Electricity liberalisation in Europe

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Outline

- History of reforms
- What is the model?
- How far have we got in the EU?
- The Directorate General Energy investigation
- The DG Competition investigation
- Issues
- Next best solution or Frankenstein's monster?

History of reforms

- The Commission has been trying to pass laws to force reforms of electricity industries since before 1990. There is a parallel process for gas
- In 1996, Electricity Directive was passed requiring countries to open electricity up to competition
- In 2003, a new Directive was passed strengthening the provisions of the 1996 Directive. This required the Commission to carry out a review in 2006.
- In 2006, DG Energy opened its review and at the same time, DG Competition opened a separate review of electricity markets
- A new Directive will result, expected to apply even stronger pro-competition measures

The Model

- A wholesale market. This provides price signals for purchases made outside this market and for investment decisions in new sources of electricity
- A retail market. All consumers can switch supplier. This places competitive pressure on suppliers: inefficient suppliers are squeezed out
- Access to the networks is available to all retailers and wholesalers on equal terms
- A sector regulatory body should exist
- Integration of retail and wholesale should be very limited or wholesale markets will be meaningless

2003 Directive

- Wholesale markets implied but not specified
- Retail competition for all non-HH consumers by 2004 and all consumers by July 2007
- Networks should be legally unbundled from generation and retail activities. Transmission by 2004, distribution by 2007
- A sector regulator with specific powers and capabilities must be present
- No provisions on separating retail/wholesale and networks

Implementation

- For the first time, the Commission acknowledges that prices are too high
- Many countries have not implemented the Directive fully and the EU is taking proceedings against them
- Transmission is generally legally unbundled (not Germany) but distribution is often not
- Retail competition for non HH consumers implemented but several countries are not prepared for HH competition. In most countries, consumer switching rates are minimal
- Wholesale markets have low liquidity & are distrusted
- Regulatory bodies are variable in powers and resources
- There has been massive concentration amongst the companies and integration of generation and retail

DG TREN

- Prices are too high
- Markets solve everything: security of supply, investment, diversity, environmental issues
- The major barrier to markets is inadequate unbundling of networks and retention of regulated prices
- No discussion of integration of generation and retail
- Solution to corporate concentration is unbundling networks
- A single European regulator is desirable
- Smart meters are a good thing

DG Competition

General agreement with DG TREN. Areas of difference are:

- In a preliminary report, it identified integration of generation and retail as a problem, but it has retreated from this
- 'Energy release' programmes are advocated as a way to 'kick-start' wholesale markets
- No mention of a single European regulatory body

The Seven Brothers	Turnover 2005 €bn (% annual increase)
E.ON + Endesa	56.4 (+21) + 18.2 (33) = 74.6
EDF*	58.9 (+15)
RWE	41.8 (-1)
Iberdrola + SP	11.7 (+35) + 8.2 (19) = 19.9
Electrabel + Distrigaz + GDF	12.2 (+6.8) + 3.8 (+29) + 27.6 (+21) = 43.6
ENEL	34.1 (+10)
Vattenfall	16.1 (+18)

	UK	Germ	France	Italy	Benelux	Nordic	Iberia	E Europe
E.ON+ Endesa	Sig	Home	Limited	Sig	Sig	Sig	Home	Sig
EDF	Sig	Sig	Home	Sig				Limited
RWE	Sig	Home						Sig
Iberdrola+ SP	Home						Home	
Electrabel+ Distrigaz+ GDF		Limited	Home	Sig	Home			Sig
ENEL				Home			Limited	Sig
Vattenfall		Home?				Home		Sig

Issues

- Unbundling networks: who will own the networks if utilities can't? Are pure TSOs and DSOs desirable? Is massive corporate concentration avoidable?
- Unbundling retail and generation: Integrated generator/retailers will defeat competition but are more likely to give security of supply
- Regulators: How to make them more representative and accountable?
- Retail competition: Can retail competition be taken away from large consumers?
- Smart meters: Too risky for small consumers?
- Spot markets: Can spot markets with low ambitions (marginal balancing) serve a useful purpose?

Can efficient electricity markets be created?

Marketeers said special characteristics of electricity were unimportant. Markets can't work because:

1. Inability to store power. Storage allows demand & price peaks to be smoothed using stocks
2. In an electricity system, supply and demand must match. Without control over producers, a system operator cannot ensure security of supply
3. Lack of substitutes. For most products substitutes can be used if supplies are short or prices high
4. Vital role in society. Modern society is dependent on reliable supplies of electricity for it to function
5. Electricity is a standard product. Switching supplier can't produce 'better' electricity. Markets are price driven: in an efficient market, prices will be driven to short-run marginal cost, too low for new investment;

Competition is not a free lunch

- If electricity is a monopoly, investment risk to financiers is low: ~7% real cost of capital
- There is now serious investment risk and in Britain real cost of capital is more than 15%.
- NETA cost British consumers at least £770m spread over 5 years. Investment in NETA (BETTA) has continued
- Retail competition cost British consumers £900m over 7 years
- In UK, retail used to be 5% of bills, now it is said to be about 30%

Next best solution or Frankenstein's monster?

The 'ideal' model is not fully achievable

- Unbundling networks is achievable but largely pointless if competition is not introduced
- Effective regulation can be achieved
- Retail competition is achievable, but expensive and unfair on small consumers
- Liquid wholesale markets will be too risky to allow investment in new generation
- With integration of retail and generation, there might be security of supply but there will be no competition