

## Unbundling Energy Networks

### The chill winds of the European Commission's regulatory proposals

What started as a mild winter is suddenly turning distinctly chilly for many energy companies. The European Commission's report on the Energy Sector Inquiry published in January sets out radical proposals for the internal energy market. Legislative proposals are expected to follow shortly. The most far-reaching of these calls for ownership unbundling of energy companies' network and supply activities, at both wholesale and retail levels, with the initial focus on the unbundling of generation and transmission businesses. This stems from the Commission's finding that several energy companies have failed to comply with 2003 energy directives requiring accounting and legal separation of supply and network businesses, and non-discriminatory access. The question addressed here is whether full ownership unbundling – with its attendant costs - is an appropriate response to a real problem.

#### The current context

Structural divestment is rare in European network businesses. The exception is the UK gas and telecommunications sectors. In both the national regulatory authority has carried out a sustained campaign against the incumbent to restructure. In the 1990s the UK gas regulator referred BG to the Monopolies and Mergers Commission (MMC) twice leading to its radical restructuring into transmission and distribution companies. In the telecoms sector BT was 'forced' to agree by Ofcom in 2005 to full functional separation, and third party access based on the concept of equivalence.

The UK experience shows that failure by companies to seize the initiative in this debate - either through full compliance with current arrangements or to develop proposals for alternative workable arrangements – serves to strengthen the regulators' hand in calling for divestment. The danger of stonewalling the regulator is that it risks regulatory 'overshoot' into the full scale restructuring of industry and companies. The frustrated regulator dismisses the alternatives - in this case non-structural business separation, greater regulatory oversight, equal network access and market liberalisation – even though they offer similar competitive and consumer gains in less costly and disruptive ways.

#### Is ownership divestment necessary?

Vertical integration offers significant advantages, namely: production efficiencies through economies of

scope; reduced external cost risk; better coordinated (and more efficient) investment decisions; and avoidance of double-marginalisation. Under an effective regulatory regime with functional separation, these advantages may be harnessed to the benefit of customers without the need for structural divestment.

Energy companies are already required to be set up as separate legal entities with separate accounts. Accounting separation is designed to prevent cross-subsidies between regulated and competitive activities and ensure that charges are transparent and cost reflective. Legal unbundling is aimed at preventing conflicts of interest and improper sharing of information. It may also include physical separation of premises and IT systems. Provided companies comply with the requirements, these unbundling arrangements may be sufficient to significantly reduce the scope for anti-competitive conduct.

A major attraction of ownership unbundling is that it removes the incentive to engage in discriminatory conduct, and thereby the need for regulatory oversight. But this advantage must be weighed against its high transactions costs and investment risks which may lead to higher prices and/or lower service levels for consumers.

An evaluation of structural divestment requires the incentive benefits to be balanced against the costs. Such an assessment must take account of particular market characteristics such as size, concentration, investment requirements and the effectiveness of the regulatory regime. It will also need to consider both short and long-term effects of unbundling on costs and prices.

A comparison across the EU (see table below) reveals that relatively few countries have implemented ownership separation of their transmission businesses, and not a single country has implemented ownership unbundling of distribution assets. The evidence also shows that markets with separately owned transmission systems have lower average price increases. This is comparable with the relatively lower level of price increases achieved under greater market opening.

A comparison of prices with unbundling is flawed, however, as it fails to take account of other factors such as the effectiveness of regulation and/or whether prices

are subject to price-cap, as well as transmission interconnectivity. It also suggests that the Commission's reforms should not put too much reliance on ownership unbundling at the expense of addressing other aspects of EU electricity markets which would result in greater market opening and more effective regulation.

Member State	Level of Unbundling		Price Change % 2000/05	% Market Opening
	Transmission SO	Distribution SO		
Austria	Legal	Legal	2	100%
Belgium	Legal	Legal	-5	~90%
Cyprus	Management	None	9	35%
Czech Republic	Legal	Accounting	29	47%
Denmark	Legal	Legal	29	100%
Estonia	Legal	Legal		10%
Finland	Ownership	Accounting	23	100%
France	Legal	Management	-3	70%
Germany	Legal	Accounting	12	100%
Greece	Legal	None	15	62%
Hungary	Legal	Accounting	32	67%
Ireland	Legal	Management	51	56%
Italy	Ownership	Legal	-4	79%
Latvia	Accounting	Accounting		76%
Lithuania	Legal	Legal		
Luxembourg	Management	Management	22	57%
Malta		**	0	0%
Netherlands	Ownership	Legal	17	100%
Poland	Legal	Accounting		52%
Portugal	Ownership	Accounting	10	100%
Slovakia	Legal	Management		66%
Slovenia	Legal	Accounting	24	75%
Spain	Ownership	Legal	1	100%
Sweden	Ownership	Legal	40	100%
UK†	Ownership	Legal	-11	100%
<b>EU Ownership Unbundling</b>			<b>12.67</b>	
<b>EU Average</b>			<b>14.65</b>	
<b>EU &gt;75% Open</b>			<b>12.78</b>	

### Structural divestment is costly

Full ownership unbundling can increase investment costs and risks. Investment coordination will be made more difficult and could result in delays or abandonment of projects. A wholesaler considering making an irreversible investment (for example building a power generator or a re-gasification terminal) may decide not to undertake it because it cannot be sure that the network owner will carry out the required investment to connect the generator or terminal. The lack of a credible commitment from the network owner may hold up the investment or result in no investment being made. This is especially the case when transaction-specific assets have considerable lower resale or salvage value. A failure to coordinate investment should be of serious concern to the Commission which has called for greater integration of EU energy markets to promote cross-border competition. Such integration is reliant on infrastructure investment to promote greater connectivity and energy security.

### Are the Alternatives Better?

The alternative to full ownership unbundling is to separate the operation of the transmission network from its ownership, enabling companies to remain vertically integrated while at the same time creating an independent system operator (ISO). The Commission regards this as less attractive because it requires greater regulatory oversight. The ISO model, adopted in Ireland and in some North American energy markets, retains the benefits of aligned incentives for efficient management and better coordinated investment, but may create significant transactions costs. The ISO model also requires the implementation of complicated agreements regarding information exchange, performance standards, maintenance schedules and investment requirements between the ISO and the transmission asset owner (TAO). There will also need to be complex terms for the attribution of responsibility and liability for any system failures. There are substantial costs not only in setting up such agreements but also in their ongoing implementation and monitoring.

### Energy companies must seize the initiative

The UK experience shows that ignoring the risks posed by the Commission's proposals is not an option. Whichever proposal is adopted it will have a profound effect on the way that Europe's largest energy companies run their businesses. It would therefore be a mistake to allow the Commission to retain the initiative. Energy companies affected by the Commission's proposals must adopt an approach that takes on board the Commission's concerns and logic. They must also assess the different models for reform and in particular quantify their impact on their business, investment, energy security, competition and customers. Failing to develop a coherent and reasoned strategy now may well prove a false economy.

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