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ISME

RESPONSE TO THE GOVERNMENT'S

ENERGY GREEN PAPER

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PREPARED FOR ISME BY COMPECON LIMITED

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EXECUTIVE SUMMARY.

This submission sets out ISME's response to the Government's Green Paper on Energy, which was published along with the Deloitte report on the Electricity Industry on 1st October 2006. ISME welcomes the opportunity provided by the publication of the Green Paper and the Deloitte Report to contribute to the debate on future energy policy. Irish business is suffering as a result of high energy costs which are due, in part, to a lack of effective competition in the Irish gas and electricity markets. ISME believes this lack of competition must be addressed as a matter of urgency. The message that emerges from the Green Paper and the Deloitte Report is that:

- § Irish industrial electricity prices, particularly for SMEs, are among the highest in the EU.
- § Lack of competition in the Irish gas and electricity markets contributes significantly to the high energy costs facing Irish business.
- § The Deloitte Report estimated that excess costs and inefficiencies in the ESB add €100m to electricity prices. **ISME believes that it is simply not acceptable that Irish households and business should be asked to bear such costs.**
- § The slow development of competition in the Irish electricity market reflects the failure by successive Governments to undertake structural reforms of the electricity industry.

ISME believes the development of effective competition in both the electricity and gas markets is essential in order to keep energy prices to Irish business as low as possible. The creation of effective competition in electricity and gas requires that Deloitte's recommended option for restructuring of the electricity industry must be implemented in full. Specifically the Government must commit itself to:

1. The full separation of the electricity transmission and distribution network from the rest of the ESB, with responsibility for the networks being assigned to a new State company.

2. The divestiture of ESB generation and supply portfolios as recommended by Deloitte.
3. Full separation of the gas transmission and distribution networks from BGE's other activities.
4. A detailed review of the current regulatory regime for the gas and electricity markets as the current regime has failed to prevent Irish business and consumers from paying for excess costs and inefficiencies within ESB.

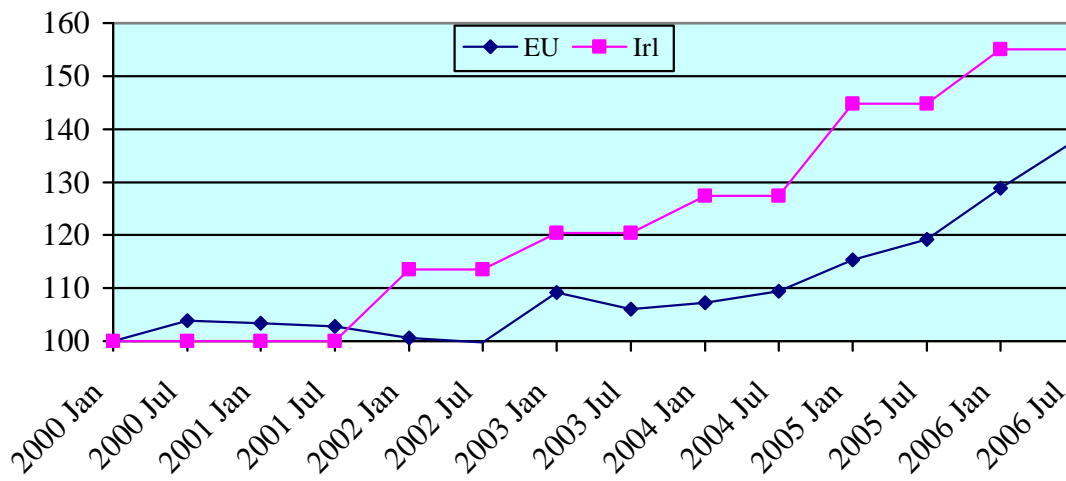
Irish Energy Prices are Excessive

Irish industrial electricity prices are among the highest in the EU, particularly for SMEs. Irish industrial electricity prices have increased by 55% since mid 2001 and are due to rise again next January. An ISME survey found that a large proportion of ISME members have expressed serious concerns at the high cost of electricity. Recent months have also seen a number of major multinational firms warning that the high cost of energy in Ireland now constitutes a serious impediment to further investment. Gas prices to industry doubled between 2000 and 2004 and have risen further since then.

Ireland's high industrial electricity prices are due, in part, to our over dependence on gas for electricity generation which has meant that increases in World gas prices have contributed to Irish electricity prices rising faster than those in other EU Member States. Fig. 1 illustrates, however, that Irish industrial electricity prices were rising faster than those in other EU Member States, even before world gas prices started to rise. Other factors have also contributed to Ireland's higher electricity prices. The Deloitte Report estimated that excess costs and inefficiencies in the ESB add €100m to electricity prices. **It is simply not acceptable that Irish households and business should be asked to bear such costs.** There is also evidence that gas transmission prices are higher in Ireland than in other EU Member States which also has an effect on electricity prices, given that a high proportion of generation is gas fired.

Irish v EU15 Industrial Electricity Prices

(Jan 2000 = 100)



Source: CSO and Eurostat

Lack of Structural Reform has Hindered Development of Competition.

The slow development of competition reflects the failure by successive Governments to undertake structural reforms of the electricity industry. There is considerable evidence from other jurisdictions that such restructuring is essential to promote vibrant competition and to ensure a successful transition from State owned monopoly to a vibrant competitive market. Where the incumbent operator owns or controls the transmission and distribution networks, it has an obvious incentive to obstruct entrants from accessing the grid. This problem can only be addressed by completely separating the transmission and distribution networks for gas and electricity from other parts of those industries. Various agencies including the Competition Authority, the Commission for Energy Regulation, the ESRI and the OECD, together with numerous other studies have highlighted the fact that structural reform is essential in order to transform the electricity industry from a monopoly to a competitive industry. **Irish business and consumers are paying a heavy price for the Government's failure to adopt such measures.**

Structural Reform is Vital.

The Deloitte report has clearly recommended that the Government should implement a major structural reform of the ESB, involving the full separation of the transmission and distribution networks as well as the divestment of generation and supply portfolios by ESB. ISME fully supports Deloitte's favoured recommendation for restructuring of the ESB and believes that the Government should give a firm commitment to accept this recommendation and set about implementing it as a matter of urgency. ISME is concerned that the Green Paper failed to include a clear commitment to implement the structural reforms recommended by the Deloitte Report. It is also concerned that the Minister in his speech launching the Green Paper appeared to rule out the Deloitte recommendation. The Green Paper states that the Government is committed to opening up the gas and electricity markets to competition. It is time to demonstrate that commitment by accepting and implementing the preferred recommendations of the Deloitte report. **The cost to the economy of failing to grasp the nettle of competitive reforms will be considerable in terms of jobs lost in many small and medium enterprises and the potential damage to Ireland's attractiveness as a location for major foreign direct investment.**

Some restructuring of the gas market with the full separation of the transmission and distribution system from other elements of BGE's business is required to ensure effective competition in the market for small gas users.

Regulatory Reform also Required.

The Green Paper has not considered the operation of the regulatory regime for gas and electricity stating that this has been deferred until the completion of the all Ireland single electricity market (SEM). While many of the problems in the gas and electricity market are due to the Government's failure to implement necessary structural reforms, there are also serious concerns about regulatory credibility and independence which have increased

the risks involved in investing in electricity generation. The Deloitte finding that inefficiencies and excess costs are adding €100m to Irish electricity prices is a serious indictment of the current regulatory regime. **Regulatory arrangements for the gas and electricity arrangements need to be reviewed as a matter of urgency.**

1: INTRODUCTION.

1.1: Background to the Report.

This report has been prepared by Compecon Limited on behalf of ISME in response to the Government's Green Paper on Energy which was published on 1st October 2006. With the publication of the Green Paper, the Government initiated a consultation process on Irish energy policy. The Green Paper has sought submissions from interested parties and posed a number of specific questions regarding future energy policy. Coinciding with the publication of the Green Paper, the Department of Communications, the Marine and Natural Resources (DCMNR), published a detailed review on the future of the electricity in the industry which was carried out by Deloitte consultants.

1.2: Scope of the Report.

The present report focuses primarily on the issue of energy costs to Irish business, particularly small and medium sized enterprises. It considers whether the proposals set out in the Government's Green Paper are likely to address the problem of high energy costs facing Irish business. The report focuses primarily on the electricity industry, in light of the recommendations made in the Deloitte report for major structural reforms in that industry. It also considers whether similar reforms might be appropriate in the case of the gas industry.

In preparing this submission Compecon was specifically asked to address the following issues:

1. Review the performance of the Irish electricity market since 1998 and identify possible shortcomings, in particular the lack of progress to date in introducing competition and the consequent negative effect on prices.

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2. Analyse the main findings in the Deloitte report and assess whether these are adequate to address the problems identified at 1. Other relevant reports were also considered.
 3. Compare the Green Paper proposals for the electricity industry with the recommendations contained in the Deloitte Report.
 4. Identify whether the proposals in respect of competition contained in the Green Paper are likely to address the high cost of electricity prices for business in the Republic of Ireland.
 5. Respond to arguments against competition in the Irish electricity market.
 6. Respond to the consultation questions in the Green Paper that are relevant to the question of competition.
 7. Briefly address the issues of sustainability and security of supply.

1.3: Structure of the Report.

The balance of this report is structured as follows. Section 2 describes the main features of the electricity industry in Ireland. The issue of promoting competition in the Irish electricity industry is considered in Section 3. The gas market is examined in Section 4, while Section 5 looks at the operation of the regulatory regime for gas and electricity. Section 6 sets out ISME's response to the Green Paper consultation questions.

2: THE ELECTRICITY INDUSTRY IN IRELAND.

2.1: Background.

The production and supply of electricity comprises four distinct stages:

- § Generation;
- § Transmission;¹
- § Distribution;² and
- § Supply to final customers.

The ESB was established in 1927 and operated as a state owned monopoly vertically integrated utility (VIU), i.e. it operated in all four stages of production and supply. As a result of EU legislation, Ireland along with other EU Member States was required to gradually open up its electricity markets to competition. The EU legislation also requires that, in the case of VIUs, control of the transmission and distribution systems be separated from other areas of the business. A new entity, Eirgrid, has been established as the transmission system operator (TSO) while a new distribution system operator (DSO) is in the process of being established.

The industrial electricity market has gradually been opened to competition on a phased basis, beginning in February 2000.³ The market was fully opened to competition in 2005. There are currently six entities (including two ESB entities) active in the industrial and commercial supply market. ESB Customer Supply is the regulated public electricity supplier (PES) and is the supplier of last resort. ESB Independent Energy (ESBIE) is a wholly owned subsidiary of the ESB. According to Deloitte ESBIE is a significant player in the industrial and commercial market. The other suppliers include the State owned

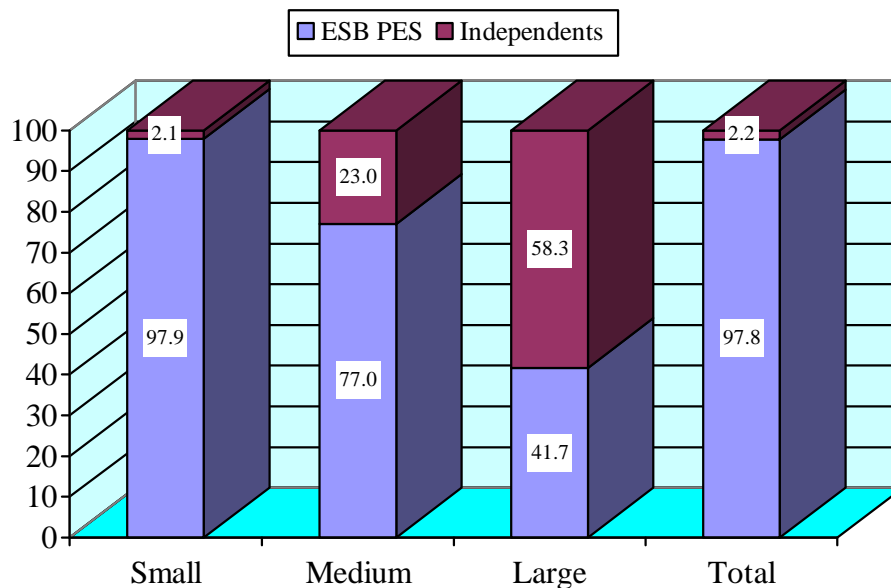
¹ In electricity, transmission refers to the high voltage nation-wide network of lines that carry power from generating stations.

² Distribution involves taking power from this network, reducing voltage by means of transformers to levels suitable for industrial and domestic usage and then supplying power to individual homes and business premises by means of the lower voltage local line network.

³ EU Directive 96/62 required Member States to open up 28% of their markets to competition with effect from February 1998, but the Irish Government obtained a derogation delaying this for two years.

BGE, Energia (a wholly owned subsidiary of Viridian Power & Energy), Airtricity and CHPower. The entry of firms into the supply market has been facilitated by an auction system which has allowed firms bid for electricity from the ESB, thus allowing them to build a customer base in advance of building power stations. Fig.2.1 provides some details of suppliers' market share by customer type.⁴

Fig.2.1: Suppliers's % Market Share by Customer Type



Source: Deloitte, Table 3.2

The chart shows that almost 98% of all electricity customers obtain their supplies from ESB PES. In the market for large customers, which are effectively large commercial and industrial customers, independent suppliers have managed to gain a 58% market share. Competition has been slow to develop in the market for household and SME customers. ESB PES accounts for 98% of small users and 77% of medium sized users.

To date there has been limited new entry in electricity generation. As a result the ESB still controls the bulk of generation assets.

⁴ The chart relates to both business and household customers.

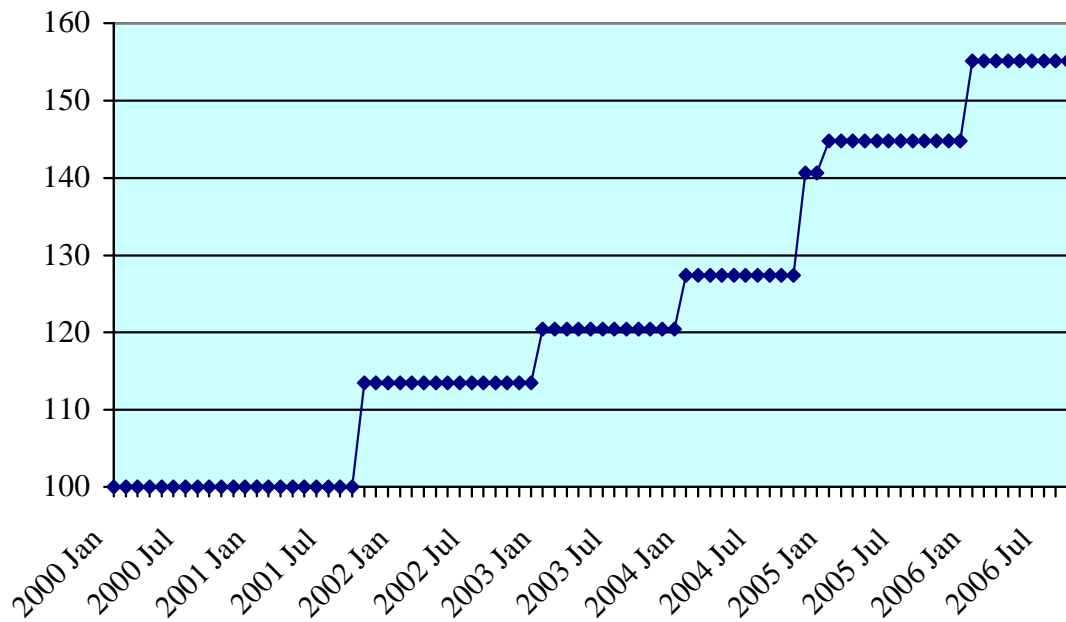
There are proposals for the establishment of an all-Ireland single electricity market (SEM). This is due to come into operation in mid 2007. This process will involve *inter alia* increased interconnection between the electricity systems in the Republic and Northern Ireland. The Government has also announced proposals for the construction of a 500MW interconnector between the Republic of Ireland and Britain. This is expected to be completed in 2012.

2.2: Irish Industrial Electricity Prices.

Irish business has experienced substantial increases in electricity prices over the past few years. This is illustrated by Fig.1 which shows trends in the wholesale ex vat price paid by manufacturers for electricity since January 2000.

Fig. 1: Irish Wholesale Electricity Prices

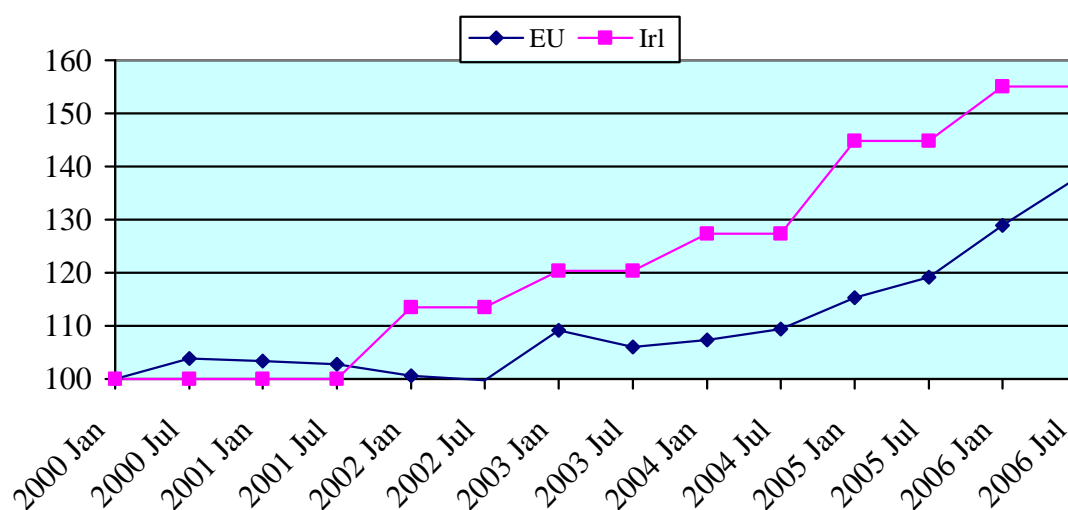
(ex VAT 2000 = 100)



Source: CSO

The chart shows that Irish wholesale electricity prices have increased sharply over the past five years. Between September 2001 and January 2006, the wholesale price of electricity to Irish manufacturers increased by 55%. Prices are set to rise by a further 12.5% in January 2007. Fig.2.2 compares trends in Irish wholesale electricity prices to manufacturers with average industrial electricity prices in the EU 15.

Fig.2.2: Irish v EU15 Industrial Electricity Prices



Source: CSO and Eurostat

The chart shows that Irish industrial electricity prices increased much faster than the average for the EU 15 up to mid 2004. Over that period average industrial electricity prices in the EU 15 increased by only 9%, while Irish prices rose by 27%. EU prices have risen sharply since mid 2004, reflecting rising world oil and gas prices. Between July 2004 and July 2006, average industrial electricity prices in the EU 15 increased by 26% while Irish industrial electricity prices increased by 22% over the same period. Over the entire period since mid 2001 Irish industrial electricity prices have increased by 55% compared with a 38% increase in the EU 15 between January 2000 and July 2006.

The substantial increases in Irish electricity prices have had a severe negative impact on Ireland's international competitiveness. In 2004, the National Competitiveness Council

reported that Irish industrial electricity prices were among the most expensive in the EU, while UK electricity prices were 40 per cent lower than in Ireland for firms consuming 10 GWh.⁵ The Deloitte Report stated that Irish electricity prices are notably higher than those of other European countries. Based on international comparisons for 2004, it stated:

“Ireland is consistently ranked among the top three most expensive countries for industrial consumers of electricity in Europe.”⁶

Table 2.1 compares Irish electricity prices with average electricity prices in EU member States for different categories of industrial user. Irish industrial electricity prices have increased by a further 22% since 2004.

Table 2.1: Irish and EU Average Electricity Prices for Industrial Customers 2004/5.

(€/kwh)			
Category	Ireland	EU	Ireland's Position
Small	0.1791	.1323	2nd Highest - 35% above EU average
Medium	0.1021	.0811	3rd Highest - 26% above EU average
Large	0.0805	.0663	3rd Highest - 21% above EU average

Source: Deloitte.

In the case of small industrial customers, Irish prices were the second highest in the EU and were 35% above the EU average. For medium and large industrial customers, Irish electricity prices were the third highest in the EU and 26% and 21% respectively above the EU average.

Deloitte also found that charges for the use of the transmission and distribution network were above the European average despite measures of quality for the distribution network performance being markedly below international standards.

⁵ National Competitiveness Council Statement on Prices and Costs 2004, September 2004. Ireland was second most expensive out of ten countries for firms purchasing 10GWh; 3rd most expensive (out of nine countries) for firms purchasing 25GWh and 3rd most expensive (out of eight countries) for 70 GWh.

⁶ Deloitte, p.9. The Report also found that for small domestic consumers prices are the second highest in Europe and 51% above the European average.

The Deloitte Report also noted that business groups consulted during the course of the report's preparation claimed that electricity prices were significantly impacting on the cost competitiveness of Irish industry. The National Competitiveness Council has recently stated that "the rapid increases in industrial electricity tariffs are adversely affecting all firms operating in Ireland. This is particularly the case for the more energy intensive sectors such as chemicals and pharmaceuticals, food, beverage and tobacco and the electronics sector – sectors of great significance to the Irish economy."⁷ Electricity prices for households have also increased sharply in recent years and are also among the highest in the EU.

2.3: Factors Contributing to High Electricity Prices in Ireland.

Ireland is heavily dependent on imports of energy. A large proportion of electricity generation plants are gas fired. As a result, Ireland is quite exposed to fluctuations in world oil and gas prices. Deloitte reported that 70% of the cost of electricity to industrial customers was accounted for by generation costs and that the fuel mix of generating plants was the principal structural factor contributing to high generation costs. According to Deloitte, the fuel mix of Irish generation plants is responsible for 70% of the differential between Irish and EU generation costs.⁸

While it is accepted that the sharp increase in Irish electricity prices in recent years is to a large extent due to rising world oil and gas prices, domestic factors have also contributed to the high electricity prices facing Irish industrial and households. Deloitte, for example, reported that:

“Detailed benchmarking of the generation, transmission and distribution businesses of the ESB reveal that there is excess cost, poor availability performance and outdated working practices remaining in the business which contribute to higher costs.”⁹

⁷ National Competitiveness Council: *The Competitiveness Challenge*, 2005, NCC, 2005, p.44.

⁸ Deloitte, p.10.

Table 2.2 provides some comparative data on generation costs. The table shows that overall generation costs in 2005 were 44% above the EU average and 29% higher than in the UK. Fuel costs were 73% above the EU average, while non-fuel costs were 27% higher than the EU average and 33% higher than in the UK.

Table 2.3 Generation Costs (ex Capital Charges), 2005
(€MWh)

	Ireland	UK	EU 15	% Diff Irl v EU 15
Average Fuel Cost	27.57	21.69	18.37	+73
Non-Fuel Cost	14.22	10.66	10.73	+27
Total	41.79	32.35	29.10	+44

Source: ESBI, *Summary Comparison of Irish and European Generation Costs*, June 2005, cited in Deloitte, p.226.

Deloitte reported that labour costs in ESB's power plants were 20-30% higher than in EU comparator countries. They also reported that ESB's power stations experienced poor availability with an average availability of 80% compared with 90% elsewhere. According to Deloitte these factors added €100m to Irish generation costs.¹⁰

In addition to the factors identified by Deloitte, there are other factors contributing to high electricity prices which are amenable to domestic control. For example, there is evidence that gas transmission charges in Ireland are higher than in other EU Member States. As a large proportion of generation plant is gas fired, the higher charges for gas transmission also contribute to higher electricity prices. Fitzgerald has stated that peat plants add €60m to electricity costs.¹¹ The use of peat for electricity generation is justified on security of supply grounds, as it is an indigenous fuel source. Obviously some premium may be justified on that basis. Bord na Mona has a monopoly on peat

⁹ Deloitte, p.85.

¹⁰ The ESB's 2001 Annual Report stated that it was envisaged that 2,000 staff – 21% of the total - would leave the company under the terms of a voluntary severance package over the following five years. The 2005 report suggests that staff numbers actually fell by 1,100 which is significantly short of the original target. Between 2000 and 2005 ESB average earnings increased by 65% while average earnings in all industries increased by just 34% over the same period.

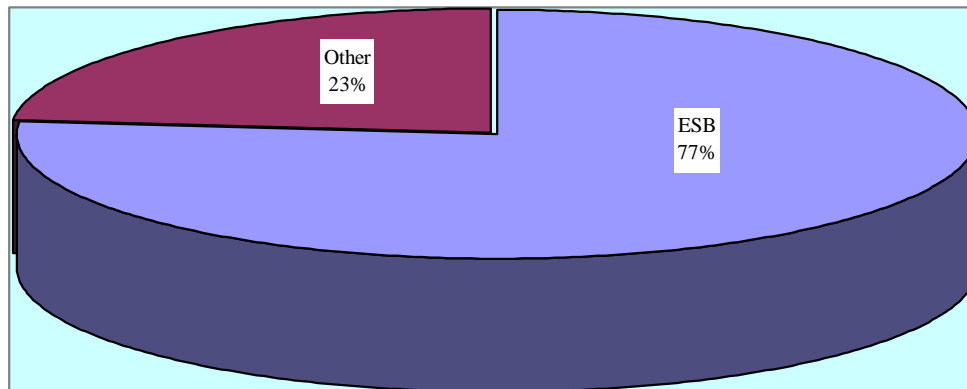
¹¹ J. Fitzgerald (2005): Speech to Competition Press Conference as reported in *Competition*, 13(9): 181-5.

production, while the ESB is allowed pass on the excess cost of peat plants as a result of the public service obligation (PSO) levy. In those circumstances, there is no obvious incentive to reduce cost and maximise efficiency of peat plants.

2.4: ESB Dominance.

Such excess costs and inefficiencies are attributable to the lack of competition in the Irish electricity market. As pointed out, there has been very little new entry in generation. As a result ESB plants still account for more than 75% of installed generating capacity as illustrated in Fig. 2.2. More importantly ESB PG controls all the conventional mid-merit and peak generation plants. Deloitte reported that ESB plants set the price for electricity 99% of the time.

Fig.2.2: Distribution of Installed Generation Capacity in the Republic of Ireland



Source: Deloitte.

The Deloitte report concluded that ESB had a dominant position at all levels of the industry.

“As the incumbent vertically integrated utility in the Republic of Ireland, ESB holds a dominant position in all segments of the electricity value chain by virtually any set of measures.”¹²

It further stated that the ESB’s dominance constituted a major impediment to new entry.

“The dominance of ESB has raised barriers to entry in generation and supply. ESB’s dominance derives from, *inter alia*, its ownership of a large, diverse and flexible portfolio; ownership of price setting capacity (ESB PG units set spill price 99% of the time from January to June 2005); ownership of generation sites with favourable access to cooling water, grid and fuel infrastructure; high market share in the supply side (i.e. approximately 74%); brand strength; and extensive information and market intelligence advantages.”¹³

2.5: Conclusions.

Electricity is vital to a modern developed economy. It provides lighting, heating and power for industry. The Deloitte Report demonstrated that Irish electricity prices are high by international standards and, more importantly, are higher than they should be due to the ESB’s excess costs and inefficiencies. These costs are borne by consumers and business. They are having a negative impact on industrial competitiveness. **Put bluntly Irish industry and consumers are paying €100m more for electricity as a result of the ESB’s inefficiencies and high labour costs. It is unacceptable that Irish business and consumers should have to bear such costs. It is therefore essential that measures are taken to eliminate such excess costs.**

¹² Deloitte, p.102.

¹³ Deloitte, p.13.

3: PROMOTING COMPETITION IN THE IRISH ELECTRICITY MARKET.

3.1: Background.

The EU adopted measures designed to open up national electricity markets throughout Europe, thereby permitting increased competition across national borders. Directive 96/92EC provided for the gradual opening of electricity markets with Member States required to open 28% of their domestic markets to competition in February 1998, with this proportion set to rise to 40%. Ireland sought and obtained a two year derogation from the Directive. In November 2002, the Council of Ministers agreed a timetable for full liberalisation of the electricity market, which provided that all business users will be free to choose energy supplier by July 2004, with all domestic consumers being given this right from 2007. EU legislation requires some unbundling of transmission and distribution operations from other parts of the industry.

The Government Green Paper on Energy states:

“The Government is committed to ensuring that real competition is delivered in Irish electricity and gas markets.”¹⁴

The Irish electricity market has been fully open to competition since early 2005, which is ahead of the EU deadline. Competition has been slow to develop, however, with little new entry in generation. This begs the question of why this should be so.

3.2: The Transition from Monopoly to Competition.

There are a number of difficulties involved in the transition from a state owned vertically integrated monopoly to a competitive market. The electricity industry combines activities which are natural monopolies and others which are potentially competitive. The

¹⁴ Department of Communications, Marine and Natural Resources, *Towards a Sustainable Energy Future for Ireland*, October 2006, p.17.

transmission and distribution networks constitute natural monopolies, while generation and supply are potentially competitive. Firms wishing to enter the generation and supply businesses need access to the transmission and distribution networks. A vertically integrated incumbent has obvious incentives to deny them access to such facilities or to grant such access on unfavourable terms. There is a wide range of ways in which incumbents can prevent access, ranging from the obvious to the subtle. Ergas observed that the incentives to deny access to networks to rivals may be greater in publicly-owned firms:

“Particularly in public enterprises with a long history of public ownership, managers may be output or employment maximisers, more interested in retaining market share than in increasing shareholder value. Being risk-averse, the incumbent’s managers may weigh the certain loss of a ‘quiet life’ far more heavily than the uncertain gains they could secure from operating in a competitive environment ... As a result, the firm’s managers may stall or obstruct access by the entrant even when such access would have been granted by the facility’s owners.”¹⁵

The US Federal Energy Regulatory Commission (FERC) Decision No. 2000 noted that generators that control transmission facilities “have poor incentives to provide equal quality transmission service to their power marketing competitors”.¹⁶ Regulation may not be able to prevent the denial of access by a vertically integrated incumbent without incurring substantial costs. In contrast, the unintegrated owner of a transmission network would never have an incentive to refuse to deal unilaterally. A number of studies have thus concluded that it is necessary to completely separate the natural monopoly transmission and distribution networks from the potentially competitive generation and supply businesses.¹⁷

¹⁵ H. Ergas, (1995): Access and Interconnection in Public Utilities, mimeo.

¹⁶ Federal Energy Regulatory Commission Decision No. 2000, p.35.

¹⁷ See, for example, D.M. Newbery, (2001): Problems of Liberalising the Electricity Industry, *European Economic Review*, 46; OECD, (2001): *Structural Separation in Vertical Industries, Report by the Secretariat*, Paris: OECD; S. Scott and F. Convery: (1990): Energy and Privatisation in Ireland in F. Convery and M. McDowell eds. *Privatisation: Issues of Principle and Implementation in Ireland*, Dublin: Gill and Macmillan; United States Federal Trade Commission, (2000): *Staff Report: Competition and Consumer Protection Perspectives on Electric Power Regulatory Reform*, Washington D.C.: Federal Trade Commission.

The US Federal Trade Commission highlighted the serious difficulties involved in trying to prevent a dominant vertically integrated firm from using its control over transmission to abuse its market power. It pointed out that monitoring and enforcing compliance with non-discriminatory regulations is particularly difficult because quality of service is time sensitive. Conditions can change on an hourly basis making it virtually impossible to intervene before conditions have changed. Discrimination could involve subtle reduction in quality of service whose effects would be more difficult to identify and measure than outright denial of access. It concludes that:

“Complete separation of both ownership and control can provide the best assurance against the anti-competitive incentives and capabilities of combined operations. Divestiture also avoids the expense and intrusiveness – and perhaps futility – of monitoring and controlling a firm’s day-to-day behaviour.”

Commenting on the separation of the various state owned utilities in Australia into separate generation, transmission, distribution and retailing businesses, the Director of Australia’s National Competition Council observed:

“The structural separation of the old energy monopolies was crucial to the development of competitive markets.”¹⁸

Armstrong *et al.* argue that:

“Whether or not to apply policies of vertical separation to previously integrated monopolies is perhaps the most important question for structure regulation.”¹⁹

They also point out that simple accounting separation is not enough, as it is very difficult for a regulator to ensure that costs are correctly apportioned between different business activities.

A recent EU report on the operation of gas and electricity markets has indicated that the VIU model can raise barriers to entry, confer unfair advantages on incumbents, and prevent effective and transparent market operation. It found that the retention of the networks business within a VIU, even on a functionally unbundled basis, gives rise to

¹⁸E. Willett, (2001): *The Report Card on Electricity and Gas Reform*, AEUC mimeo, p.5.

incumbent advantages, both real and perceived, in terms of the potential for cross-subsidisation and increases the degree of information asymmetry between the regulator and the VIU. The EU noted that:

“the experiences of full ownership unbundling suggests that it materially changes the behaviours of the network undertaking: fully unbundled TSOs and DSOs will focus on optimising the use and capacities of the networks.”²⁰

EU Competition Commissioner Neellie Kroes has also stressed the need for structural reform.

“Our work on the Sector Inquiry has shown that a clear separation of interests between the network operators, energy producers and energy retail companies is imperative. Speaking very personally, I see only one way forward if we are to restore credibility and faith in the market. Europe needs a structural solution that once and for all separates infrastructure from supply and generation. In other words: ownership unbundling. Then we will finally see an end to discrimination, and we will also have laid the ground for a system of proper investment incentives.”²¹

Similarly, where the incumbent has inherited a dominant position as a result of the former regulatory regime, simply permitting entry is likely to be insufficient to promote competition. Bergman *et al.* concluded that “competitive outcomes cannot be reached without sufficient dispersion of the ownership of generation assets.”²² A number of other authors have also argued that some horizontal restructuring of the generation business along with vertical separation of transmission and distribution is necessary in order to promote competition.²³

¹⁹ Armstrong, M. Cowan, S. and Vickers, J. (1994): *Regulatory Reform: Economic Analysis and the British Experience*, Cambridge, Ma: MIT Press, p.160.

²⁰ As reported in Deloitte, p.16.

²¹ N. Kroes, *20th anniversary of the UK-France electricity interconnector – introductory remarks*, 30th November 2006.

²² L. Bergman, N-H von der Fehr, D.M. Newbery and P. Regibeau, 1999. The Problems and Experience of Liberalization in L. Bergman, G. Brunekreeft, C. Doyle, N-H. von der Fehr, D.M. Newberry, M. Pollitt, and P. Regibeau, *A European Market for Electricity?*, Centre for Economic Policy Research, p.229.

²³ S. Littlechild, (2003): *Electricity: Regulatory Developments Around the World* in C. Robinson ed. *Competition and Regulation in Utility Markets*, London: Institute for Economic Affairs; D.M. Newbery,

Summarising UK experience, Newbery observed that:

“The lessons from UK electricity restructuring are clear. Increased competitive pressure on generation is needed to reduce costs and that requires separating generation from transmission and distribution. Whether these benefits will be passed on to consumers depends upon the intensity of competition – particularly the number of competitors and the existence of an open access wholesale market. Unrestructured industries, even if privatised, appear to deliver few benefits.”²⁴

3.3: Lack of Structural Reform.

While successive Governments have stated their support for the development of a competitive electricity market, they have failed to take the necessary measures to bring this about. As already pointed, Government obtained a derogation from Regulation 96/62, thereby delaying the initial opening of the market to competition for two years. It is true that full opening of the market has been achieved significantly ahead of the EU deadline, but such opening is largely illusory since in reality there is very little competition in the market. The inherited dominant position of incumbent VIUs has been identified as a major obstacle to the development of competition.

Following the introduction of Regulation 96/62, the Government published a paper outlining its proposals for the development of the electricity industry and sought views from interested parties.²⁵ Crucially, however, the paper stated that “it has been agreed that ESB should remain vertically integrated insofar as this is possible within the constraints of the Directive.”²⁶

(2001): Problems of Liberalising the Electricity Industry, *European Economic Review*, 46; R. Nuttall, (2000): Competition Policy for Regulated Utility Industries in Britain, *Antitrust Bulletin*, 44(4): 935-73.

²⁴ D.M. Newbery, (2001): Problems of Liberalising the Electricity Industry, *European Economic Review*, p.6.

²⁵ Department of Transport, Energy and Communications, *Proposals for the Electricity Supply Industry in Ireland Consultation Paper*, May 1997.

²⁶ *Ibid.* p.7

Government has continued to shy away from structural reform of the industry despite numerous reports and studies which have indicated that structural reform of the Irish electricity industry is essential for the development of effective competition.²⁷ The Competition Authority,²⁸ the CER,²⁹ the ESRI³⁰ and the OECD³¹ have all stated that such restructuring is required. The CER reported that “...a comprehensive structural approach would...largely but not completely, address ESB’s market dominance”³² Several other authors have also pointed out over the years that such restructuring is essential for the creation of a competitive electricity market.³³ The managing director of the ESB National Grid observed:

“If these structural decisions cannot be taken, some other decision must be found that does not depend on markets and *recognises that competition will not play a major role in the allocation of resources in the industry*”.³⁴ (Emphasis added).

3.4: Deloitte Recommendations for Reform of the Irish Electricity Market.

Deloitte’s terms of reference required them to identify a number of possible alternatives for the reform of the electricity market and to identify a preferred option. The Deloitte

²⁷ Responsibility for the operation of the electricity transmission network has been transferred to Eirgrid but ownership remains with ESB. Eirgrid is heavily reliant on ESB for construction and maintenance of the network.

²⁸ Competition Authority, (2003): *Submission to the Commission for Energy Regulation – Irish Electricity Trading Agreements, Second Options Paper*, Dublin: Competition Authority; and Competition Authority: *Comments on the Draft European Communities- Submission to the Department of Communications, Marine and Natural Resources*, September 2004.

²⁹ Commission for Energy Regulation: *A Regulatory Approach to ESB Dominance*, 4 February 2004, Dublin: CER.

³⁰ ESRI, (2005): *Aspects of Irish Energy Policy*, Dublin: ESRI.

³¹ OECD, (2001): *OECD Reviews of Regulatory Reform. Regulatory Reform in Ireland*, Paris: OECD.

³² Commission for Energy Regulation: *A Regulatory Approach to ESB Dominance*, 4 February 2004, Dublin: CER.

³³ See, for example, S. Scott and F. Convery: (1990): *Energy and Privatisation in Ireland* in F. Convery and M. McDowell eds. *Privatisation: Issues of Principle and Implementation in Ireland*, Dublin: Gill and Macmillan; P. Massey and P.O’Hare, (1996): *Competition Law and Policy in Ireland*, Dublin: Oak Tree Press; P. Massey, and P. O’Hare: *Competition and Regulatory Reform in Energy and Telecommunications*, *Journal of the Statistical and Social Inquiry Society of Ireland*, 1995/96; P. Massey and A. Shortall, (1998): *Competition and Regulation in Public Utility Industries*, Competition Authority Discussion Paper No.7, Dublin: Competition Authority; IPA Energy Consulting, PB Power, Energy Links Consultancy, (2001): *Final Report on North South Energy Studies*, Dublin: Stationery Office; P. Massey, *Is Utility Regulation Failing Irish Consumers*, ESRI, *Quarterly Economic Commentary*, winter 2005; J. Fitzgerald (2005): *Speech to Competition Press Conference as reported in Competition*, 13(9): 181-5.

Report found that the ESB was dominant at all stages of the industry. The Report outlined a number of alternatives ranging from retention of the status quo to the privatisation and atomisation of the ESB. It recommended against both of these alternatives. The option recommended by Deloitte is set out in Section 8 of the report.

The main elements of that preferred option can be summarised as follows.

1. Completion of the legal and ownership separation of Eirgrid (TSO) from ESB and its retention in State ownership.
2. Immediate unbundling of the DSO through the creation of a legal subsidiary of ESB Networks in order to meet the mid 2007 deadline EU for separation of the DSO.
3. The sale by auction of two generation portfolios comprising 2,233 MW and a material level of price setting plant from within the ESB portfolio³⁵ and three supply packages (two carved out from the ESB's PES business along with ESB IE). The auction would also include a tender to build a new open cycle generation plant subject to CER and Eirgrid consideration.
4. Transitional restrictions to be placed on ESB PG and PES to allow new entrants to establish operations. Thereafter ring-fencing of other ESB generation assets should be removed and ESB's generation and supply businesses should be given the freedom to compete.
5. The complete legal and ownership separation of ESB Networks (TAO, DSO and DAO) from the ESB Group and its retention in State ownership.
6. The creation of a land bank of ESB PG generation sites. This would include sites where no generation facility is currently located but which have been earmarked or are considered suitable for development such as surplus land adjacent to existing power stations. The landbank would be managed by the CER and the TSO who would publish the list of such sites and grant operators leases to build and operate power stations on such sites.

³⁴ Statement of Kieran O'Brien, MD ESB National Grid to Oireachtas Joint Committee on Communications, Marine and Natural Resources, 20.6.2004.

³⁵ The two generation portfolios to be sold would comprise the Poolbeg and North Wall and the Marina and Aghada stations.

7. Measures would be adopted to prevent the creation or abuse of a dominant position by any market player.

The Deloitte recommendations would result in the complete separation of the transmission and distribution network from the ESB Group. The networks would be retained in State ownership. The auctioning of the generation and supply portfolios would result in the creation of two significant sized competitors in those businesses. ESB would remain as a vertically integrated generation and supply business. With the creation of the SEM and the construction of an interconnector to Britain such proposals would introduce a significant degree of competition into the market.

3.5: The Energy Green Paper.

The Green Paper accepts much of the Deloitte analysis. It notes that a major factor identified as influencing the reluctance of independent generators to enter the market is the perceived and actual dominance of ESB.³⁶ It concedes that:

“Unbundling and market opening have not addressed ESB’s perceived and actual dominance in the market.”³⁷

It also states that structural change would reinforce the benefits likely to accrue from the SEM and that:

“Regulatory action needs to be matched by policy measures *to reduce ownership concentration in power generation, particularly in relation to control of price-setting plant and to send firm signals in relation to progressive structural change in the electricity sector, North and South.*”³⁸ (Emphasis added).

The Green Paper describes the case for change as compelling and states that there “is a strong case, from both the security of supply and market imperatives for embarking on a process of structural change in the electricity sector.”³⁹ The Green Paper sets out the

³⁶ Para 2.3.17.

³⁷ Para 2.3.18.

³⁸ Para 2.3.20.

³⁹ Para 2.3.25.

following general principles which it describes as central to the decision on how to move forward with the change imperative.

- The Government considers that it is important to retain a strong, commercially viable ESB. This policy intention reflects ESB's fundamental role in the development of the Irish electricity sector and its own commitment to change. The Government does not intend to privatise or atomise the ESB Group.
- The Government is also broadly supportive of the continued development of ESBI as a successful international player.
- The Government is of the firm view that strategic electricity assets should be retained in State ownership for the long term. This includes transmission and distribution networks and certain generation assets, including pumped storage and hydro facilities.
- The ownership of prime generation sites capable of further development for generation purposes is seen as conveying a number of advantages on ESB, over new entrants seeking to establish themselves in the power generation sector, in terms of planning and access to infrastructure. The Government is of the view that these sites constitute a strategic national asset and believes that, as a possible policy option, consideration should be given to the creation of a State-owned landbank of such sites to incentivise the development of new independent generation capacity.
- The question of dominance and market power in price-setting generation plant will also need to be addressed as an immediate priority
- Real and effective competition in energy supply must be encouraged and facilitated in the interests of consumers.

The general principles outlined fall somewhat short of a commitment to implement the structural reform option recommended in the Deloitte Report. In particular they include a commitment to adopt some of the Report's recommendations, e.g. to retain strategic assets such as the transmission and distribution networks and certain other assets in State ownership, but not others, e.g. the principles merely state that "as a possible policy option, consideration should be given" to the creation of a landbank of sites which could

be leased to parties wishing to build new generation plant. There is no specific commitment to fully separate the transmission and distribution networks or to dispose of generation and supply portfolios. Instead there are vague references to the question of dominance needing “to be addressed as an immediate priority” and to the need for real and effective competition to be “encouraged”.

The principles also state that the Government does not intend to privatise or atomise the ESB Group.⁴⁰ The Deloitte Report stated that it had looked at this option “in order to evaluate more extreme forms of business disaggregation and privatization.”⁴¹ It concluded that this option “may be too difficult to deliver”.⁴² It is unclear why it was felt necessary to include an explicit rejection of an option which has not been recommended either by the Deloitte Report or in any of the previous studies cited here as advocating structural reform.

3.6: Structural Reforms Must be Implemented.

The Minister in his speech launching the Green Paper appeared to reject the Deloitte recommendations.

“The Deloitte report makes a specific recommendation to fragment the ESB.

The Government recognises the fundamental role played by ESB in the economic and social development of the State and the strategic value of maintaining the ESB as a strong and commercially viable company into the future.

The retention of natural monopoly networks in State ownership is also a core policy tenet for the Government.

⁴⁰ The atomisation option as outlined in the Deloitte Report provided for each generation plant to be offered for sale on a stand alone basis; the creation of a separate State company which would combine the TAO/TSO function while the DAO and DSO functions would be combined and divested.

⁴¹ Deloitte, p.172.

⁴² Deloitte, p.178.

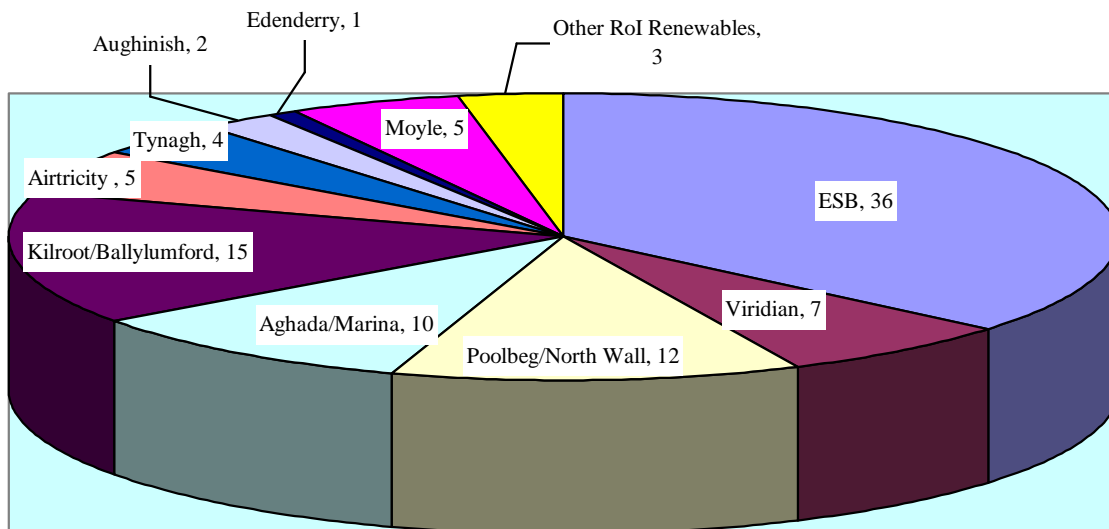
The Government does not in any circumstances favour the fragmentation of the ESB. We believe such a move would not reduce prices, but could in fact increase them and endanger our security of supply and competitiveness.”⁴³

The Minister’s claim that the Deloitte report made a specific recommendation to fragment the ESB seems somewhat exaggerated. The Deloitte report recommended the transfer of the monopoly networks to a separate State body and the divestment of some generating plants and some supply portfolios. In generation it proposed the divestment of the Aghada, Marina, North Wall and Poolbeg generation plants. The Deloitte Report made clear that this would involve the retention of a strong ESB which would operate as an integrated generation and supply business. It seems strange that the Minister should specifically rule out the recommendations of the Deloitte Report at the outset of the consultation process. Instead the Minister’s suggest that the creation of a landbank of generation sites, which was only one element of the Deloitte recommendation, will on its own suffice to create competition in generation. In rejecting proper structural reform, the Minister is not only rejecting the recommendations of his own consultants but of numerous other reports all of which have stated unambiguously that competition in the electricity market will only come about by implementing the type of wide ranging structural reforms recommended in the Deloitte Report. It is the lack of such reforms which has prevented the development of competition up to now and which has directly contributed to Ireland’s high level of electricity prices.

It is unclear why the proposal that ESB should dispose of its Poolbeg/North Wall and Aghada/Marina plants should raise any problems. Fig.3.1 shows that even with such divestment, ESB would remain by far the largest electricity generator with 36% of total generation capacity in the proposed SEM.

⁴³ Speech by Mr. Noel Dempsey T.D, Minister for Communications Marine and Natural Resources at the launch of the Green Paper Towards A Sustainable Energy Future for Ireland, in the Government Press Centre, Government Buildings, Sunday, 1 October 2006.

Fig. 3.1: Structure of Electricity Generation in SEM Under Deloitte Proposals (%)



Source: Deloitte

In mid 2006 ESB Chairman Mr. Tadhg O'Donoghue was quoted as saying:

“Some people tell you ESB must sell off half its power stations, the problem with that is, even if we were willing to sell, it would be difficult to find willing buyers.

If you ask anyone prepared to invest in the industry, they will tell you they want an old clapped out ESB station like a hole in the head.”⁴⁴

The Deloitte Report, correctly in our opinion, specifically rejects the view that the problem of ESB dominance will be addressed by the creation of the SEM. They point out that in the proposed SEM certain generation plants are likely to set the price for the rest of the system for the majority of the time and that all of those plants are currently owned by ESB PG. They state that:

“ESB will have an incentive to maximise prices and, without regulatory or structural remedy, will also have the potential to exercise that power.”

They go on to state:

“There is extensive international experience and evidence that indicate that this price-setting dominance needs to be addressed if the pool is to work efficiently and end-user prices are to reach economic levels. Based on our analysis, ESB PG, have held, hold and are projected to continue to hold a dominant position in the generation segment, in particular in relation to this price-setting ability.”⁴⁵

An earlier report on the SEM stated that such a market “should be large enough to support wholesale and retail competition *with the support of rules preventing concentration of ownership of generation and supply.*”⁴⁶ (Emphasis added).

Deloitte warn that without significant structural reform, the SEM is likely to result in an ESB/Viridian duopoly “that provides little impetus for change, choice or innovation.”⁴⁷

Deloitte’s views echo those of IPA which warned that:

“...if the Governments’ objective is to achieve a competitive market by 2005, and to prevent a duopoly situation arising, action will be required to tackle the position of ESB (Generation) and the NIE contracts.”⁴⁸

The emergence of a duopoly would mirror the position that emerged in England and Wales following privatisation of the UK electricity industry. The experience there, along with those in Scotland and Spain, indicates that this may not produce any significant gains.

It was announced on 30th November that the CER had granted approval to the ESB to construct a new gas fired generation plant near its existing Aghada plant, in return for a commitment by ESB to reduce its overall generation capacity by closing a number of its older plants representing 1,300MW of capacity. The CER reportedly reserved the right to order ESB to divest the new plant if the ESB does not fulfil its commitment to divest or

⁴⁴ *Irish Times*, 20.7.2006.

⁴⁵ Deloitte, p.14.

⁴⁶ IPA, p.4.

⁴⁷ Deloitte, p.15.

close the 1,300MW of capacity. The Deloitte report had recommended that ESB should be given permission to build a new plant at Aghada, if no other investor came forward, in order to address shortages in capacity expected to emerge in 2009. It also recommended, however, that this plant should be included as part of the 2,200MW to be divested. The energy regulator is reported as stating that this proposal, in conjunction with the establishment of the SEM “will ensure that no one company will have undue power or dominance over prices in the market.”⁴⁹ It is far from clear that this would be the case. The proposal involves a significantly smaller divestment of generation capacity than recommended by Deloitte, while it has no effect on the ESB’s supply business. Reducing ESB’s dominance requires not only a reduction in its total generation capacity, but a reduction in price setting capacity. As most of the plant involved under the CER proposal is older plant, it is not clear that this addresses the issue of ESB ability to dictate prices in the proposed SEM for substantial periods of time. ISME is concerned that this decision may pre-empt the proposals made in the Deloitte report. It is particularly concerned that this announcement has taken place during the consultation period.

The Green Paper states that it is proposed to construct a new North-South inter-connector which would increase transfer capacity to over 600MW and a 500MW inter-connector to Britain by 2012.⁵⁰ It has been recognised that expanding the size of markets by inter-connecting them might partially alleviate concerns over dominance, although serious doubts have been raised about the effectiveness of such measures. Deloitte stated that there was a common consensus that one interconnector to Britain would not make Ireland part of the UK or wider EU electricity market.⁵¹ Effectively the two proposed inter-connectors would represent the equivalent of two additional power stations.

Experience in other countries indicates that generators in particular areas may be able to induce congestion on inter-connectors, thus reducing the size of the market for periods of

⁴⁸ IPA, p.16.

⁴⁹ *Irish Times*, 30th November 2006.

⁵⁰ Green Paper, p.11.

⁵¹ Deloitte, p.212.

time.⁵² Borenstein *et al.* reported that in parts of the US generators reduced the geographic size of the market by reducing output and causing congestion on the grid.⁵³ Such experience suggests that increasing inter-connection capacity on its own might not suffice. Commenting on Swedish experience, Bergman *et al.* concluded, that "...it is better to rely on the redistribution of generation assets" whenever possible, because the benefits from market expansion "...are likely to be more uncertain and less immediate."⁵⁴ Deloitte reported that some users of the North-South inter-connector had complained that certain users were making high bids for capacity on the inter-connector and engaging in exclusionary tactics to prevent access to capacity. Long-term plans for the construction of an inter-connector to Britain would not address the problem of ESB dominance.

3.7: Conclusions.

The ESB has made considerable efforts to meet EU requirements to unbundle its various business units. Such measures, according to Deloitte, have "failed to address the perceived and actual nature of its dominance and influence over the electricity market."⁵⁵

They go on to state that:

"No competitive market can be delivered unless ESB dominance is addressed."⁵⁶

In similar vein the Competition Authority has stated:

"The regulatory and legislative regime has, to date, failed to address the structural problems which inhibit the development of real competition in the Irish electricity market. Therefore, structural changes continues to be the best solution, and should be instituted by means of legislation."⁵⁷

⁵² Electricity is non-storable and 1KW of electricity at 5pm is not the same as 1KW at 5am. By inducing congestion on inter-connectors for even relatively short periods of time, generators can force up prices at peak times.

⁵³ S. Borenstein, J. Bushnell and C. Knittel, (1999): Market Power in Electricity Markets: Beyond Concentration Measures, *Energy Journal*: 20(4), 65-89.

⁵⁴ L. Bergman, N-H von der Fehr, D.M. Newbery, and P. Regibeau, P. (1999): The Problems and Experience of Liberalization in L. Bergman, G. Brunekreeft, C. Doyle, N-H. von der Fehr, D.M. Newbery, M. Pollitt and P. Regibeau, *A European Market for Electricity?*, London: Centre for Economic Policy Research, p.229.

⁵⁵ Deloitte, p.15.

⁵⁶ Deloitte, p.88.

⁵⁷ Competition Authority, 2004.

The Deloitte report concludes that “the VIU model will not deliver the benefits of market competition, customer choice and efficient end-user prices.”⁵⁸ In calling for both horizontal and vertical restructuring of the ESB, the Deloitte report echoes the views of many previous studies of the Irish electricity industry.

The proposals for reform of the electricity industry set out in the Recommended Alternative in the Deloitte Report would, in our view, result in the creation of a genuinely competitive electricity market. In our view it is essential that these proposals should be implemented in their entirety. The Report itself emphasises the integrated nature of the recommended option.

“This set of recommendations is provided as an integrated solution whereby elements of reform in one segment are dependent on reform in another segment. The recommendation is not presented as modular whereby one aspect of reform can be implemented in isolation and so careful consideration needs to be given where actual implementation departs from the full set of reform presented.”⁵⁹ (Emphasis in original).

Government needs to recognise that a competitive electricity market will not develop without such structural reforms. It is therefore necessary for the Government to demonstrate its commitment to promoting competition in the electricity market by implementing the Deloitte recommendations.

⁵⁸ Deloitte, p.16.

⁵⁹ Deloitte, p.184.

4: THE GAS MARKET IN IRELAND.

4.1: Introduction.

The introduction of natural gas during the 1980s facilitated the construction of a national transmission system in place of the handful of former separate local city and town networks. The main gas pipeline was originally largely confined to the South and East of the State, but has gradually been extended over time. Originally all natural gas was supplied from the Kinsale Head field. The depletion of domestic gas supplies led to the construction of an interconnector to the UK. A second interconnector has been built subsequently and approximately 80% of gas is now imported. In the past all natural gas extracted off-shore had to be sold to Bord Gáis Éireann (BGE) for resale. BGE also controls the high-pressure transmission network and the interconnectors linking Ireland to the UK gas network. Like the ESB it is a VIU.

4.2: Key Characteristics.

Like the electricity industry, the gas industry can be divided into four different vertical stages:

- Production
- Transmission
- Distribution
- Supply.

As in the case of electricity, production and supply are potentially competitive, while transmission and distribution constitute natural monopolies. Like electricity, demand is seasonal and subject to random fluctuations. Gas differs from electricity in one important respect, as it is possible to store gas to cope with peak demand.

Liberalisation of the gas markets at EU level has occurred along the same lines as the electricity market – namely, with partial opening of the market to competition, non-discriminatory access to the networks and functional unbundling of VIUs.

Liberalisation of the gas market in Ireland, to some extent, preceded EU measures. The Energy (Miscellaneous Provisions) Act, 1995 permitted competition in respect of large users of natural gas by providing for third party access to BGE's transmission network for such users. Under the provisions of the Act, gas users that consumed more than 9 million therms were eligible for third party access, i.e. they could purchase gas from a supplier other than BGE and use the transmission and distribution network. In effect this resulted in only a small number of customers being able to purchase gas from suppliers other than BGE, but these accounted for a large proportion of the market in volume terms.

The Gas (Interim) (Regulation) Act, 2002 introduced a further opening of the Irish gas market. On 1 January 2003, the threshold for eligibility further dropped to 0.5 million standard cubic meters of gas (181,000 therms or 5.25 GWh) and the market was fully opened to competition in 2005.

4.3: Irish Gas Prices.

The Green Paper notes that between 2000 and 2004 gas prices to Irish industrial customers increased by 100%.⁶⁰ The CER has authorised a further increase of 30% with effect from October this year.⁶¹

Unit costs of gas transmission were reported to be three times the corresponding charges in Britain, while distribution and meter reading unit costs were respectively two and half times and twice the level of those in Britain. It has been claimed that the CER's methodology led to an overvaluation of the regulatory asset base which in turn resulted in

⁶⁰ Green Paper, p.36. In contrast prices to domestic consumers increased by 29% over the same period.

⁶¹ This was subsequently partly reversed.

transmission revenues being significantly higher than they needed to be. It was estimated that unit cost reductions of 18-25% were possible. Such reductions would also have some knock-on effects on electricity prices.⁶²

4.4: Need for Structural Reform

As in the case of electricity little attempt has been made to date to restructure BGE, which remains vertically integrated. As in the case of the ESB, however, it is essential that the natural monopoly transmission and distribution network be completely separated from the other arms of BGE's business. The UK Government initially decided against vertical separation of British Gas (BG), in order to retain management support for privatisation. The failure to implement vertical separation constituted a major impediment to the development of competition in the UK gas market and prompted several investigations by the OFT and MMC before BG itself decided to split its business into two separate companies.

BGE's transmission and distribution businesses could be transferred to a separate State company as Deloitte recommended in the case of the electricity transmission and distribution networks. In volume terms 80% of gas sales were open to competition even before the household and small business markets were opened to competition. In those circumstances there would appear to be no need to restructure BGE's supply business.

⁶² P. Hunt, (2004): *The Natural Gas Industry in Ireland: Efficient Pricing of Transmission, Distribution and Supply to Final Consumers*, Energy Consulting, available at www.cer.ie

5: REGULATION OF THE GAS AND ELECTRICITY MARKETS.

5.1: Regulation – What Have We Learned?

The Deloitte Report's Terms of Reference specifically precluded it from reviewing the existing structure, functions and responsibilities of the CER. Similarly the Green Paper states that it is premature to undertake a comprehensive review of the regulatory regime before the commencement of the SEM in 2007. The decision not to review the regulatory regime is unfortunate. There are grounds for serious concern about the way the regulatory regime has operated which need to be addressed.

Traditionally gas and electricity were regarded as natural monopolies which had to be regulated to prevent the abuse of monopoly power. In Ireland, as in many European countries, State ownership was viewed as a way of ensuring these industries were operated in the public interest. In the US such industries were generally privately owned with the scope for abuse of market power regulated by profit or rate of return regulation.

During the 1970s and early 1980s, there was a growing realisation that traditional forms of regulation were ineffective. The economic literature highlighted regulators' inability to achieve first-best outcomes due to information asymmetries, which enable the regulated firm to set price above cost and extract socially-costly rents from its activities, i.e. regulated firms were able to "capture" the regulatory process because they had far more information than the regulator.⁶³ Nationalising such industries created highly centralised organisations in which information was asymmetrically distributed in favour of

⁶³ See, for example, J-J. Laffont and J. Tirole, (1993): *A Theory of Incentives in Procurement and Regulation*, Cambridge: MIT Press; and J-J. Laffont, (1994): The New Economics of Regulation Ten Years After, *Econometrica*, 62(3): 507-37.

management, making it difficult to exercise effective public control.⁶⁴ Regulatory agencies are also prone to bureaucratic capture resulting in an inherent bias toward increasing their activities. Such considerations resulted in a major reappraisal of public policy for regulating energy utilities, beginning in the United States and Britain in the early 1980s and subsequently spreading to other countries.

Reform programmes introduced in most countries were based on a recognition that; while the transmission and distribution networks in gas and electricity are natural monopolies, other activities are potentially competitive; and generally had two broad characteristics.

1. Measures to permit competition in potentially competitive segments of utility industries, reflecting a view that competition was superior to regulation; and
2. In natural monopoly areas, where regulation remains necessary, attempts were made to devise more effective regulatory tools designed to reduce the risk of regulatory capture.

In potentially competitive sectors, regulation has frequently been seen as a necessary temporary measure “to hold the fort” until competition developed.⁶⁵

The Deloitte Report points out that the Government’s failure to implement meaningful structural reform of the gas and electricity industries has undoubtedly increased the complexity of the task facing the regulator.

“Against this backdrop of, on the one hand, political commitments to competition but, on the other hand, *a structure that mitigates against competitive outcomes*, the regulator has faced very challenging issues in the discharge of its role.”⁶⁶

As noted in Section 3 of this report, incumbent VIU’s have a clear incentive to deny access to the transmission and distribution networks to their rivals or to provide such access on less favourable terms than their own subsidiaries. This can be achieved in all sorts of subtle ways, many of which are very difficult for the regulator to detect.

⁶⁴ M. Schick, (1993): *Nationalization and the Background to Recent Regulatory Issues* in R. Sugden (ed.), *Industrial Economic Regulation: A Framework and Exploration*, Routledge.

⁶⁵ S. Littlechild, (1999): *Privatisation, Competition and Regulation*, Institute for Economic Affairs, Wincott Lecture, mimeo.

Similarly the potential for transfer pricing within a VIU makes it very difficult for the regulator to set access charges for use of the networks correctly.

“The pricing of access to essential facilities can be complex even when their ownership is separate from competitive activities, but it is especially controversial when there is vertical integration.”⁶⁷

5.2: Regulatory Credibility.

Electricity generation involves considerable sunk costs in assets with a relatively long life-span, with generation plants typically having a life-span of 20-30 years. Once the regulated firm has invested in new capacity, a price that is sufficient to cover its variable costs is sufficient to cause it to continue supplying services. The risk that the regulator may set prices *ex post* that are too low to cover the fixed costs of necessary investment or in some other fashion alter the rules greatly increases the risk attaching to such investments. Potential entrants and financial institutions recognise the risk that the regulator may alter the rules of the game *ex post*. This obviously increases the risk associated with such investment, resulting in higher capital costs and may deter firms from undertaking such investment at all. This raises problems regarding credibility and commitment of the regulator. Allied to this is the problem of “regulatory capture” and the need for the regulator to be perceived as clearly independent. While the Government’s failure to implement proper structural reform has undoubtedly made the regulator’s task far more difficult than it need be, a number of regulatory decisions also raise potential concerns about regulatory commitment and credibility.

The CER, for example, requested both the ESB and BGE to prepare proposals on how the electricity and gas markets should be regulated and then sought submissions on these proposals from third parties. This effectively allowed the incumbent firms to set the regulatory agenda and raises serious questions about the extent of regulatory capture.⁶⁸

⁶⁶ Deloitte, p.15.

⁶⁷ J. Vickers, (1998): Regulation, Competition and the Structure of Prices in D. Helm and T. Jenkinson (eds.) *Competition in Regulated Industries*, Oxford University Press, p.34.

⁶⁸ See, for example, CER: *End to End Regulation of ESB*, January 2004

The CER stated in a report published in February 2004 that comprehensive structural reform would largely address ESB's market dominance but stated that it did not have the authority to order such a break-up. It announced that it was not ruling out future structural changes to ESB, but would "develop a regulatory approach that will, in the absence of any structural reforms, ensure a market that works well and will achieve many, if not all market benefits." Such claims ignore the fact that regulation simply cannot deliver such benefits. Regulators cannot identify what outcomes would occur in a competitive market and so they cannot replicate such outcomes. It subsequently emerged that the CER had written to the Minister in December 2003 stating that the Government's proposals for separation of ownership and control of the electricity grid were flawed and recommended that they be dropped and that the transmission system should be owned and controlled by a wholly-owned ESB subsidiary. It stated that, while some commentators would advocate full separation, the EU Directives did not require this.⁶⁹

Proposals for the introduction of new market arrangements for electricity were subsequently withdrawn. If investors do not know how the market is going to work and what the basic rules of the game are, then they will be reluctant to invest.

The CER has adopted a policy of reviewing gas and electricity prices annually by analysing the cost structure of the regulated firms and allowing some provision for a profit margin. Such an approach ignores the fact that the regulator has insufficient information to decide whether costs are justified or not – it cannot prevent gold-plating – and provides no incentives for the regulated firms to cut costs. In such circumstances prices are unlikely to differ from what an unregulated monopolist would charge. By focusing on applications for price increases regulators have ignored the potential for reducing costs through increased productivity and reductions in overmanning.

The Deloitte Report has estimated that excess costs and inefficiencies in the ESB have added €100m to the cost of electricity. The existence of excess costs and inefficiencies of

⁶⁹ *Competition* 13(2), p.30.

such an order of magnitude provides clear evidence that the current regime for regulating electricity prices has failed to deliver efficient electricity prices to Irish business and households. As noted in Section 4 of this report, similar questions arise in respect of gas transmission and distribution charges.

The CER (2001) has also sought to regulate prices at a detailed level.

“As well as the overall increases in tariffs the Commission reviewed and determined the structure of each tariff.”

Such an approach effectively involves the regulator second guessing company management, which is not the regulator’s job.

Recent events have highlighted a further weakness in the CER’s price review methodology. It approved substantial price increases for both gas and electricity because oil and gas prices were at record high levels at the time of the price review. Oil and gas prices have since fallen back leading to pressure on the CER to re-examine its decision.

It has often been suggested that Irish electricity prices are not high enough to attract new entrants into electricity generation. Such claims are hard to reconcile with the fact that Irish electricity prices are among the highest in the EU. They also ignore the fact that price increases supposedly designed to attract new entrants primarily benefit the ESB, which has seen its profits increase sharply under regulation.⁷⁰ In 2003, newspaper reports stated that more than one ESB board member “is understood to have commented at a board meeting that the company was doing very well out of the regulation process”.⁷¹ Claims that higher prices are required to attract new entry also ignore the fact that this is a direct result of increased risk caused by a combination of regulatory uncertainty and Government failure to undertake the necessary restructuring of the electricity industry to facilitate competition. Government commitment to structural reform of the gas and

⁷⁰ Changes in ESB accounting policies, in particular the fact that the 2005 Accounts were prepared on the basis of EU International Financial Reporting Standards, mean that it is not possible to compare the figures for 2004 and 2005 with those for earlier years. The 2005 Accounts indicate that ESB pre tax profits increased by €57.5m or 31% on the previous year.

⁷¹ *Irish Independent*, 2.10.2003, Why Regulation is Good for ESB.

electricity combined with a review of the regulatory regime could significantly reduce the perceived risks involved in entering the Irish market.

5.3: Regulatory Accountability.

Regulators are themselves monopolies and it is therefore necessary to ensure that they are subject to an adequate level of accountability. Westrup found that Oireachtas Committees had failed to properly oversee the activities of regulatory bodies because of a combination of inability; ignorance or partiality; and lack of interest. He observed that “the Oireachtas has shown little enthusiasm for carrying out its scrutiny role” and described “the apparent unwillingness of different Oireachtas committees to meet with the different regulators on even an annual basis is an indication of a reluctance to take seriously a scrutiny role”. It appears that committees only take an interest in the activities of regulators when such issues become hot topics politically and present an opportunity for political points scoring. This of course does not permit for the sort of detailed and in-depth performance reviews that are necessary. There is therefore a need to address the issue of regulatory accountability.⁷²

Another way of ensuring greater regulatory accountability is by having a proper appeals process. Customers and customer groups should have a right to appeal decisions on prices and price caps with a single appeals panel responsible for considering appeals against regulatory decisions.⁷³

⁷² J. Westrup, (2002): *Financial Services Regulation in Ireland: The Accountability Dimension*, Studies in Public Policy 10, The Policy Institute, Trinity College Dublin, p.55.

⁷³ Earlier this year the Government sought submissions on the issue of regulatory appeals.

6: RESPONSES TO SPECIFIC QUESTIONS POSED IN THE ENERGY GREEN PAPER.

ENSURING THE SECURITY OF ENERGY SUPPLY

1) In addition to enhancing the contribution of renewable energy, what actions could be taken to further diversify the fuel mix for electricity generation and reduce dependence on oil and gas?

2) How can generation and transmission adequacy in the electricity sector be improved?

A: The issue of generation adequacy can be addressed by adopting the recommendations for reform of the electricity market outlined in Section 8 of the Deloitte Report.

3) What actions should be taken to create strategic storage capacity in the gas sector?

4) What are the challenges to greater participation by new players in the development and operation of power generation plant - and how should they be addressed?

A: The Deloitte Report has clearly identified the dominant position of the ESB as a major impediment to new entry in generation. It has recommended a restructuring of the ESB which is summarised in section 3.4 of the present report. In our view the adoption of Deloitte's recommended option as set out in Section 8 of their report in its entirety is necessary to address this issue.

5) How, and over what timeframe, should Ireland pursue greater electricity interconnection with Europe?

6) What measures could be taken to encourage the exploration and production of indigenous energy resources?

7) Given the existing level of dependence on imported fossil fuels, what needs to be done to enhance contingency measures?

8) Does the Green Paper generally set out the right policy directions for security of energy supply?

PROMOTING THE SUSTAINABILITY OF ENERGY SUPPLY

- 9) What can be done to improve the pace and range of development of renewable energy resources for electricity generation on a sustainable basis?
- 10) In addition to electricity generation, what actions should be taken to develop renewable energy usage in the transport and heat sectors?
- 11) What significant new initiatives could be taken to increase energy efficiency across the economy and in particular in households, businesses, the public sector, the transport sector and the built environment?
- 12) What additional policy measures should be introduced to significantly expand energy RTDI and what are the priority areas of research, which need to be targeted?
- 13) In light of the Government's Science, Technology and Innovation Strategy, what needs to be done to radically expand the national energy research capacity?
- 14) What are the key supply and demand questions to be addressed to underpin a fully cohesive National BioEnergy Strategy?
- 15) Do we need to choose between mandatory targets and better incentives for renewable energy and energy efficiency - or is a mix of both the best way forward?

A: A properly designed system of price based incentives is likely to prove far more efficient than a system of mandatory targets.

- 16) Does the Green Paper generally set the right policy directions for energy sustainability?

A: No. The Green Paper sets out targets with no indication of how these are to be achieved and, more importantly, contains little or no consideration of the cost of achieving such targets. In the case of electricity it sets a target of renewable penetration of 15% of electricity consumption by 2010 rising to 20% by 2020. Such targets have significant cost implications in terms of grid infrastructure and back-up generation capacity. It makes no sense to set such targets in the absence of a full consideration of the cost implications.

ENHANCING THE COMPETITIVENESS OF ENERGY SUPPLY

17) In the context of liberalisation of the Irish energy market, what further actions should be taken to develop more fully competitive electricity and gas markets and what specific barriers need to be overcome?

A: The Government must commit itself to fully implement the recommendations for restructuring of the electricity market set out in Section 8 of the Deloitte Report. These measures must be implemented as quickly as possible. In addition the Government should also transfer ownership and control of the gas transmission and distribution network from BGE to a new State company. Steps must also be taken to restore regulatory credibility.

18) What policy measures and targets should be introduced to reform institutional arrangements and market structure, particularly in the electricity and gas sectors?

A: See previous answer.

19) While a significant proportion of our energy prices are determined by international oil and gas prices, what actions should be taken domestically to reduce the cost of electricity and gas to consumers?

A: The Government needs to adopt measures to promote greater competition in both gas and electricity. In the case of electricity this requires the complete implementation of the recommendations contained in Section 8 of the Deloitte Report. In the case of gas this requires the complete separation of the gas transmission and distribution from BGE.

20) State-owned enterprises (e.g. ESB, BGE, Bord na Mona) have played a central role in the development of the energy sector. How should the role of State-owned energy enterprises respond to the challenges of meeting our energy needs in the future?

A: Both ESB and BGE should be restructured with the natural monopoly transmission and distribution networks being transferred to new State companies that are totally independent of ESB and BGE. The ESB should also be required to divest certain generation and supply assets as recommended by the Deloitte Report. BGE and ESB

should then be permitted to compete on an equal footing with other operators in the market.

21) What further action should be taken to alleviate fuel poverty?

A

22) Does the Green Paper generally set the right policy directions for enhancing the competitiveness of the Irish energy sector?

A: No the Green Paper does not go far enough in this regard. It fails to accept fully the recommendations for reform of the electricity market contained in the Deloitte report. Limiting itself to vague references about the need to address dominance and promote competition. It also fails to address the need for restructuring of BGE. Finally the paper has not even looked at the current regulatory regime which has clearly failed to prevent Irish business and households paying excessive prices for gas and electricity due to excessive costs and inefficiencies.