created from a large number of generation and distribution companies with the intention of creating companies large enough to compete with international groups. The government then planned to privatise them soon after their creation. But this process has been continually delayed, most recently by the global credit crisis and it may be that the Initial Public Offerings (IPO) will not be before end 2009.

There had been criticism that this concentration and integration of generation and retail had been at the expense of competition. The head of the regulatory body, URE, was sacked in October 2007, soon after electricity retail competition had been introduced for all in July 2007. The outgoing head of URE, Adam Szafranski, was replaced by Mariusz Swora, who decided that the existing structure of electrical energy sector did not allow for free-market prices and reinstated the tariff regulation.

5.2. Baltic States

In November 2008, the prime ministers of Latvia, Lithuania and Estonia decided that they would, by 2013, join the Nordic market, creating first a Baltic market by 2012. This would require them to reform their electricity industry structure so that it complied with Nordic market principles. The details of this will be worked out in 2009, but it will require major new cables to be constructed. The prime ministers also affirmed their support for the construction of a new nuclear plant in Lithuania to replace the existing Russian-designed plant.

5.3. Luxembourg

In July 2008, Luxembourg's main energy companies announced their intention to merge to create a single national champion company.[31] The new entity would be formed through the merger of the electricity group CEGEDEL, gas supplier SOTEG and gas distributor Saar Ferngas. In January 2009, the Luxembourg government announced the completion of the deal. The shareholders in the new company were stated to be: the State of Luxembourg (28.3%); ArcelorMittal Luxembourg (25.3%); RWE (19.8%); E.ON (10.8%); SNCI – a bank owned by the Luxembourg state (10.8%); and Electrabel/GDF Suez (5.1%).[32]

[31] Global Insight, 'Luxembourg to Consolidate Energy Companies into National Champion' July 24, 2008.
[32] http://www.cegedel.lu/imperia/md/content/cegedel/cegedel-sa/communiques-presse/fusion/communique_fusion_en_23janv2009.pdf