Regulators' Annual Report to the European Commission

Commission for Energy Regulation
(Ireland)

August 2007

1 Foreword

The energy sector in Ireland has reached an important stage in its development over the past year. The CER commenced the electricity market liberalisation process in Ireland in 1999; we are now in the final stages of the establishment of the historic all island electricity market and the subsequent benefits which this market will deliver for customers.

Much of the CER's focus since mid 2006 has been on the continued design and development of the Single Electricity Market (SEM) for Ireland and Northern Ireland. The project continues apace towards the 'Go-live' date of 1 November 2007. On 11 April 2007 the two Regulatory Authorities (CER & NIAUR) for energy in Ireland and Northern Ireland signed a second Memorandum of Understanding (MOU) setting out a programme of agreed measures for the further strategic development of all island electricity markets. On 3 July 2007, the Regulatory Authorities announced 'Go-Active' of the legal framework for the SEM. This is the final preparatory step before the start of trading, planned for 1 November 2007.

The development of greater levels of competition in the electricity generation market has also been a key area of focus for the Commission in 2006/07. Late 2006 saw the signing of the CER-ESB Asset Strategy Agreement outlining plans for ESB to reduce its generation portfolio by 1,300 MW plus an additional 200 MW of peaking plant. ESB has now announced a proposed Indicative Programme to reduce its market share in the generation sector to 40% by 2010.

The past year has been an exciting one for the Natural Gas Market in Ireland with full market opening taking place in July 2007. While competition in the residential and small business sector of the market is still in the early stages of development, the Commission is developing the necessary structures and processes to ensure the market functions and allows new participants to enter and compete in a manner that is fair and transparent.

Throughout 2007, the CER has been engaged in the five year annual reviews of Bord Gáis Networks and Bord Gáis Supply businesses. The reduction in Bord Gáis Transmission and Distribution tariffs as a result of these reviews alongside falling international fuel prices has contributed to significant natural gas price decreases for end users; a 10% reduction in February 2007 with an average 10.6% reduction to be implemented on 1 October 2007.

Regulated end user electricity prices increased by 12.6% in January, primarily as a result of high international fuel prices throughout 2005 and 2006. Fuel prices have since softened and it is likely that there will now be a decrease in electricity prices to apply from 1 November 2007.

Following the enactment of the Energy (Miscellaneous Provisions) Act 2006 in December 2006, the CER's functions have been expanded in a number of areas. The Act assigns the Commission responsibility for the regulation of natural gas and electricity with regard to safety. The Commission established a Gas and Electricity Safety Team during 2007, with responsibility for implementing the CER's gas and electricity safety responsibilities under this act. The Gas and Electricity Safety team

have now published two papers outlining their proposals for the regulation of gas installers and electrical contractors with respect to safety.

Ireland's security and reliability of electricity supply remained consistent and satisfactory throughout Winter 2006/07. Eirgrid, the Transmission System Operator (TSO) recently published their Winter Outlook Report for 2007/08. This report indicates a satisfactory generation capacity margin will be maintained for Winter 2007/08.

The Irish Government undertook a major review of energy policy in Ireland in late 2006 and into 2007, culminating in the publication of its White Paper on Energy Policy in March 2007. The CER has welcomed the initiatives and actions outlined in the White Paper on Energy. It provides a detailed and focused policy direction for the development of the Energy Sector in Ireland in the period between now and 2020. Renewable energy targets of 15% of total consumption by 2010 and 33% by 2020 have been set, while a number of other policies aimed at market development have been outlined. The CER will play its part in achieving the targets and actions set out in the White Paper.

In February 2007 the Commission updated its mission statement. Our Mission is as follows:

In a world where energy supply and prices are highly volatile, the mission of the CER, acting in the interests of consumers is to ensure that:

- the lights stay on
- the gas continues to flow
- the prices charged are fair and reasonable
- the environment is protected, and
- electricity and gas are supplied safely

Some of the key highlights and milestones of the year from a regulatory point of view are listed below:

- The Commission published a paper outlining the estimated timeline for connection of Gate 2 offers in Feb 2007. By end 2006, there was 1,161 MW of renewable generation on the system. We are now well on the way to meeting our renewable energy targets as set out in the Governments White Paper on energy.
- Progress has been made on the East-West Interconnector between Ireland and Wales. The Commission selected a route in July 2007 and is currently working with Eirgrid on the design of a competition for the construction of the interconnector. The interconnector will have a capacity of 500 MW and is due to be constructed no later than the end of 2011.
- In March 2007 the CER formally launched suppliers and network operators Codes of Practice. This has been a culmination of a number of years work between the Commission and suppliers and network operators.
- The Commission formally established its Business Information Centre in early 2007 with the aim of improving the operating efficiency of the CER.

At an organisational level, the Commission became a two person body in September 2006, when Ms. Regina Finn decided to take up the position as Chief Executive of Ofwat, the economic regulator for the water and sewerage industry in England and Wales. Following the appointment of a new Government in June 2007 it has been indicated that a third Commissioner will be appointed by the Minister for Communications, Energy and Natural Resources in the coming months.

In conclusion the Commission believes that although the past year has been a difficult period for all involved in the energy sector in Ireland, good progress towards market development has been achieved. A significant body of work remains to be done however; of key importance is the successful implementation of the SEM on 1 November 2007. The CER remains committed to working with its industry partners to fully implement the European Directives on electricity and gas and to deliver the benefits of competition for all customers in Ireland.

Tom Reeves
Chairperson

Michael G. Tutty
Commissioner

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2 Summary/ Major Developments since mid-2006

2.1 The Commission for Energy Regulation

The Commission for Energy Regulation is the independent statutory body responsible for regulating and overseeing the liberalisation of the electricity and natural gas sectors in Ireland under the Electricity Regulation Act of 1999 and the Gas (Interim) (Regulation) Act of 2002.

2.1.1 Organisational structure of the CER

There are presently two members of the Commission for Energy Regulation who are appointed by the Minister for Communications, Energy and Natural Resources[1]. The Commission is collectively responsible for decision making. The members of the Commission are Mr. Tom Reeves (Chairman) and Mr. Michael G. Tutty – Commissioner. The CER has four divisions, each managed by a divisional director. The four divisions are: Energy Markets (All Island Project), Energy Networks, Environment, Retail & Consumer Affairs, and Generation & Safety..

The Energy Markets division is jointly responsible for the development of a future single wholesale electricity market across the island of Ireland[2]. The Energy Networks division is responsible for regulation of the monopoly activities of the incumbents in the electricity and gas markets. The Environment, Retail & Consumer affairs division is responsible for regulating retail markets in electricity and gas, while the Generation & Safety division is responsible for all matters relating to the present wholesale market and issues relating to the impact of electricity and gas production and usage on the environment.

2.1.2 CER Functions

Section 8 of the Electricity Regulation Act, 1999 established the Commission for Electricity Regulation (CER). Section 9 detailed the functions of the new Commission with respect to its role in the Irish electricity sector. This Act came into effect in September 1999.

Section 5 of the Gas (Interim) (Regulation) Act, 2002 extended this legal role, and the functions of the CER, to the gas sector, thereby renaming the CER as the Commission for Energy Regulation. This Act also extended the functions of the CER in the electricity industry.

Subsequent secondary legislation, or statutory instruments, has been enacted since 1999, which have further added to these functions. Following the introduction in 2003 of electricity Directive 2003/54/EC and gas Directive 2003/55/EC, three pieces of legislation have amended these functions. One of these concerned the

[1] Under legislation (Electricity Regulation Act 1999), there is an allowance for up-to a three person Commission.
[2] This project is being implemented in conjunction with the Northern Ireland Authority for Utility Regulation (NIAUR).

CER's electricity functions and two concerned the gas sector – Statutory Instrument Number 60 of 2005 (European Communities (Internal Market in Electricity) Regulations 2005); Statutory Instrument Number 452 of 2004 (European Communities (Internal Market in Natural Gas) Regulations 2004) (Number 2), and Statutory Instrument Number 320 of 2005 (European Communities (Internal Market in Natural Gas) Regulations 2005).

In late 2006, a further piece of primary legislation was enacted which added significant extra functions to the Commission's remit. The Energy (Miscellaneous Provisions) Act 2006 outlines the functions of the CER regarding the all island energy market and regarding electrical safety, natural gas safety and the regulation of electrical contractors.

A list of the 'Functions of Commission', as contained in the consolidated version of section 9 of the Electricity Regulation Act, is presented in Appendix A of this document.

In short the CER has the following duties:

- to encourage and facilitate competition in the generation and supply of electricity;
- to encourage and facilitate competition in the gas market by issuing consents for the construction of onshore gas pipelines and licensing shippers/suppliers;
- to protect the interests of final customers;
- to not discriminate between electricity and gas industry undertakings;
- to regulate end-customer prices charged by Electricity Supply Board (ESB), in its capacity as Public Electricity Supplier (PES) and Bord Gáis Eireann (BGE), in its capacity as the regulated gas supplier;
- to regulate access to, and use of, the electricity and gas networks;
- to secure that all reasonable demands by final customers of electricity for electricity are satisfied;
- to ensure that license holders are capable of financing the undertaking of the activities which they are licensed to undertake;
- to promote safety and efficiency on the part of electricity and natural gas undertakings;
- to promote the continuity, security and quality of supplies of electricity and natural gas; and
- to promote the use of renewable, sustainable or alternative forms of energy;
- to participate in the development of an all-island energy market;
- to regulate the activities of electrical contractors with regard to safety;
- to regulate the activities of natural gas undertakings and natural gas installers with respect to safety;
- to promote the safety of natural gas customers with regard to supply, storage, transmission, distribution and use of natural gas

2.1.3 Main Enforcement Powers

The CER has a significant range of enforcement powers. These include:

- Licences: Anyone seeking to construct a power station, generate or supply electricity in Ireland must apply to the CER for a licence. The Transmission

System Operator and the Distribution System Operator for electricity and gas are also licensed by the CER. The electricity Transmission System Owner is also licensed.

- Directions: Under section 24 of the Electricity Regulation Act, 1999 the CER can issue a direction to a licensee to comply with its licence or authorisation conditions.
- Determinations: Where the CER decides not to give a direction under section 24 of the Electricity Regulation Act, 1999, it may make a determination that the holder of a licence or authorisation has committed a specific breach of a condition or requirement.
- Court Orders: In order to ensure compliance with section 24, the CER may apply to the Irish High Court requiring the holder of a licence or an authorisation to discontinue or refrain from specific practices.

2.1.4 Interagency Agreements

The CER interacts with a number of other governmental bodies including the Irish Competition Authority and Sustainable Energy Ireland.

The Irish Competition Authority is responsible for implementing Ireland's competition legislation which mirrors EU legislation. This remit includes the energy sectors. This overlaps with the CER's responsibility to facilitate and encourage the development of a competitive energy market and may overlap with the implementation of some of the CER dispute resolution functions. In accordance with the Irish Competition Act, 2002, the CER and the Competition Authority have put in place a co-operation agreement. This agreement governs the relations between the two bodies. The agreement provides for the exchange of information and allows each party to forbear to act where it considers the other is investigating or exercising its powers in a certain matter. To date the Competition Authority has not taken any case in relation to an energy company.

Sustainable Energy Ireland is the government body charged with improving energy efficiency, advancing the development and competitive deployment of renewable sources of energy and combined heat and power, and reducing the environmental impact of energy production and use.

Furthermore, the CER interacts with the Department for Communication, Energy and Natural Resources (DCENR) which is the Department with responsibility for the development of energy policy in Ireland. This department is also responsible for licensing all offshore gas developments and pipelines (the CER is responsible for the licensing of all onshore gas pipelines). The department is also the main shareholder in the incumbent gas and electricity companies, Bord Gáis Eireann (BGE) and the Electricity Supply Board (ESB).

2.1.5 Independence & Accountability

The CER is independent of the government and any other state agency in the implementation of its functions. However the CER is required to comply with directions issued by the Minister for Communications, Marine and Natural Resources as regards the performance of its functions. These directions may not be made in respect of specific or individual licensees. The CER is also accountable to

parliamentary committee(s) on energy and submits an annual report for approval by the Minister for Communications, Energy, and Natural Resources.

The CER is funded by a levy on the industry which is collected directly, but must obtain approval of the Minister for Communications, Energy and Natural Resources and the Minister for Finance, for staff numbers and salaries.

2.2 Main Issues in Electricity & Gas

2.2.1 Since Market Opening

The CER has addressed a considerable range of issues since its establishment in late 1999.

2.2.1.1 Electricity & Gas Markets

One of the key challenges for the CER has been to facilitate and promote the introduction of full competition in the electricity and gas markets. Historically, both the electricity and gas markets were characterised by vertically integrated, stated owned monopolies. The electricity market was first opened to partial competition in 2000 while initial segments of the gas market were opened to competition in 1997.

Since then, the CER has been engaged in the process of developing the structures and processes to ensure that the market functions and allows participants to compete in a manner that is fair and transparent.

The electricity retail market has been fully open to competition since February 2005. Full market opening of the gas retail market took place in July of this year, in line with EU requirements. Retail market opening in both sectors has been supported by the implementation of a range of customer switching business processes which have allowed energy customers to change supplier without delay and without charge. These processes, and the systems required to support them have been developed in consultation with all active independent suppliers and the CER.

At wholesale level, in July 1999, the then Minister for Public Enterprise issued a *policy direction* setting out interim electricity trading arrangements that the CER was required to implement. These arrangements, which are supervised and reviewed by the CER, are due to continue in their present form until the establishment of a *Single Electricity Market* in November 2007 which will merge the energy markets in the Republic of Ireland and Northern Ireland.

The development of such a *Single Electricity Market* is one element of a project to establish a single market for electricity and gas across the island of Ireland. The CER is working closely with its counterpart in Northern Ireland, the Northern Ireland Authority for Utility Regulation (NIAUR), to develop this market by November 2007.

In the gas wholesale market, transmission capacity is now governed by 'Entry-Exit' arrangements. In early 2004, the CER initially proposed to change to Entry-Exit arrangements from the existing point-to-point system. These changes, which were

introduced in April 2005, have afforded shippers increased flexibility in the transportation of gas.

2.2.1.2 Electricity & Gas Regulation

The CER also regulates the vertically-integrated incumbents – Electricity Supply Board (herein referred to as 'ESB') in the electricity market and Bord Gáis Eireann (herein referred to as 'BGE') in the gas market.

The CER regulates the charges, tariffs and access conditions imposed by these two entities. The CER conducts five-year reviews of revenue earned by the electricity network operators and the gas network operators. There are also annual price controls in place for the regulated generation and supply business units of the ESB and for the supply arm of BGE. The CER also regulates access conditions, connection charges and use of system tariffs imposed by the transmission and distribution operators. In gas, this concerns BGE Networks as owner and operator of the gas transmission and distribution systems. For electricity, this concerns Eirgrid as Transmission System Operator (TSO) and ESB Networks as the Distribution System Operator (DSO) and Transmission System (Asset) Owner (TAO).

Further the CER has introduced a number of ring-fencing requirements between and within the incumbents' regulated businesses to ensure that certain business units are autonomous and independent of one another. These requirements are enforced by way of licence conditions and business separation implementation programmes. The full business separation of ESB network operators from its generation and supply businesses was completed in late 2005. An equivalent programme for gas has also been completed.

2.2.1.3 Security of Supply

The CER has a role in monitoring the security of supply/generation adequacy and, together with Eirgrid as the TSO and the Minister for Communications, Energy & Natural Resources, is putting in place appropriate arrangements to ensure that a satisfactory generation capacity margin is maintained and electricity supply is secured.

The growth in the Irish economy over the last ten years has led to a substantial increase in electricity and gas demand. Since the mid 1980s, electricity and gas demand has doubled. The period 2000-2003 saw 750MW of new capacity added to the Irish electricity system, representing an increase of 20 percent over previous total installed capacity level. Nevertheless, by late 2002, prompted by potential shortages predicted by medium-term generation adequacy forecasts, the CER held a competition to invite firms to invest in additional generation capacity with the output to be sold to ESB Public Electricity Supplier (ESB PES) for 10 years following commissioning. In late 2003 the CER awarded the contract to construct and operate 400MW and 150MW plant to Tynagh Energy and Aughinish Alumina, both based in the west of Ireland. Both of these plants were completed in early 2006. These two generating plants added 10 percent to total installed capacity in the Irish system in 2006.

Viridian Plc, which owns and operates a 343MW CCGT plant in North Dublin, is constructing another CCGT at this site, which will be completed by the end of 2007/early 2008. This will add approximately 400 MW to the system.

The CER also plays a role in promoting further interconnection with neighbouring jurisdictions. Aside from supervising auctions of capacity on the existing Northern Ireland-Republic of Ireland electricity interconnector, the CER is currently involved in developing a competition to construct a 500 MW interconnector between Ireland and Britain. A second electricity interconnector with Northern Ireland has also been approved and is at planning stages. This is in addition to two existing gas interconnectors between Ireland and Scotland, IC1 and IC2. Moreover, a Northern Ireland-Republic of Ireland gas pipeline has been completed which improves security of supply throughout the island.

2.2.1.4 Public Service Obligations & Consumer Protection

The CER is also responsible for implementing & enforcing public service obligations and calculating and managing the implementation of levies to meet such obligations.

In 2002 the then Minister for Public Enterprise ordered that an environmental and fuel security of supply 'public service obligation' be imposed on all final customers. Since this time the CER has been charged with examining additional costs, and approving charges, relating to supporting ESB PES purchase electricity output from peat and wind generation plant as part of that PSO.

Another public service in place is the entitlement of all electricity and gas customers to minimum quality of supply standards. The CER supervises these via the various network operators' licences and various performance reporting mechanisms.

The CER also has responsibility for the design, implementation and supervision of consumer protection measures outlined in electricity Directive 2003/EC/54 and gas Directive 2003/55/EC, as transposed into Irish legislation under S.I. 60 of 2005 and S.I. 452 of 2004, respectively. Many of these measures are already in place or are being developed in consultation and include:

- minimum standards of practice in respect of disconnection;
- supplier contract transparency;
- protection of domestic customers in the areas of supplier marketing, billing standards, bill payment methods and marketing;
- measures to protect vulnerable customers; and
- an information and complaints service to final customers.

Finally, all electricity customers served by ESB PES are served at fixed regulated supply tariff levels approved on an annual basis by the CER. Lower usage Bord Gáis Energy Supply (BGS) gas customers are also served at fixed tariff levels. Larger BGS customers are charged according to a regulated tariff formula. Gas-fired power producers are not covered by these regulated gas tariffs.

2.2.2 Main Developments since Mid-2006

Throughout 2007 and since mid 2006, the CER's key focus has been on the development of the Single Electricity Market (SEM); new wholesale trading arrangements for the island of Ireland. However the following items have also been of significant importance:

- The development of a strategy for greater levels of competition in the electricity generation market (CER-ESB Asset Strategy Agreement);
- The improvement of Ireland's levels of electricity interconnection;
- The continued development and implementation of connection policy for renewable generators;
- The regulation of the gas networks and the incumbent gas supply company (BGE Supply);
- The development of the CER's safety functions;
- Electricity and gas end user prices, and;
- Consumer Protection in the natural gas and electricity sectors.

2.2.2.1 *Electricity and Gas Networks*

Connection Offers to Renewable Generators: Ireland has recently increased its target for renewable penetration to 15% of total consumption from renewable sources by 2010 and further to 33% by 2020. In June 2006, the Commission published a final decision on 'Gate 2' connection offers for renewable generators. Gate 2 is the second milestone in the group processing regime for renewable generator connection applications. In November 2006, the Commission decided to approve the additional of over 1,300 MW of new renewable power to the electricity system, under the Gate 2 process, the vast majority of which will be from wind. This involves 121 new renewable projects throughout the country. To indicate the scale of this commitment, there was 803 MW of wind generated energy on the Irish system by mid 2007.

Gas Network Revenue Review: Throughout 2007, the CER has been engaged in the five year revenue review of the Bord Gáis Networks business. Bord Gáis Networks owns and operates the Irish gas transmission and distribution systems. The Bord Gáis Revenue Review for 2007/08 – 2011/12 outlines the revenues which Bord Gáis Networks will be allowed to recover over the next 5 years. It is based on a comprehensive review by the CER of the investment and operating costs which BGN will face over the period. For the five year period, CER has allowed a total revenue allowance of €1.55 billion. This covers the cost of investing in and operating Ireland's gas transmission and distribution networks over the next five years.

The five year control period has allowed the CER to ensure the planning of stable network development. There is expected to be 150,000 new connections to the gas network in the next 5 years, with the addition of 1,500 km of mains to the network. The CER has also approved the replacement of remaining cast iron pipes with polyethylene pipes, while significant investment is being made in ensuring gas safety.

2.2.2.2 Irish Government White Paper on Energy

In March 2007, the Irish Government published its White Paper on Energy, following consultation on the Green Paper which was published in October 2006. The CER participated fully in the consultation process, both providing a detailed

submission to the Department of Communications, Marine and Natural Resources[3] and also meeting with the Department to discuss the CER's proposals.

A full copy of the CER's submission on the Green Paper can be found on the CER's website (www.cer.ie) while details of the White Paper are available on the Department's website (www.dcmnr.gov.ie).

The CER was encouraged by the Government's commitments outlined under the White Paper on Energy and has committed fully to working to implement the targets and policies outlined in the paper.

2.2.2.3 Electricity Supply Charges 2006

The Commission is responsible for reviewing the costs involved in supplying electricity to customers of ESB PES and the electricity prices that ESB PES proposes to charge to cover these costs. In September 2006, the Commission published its proposed direction to ESB PES on electricity prices to apply from January 2006. The requirement for an average price increase of 19.7% was outlined.

However following on from this announcement, international fuel prices which are a key determinant of electricity prices fell sharply. This allowed the Commission to require significant cost savings from ESB. In December 2006, the Commission revised downwards its decision on ESB PES prices for 2006. A 12.6% average price increase was approved and this was implemented on 1 January 2006.

Price increases for 2007 were primarily driven by increases in costs of generation over 2005, despite the fact that it was possible to achieve fuel savings in late 2006. International gas prices increased threefold between September 2003 and August 2006, before starting to soften. Ireland is heavily dependent upon imported natural gas, oil and coal for its electricity generation.

Another factor leading to the requirement to increase prices for 2007 was the exceptionally high level of new connections to the electricity network in 2006. There were 110,000 new connections in 2006, far ahead of expectations.

The Public Service Obligation levy for 2007 was reduced to zero. This is because the high international fuel prices increased the cost of conventional generation significantly and the subsidies required by PSO plant were at a minimum.

2.2.2.4 Electricity Generation/ Wholesale Market

All-Island Single Electricity Market (Northern Ireland & Ireland): In August 2004, the CER agreed a *Memorandum of Understanding* with the Northern Ireland Authority for Energy Regulation to develop an All-Island energy market in Ireland. This was followed-upon by the publication in November 2004 by both governments of an All-Island Energy Market Development Framework. The first step towards achieving this is development of a single wholesale electricity market. This new wholesale

[3] The name of the Department was changed to Department of Communications, Energy and Natural Resources, following the appointment of a new Government after the Irish general election in May 2007.

electricity market (the *Single Electricity Market*, the SEM) will be in place by November 2007.

Significant work on the development of the SEM has continued throughout 2006 and into 2007. On 3 July 2007, the Regulatory Authorities (CER and NIAUR) oversaw "go-active" of the new market. This was the last key milestone in the project prior to actual go-live. Go-active involved the formal adoption of the legislative framework to support the SEM and the market rules as outlined in the Trading & Settlement Code. The market operator licence was also granted to EirGrid and SONI, the two system operators for the island of Ireland. Market trials and testing will continue between July and November to ensure readiness of all market participants in advance of go-live in November.

In addition, the CER and NIAUR also committed to further all island cooperation with the signing of a memorandum of understanding on 22 March 2007. The MoU outlined the two regulatory authorities shared objectives for increasing competition for the benefit of customers on the island of Ireland.

CER-ESB Asset Strategy Agreement: In November 2006, the CER agreed an outline strategy with ESB Power Generation (ESB PG) to reduce that generator's share of the electricity market to 40% by 2010. The agreement outlined plans to sell/ divest upwards of 1,300 MW of existing power plant by 2010, plus the sale of generation ready sites. In exchange the CER has authorized the construction of a new 430 MW CCGT by ESB. On 29 June 2007, the CER confirmed the plants to be sold/ divested by ESB.

Security of Supply Report: As required per Directive 2003/54/EC, in August 2006 the CER submitted a report on Security of Supply of Electricity to the European Commission.

2.2.2.5 Natural Gas Supply

Bord Gáis Prices 2006 & 2007: In September 2006, the Commission approved a 33.8% increase in Bord Gáis' (BGS) gas tariffs for residential and small industrial and commercial (I and C) customers for the gas year 2006/07. This applied from 1 October 2006. The scale of the increase was primarily driven by the high wholesale gas prices which prevailed throughout 2005 and up to late 2006 and in particular the high cost of gas for delivery in Winter 2006/07. Bord Gáis purchases the vast majority of its gas in the UK wholesale gas market.

However, as international gas prices started to soften in late 2006, the Commission was in a position to require Bord Gáis to reduce its prices by 10% from 1 February 2007.

In July 2007, the Commission published proposals for a further on average 11% reduction in Bord Gáis prices to apply from 1 October 2007. This equates to an allowed revenue of €499.03 million for the gas year 2006/07. At the same time the CER published its proposals following the five year revenue review of Bord Gáis Energy Supply.

The Commission has also decided to amend the structure of tariffs charged to customers of Bord Gáis Energy Supply. This applies to NDM (non daily metered) customers. These are residential customers and small and medium sized businesses. The tariff structures have been changed to allow for greater choice for customers and to ensure that the tariffs charged are fully cost reflective.

2.2.2.6 Consumer Protection (Electricity & Gas)

Customers Codes: Following the publication of natural gas SI 452 of 2004 and electricity SI 60 of 2005 the Commission's responsibility for consumer protection has been expanded with the inclusion of a remit with respect to complaints and the ability to provide for customers through suppliers' licence conditions.

All suppliers must now provide three consumer codes of practice. These are:

1. A code of practice for billing of customers and the format of bills;
2. A code of practice on complaint handling;
3. A code of practice on disconnection.

A further three codes of practice must be produced by suppliers wishing to enter the domestic market. These are:

1. A code of practice for the payment of bills by domestic customers;
2. A code of practice detailing special services for domestic customers who are vulnerable customers;
3. A code of practice on marketing to domestic customers.

Suppliers and network operators were required to prepare Codes of Practice for each of the above areas and Customer Charters for approval by the CER. In March 2007, the CER formally launched the Codes of Practice and is continuing to monitor supplier and network operator compliance with their Codes.

CER Customer Complaints Division

Within both S.I. 452 and S.I. 60 is the requirement for the CER to establish a dispute resolution mechanism for customers with unresolved complaints. The Commission has now formally established its Customer Care Team (CCT). The CCT is responsible for resolving complaints from customers against their electricity and gas supplier or network operator, where an attempt has been made by that supplier or network operator to resolve the complaint themselves. The Customer Care Team is also responsible for developing consumer policy and codes of practice in relation to customer protection.

During the year 2006 a total of 891 consumer complaints against companies operating in the gas and electricity sectors were recorded, a 53% increase on the 2005 figures. This increase is attributed to significant price increases in 2006, an increased awareness of the role of the CER and increased awareness amongst customers of their rights and the obligations on suppliers and networks operators.

2.2.2.7 Gas and Electricity Safety

Under the Energy (Miscellaneous Provisions) Act 2006, the CER was assigned responsibility for the regulation of gas and electricity safety. In 2007 the CER has established a Gas and Electricity Safety team, with responsibility for implementing the CER's safety responsibilities. This team has set about scoping the extent of the role and task. In July and August 2007, the team has published a "Vision for the Regulation of the Natural Gas Safety Framework" and a "Vision for the Regulation of the Electrical Contracting Industry in Ireland".

These documents outline the CER's plans for the step by step implementation of a new safety regime in the gas installer industry and electrical contractor industry.

Natural Gas Safety: The CER is proposing to appoint an independent safety body which will be responsible for registering all natural gas installers wishing to continue working in the industry after 1 January 2009. Once the register is established, it will be illegal for any individual who is not registered to complete gas works.

Key to the new regime is the introduction of safety certificates for all gas work. These certificates will provide confirmation that the work has been done in accordance with the national standard.

The CER has also developed and implemented a formal reporting procedure for gas safety incidents.

Electrical Safety: The CER is also developing a regulatory model that will apply for electrical contractors and once completed, will be appointing an independent safety body or bodies for the electrical contracting industry. Unlike gas, the legislation does not require that all electrical work will have to be done by a registered electrical contractor. Instead, there are different categories proposed within the new model. These are 'restricted works' which is the category of work that may only be done by a registered electrical contractor, and 'controlled works' which may be done by non-registered contractors but which must be inspected by the safety body prior to certification.

The aim of all of these initiatives will be to continually improve safety within the gas and electricity installation services industry, promote safety in the installation, maintenance and use of gas and electrical installations and to reduce the safety risks associated with their use, in particular in the home and to members of the public.

2.2.2.8 Other Developments

CER Mission Statement & 10 Key tasks for 2007: In February 2007, the CER published its revised mission statement and its 10 key tasks for the year. These are outlined below:

CER Mission Statement

In a world where energy supply and prices are highly volatile, the mission of the

CER, acting in the interests of consumers is to ensure that:

- the lights stay on
- the gas continues to flow
- the prices charged are fair and reasonable
- the environment is protected, and
- electricity and gas are supplied safely

CER Key Tasks for 2007

Along with our mission statement, the Commission has identified ten key tasks for 2007. These are outlined below:

- Implement ESB Power Generation Asset Strategy Agreement
- Implement Single Electricity Market (SEM) and develop further All Island Energy Market (AIP) Plans
- Complete Bord Gáis Networks and Supply 5-year revenue reviews
- Implement Customer Care Plan
- Arrange for the design and launch of a competition for the East-West Interconnector
- Review and approve electricity and gas prices for 2008
- Implement Gate 2 policy and consideration will be given to the next steps
- Manage impact in Ireland of current reforms in UK gas transmission offtake arrangements
- Develop structures for implementing our safety responsibilities
- Implement HR Strategy and the development of the Business Information Centre (BIC)

The CER continues to regularly monitor its progress towards each of its strategic objectives and intends to carry out a full review on the implementation of its 10 key tasks in late 2007.

3 Regulation & Performance of the Irish Electricity Market

3.1 Electricity Regulation

3.1.1 General

The CER was established as regulator of the electricity sector in Ireland in 1999. Since then the retail electricity market has seen four phases of market opening. The various phases are outlined in the table below.

3.1.1.1 Electricity Retail Market Opening

In February 2000, 28 percent of the electricity market, comprising approximately 400 of the largest consumers of electricity in Ireland with an annual consumption of 4GWh or more, was opened to competition. In February 2002, the market in Ireland was further opened to competition when 40 percent of the market, comprising approximately 1,600 customers, became eligible to choose their electricity supplier. This threshold was extended to 56 percent of the market, or 13,500 customers, in February 2004. The market has been fully open to competition since February 2005.

Market Opening Phases					
	2000	2002	2004	2005	2006
% Market Open	28%	40%	56%	100%	100%
Eligible Volume Threshold (GWh)	4GWh	1GWh	0.1GWh	-	-
No. of Eligible customers	400	1,600	13,000	1.8m	2.0m

Source: CER

Since 2000, all customers have been eligible to choose a renewable electricity supplier. This right was extended in 2001 to customers using CHP-generated electricity.

3.1.2 Management & Allocation of Interconnection Capacity & Congestion Mechanisms

Congestion on the electricity power system is assessed and published by Eirgrid as TSO. This assessment is published in its annual *Forecast Statement*. This document presents the results of the transfer capability analyses and highlights the opportunities and limitations for export and import power transfers with both Northern Ireland and Britain.

Concerning the integration of congestion management measures with the functioning if the wholesale market, the market in Ireland is a bilateral market (until the establishment of the SEM on 1 November 2007) whereby parties nominate their preferred running and the TSO deviates them from their preference as little as possible consistent with system security requirements including internal congestion

management and system demand[4]. Generators receive compensation for deviations requested by the TSO for system security, but do not receive compensation if scaled back due to excess generation nominations to run compared to system demand. Congestion on the interconnector is treated differently.

The agreed interconnector flow is treated as a change in system demand. All nominations for use of the interconnector in each direction are received, and a net position is determined. If the net position is within the interconnector transfer capability then all nominations are accepted, if outside, rationing occurs to the level of available capacity in that direction. The system demand is modified by the requested net interconnector flow to establish to required generation for generators in the south. An assessment of the computation of transmission capacity is completed by, and made available from, the Northern Ireland and Republic of Ireland TSOs.

3.1.3 Regulation of Electricity Transmission & Distribution Companies

There is one transmission system operator (TSO), Eirgrid, and one distribution system operator (DSO), ESB Networks. ESB Networks is also the Transmission System Owner (TAO).

Electricity Network Operators					
	Number of regulated companies	Approx network access charge (€/MWh)[5]			Interruptions (minutes lost per customer per year)
		Ig	*Ib*	*Dc*	
Transmission	1	n/a	n/a	n/a	n/a
Distribution	1	n/a	n/a	n/a	n/a

3.1.3.1 Electricity Network Tariffs

The CER collects an array of information from the network operators for the purposes of calculating allowed revenues and network tariffs. This includes collecting information on the existing *Regulated Asset Base* (RAB), operating costs (OPEX), capital expenditure costs (CAPEX) and asset values.

This process commences with the system operators submitting their proposed revenue requirements to the CER. The CER then reviews the information provided and decides on the allowed revenues for the operators based on a number of criteria, namely based on benchmarking data.

[4] See section 3.2.1 for a description of the Irish wholesale electricity market.

[5] The figures presented refer to the following Eurostat categories:

'Dc: household customer with annual consumption of 3 500 KWh/ year;
Ib: commercial customer with annual consumption of 50 MWh / year, subscribed maximum power 50 KW;
Ig: industrial customer with annual consumption of 24 GWh/ year, subscribed maximum power 4000 KW'.

It should be noted that for Ib, the average customer in the small Irish small business category has a higher load factor than the customer type provided by Eurostat. Therefore the average transmission and distribution cost of serving a small business customer is less than that provided in the table.

The benchmark data used consists of the following:

- 'OPEX': operational costs including payroll;
- 'CAPEX': network capital expenditure, load (growth) related and non-load (reinforcement) related.

The CER also reviews historical data to evaluate the operators' performance over the previous control periods, and reviews the submissions for expenditure in the coming control period including operational efficiencies, the delivery and requirements for capital investment, and improvements in the network. This review, technical, economic and financial in nature, may include top-down and bottom-up analyses. Price controls are set for a duration of five years.

The Department of Communications, Energy and Natural Resources (DCMNR) is informed of the outcomes of these revenue reviews.

The CER approves any changes to tariffs and has quality of service measures as part of its review of the revenue submissions, including benchmarking, efficiency targets and quality of service reports.

Regarding performance targets, the DSO is required to submit an annual report to the CER detailing quality of service targets met, reasons for not meeting targets (if appropriate) and recommendations for improving the targets for the future. The CER reviews these reports and decides on appropriate action and also on what targets are required to be met for the next submission.

The DSO and TSO release to market participants a *Statement of Charges* and a *Tariff Schedule*, detailing the prevailing tariff terms and conditions for the following year.

3.1.3.2 Electricity Balancing[6]

One of the roles of Eirgrid as the TSO is to perform a market and settlement function.

The Irish wholesale electricity market in Ireland is based on a bilateral trading model, i.e. generators (who produce energy) and suppliers (who have signed up customers and hence need to buy energy) arrange bilateral trades for the purchase of electricity. Generators are then required to nominate the schedule of energy they want to produce (and hence trade) a day ahead of real-time operation.

They also nominate the prices they require if changes in output are needed. The TSO uses this schedule, making any changes needed to reflect transmission system requirements, changes in generator availability and difference between forecast and actual customer demand. This approach has some similarities to the Nordpool structure or the structure introduced in the British trading arrangements, BETA. Generators must comply with the terms of the *Trading and Settlement Code*, which is approved by the CER.

[6] See section 3.2.1.2 for a full description of the Irish wholesale trading system, including information on how imbalance prices are set and what market information is required to be published to participants.

The Single Electricity Market (SEM) is the establishment of new wholesale trading arrangements for the island of Ireland. The SEM will replace the present transitional trading arrangements. The design of the SEM is a Gross Mandatory Pool; generators will sell their power into the pool and suppliers will purchase out of the pool. The market will be administered by a Single Market Operator (SMO). The SMO has been established by EirGrid and SONI, the two TSO's on the island of Ireland.

3.1.3.3 Electricity System Information

Eirgrid publishes a range of wholesale market information concerning generators, imbalance prices and trading data.

In 2002, the CER published a decision outlining what information items are required to be made available to the electricity wholesale market. The following information items were required to be made available including the following generator information (on an individual unit basis):

1. Plant Availability (Scheduled Outage Rates and Forced Outage Rates);
2. Heat Rate Curves;
3. Start Costs and associated Time variables;
4. Minimum Generation Level;
5. Maximum Generation Level;
6. Ex-Ante Nominations ('ANOM');
7. Ex-Post Nominations ('XNOM');
8. Actual Generation;
9. Instructed Quantity;
10. Actual Availability.

This information is published by Eirgrid for all centrally dispatched or trading generators on a generation unit basis. The CER also decided that Eirgrid should publish the following wholesale trading data:

11. The total system demand as used for settlement purposes (specifically as utilised by EPUS[7]) per trading period;
12. Aggregate total independent supplier demand in MWh per trading period;
13. The marginal plant in EPUS, defined as the plant with the highest DEC[8] bid that has an XNOM from EPUS, and the associated DEC price, per trading period;
14. The marginal plant running on the system, defined as the plant with the highest DEC bid that is generating, and the associated DEC price, per trading period;
15. The plant setting the EPUS derived *spill*[9] price, and the associated DEC price, per trading period;
16. Aggregate Non-ESB volumes traded in MWh per trading period;
17. Aggregate imbalance volumes following all bilateral trading (i.e. aggregate Top Up volumes and aggregate *Spill* volumes in MWh per trading period).

[7] The *Ex-Post Unconstrained Schedule* is the wholesale trading system engine.
[8] *Incremental* (INC) and *Decremental* (DEC) prices are bid into the TSO and are used to schedule plant if more plant than required bid in an ANOM, and to increase and/or decrease generation where appropriate for transmission constraints, demand changes or for safety reasons.
[9] The *Spill* price is the price generators receive from ESB PG as 'market maker' for their energy 'spill' surpluses. This based on the avoidable fuel costs of the marginal system plant.

The following market information is also published:

Market Price Indices
- *Spill* Price Euro/MWh;
- *Top-Up*[10] Price;;
- Secondary *Top-Up* Price;

Volumes of Top-Up and Spill Traded
- Volume of *Spill* sold;
- Volume of *Top-Up* purchased;
- Market Demand;
- Total System Demand – as per settlement (sum of independent and ESB PES demand);

Imports and Exports
- ATC (Import/Export);
- Total Import Nominations;
- Total Export Nominations;
- Total Actual Imports;
- Total Actual Exports;

Capacity
- Total Installed Capacity;
- Total Projected Availability;
- Loss of Load Probability;

Ex Post Unconstrained Schedule – Generator Nominations and Demand
- Sum of Ex-ante Nominations ('ANOM's);
- Sum of Actual (ex-post) Availability;
- Sum of 'ANOM's (capped by Availability).

[10] The *Top-up* price is the price suppliers pay to buy 'top-up' energy from ESB PG. This price is regulated and is formulated on the cost to ESB PG of producing top-up power.

3.1.4 Unbundling of Electricity Networks

As stated above ESB currently owns the electricity networks and also operates the electricity distribution system. In 2001, the CER issued a transmission system owner (TAO) and a distribution system operator (DSO) licence to ESB Networks. A transmission system operator (TSO) licence was granted to Eirgrid. An *Infrastructure Agreement*, outlining the establishment of a fully independent transmission system operator, Eirgrid as an independent state-owned undertaking, was formulated in 2001 and was fully implemented in July 2006.

Business separation arrangements also exist between ESB Networks and the production and supply arms of ESB; ESB Power Generation (ESB PG) and ESB's supply businesses, ESB Public Electricity Supplier (ESB PES) and ESB Independent Energy (ESBIE).

Details of these networks separation arrangements are presented in the table below and are incorporated in each of the system operator's (or owner's) licence:

Electricity Unbundling		
	Transmission	Distribution
	Yes/No	*Yes/No*
Separate headquarters	Y	N
Separate corporate presentation	Y	N
Unbundled regulatory accounts with guidelines	Y	Y
Audit of unbundled accounts	Y	Y
Publication of unbundled accounts[11]	Y	Y
Separate board of Directors without Directors from other group companies	Y	N

Source: CER

The relevant unbundling provisions of these licences are as follows:

- Implementation of Legal Unbundling & Network Ownership: Ownership of the networks is with ESB, an undertaking that is owned by the state (95 percent) and by its own employees (5 percent). Operation of the distribution networks is also to remain with ESB. Eirgrid currently undertakes operation of the transmission system and the wholesale market. Eirgrid was legally separated from ESB in July 2006. The Government has outlined, in its White Paper on Energy, its intention to transfer ownership of the transmission network from ESB to EirGrid. This would establish EirGrid as the National Transmission Grid Company. This is due to take place before the end of 2008.

- Ringfencing Arrangements: The TSO, Eirgrid, is fully independent of ESB. Eirgrid is owned by the state (through the Department of Finance and the Department of Communications, Energy and Natural Resources). ESB Networks is a ringfenced business within ESB. As such, ESB Networks as DSO and TAO is separated from the production and supply arms of ESB, ESB PES and ESB PG. The ESB Networks business is less stringently ringfenced from ESB Regulatory Affairs and from shared services business units.

[11] Unbundled accounts are published in a summarised format.

In terms of location, Eirgrid has separate offices within the building used by ESB as its head office. Physical separation is achieved by the use of locked doors and security code access. Eirgrid is planning its move to new offices later in 2007. ESB Networks premises are separate from other ESB premises.

- Incumbent's Corporate Image: In terms of presentation, Eirgrid presents itself as Eirgrid and the TSO, emphasising its difference and separation from ESB, with its own logo and its own website at www.eirgrid.com. ESB Networks presents itself as the DSO and TAO. ESB Networks does not use a separate logo or corporate website.

- Publication of TSO/TAO/DSO Accounts: Unbundled accounts are submitted by ESB Shared Services for the TSO and TAO. However, any transmission system costs are submitted by Eirgrid.

- Regulatory Accounting Guidelines ('RAGs'): In 2002 the CER issued detailed guidelines in the regulatory guidelines. Penalties for non-compliance include revocation of licences.

  The CER regulates accounts submissions under Condition 14 ('Separate Accounts for the Separate Businesses') of ESB Networks' Transmission System Owner Licence, Condition 20 of the Eirgrid's Transmission System Operator Licence and Condition 19 of the ESB Networks' Distribution System Operator Licence.

  These conditions ensure that ESB maintains separate accounting and reporting arrangements, in a form approved by the CER.

- Audit of 'RAGs': These regulatory accounts are subject to a separate audit from an audit team of certified accountants separate from the audit team for ESB accounts and for Eirgrid.

- Role of Compliance Officer(s): The sole role of the compliance officer(s) is to facilitate compliance by the licensee's obligations and duties under the licence and any other legislative obligation or duty notified to the licensee by the CER. In particular, the duties and tasks assigned to the compliance officer(s) include recommending and establishing practices, procedures and systems to ensure the licensee's compliance with the relevant duties and monitoring the effectiveness of the practices, procedures and systems adopted by the licensee to ensure its compliance with the relevant duties.

- Shared Costs: Costs of transmission are applied separately and paid for by Use of System charges and other payments from users of the system. Costs of the DSO are shared in some areas and are apportioned by the DSO's regulatory accounts.

- Other Regulatory Sanctions: As outlined above the requirement for separate financial accounts in respect of each separate business is included under both the distribution and transmission licences issued to ESB Networks and Eirgrid. Failure to adequately implement the procedures would mean that the licensees would not be in compliance with their licence obligations.

Section 24 of the Electricity Regulation Act, 1999 states that where the CER is of the opinion that the holder of a licence may be contravening or may be likely to contravene a condition or requirement it may issue a notice to the holder of the licence.

Following consideration of any representations or objections in relation to this the CER may make a direction to the holder of the licence to take sure measures as are necessary to cease the contravention or to prevent a future contravention. Alternatively as outlined under Section 25 where the CER decides not to issue a direction under Section 24 it may make a determination that the holder of the licence has committed a specified breach of a condition or requirement. In order to ensure compliance with a direction given under Section 24 the CER may apply to the Irish High Court for an order requiring the holder of the licence to discontinue or refrain from specified practices (Section 26).

Schedule 2 of the Licences outlines the CER's right to revoke the licences if the licensee fails to comply with a direction under Section 24 of the 1999 Act, a determination under Section 25 of the Act of 1999 or an order under Section 26 of the Act of 1999 and such failure is not rectified to the satisfaction of the CER within the appropriate time period.

3.2 Competition in the Irish Electricity Market

The liberalisation of the wholesale and retail electricity sectors commenced in February 2000. This followed a policy direction from the Minister for Public Enterprise which established interim wholesale trading arrangements. The opening of the electricity retail market was completed in February 2005; from which date all electricity customers could choose their electricity supplier.

As of mid-2007, over 30 percent of the market was being served by suppliers which are independent of the incumbent ESB Public Electricity Supplier[12].

3.2.1 Description of the Electricity Wholesale Market

This section opens with a high level view of the wholesale market and describes the trading arrangements currently in force in Ireland. It then provides some background to the structure of this market. Finally, Ireland's integration with other markets and further expected developments are discussed.

3.2.1.1 Electricity Market Demand

Wholesale market demand in 2006 was 26,600 GWh, up from 25,500 GWh in 2005. In 2006, the system maximum demand of approximately 5,035 MW was served by 5,836 MW of fully-dispatchable available generation capacity. Another 862 MW partial or non-dispatchable generation capacity was available by the end of 2006.

3.2.1.2 Electricity Wholesale Trading Arrangements

The existing wholesale market for electricity, established in 2000, is due to continue in its present form until the establishment of a *Single Electricity Market*, merging the energy markets in Ireland and Northern Ireland, expected in November 2007.

A policy direction issued by the then Minister for Public Enterprise to the CER, in accordance with Section 9(1)(a) of the Electricity Regulation Act, 1999, established the present trading arrangements for electricity in Ireland. These arrangements were due to last for a transitional period ending February 19th 2005. This period has now been extended to last for the period leading to the establishment of the *Single Electricity Market.*

The main objective of the trading arrangements is to promote efficient competition amongst licensed generators and suppliers within the market segment open to competition.

The high level principles, as set out in the Ministerial Policy Direction and subsequent legislation, have been translated into a *Trading and Settlement Market* with central dispatch by the TSO National Control Centre, and a bilateral wholesale market where participants can trade energy and balance out their uncontracted energy needs with the incumbent generation company, ESB Power Generation[13].

[12] The ESB Public Electricity Supplier, as the incumbent supplier, is licensed under special conditions outlined in S.I. 60 of 2005. Hereafter the ESB Public Electricity Supplier is referred to as 'ESB PES'.
[13] ESB Power Generation, as the incumbent generating firm, is also licensed under special conditions outlined in S.I. No. 60 of 2005. Hereafter ESB Power Generation is referred to as 'ESB PG'.

The following are the key characteristics of the wholesale market, as established under the Ministerial *Policy Direction* and subsequent enabling legislation:

- It established a bilateral wholesale market where participants can trade energy and balance out their uncontracted energy needs with ESB PG, the incumbent generator.

- Thus, a regime for the provision of *top-up* (energy shortfalls) and *spill* (excess energy) was introduced and the CER introduced a code to govern all transactional aspects of the wholesale market, entitled 'the *Trading and Settlement Code*'. All market participants wishing to operate in the market must sign up to, and are bound by, this code.

  – *Top-Up*

    The independent sector in all normal circumstances is able to purchase *top-up* from ESB PG in sufficient quantity to provide backup supply to the independent sector at prices that average out over the year to the estimated full costs of a Best New Entrant (BNE).

    The price of *top-up* is profiled throughout the year (time of day, week and seasonal variance) broadly reflecting the incumbent's avoidable fuel costs plus an extra capacity element weighted according to the expected loss of load probability.

    In order to ensure that *top–up* is only used as back-up power, the amount of *top-up* that independent generators and suppliers are entitled to buy is limited whereby any excess amount, beyond specified limits, is priced at a premium.

    The one exception to this limitation is granted to green and CHP suppliers. First-tier *top up* rates are applied to the entire *top-up* requirements of green and CHP participants when balancing in the market.

  – *Spill*

    The independent sector is able to sell *spill* to the incumbent at prices broadly reflective of the incumbent's avoidable fuel cost[14].

As can be seen from the above description of Ireland's trading arrangements, the electricity market provides for bilateral trades between generators and suppliers for the purchase of electricity, with a balancing mechanism through the provision of *top-up* and *spill*.

Generators nominate to the TSO the schedule of energy they want to produce (for trade a day ahead of real-time operation). They also nominate the prices they require if changes in output are needed. The TSO uses this schedule, making any adjustments necessary, to reflect transmission system requirements, changes in

[14] Any large generator, whether it be owned by ESB or by an independent firm, can set the spill price. However, in the vast majority of cases the price-setter is ESB PG.

generator availability and any difference between forecast and actual customer demand.

As the initial commercial positions are based on forecasts, imbalances are a normal occurrence (e.g. customer demand may be higher than expected or a generator may be unavailable etc). Under the *Trading and Settlement Code*, the Settlement System Administrator (SSA), a business unit within the TSO, is required to calculate the imbalances that participants may face.

The market provides participants with the opportunity to 'trade-out' imbalances with each other and nominate these contractual volumes to the SSA.

The SSA then calculates the residual imbalance amount each participant owes (energy deficit or *top up*), or is owed (energy surplus or *spill*). The SSA also calculates the payments to be made by the TSO to compensate generators, if changes to their nominations are required for transmission system reasons. Finally, the SSA then invoices for these charges and arranges the transfer of funds.

3.2.1.3 Electricity Wholesale Market Structure

Description

The Irish wholesale electricity market can be described in terms of (1) the bilateral trading arrangements in place, (2) the regulation of contracts between ESB PG and ESB PES and (3) the regulation of ancillary services:

1. *Bilateral Wholesale Market*[15]

   The bilateral wholesale market, as described previously, is where market participants – suppliers and generators – can trade energy and balance out their uncontracted energy needs with the incumbent generation company, ESB PG. This is not divided between different parts of the merit order.

2. *Regulation of Supply and Generation Businesses of the Incumbent - ESB*

   The sale of electricity from the incumbent's generation arm, ESB PG, to the incumbent's supply arm, ESB PES, is regulated by the CER, as is the sale of electricity from ESB PES to final customers. The revenue that ESB PG is allowed to recover from ESB PES is calculated as ESB PG's total *allowable costs*, less ESB PG's regulated market revenues. This revenue that ESB PG earns from ESB PES is set out on a €/MWh basis and profiled by time of day and season, taking account of the cost structure of ESB PG plant.

3. *Ancillary Services*

   Ancillary services are provided by generators, of which ESB PG is the largest, for which they receive regulated revenue from the TSO. There is no market where ancillary services are traded.

[15] See section 3.2.1.2 for a description of Irish wholesale market trading arrangements.

Volume of electricity traded

Ninety-five percent of energy traded – in the form of bilateral 'over the counter' trades – is covered by contracts of 1 to 5 years duration (either in the bilateral market or through *Power Purchase Agreements*). While the Irish wholesale market could be categorised as a *Bilateral-Balancing Market*, currently, there are, as such, no 'standardised power exchange products'.

Although the CER is aware that certain longer-term contracts do exist between generators and suppliers – in the form of Power Purchase Agreements – the CER does not have any data readily available on the number of the contracted amounts or the duration of such contracts.

Active demand side participation

At present there is no facility in place to allow market participants to participate directly in the wholesale market.

However, the TSO does manage a retail market demand side management scheme, the Winter Peak Demand Reduction Scheme (WPDRS).

3.2.1.4 Integration of the Irish Wholesale Market with Other Markets

Ireland has one electricity interconnector with its nearest neighbour, Northern Ireland. This has a *Net Transfer Capacity* of 330MW.

Given the proximity of these markets to each other, together with the fact that the jurisdictions are both on the same island, it has been deemed to be of significant strategic value by both governments for both markets to merge. This will occur in November 2007, with the formation of the *Single Electricity Market*.

This decision was taken against a background of co-operation on common energy issues, with both governments having a shared interest in more competitive energy markets, reduced energy costs and improved reliability of supply. This work, being conducted under the title *All-Island Project* (AIP), is also set against the background of the European Union's single market for electricity and natural gas and the growing regionalisation of markets.

The *Single Electricity Market* will establish, for the first time, a single wholesale market in which generators and suppliers of electricity on the island will trade all their electricity on a daily basis regardless of their location on the island. This will be done through a central pool (gross mandatory pool with centralised dispatch) which will maximise the potential for market efficiencies and cost savings.

3.2.1.5 Further Interconnection and Market Developments

Ireland is connected to Northern Ireland via a 600 MW AC 'North-South' interconnector. In turn Ireland is indirectly connected to Scotland via a 400 MW DC interconnector between Northern Ireland and Scotland at Moyle. Each year auctions are held to allocate capacity across both interconnectors.

With the commencement of the SEM in November 2007, the North-South Interconnector will be considered part of an all island transmission grid.

'North-South' Interconnection

As stated above, the North-South interconnector currently has a *Net Transfer Capacity* of 330MW in a north-south direction. In recent years the take-up of capacity has been close to zero even though the *Net Transfer Capacity* in a south-north direction has been 170 MW. All 'North-South' capacity to date has been allocated on a yearly product basis.

In March 2005, Eirgrid submitted to the CER a proposal for further additional interconnection with Northern Ireland. In April 2005, the CER approved Eirgrid to proceed to carry out the work necessary to obtain planning permission for this interconnection. It is expected that this interconnector will become fully operational in 2012.

'East-West' Interconnector

In December 2003 the CER decided that it would actively promote the development of 'East-West' electricity interconnection between Ireland and Britain. This decision followed the completion of a cost-benefit study which assessed the overall economic merits of East-West interconnection. The CER advised the Minister for Communications, Marine and Natural Resources at that time, to this effect.

In February 2004 the Minister announced that the government favoured the development of two 500 MW 'East-West' interconnectors. The Minister requested the CER to investigate the degree of potential commercial interest in developing this project on a merchant basis. In August the Minister restated his intention to press ahead with the construction of two 500 MW electricity East-West interconnectors and requested the CER to develop a competitive process to deliver this interconnection.

In early 2005, the Commission, with the assistance of independent consultants, began assessing processes for the delivery of 'East-West' Interconnection. A report was presented to the Minister in February 2006. In July of 2006, the Government indicated its support for the development of 'East-West' Interconnection and this was further outlined in the Government's White Paper on Energy. It has been decided that a 500 MW interconnector between Britain and Ireland will be developed, which will be owned and operated by EirGrid. The Commission are now involved in the development of a competition for the construction of this interconnector.

In addition in July 2007, the Commission made its decision on the route of the interconnector while it has also directed EirGrid to reserve capacity on the electricity system for the connection of the interconnector in 2011.

3.2.1.6 Mergers and Acquisitions

There have been no recent significant mergers or acquisitions within the Irish electricity market on which to report.

3.2.2 Description of the Electricity Retail Market

This section discusses the concentration of suppliers in the retail electricity market over the years 2000 to 2006. The market share position of suppliers is also described, including a comparison of market share held by independent suppliers vis-à-vis the position of the ESB, the incumbent supply company. Finally, this section shows the evolution of regulated ESB PES tariffs since market opening took place in 2000.

3.2.2.1 Retail Market Concentration

There are currently 9 undertakings active in the Irish retail market. Of this number, 7 are Independent suppliers which are not affiliated in any way with the incumbent ESB.

The largest supplier undertaking, ESB, also has a 'universal service', or default, supplier arm known as ESB PES. Two out of the next three largest suppliers serve mostly medium and large industrial and commercial customers. The fourth largest supplier focuses on small and medium-sized commercial customers. This firm is also involved in the domestic market. Overall there are 4 suppliers (3 where ESB PES and ESBIE are combined) in the largest and medium-sized retail segment, 3 (2) suppliers in the small business sector and 2 (2) in the domestic market.

The growth of independent suppliers has been organic, as ESB has not divested generation plant. The one exception to this is that several non-ESB suppliers purchase energy from the ESB-Statoil owned 'Synergen' generation plant via the *Virtual Independent Power Producer* capacity release auction process (see section 3.2.3.1(5)).

3.2.2.2 Supplier Characteristics

Regarding the nationality of active suppliers, all but one of these firms is based in Ireland. The exception is the supplier Energia, a subsidiary of Viridian (Northern Ireland Electricity). Of the 4 largest suppliers, only one is not vertically integrated with a generation business.

As mentioned above, the incumbent ESB also owns and operates the Irish distribution system, of which there is only one in Ireland. ESB also currently owns the transmission system. However, the operation of the transmission system is undertaken by the independent TSO, Eirgrid. The operation and ownership of the networks is separated from the supply businesses via management separation. However, all of these business units share selected common services within ESB's corporate structure.

3.2.2.3 Retail Market Customer Switching

Overall, a considerable proportion of industrial customers have switched supplier since market opening commenced in 2000. A smaller, yet significant, number of commercial customers have changed since this date, while the extent of domestic switching has been negligible.

In regard to customer switching processes, there are no charges for changing supplier. The maximum delay for changing supplier is 20 days. Finally, there is no process-restriction on customers in debt from changing supplier.

In September 2006, the Commission decided that levels of competition amongst suppliers in the 'large energy users' sector of the market had developed to a sufficient level to end tariff regulation in this sector of the market. This effectively prevented ESB PES from competing for customers in this market sector. ESB PES is still active in this sector of the market, supplying customers that could not obtain another supplier.

3.2.2.4 Regulated Supply Tariffs

The CER approves the tariffs of the default supplier, ESB PES. All other suppliers set prices below the ESB PES level. From 2002, these tariffs – which typically apply from January to December in each year – have been approved on an annual basis.

ESB PES customers are divided into the following categories:

1. Domestic Urban (residential customers served by three-phase low voltage network);
2. Domestic Rural (residential customers served by single-phase low voltage network);
3. Residential Business (connections where a customer is both residential and commercial);
4. Small (a) Commercial & (b) Industrial (General Purpose: customers with a maximum import capacity of less than 50kVA);
5. (a) Commercial & (b) Industrial Low Voltage Max Demand (customers with a maximum import capacity of 50kVA or above);

There are also three other categories of customer in the market (see below). The CER no longer publishes tariffs for these customer categories. ESB PES does not supply customers in these categories unless the customer does not receive a reasonable offer of supply from another supplier.

6. (a) Commercial & (b) Industrial Medium Voltage Maximum Demand (customers connected to medium voltage 10kV or 20kV network);
7. High (38kV) Maximum Demand (customers connected to 38kV network);
8. Extra-high (110kV) Maximum Demand (customers connected to 110kV network).

As applied to Eurostat customer categories, tariffs 1-3 charged in Ireland roughly correspond to domestic categories Da to De. Tariff categories 4-8, above, relate to Eurostat Ia to Ii industrial and commercial customer categories. However, the key difference between these two classification systems is that the majority of Irish tariffs are charged to customers based on their network characteristics, while Eurostat categories are based on customer usage. Therefore, in Ireland, the default supplier's average cost of serving customers in any given category may be considerably higher than the costs to an independent supplier of serving customers in the same category.

Ultimately this is because customers have varying demand and capacity characteristics. These factors play a crucial part in determining the default supplier's average cost of serving its customers. In other words if one applied the default ESB PES large customer tariff to all large customers, the average cost of serving customers would decrease. Therefore, as only a small proportion of large customers remain with ESB PES, the ESB PES cost of serving MV, 38kV and 110kV is not representative of prices faced by an 'average' large customer. For instance most of ESB PES' customers at 110kV are power stations with low usage but high import capacity.

3.2.3 Measures to Avoid Abuses of Dominance in the Electricity Market

The following section sets out the rules governing generators and suppliers, together with any specific measures to address the issue of market dominance and any undesirable, anti-competitive behaviour in the wholesale and retail markets.

This section also includes an overview of the CER's capacity release measures.

3.2.3.1 Electricity Wholesale Market

The section describes measures in place in the existing transitional wholesale electricity market. The nature of some of these measures will change with the commencement of the SEM in November 2007. In addition to these measures, a specific market power and dominance work stream has been built into the design of the SEM market. This puts in place requirements and monitoring arrangements on generators and suppliers to ensure that dominance issues do not arise in the SEM.

The CER issues licences for generation and supply which set the terms for regulating the behaviour of licensees.

However, the detailed rules of the conduct of market participants in the wholesale market are covered by the *Trading and Settlement Code* which sets out the rules and regulations for operating in the market. In order to access the market, participants are required to sign up to the *Framework Agreement* which establishes their obligation to adhere to the rules and regulations as set out under the *Trading and Settlement Code*.

(1). Rules Governing Generators

Specific aspects of generator's conduct governed by the *Trading and Settlement Code* include:

- Compliance with *Agreed Procedures* (which are the detailed procedures which are required to be followed and cover such areas as market admission process, interconnector trading, dispute procedures, bilateral contract arrangements and nominations, communications procedures, etc.);
- Provision and maintenance of *Security Cover*;
- Reporting requirements;
- Rules for *Generator Nominations*;
- Rules and procedures surrounding a Generator's *Bilateral Settlement*.

Specific requirements include:

(i). Transparency surrounding Availability & Bidding Behaviour

Each day every Participant with dispatchable units tells the Settlement System Administrator (SSA) what production it wants to achieve for the next day i.e. its *Nomination*. It also informs the SSA of its price for varying output from that level. The specific rules surrounding this process include the following:

- the *Generator's Nomination* is required to be submitted to the TSO by 10:00 hours day-ahead and is required for each trading period of the next following trading day (the day is broken into 48 half-hour trading periods);
- the *Trading & Settlement Rules* are predicated on the basis that all generating unit energy information is on the basis of the amount exported rather than the generated amount. Therefore, the generator is required to include in its nomination two factors that define the relationship between exported and generated values;
- the *Trading & Settlement Code* requires the submission of price sets which are to be offered by the generator into the market (to specify, *Incremental* and *Decremental* costs (i.e. prices for being instructed away from nominated output), start prices, idling prices, etc.);
- a separate code, the *Grid Code*, details the requirements concerning revised declarations of availability.

(ii). Market Surveillance & Preventing Abuses of Dominance

With respect to the specific issues of market surveillance and the regulation of the behaviours of the incumbent generation company, the following should be noted:

- the CER has issued a direction to the incumbent generator, stipulating how it is to behave in bidding into the market;
- the CER monitors this behaviour on an on-going basis (including review of monthly reports from the incumbent and interacting with the SSA on market behaviour);
- the CER licences the incumbent which requires them to act in a certain manner, with the inclusion of conditions to specifically address the issue of behaviours (and the prevention of anti-competitive behaviours);

(2). Rules Governing Suppliers (in the Wholesale market)

Similar to the situation for generators, suppliers are governed by the *Trading and Settlement Code* and also by the terms and conditions set out in the supply licence.

(3). Transparency & Rules Concerning Contract Structure

Given the nature of the market at present, as suppliers do not bid into the market, there are no rules concerning their bidding behaviour. Suppliers will generally engage with generators through bilateral contracts which are not regulated by the CER.

Suppliers are, however, bound to honour rules surrounding dealing with imbalances, settlement, security cover, interconnector nominations and appropriate reporting requirements.

(4). Regulation of ESB's Contract Structure

The CER regulates the sale of electricity from ESB PG to ESB PES, and in turn from ESB PES to the final consumer.

(i). Original Legal Basis

Regulation 31 of European Communities (Internal Market in Electricity) Regulations 2000 (Statutory Instrument No. 445 of 2000) provided the original legal basis for the regulation of ESB PG and for the sale of electricity from ESB PG to ESB PES. Regulation 31 states that the CER is required to ensure that ESB can satisfy the demand for electricity from its customers, in the first instance from ESB PG's portfolio of power stations. The regulation also requires the CER to examine the charges and underlying costs of the sale of electricity supplied by ESB PG to ESB PES.

A cost-based regulation of ESB PG has been achieved in the past via an arrangement known as the *Bulk Power Agreement* (BPA). The BPA included an examination of the charges and underlying costs of the sale of electricity supplied by ESB PG to ESB PES. Under the BPA, the revenue that ESB PG was allowed to recover from ESB PES was calculated as ESB PG's total allowable costs, less ESB PG's regulated market revenues. This revenue that ESB PG would earn from ESB PES was set out on a €/MWh basis and profiled by time of day and season.

These net costs were recovered from ESB PES at a demand-weighted average price that was determined by dividing the allowable net costs by the anticipated forecast of sales by ESB PG to ESB PES. The demand-weighted average price is the average income per MWh that ESB PG will earn if ESB PG's load shape is sold at a particular profile of prices that vary by time of day, week and season across the year.

The difference between ESB PG's revised and previously estimated market driven costs and revenues, along with inflation variances in the controllable cost category, and the amount ESB PG actually recovered from ESB PES in sales revenue in the year in question was reflected in an annual correction factor, the so-called k factor. This represented an under- or over-recovery of revenue due to ESB PG and was taken into account in the subsequent year's determination of allowed ESB PG revenue under the BPA.

(ii). Legal Basis since 2005

With the signing of European Communities (Internal Market in Electricity) Regulations 2005 (S.I. 60 of 2005), the regulation of ESB PG was given a new legal basis from February 2005, the date of full electricity market opening. Regulation 3 of S.I 60 of 2005 enables the CER to continue to put in place arrangements it deems appropriate which have the effect of securing the extent to which ESB PG generating stations supply electricity to ESB PES and other licensed generators or suppliers. The CER may also examine such charges for electricity from ESB PG stations, and following an examination where the CER considers it necessary, issue Directions to ESB.

Given the short period of time between now and the introduction of Single Electricity Market (SEM) in November 2007, the CER regards the continuation of the existing approach to the regulation of ESB PG's costs as the most prudent approach to be followed until then. Thus the revenue that ESB PG accrued from the sale of electricity to ESB PES will continue, for the remainder of 2006 and 2007, to be approved on the basis of ESB PG's total allowable costs, less ESB PG have regulated market revenue.

(5). Capacity Release Measures in Ireland – Experience with Virtual Power Plant Auctions

Due to a lack of independent generation capacity, over the past number of years the CER has organised capacity release measures in the form of the *Virtual Independent Power Producer* (VIPP or GVIPP) auctions, which offered additional capacity to licensed suppliers to service customers in advance of new generation plant becoming available. The ultimate aim of such arrangements is to increase competition in the supply of electricity in Ireland and to also encourage market entry for new generators. The VIPP auctions concern the auctioning of conventional thermal generation while the GVIPP or Green VIPP concerns renewable power.

The CER has run six VIPP auctions and two GVIPP auctions to date. The most recent VIPP auction, VIPP6, was held in November 2005 and resulted in 200 MW of generation capacity being made available to the market. There were three successful bidders in the process.

The most recent GVIPP auction took place in June 2006 and concerned the auction of 190 MW of 'green' electricity. There were four successful bidders in this auction process.

3.2.3.2 Electricity Retail Market

The CER monitors the conduct and behaviour of ESB suppliers by employing a number of measures. ESB's activities, as the Public Electricity Supplier, are regulated in the areas of final customer tariffs and supply terms & conditions. Supply terms and conditions include conditions concerning consumer codes of practice, non-discrimination and duty-to-supply clauses, performance reporting, and supplier of last resort obligations. The CER regulates these supply activities on the basis of a temporary 'public electricity supplier' licence issued to ESB in April 2006.

Mirroring the regulation of ESB PG outlined above (see section 3.2.3(4)), the regulation of these ESB PES activities has been passed to the CER by the provisions of two pieces of legislation; Regulation 31 of S.I. 445 of 2000 and Regulations 17 to 21 of S.I. 60 of 2005. The CER monitors the activities of ESB's PG business and its PES business through licensing arrangements. In June 2007, final licences for these businesses to operate in the SEM were issued.

These PES and PG licences include ringfencing arrangements which cover the disclosure of information between the two businesses, between the two businesses and the regulated network businesses and between the two businesses and board of ESB.

ESB's independent supply business, ESB Independent Energy, is licensed as a 'brown', a renewable and a CHP independent supplier. As well as being subject to generic licence conditions, ESBIE's licences contain conditions limiting its marketing activities. The present ESBIE licences also contain a market dominance condition. This condition also allows the CER to specify what constitutes the relevant market for the purpose of monitoring market dominance.

(1). Tariff Approval & Publication

ESB PES, as the default supplier, must publish its tariffs, as approved by the CER. ESB PES offers these tariffs on the principle of non-discrimination. Changes to approved tariffs may be undertaken on an annual basis. Independent suppliers, on the other hand, are not required to publish their respective tariffs.

(2). Supply Obligation

Under regulation 18 of S.I. 60 of 2005, ESB PES has a duty to supply all customers who make reasonable requests for supply. Independent suppliers are not subject to this regulation.

(3). Supplier Contractual Obligations

Regarding suppliers' contractual obligations, ESB PES is the residual supplier and is therefore responsible for all metered energy not accounted for by independent suppliers or by network losses. As stated above, in order to meet this demand ESB PES procures energy from independent generators and from its generation arm, ESB PG. ESB PES 'nets' contracted independent generation from its own residual demand and sources the remainder from ESB PG. Contracts held with these independent generators are typically long-term.

As specified in S.I 60 of 2005, ESB PES is required to purchase electricity at the best effective price available in the wholesale market (Economic Purchase Obligation).

(4). Business Separation

ESB PES is functionally separated from ESB Networks as DSO and TAO and from Eirgrid as TSO. In 2001, the CER licensed ESB as transmission owner and distribution operator. Under these licences, ESB is required to separate these network businesses from its affiliated supply and generation businesses. This 'business separation' process was commenced in late 2001 and will be fully complete by the end of 2005 (the Transmission System Operator, Eirgrid, which was established in 2001, was fully separated from ESB in June 2006.)

3.2.3.3 Competition Policy Actions

To date, there have been no competition policy actions in the Irish wholesale or retail electricity markets.

4 Regulation & Performance of the Irish Natural Gas Market

4.1 Natural Gas Regulation

4.1.1 General

The CER assumed the role of regulating the Irish gas sector in 2002. Since then the retail gas market has seen four phases of market opening including full market opening in July 2007. The various phases are outlined in the table below.

4.1.1.1 Gas Retail Market Opening

At the end of June 2007, the incumbent Bord Gáis Energy Supply (BGS) supplied 30 percent of gas volume in Ireland. The remaining volume was supplied by independent suppliers, or in the case of some power stations, was self-supplied.

The independent suppliers competing for customers in different sectors of the gas market are Energia, Vaÿu and Flogas.

Market Opening Phases						
	1999	2000	2001	2002	2004	2007
% Market Open	72%	72%	77%	77%	84%	100%
Eligible Volume Threshold (GWh)	265	265	21	21	-[16]	-
No. of eligible customers	10	10	150	250	18,100	0.5 m

The natural gas market in the Ireland has been opening to competition in phases since 1997. Since 2004 all non-domestic customers were free to choose their supplier. Full Market Opening in the natural gas market took place on 1 July 2007.

In advance of the market being fully open, the CER, in order to encourage a new supplier in the domestic market, awarded a franchise for the supply of gas to domestic customers in areas of the west of Ireland to Flogas in July 2004. This coincided with the extension of a major gas pipeline into this area. With full market opening in 2007 this franchise has expired and all suppliers can now compete for customers in this area.

4.1.2 Management & Allocation of Interconnection Capacity & Congestion Mechanisms

There is one gas transmission system operator and one gas distribution system operator. Both systems are owned and operated by BGE Networks.

[16] In 2004 the gas market was opened to all non-domestic customers.

4.1.2.1 Gas Congestion Management

Due to recent network enhancements there is a very low level of congestion on the Irish gas network, including on the interconnectors with Britain (IC1 and IC2). The rules being applied for congestion management are in line with Directive 2003/55/EC, and are outlined in the Irish gas *Code of Operations*, published in April 2005.

As there is currently adequate capacity available on the Irish gas transmission system capacity is allocated on a first-come first-served basis. A 'use-it or lose-it' provision provides for the withdrawal of capacity that has not been used in a year. While the CER is keeping these rules under review as the market develops, it is thought that the cost of capacity (and particularly interconnector capacity) acts as a disincentive for market participants to hoard capacity.

Other features of congestion management measures include:

- Secondary market for capacity: The secondary market for capacity operates on an over-the-counter bilateral basis. While the Transporter, BGE Networks, is not a party to these capacity trades, it does recognise these trades on its systems;

- Interruptible Capacity: Interruptible capacity is not currently made available on the Irish system, due to the minimal risk of interruption;

- Cross-border link swaps: Since cross-border links are not congested no swaps are in place;

- Transit Contracts (Article 3(1) of Directive 91/296): No transit contracts exist at present. The South/North pipeline will be transiting from 2006 onwards. The transit arrangements have not yet been finalised;

- Assessment of maximum technical capacity: The TSO methodology on the maximum technical capacity is assessed in the annual *Gas Capacity Statement* (GCS) prepared by the CER. The GCS estimates the gas capacity of the system and in addition acts as an independent check on the TSO methodology.

4.1.2.2 Gas System Information

The CER wishes the market to be as transparent as possible, so any party that avails itself of, or intends to avail itself of, third part access (TPA) on the transmission network can do so with the requisite level of information regarding the operation of the system and the gas market more generally.

As part of its review of gas market arrangements, the CER consulted in July 2003 on the publication of gas system information. Following this, in June 2004 the CER published the BGE *System Information* decision paper which lists the information that the CER considers important for BGE to publish to foster a liberalised and efficient market. This paper included information concerning system operations and the natural gas market in general. These provisions include the recommendations of the Madrid Forum, as set out in the GGP2. These provisions came into effect in

April 2005 with the introduction of the new *Code of Operations* and contractual framework for the market.

4.1.3 Regulation of Gas Transmission and Distribution Companies

Currently, the gas transmission and distribution system operators and owners are in the process of being legally separated as required by new legislation, SI 760 of 2005, which was introduced in late 2005 which gave further legal effect to Directive 2003/55/EC.

4.1.3.1 Gas Network Tariffs

BGE owns and operates the gas networks in Ireland. BGE proposes network transmission and distribution tariffs to the CER as part of the annual tariff review exercise[17]. The CER reviews the assumptions underlying these submissions and the impact these will have on system-users. The CER then carries out a public consultation on the proposed tariffs in advance of issuing a determination.

A 'revenue review' is undertaken every five years for both transmission and distribution costs, during which the CER makes an in-depth examination of BGE's costs, including the benchmarking of costs against the same activities in other countries. BGE's allowed costs are decreased as appropriate to reflect efficiencies that should be achieved.

The performance of the networks is evaluated in the context of tariff reviews and in the wider context of public safety – for example; the CER has approved expenditure to replace cast iron pipes with PE pipes for safety reasons.

Regarding quality of supply, there is a low risk of interruption on the Irish natural gas system; as such continuity of supply is not an issue in this market.

Natural Gas Network Operators 2006					
	Number of regulated companies	Approx network access charge (€/Cubic Metre)			Interruptions (minutes lost per customer per year)
		I4	*I1*	*D3*	
Transmission	1	n/a	n/a	n/a	Negligible
Distribution	1	n/a	n/a	n/a	Negligible

Conversion:	1 cubic m =	11.1138 kWh

Source: CER

4.1.3.2 Gas Balancing

Natural gas market balancing arrangements are included in the Irish gas *Code of Operations*, as approved by the CER. The needs of small market participants and new entrants are taken into account in the tolerance ranges, which are based on

[17] Gas tariffs and revenues are approved for the 'gas year' which begins in October and continues until the end of the following September.

customer category (i.e. smaller customers have larger tolerances). Daily entry-exit balancing is on an aggregate basis across the entire portfolio of individual shippers and market participants can trade out any imbalance ex-post with another shipper (which has an opposing *Daily Imbalance Quantity* for the same day).

The table below describes the Irish balancing mechanism in greater detail:

Gas Balancing Mechanism Characteristics	
Definition of balancing charges	Under the *Code of Operations*, balancing charges are defined as the *Daily Imbalance Charge* and the *System Imbalance Charge*.
Definition of penalties	Penalties are charged on as imbalances outside the appropriate tolerance range that are not traded out. *First tier imbalances* (i.e. within the tolerance range) are cashed out at a neutral price, which is not punitive. In excess of the tolerance market participants are penalised at the *Second tier imbalance* price.
Existence of tolerance levels	Tolerance levels are set on a customer category basis. The Transporter, BGE Networks, calculates the *Shipper Portfolio Tolerance* in respect of each day for each registered Shipper. The calculation methodology for the *Shipper Portfolio Tolerance* is outlined in Part E, Section 1.7 of the Code of Operations.
TSO/DSO energy procurement	The network operators procure energy through an annual tender for balancing and shrinkage.
System Requirements	Bord Gáis Transmission publishes a report outlining its balancing requirements on an ex-post basis. Estimates are published to shippers and to tendering parties ex ante.
Balancing incentives	System users have an incentive to balance within the set tolerance levels so that they are not faced with the punitive second tier imbalance price.
Balancing interval	Entry/exit balancing is on a daily basis.
Balancing areas	In the Ireland, there is a single transmission/ distribution system, which corresponds with the single balancing area.
Interaction between areas	N/A
Grouping of Imbalances	The entry-exit balancing regime operates on an aggregate basis across the entire portfolio of the individual shipper. System users can trade out any imbalance on an ex-post basis.
Imbalance Settlement timetable	Shippers are notified of the initial imbalance at 17.00 on the day following the trade. They have from this time to 17.00 seven days after the end of the month to trade out the imbalance with other shippers. Shippers are notified of the final imbalance position at 17.30 seven days after the end of the month.

4.1.3.3 Information provided to Participants by TSO

In 2004, the CER published a decision outlining what information the TSO must provide to market participants regarding balancing. In particular, the following information is provided:

(1). Balancing Actions

BGE publishes in a generalised format the criteria used to determine when an action is necessary. BGE will also publish (possibly in arrears to allow for validation) the location, date, and volume (buy/sell) for balancing actions taken. BGE will be obliged to keep a record of the reasons why certain balancing actions are taken. This information will not be published but will be available to the CER to review.

(2). Imbalance Prices

BGE publishes all possible charges that Shippers and potential Shippers will face, in table format showing all charges, explaining how/why these apply, stating what the charge actually is (or has been, where appropriate), and referring to the relevant sections of the *Code of Operations* or web addresses, for example, where background of the charges may be found.

4.1.4 Unbundling of Gas Networks

As stated above BGE owns and operates the gas networks. In 2004, the CER issued transmission, distribution and supply licences to BGE. New legislation, SI 760 of 2005, was introduced in late 2005 which gave further legal effect to Directive 2003/55/EC by providing for the legal unbundling of the transmission and distribution systems operations of BGE

The business separation arrangements exist between BGE Networks and BGS are presented in the table below:

Gas Unbundling (From BGS)		
	Transmission (Yes/No)	Distribution (Yes/No)
Separate headquarters	Y	N
Separate corporate presentation	N	N
Unbundled regulatory accounts with guidelines	Y	Y
Audit of unbundled accounts	Y	Y
Publication of unbundled accounts	N	N
Separate board of Directors without Directors from other group companies	N	N

Source: CER

The relevant provisions of these licences are as follows:

- Implementation of Legal Unbundling: The then Minister for Communications Marine & Natural Resources signed a statutory instrument in late 2005 (SI 760 of 2005) which provides for the legal unbundling of the distribution and transmission operation activities of the incumbent BGE.

- Network Ownership: BGE is responsible for the transmission, distribution and supply of natural gas in Ireland and is wholly-owned by the Irish Government. As such, BGE Networks is responsible for transmission and distribution network operations, including gas transportation, infrastructure development and maintenance of the network.

- Ringfencing Arrangements: There are ringfencing arrangements in place between BGE Networks and BGS. However, these businesses are not as yet physically separated. BGE also has one 'shared services' division.

- Incumbent's Corporate Image: The network operator is branded as BGE Networks, while the supply arm is presented to customers as Bord Gáis Energy Supply. However, BGE's website and logo are common use. Moreover, BGE publishes one annual report for its businesses.

- Publication of TSO/DSO Accounts: The 2005 BGE Financial Accounts include segmental analysis by business segment (i.e. Transmission Operations, Distribution Operations, Energy Supply – Total, Energy Supply External Turnover and Ancillary Businesses). The Natural Gas Transmission and Distribution Licences granted to BGE include detailed requirements in relation to the preparation of separate financial accounts for each separate Business. The requirements in relation to these are outlined further below.

- Regulatory Accounting Guidelines ('RAGs'): The CER regulates BGE accounts submissions under condition 26 of the gas transmission Licence and under condition 25 of the gas distribution licence.

  These conditions ensure that BGE maintains separate accounting and reporting arrangements, in a form approved by the CER.

- Audit of 'RAGs': Under condition 25 of the distribution licence and condition 26 of the transmission licence, the licensee shall in relation to each separate business procure in respect of the accounting statements prepared in accordance with this condition for the financial year, a report by the auditors addressed to the CER stating whether in their opinion these statements have been properly prepared in accordance with this condition and give a true and fair view of the revenues, costs, assets, liabilities, reserves and provision of, or reasonable attributable to the separate business to which the statements relate.

- Role of Compliance Officer: The sole role of the compliance officer (as outlined under condition 22 of the distribution licence and condition 23 of the transmission licence) is to facilitate compliance with the licensee's obligations and duties under the licence and any other legislative obligation or duty notified to the licensee by the CER. In particular, the duties and tasks assigned to the compliance officer include recommending and establishing practices, procedures and systems to ensure the licensee's compliance with the relevant duties and monitoring the effectiveness of the practices, procedures and systems adopted by the licensee to ensure its compliance with the relevant duties.

- Other Regulatory Sanctions: As outlined above the requirement for separate financial accounts in respect of each Separate Business is included under both the Distribution and Transmission Licences issued to BGE. Failure to adequately implement the procedures would mean that the Licensees would not be in compliance with their licence obligations.

4.2 Competition in the Natural Gas Market

The liberalisation of the gas sector commenced in 1997. In 2002 the CER took over the role of regulating the gas wholesale and retail markets. Since this time, a new gas *Code of Operations* has been introduced which has established rules for the operation of wholesale 'Entry-Exit' arrangements and the operation of the distribution networks. This code was introduced in April 2005.

As of mid-2007, 70 percent of the market by volume was being served by suppliers independent of the incumbent BGE Energy Supply (BGS).

4.2.1 Description of the Gas Wholesale Market

This section opens with a high-level description of the wholesale market in terms of market demand and concentration. It then details Ireland's gas production and import capabilities, with particular emphasis on Ireland's existing level of gas interconnection with the Britain Finally, this section outlines measures employed by the CER to survey and reduce market power in the gas market.

4.2.1.1 Gas Market Demand & Market Concentration

Total gas demand in the Irish market for 2006 was 4.6 bcm/year. In 2006 , 91% of gas supplied was imported into Ireland. In other words, 0.42 bcm/year out of the total supplied of 4.5 bcm/year came from indigenous production. Imports are sourced from the United Kingdom through interconnectors.

There is a natural gas trading market in place. Most gas contracts are bilateral 'over the counter' trades.

4.2.1.2 Degree of Integration with other TSOs

The Irish market is highly integrated with Britain due to the high level of gas importation from Scotland.

For example, gate closure times are set with reference to the British market. The price of gas in Ireland is closely tied to the National Balancing Point (NBP) price in Britain plus transportation costs. There is also a *Connected Systems Agreement* in place between the British and Irish gas network operators.

The *All-Island Project* (AIP) between the Ireland and Northern Ireland includes the development of an all-island gas market going forward.

4.2.1.3 Gas Production & Importation

The CER does not regulate gas producers – this role is under the remit of the Department of Communications Energy and Natural Resources (DCENR). Due to the fact that there are no capacity constraints on the Scotland-Ireland interconnectors new entrants may secure import capacity. Since the market is a bilateral 'over-the-counter' contracts market there is no swaps market in place. Similarly, since the market is bilateral there is no direct market surveillance.

However, all shippers/suppliers in the market require a Shipper/Supply Licence[18] from the CER. These licences include the following conditions:

- Provision of Information to CER: The general conditions of the licence include the requirement for the provision of information to the CER. The licensee must provide to the CER in such form and at such times as the CER may require such information and reports as the CER may consider necessary or relevant or it may require in the performance of its duties or functions under legislation. In addition, the licensee shall publish information (save for confidential or commercially sensitive information) in such form and manner and at such times as the CER may require.

- Market Surveillance: Condition 8 of the general conditions prohibits anti-competitive behaviour stating that the licensee shall not prevent, restrict or distort competition to any appreciable extent in any market relating to the supply, distribution, transmission or storage of natural gas. The licensee is also prohibited from abusing any dominant position it may have. The CER shall determine whether the licensee holds a dominant position.

- Competition Policy actions: Specific conditions relating to economic regulation applicable only where the licensee is BGE include the ring-fencing of the supply business and restriction on use of certain information (Condition 14). Condition 16 refers to prohibition of cross-subsidies.

  Condition 18 prohibits discrimination in supplying or offering terms for the supply of natural gas. In particular, the licensee shall not show undue preference to any person (or class of persons) and shall not exercise undue discrimination between any persons (or classes of persons).

  Condition 19 lays down the duty to offer supply whereby the licensee shall upon receipt of a request from a person who the licensee is authorised to supply by this License and who is a final customer as soon as practicable a) offer to enter into a supply contract to supply natural gas to the premises in respect of which the supply is requested; and b) where the terms offered are accepted by the customer, give a supply of natural gas to those premises in accordance with the terms offered.

- Gas Release Programmes: In 2004, the CER held a competition for the award of a *Gas Supply Franchise*, which provided for the exclusive rights to supply franchise customers (within a defined geographical area which was newly connected to the national gas grid) with natural gas for the period leading up to full market opening.

  In conjunction with this competition, the CER held what may be considered a form of gas release programme, whereby the winner of the franchise was entitled to obtain gas (exclusively for the supply of the franchise business subject to the competition) from the incumbent gas company on terms and conditions (including cost) for gas which were broadly similar to those applying to the incumbent's franchise supply business. In order to facilitate

[18] Natural Gas customers in Ireland may be supplied by a shipper or a supplier.

this, the incumbent was directed to create a supply tariff for a new category of customer i.e. the winner of the gas supply franchise.

This was a once-off programme for a defined amount of gas (limited to that required to supply the franchise business in the geographic area, for the duration of the franchise), made available to one entity i.e. the winner of the franchise competition.

The initial terms and conditions for supply of gas under the arrangements were outlined in August 2004 and revised in October 2004. With full market opening in 2007, all suppliers can now compete for all customers.

4.2.2 Description of the Gas Retail Market

This section discusses the concentration of suppliers in the retail market over the years 2000 to 2006. The market share position of suppliers is also described, including a comparison of market share held by independent suppliers vis-à-vis the position of the BGS the incumbent supply company.

4.2.2.1 Gas Retail Market Concentration

There are eight suppliers currently active in the Irish retail gas market. Of this number, seven are independent suppliers who are not affiliated in any way with the incumbent BGS. Independent supply fell considerably in 2002 due to the liquidation of a major industrial customer. With the exception of Flogas Natural Gas all of the other suppliers are targeting the medium-sized industrial customers. The growth of all independent suppliers has been organic as no supplier in the Irish gas market has been the subject of a take over bid to date.

4.2.2.2 Gas Supplier Characteristics

Regarding the nationality of active suppliers, one of these firms is based outside Ireland. (Energia, a subsidiary of Viridian is based in Northern Ireland). This company entered the Irish market through organic growth rather than through acquisition.

The incumbent BGE also owns and operates the gas transmission and distribution systems. The operation of the systems is separated from the supply business via legal and management separation. However, all BGE business units share selected common services within the BGE corporate structure.

4.2.2.3 Customer Switching

At this time there are no charges associated with changing supplier in the gas retail market. For *Non-Daily Metered* Customers change of supplier can be affected in one business day. Customers may only change supplier once within twenty working days. For *Daily Metered* customers the process may take up to twenty business days.

Overall, a considerable proportion of industrial customers have switched supplier since market opening commenced in 1999. Full market opening took place in July 2007.

4.2.2.4 Regulated Supply Tariffs

The CER approves the tariffs of the incumbent supplier, BGS. Independent suppliers have unregulated tariffs. However they tend to set their tariffs at a level just below that of the incumbent.

In 2007, the CER undertook a review of the structure of BGS' tariffs for non daily metered customers. This has led to the introduction of a new suite of tariffs, which will be implemented on 1 October 2007. The new tariff structures have been designed to ensure cost reflectivity and a greater level of choice for customers. In addition the new tariffs encourage greater energy efficiency as fixed or standing charges are reduced significantly and therefore a customers bill is influenced to a much greater degree by their consumption of gas.

5 Security of Supply

5.1 Electricity SoS

This section details the CER's role and that of Eirgrid as TSO with respect to security of electricity supply. It then examines growth in demand and the forecast situation for security of supply and provides an examination of the various measures being undertaken by the CER to address security of supply issues. There is then a discussion on the CER's role with respect to the authorisation of new plant, details of upcoming new infrastructural developments, the current and forecast generation mix, together with a brief description of the various incentives currently in place in the Irish market to encourage new generation capacity. The section concludes with an overview of upcoming networks developments intended to assist security of supply through further interconnection.

5.1.1 CER & TSO's Role

The CER has a role in monitoring security of supply/generation adequacy and, together with the TSO (Eirgrid) and the Department of Communications, Energy & Natural Resources (DCENR), putting in place appropriate arrangements to ensure that a satisfactory generation capacity margin is maintained and electricity supply is secured.

To this end, the CER reviews the generation adequacy of the Irish system on a weekly basis and publishes a weekly report on its website. This report also contains quarterly comparisons and useful data on generation adequacy including wind statistics. , The CER also produces an bi-annual report on security of supply for the European Commission while an annual update is provided in the CER Annual Report. The CER also approves the annual forecast statement (covering the subsequent seven year period) produced by the TSO. In August 2007, Eirgrid also produced its Winter Outlook Report for winter 2007/08. This indicated a positive security of supply outlook for the coming winter in Ireland.

In consultation with the DCENR and other relevant parties, it decides on any necessary actions where deemed appropriate to protect or enhance security of supply. In addition to putting in place such measures as deemed appropriate, the CER has established a regulatory regime in the authorising and licensing of generation and regulation of the various networks codes to assist in the enforcement of security of supply.

The TSO, in addition to the preparation of its annual forecast statement, is responsible for the day-to-day monitoring of generation capacity and system management (management of nominations, dispatch, ancillary services and system emergency management (system alerts, load shedding, etc.).

5.1.2 Security of Supply Indicators

5.1.2.1 Growth in Electricity Demand

Electricity demand in Ireland has experienced substantial growth over recent years. In 1996 total system demand was just over 15,000GWh. By 2006 this figure had reached almost 26,000GWh. To date, the record peak demand, which occurred in December 2006, was 5,035 MW. The peak demand has been consistently growing at a rate of 4 – 5% each year over the past 5 years.

5.1.2.2 Peak Demand and Forecast Increases – Key Figures – end 2006

- Currently available generation capacity: 6,698 MW (862 MW partially or non-dispatchable);
- Current levels of electricity peak demand: 5,035 MW;

By end 2007, EirGrid has forecast that the available generation capacity will have increased to 7,562 MW (13% increase). This will be made up of 6,445 MW of fully dispatchable plant with the level of partially or non dispatchable generation increasing by almost 30% to 1,117 MW[19]. This is primarily due to an increase in wind generation coming onto the system. EirGrid has estimated that the peak demand on the system will increase to 5,250 MW over the winter of 2007/08[20].

5.1.3 TSO Annual Reviews of Generation Adequacy (7 Year Forecast Statement)

The TSO produces an annual forecast statement of generation adequacy covering the subsequent seven-year period. In 2004, the TSO commented that the central issue to security of supply has become plant availability, particularly availability of the incumbent generation company's plant.

Although plant availability has improved since then, this issue remains the dominant factor affecting system adequacy, and outweighs other factors such as variations in demand.

In 2004 the TSO predicted that, at the current poor availability levels, and without the extension of short-term capacity contracts or reliance on the interconnector with Northern Ireland, deficits in the range of 500 MW to 1200 MW are likely to prevail over the period 2005 to 2011. The TSO concluded that these deficits are first evident in 2005, decreasing marginally with the addition of new capacity in 2006, but increasing again in the longer term.

The TSO's statement concluded that, despite the addition of three new large generation stations over the next three years (described below and expected to contribute an additional 900 MW), the adequacy of the system will still be below standard if system availability remains low. The magnitude of the shortfall in the

[19] Source: EirGrid Generation Adequacy Report 2007 – 2013.
[20] Source: EirGrid Winter Outlook Report 2007 – 2008.

future will depend largely on what actions are taken to improve the availability situation, and any additions to the expected plant portfolio.

The CER's role and response to the conclusion of the TSO's forecast is focussed on short-term and medium term measures:

(1). Short-Term Measures

With respect to the immediate issue of low availability and short-term capacity deficits, the CER is actively monitoring the plant availability of the incumbent generation company, ESB PG.

In addition to monitoring and approving plant overhauls, the CER has put in place financial incentives and penalty mechanisms to encourage improvement in plant performance.

Furthermore, the CER has overseen the contracting of additional capacity in the form of emergency generation (additional peaking capacity plants) and a guaranteed contract from a generator in Northern Ireland (of 167 MW).

(2). Medium-Term Measures

Studies conducted in 2002 and 2003 had predicted that unless action was taken, there would be significant shortfalls in electricity generation for the winter period from 2005 onwards.

The CER determined that measures were to be put in place to provide for the delivery of additional generation capacity. In light of this, and in addition to making arrangements for short-term peaking generation to be put in place, the CER arranged a competition whereby successful bidders would be awarded a power purchase contract with the incumbent supplier, ESB PES. The intention of this process was to encourage the entry of new capacity into the market to provide for generation adequacy, with such capacity to be provided by independent power providers.

Arising out of this competitive process, two new point plants were announced:

- Tynagh Energy, located in the mid-west of Ireland, a 400 MW CCGT power plant (delivery January 2006); and,
- Aughinish Energy, located in the south-west of Ireland, a 150 MW CHP plant (delivery November 2005).

Furthermore, another Combined Cycle Gas Turbine plant, of approximately 400 MW capacity, is being constructed outside Dublin. This is expected to be commissioned in late 2007/early 2008.

In March 2007, the Commission authorised the construction of a further gas fired CCGT (430 MW). This plant is to be constructed in the Cork region by ESB as part of the CER-ESB Asset Strategy agreement. It is expected that this new plant will be on the system in 2010.

In addition in August 2007, Bord Gáis Eireann has received an authorisation to construct a 445MW power station in Co. Cork, while the Commission is also working with a number of other companies at the early stages of developing plans for power stations.

5.1.4 Progress on Major Infrastructure Projects

5.1.4.1 CER's Role with respect to Authorisation of Generation

Under the relevant legislation, generation plant is required to obtain an Authorisation to Construct or Reconstruct Generation Plant and a Licence to Generate. These contain a number of conditions relating to the construction and operation of the plant, and the applicant's business.

These are both issued by the CER which assesses the suitability of applications in accordance with the following criteria:

- Suitability of the Applicant (correctly constituted body, managerial competency, solvency, etc.);
- Suitability of Project – technical assessment (generation plant and technology proposed, construction and commissioning programme, plant engineers, network connection agreements, etc.);
- Compliance with relevant legislation (environmental regulations, planning permissions, other permits (Water Extraction Licence, Thermal Emissions Regulations, etc);
- Project business plan (project financing, business plan, off-take arrangements, accounts projections, etc.);

5.1.5 Current Generation Fuel Mix

The actual breakdown of Ireland's generation by fuel source, from 2000 to 2005 is shown below.

System Energy Sources %								
	Coal	HFO	LFO	Gas	Peat	Hydro	Wind & SSG*	Total
2005	26	11	0.2	44.7	4.8	2.5	4.5	94
2004	25.7	12.2	0.2	44.8	4.8	2.5	3.4	94
2003	25.4	9.7	0.3	50.7	8.2	2.3	2.7	100
2002	27.9	15.0	0.2	42.3	8.4	3.6	2.6	100
2001	28.7	20.9	0.3	36.8	8.9	2.3	2.2	100
2000	30.0	18.9	0.3	37.6	7.5	3.5	2.1	100

Source: Eirgrid
*SSG – Small Scale Generation

5.1.6 Implicit and Explicit Incentives to Build Capacity

There are a number of aspects of the Irish market with relate to incentives to build capacity:

- *Capacity Margin payments*, a payment based on contribution by generation plant to the capacity margin, based on spare capacity provided at the daily peak demand;
- A *capacity-related spill price* which is an extra amount, per MWh, paid for all spilled energy as a form of capacity payment;
- A *spill floor price* which provides for a guaranteed minimum price, below which the price cannot fall (offering a degree of revenue certainty for generators);
- *Power Purchase Agreement* schemes (particularly to support renewable generation projects) whereby projects are guaranteed off-take contracts with the incumbent generation company, incumbent supply company, for fixed periods of time (in the past, such schemes have been implemented by both the CER and the Ministerial Department with responsibility for energy).

5.1.7 Network/Interconnection Projects

As described in section 3.2.1.5 the Republic of Ireland is connected to Northern Ireland via a 600 MW AC 'North-South' interconnector. In turn Ireland is indirectly connected to Scotland via a DC interconnector between Northern Ireland and Scotland at Moyle. Each year auctions are held to allocate capacity across both interconnectors.

'North-South' Interconnection

The North-South interconnector between Northern Ireland and the Republic of Ireland currently has a *Net Transfer Capacity* (NTC) of 330MW in a north-south direction.

In March 2005 Eirgrid submitted to the CER a proposal for further additional interconnection with Northern Ireland. In April 2005, the CER approved Eirgrid to proceed to carry out the work necessary to obtain planning permission for this interconnection.

As stated earlier, the interconnector with Northern Ireland will become an integral part of an all island transmission system with the commencement of the SEM in 2007.

'East-West' Interconnector

In December 2003 the CER decided that it would actively promote the development of 'East-West' electricity interconnection between Ireland and Britain. This decision followed the completion of a cost-benefit study which assessed the overall economic merits of East-West interconnection. The CER advised the then Minister for Communications, Marine and Natural Resources to this effect.

In February 2004 the Minister announced that the government favoured the development of two 500 MW 'East-West' interconnectors to be developed on a

merchant basis. The Minister requested the CER to investigate the degree of potential commercial interest in developing this project on a merchant basis. In August the Minister restated his intention to press ahead with the construction of two 500 MW electricity East-West interconnectors and requested the CER to develop a competitive process to deliver the interconnection.

In early 2005, the Commission, with the assistance of independent consultants, began assessing processes for the delivery of 'East-West' Interconnection. A report was presented to the Minister in February 2006.

In July of 2006, the Government indicated its support for the development of 'East-West' Interconnection and this was further outlined in the Government's White Paper on Energy. It has been decided that a 500 MW interconnector between Britain and Ireland will be developed, which will be owned and operated by EirGrid. The Commission are now involved in the development of a competition for the construction of this interconnector.

In addition in July 2007, the Commission approved the route of the interconnector while it has also directed EirGrid to reserve capacity on the electricity system for the connection of the interconnector in 2011.

5.2 Natural Gas SoS

This section details the current gas security of supply situation in Ireland. In doing so it examines growth in demand and the forecast situation for security of supply. There is then a description of upcoming new infrastructural developments, as well as new networks developments.

5.2.1 Security of Supply Indicators

Total gas demand in Ireland for 2006 was 4.6 bcm, up from 2.9 bcm in 1996. Projected growth rates over the next three years are outlined in the 2007 *Gas Capacity Statement* prepared by the CER in consultation with BGE.

5.2.2 Production and Import Capacity

5.2.1.1 *Currently Available*

Indigenous gas fields supplied over 80 percent of the market in 1996 (i.e. 2.42 bcm out of a total of 2.93 bcm in that year). By 2006, this position had been reversed with more than 90 percent of the gas supply in Ireland being met by imports via the interconnectors from Scotland.

Since the 1970s Ireland has been supplied from the Kinsale and Ballycotton fields delivering to the Inch terminal off the south coast of Ireland. These fields are now in decline. The addition of gas production from the Seven Heads field (also off the south coast) from December 2003 has contributed to an increased level of indigenous supply, albeit at lower rates than originally projected.

The two Scotland-Ireland interconnectors (IC1 and IC2) currently provide over 90 percent of Ireland's gas supply and are supported by compressor stations onshore in Scotland. The maximum daily import capacity for the interconnectors is imposed by the capability of the compressor stations to deliver high-pressure flows into the pipelines.

5.2.1.2 *Forthcoming (Next three years)*

The Corrib gas field, which has a peak supply capability of approximately 10 mscmd, is currently being developed off the west coast of Ireland. There have been some difficulties with progressing the on-shore element of this work due to local opposition to the project.

5.2.3 Network/Interconnection Projects

In 2002, BGE (Northern Ireland) was granted a gas transmission licence by the Northern Ireland Authority for Energy Regulation (NIAER) to build, own and

operate two transmission pipelines in Northern Ireland in two phases over a five-year period.

Following the completion of a pipeline from Belfast to Derry in October 2004, the CER, on behalf of the DCMNR and in association with NIAER and the Northern Irish Department of Enterprise, Trade and Investment, commissioned a feasibility study to evaluate the various route options for a pipeline linking the Belfast-Derry pipeline to Letterkenny in the Republic of Ireland. This study has been completed and is currently being reviewed by the CER and NIAUR.

6 Public Service Obligations & Consumer Protection

In line with European legislation, public service obligations in Ireland cover the following areas in electricity and gas:

- Quality of Supply;
- Consumer Protection;
- Supplier of Last Resort.

Quality of supply obligations and performance targets cover selected service obligations such as supply continuity and safety issues. These obligations and targets are placed on the network operators and owners – Eirgrid and ESB in electricity and BGE in the gas market.

Consumer protection measures apply to all suppliers active in the Irish retail energy markets. These cover supplier conduct over a range of areas such as marketing, billing, complaints handling, customer debt, treatment of vulnerable customers and disconnection. These obligations are broadly equivalent for suppliers in the electricity and gas markets and are specified by codes of practice submitted by suppliers and approved by the CER. Supplier-customer contract conditions are also covered in the form of a 'supplier charter'.

Customers are also protected when their supplier abruptly exits the market. In the event of such an exit, the CER obliges a supplier, or a number of suppliers, to act as a Supplier of Last Resort (SoLR).

Several PSOs also apply exclusively to the electricity sector covering the following areas:

- Environmental Protection/Security of Supply;
- Network Access;
- ESB PES Universal Service/Duty to Supply.

In Ireland, the term – 'Public Service Obligation' – generally refers to the obligations placed on suppliers in the areas of environmental protection and security of supply. The objectives of the 'PSO' are to ensure reasonable self-sufficiency in electricity generation capacity by utilising peat as a primary fuel source and to promote renewable energy sources to help protect the environment. The cost of meeting these environmental and security of supply PSOs is met by all customers based on charges set by the CER.

The CER also has a legislative duty to 'have regard to' customers located in rural areas. Moreover ESB PES has a duty to supply all reasonable requests for supply received from customers.

Finally, the CER sets regulated tariffs for end-customers served by ESB PES in the electricity market and BGE Energy Supply in the gas market.

This section considers each of these in turn, starting with electricity & gas PSOs. Electricity-specific PSOs are dealt with separately. Finally, the methods used to calculate the regulated supply tariffs are outlined.

6.1 Irish Legislative Framework

The Electricity Regulation Act, 1999, and the Gas (Interim) Regulation Act, 2002, transposed into Irish legislation the various public service obligations outlined in European electricity and gas Directives 96/92/EC, and 98/30/EC. Electricity S.I. 60 of 2005 subsequently adopted obligations and consumer protection measures included in electricity Directive 2003/54/EC. Equivalent measures in gas resulting from Directive 2003/55/EC were introduced by S.I. 452 of 2004.

6.1.1 Electricity PSO Legislation & Licensing

In accordance with Section 9 of the Electricity Regulation Act, 1999, the CER is obliged to:

- to secure that all reasonable demands by final customers of electricity are satisfied;
- to promote the continuity, security and quality of supplies of electricity;
- to promote the use of renewable, sustainable or alternative forms of energy;
- to take account of the protection of the environment;
- to carry out its duties and functions in a manner that it considers protects the interest of final customers.

The Act does not create a hierarchy of functions and duties for the CER. Therefore, under this Act the CER must balance its duties regarding environmental protection, security of supply, treatment of final customers, network access and security of supply. This Act places particular emphasis on the protection of elderly and rural customers.

Regulation 31 of S.I. 445 of 2005 conferred on the CER the duty of approving electricity supply charges levied by ESB PES. Regulation 19 of S.I. 60 of 2005 reaffirms this duty.

S.I. 60 of 2005 also added Directive 2003/54/EC 'Annex A' consumer protection measures and a universal service obligation to this list. This S.I. also provides for the labelling of energy sources on electricity bills.

Where relevant these duties are to be included in generic supply licence and permanent ESB PES supply licence due to be issued by the end of 2007.

6.1.2 Natural Gas PSOs Legislation & Licensing

The Gas (Interim) (Regulation) Act of 2002 extended the existing electricity customer protection functions of the CER to the gas market.

In addition, the public service and consumer protection requirements placed on market participants as outlined in Directive 2003/55/EC have been transposed into S.I. 452 of 2004.

In S.I. No. 452 it is stated in regulation 21A that the function of the CER with respect to consumer protection is to ensure:

- there is a high standard of protection for all final customers in their dealings with natural gas suppliers;
- all final customers are supplied with natural gas of specified quality at reasonable prices;
- there are dispute resolution mechanisms in place for users of the natural gas system and their final customers;
- there are adequate safeguards to protect vulnerable customers (including the elderly and disabled) which shall include measures to help such customers avoid disconnection;

The CER is entitled to give directions, as it deems necessary, in order to carry out the above functions. A supplier or shipper in breach of such a direction is guilty of an offence and is liable on summary conviction to a fine not exceeding €3,000.

These duties were included in generic and BGS licences issued in April 2004.

6.2 Electricity & Gas PSOs

6.2.1 Quality of Supply

In electricity, under condition 13 of the ESB Distribution System Operator's licence, in 2001 the ESB submitted to the CER a report setting out the criteria against which the performance of the Distribution Business would be measured. These criteria included data on the number of disconnections, the number of customer minutes lost etc.

Every year since 2001, the DSO has submitted an annual performance report outlining performance against these criteria. This report is published by the CER in September of every year. The CER can amend these performance criteria from time to time. Condition 11 of the Transmission System Owner's licence and condition 16 of the Transmission System Operator's licence include equivalent conditions. The TSO does not submit an annual performance report. However, transmission performance indicators are provided for in the regulated accounts.

In 2004, the CER issued gas transmission and distribution system operator licences to BGE Networks (at that time known as BGE Transportation). Conditions 14 and 18 of the distribution licence and conditions 15 and 19 of the transmission licence refer to quality and safety obligations placed on BGE.

6.2.1 Consumer Protection Measures

Customer protection obligations, as outlined in suppliers' licences, are binding on all suppliers serving residential customers. The application of these measures to business customers is at the discretion of the CER.

Customer protection measures take the form of supplier codes of conduct and supplier charters (contracts). These measures are broadly equivalent for electricity and gas. Finally, the CER is to establish a customer complaints service in early 2007 which will, upon its establishment, arbitrate supplier-customer disputes.

6.2.1.1 Supply Codes of Conduct – Gas & Electricity

Following the publication of S.I. 452 for gas, the CER issued a Natural Gas Supply Licence which contained the requirement for suppliers to publish codes of practice under a number of headings.

The gas supply licence provides for three consumer codes of practice which all suppliers must produce in order to comply with the terms of their licence. These are:

1. A code of practice for billing of customers and the format of bills;
2. A code of practice on complaint handling;
3. A code of practice on disconnection.

A further three codes of practice must be produced by suppliers wishing to enter the domestic market. These are:

1. A code of practice for the payment of bills by domestic customers;
2. A code of practice detailing special services for domestic customers who are vulnerable customers;
3. A code of practice on marketing to domestic customers.

Guidelines for the operation of these codes were consulted on and agreed in late 2005. Suppliers submitted their codes and customer charters to the CER and these were formally launched in March 2007.

In addition both the gas and electricity industries are now developing central databases of vulnerable customers or customers with special needs which will be held by the network operators. Suppliers will then input customers' status to the central database.

In 2007, the electricity supply licence has been revised to specify the requirement of each of these codes.

6.2.1.2 Contract Transparency – Gas & Electricity

Under condition 12 of the natural gas supply/shipping licence BGS is required to publish the terms on which it supplies natural gas to eligible customers. An addition, condition 23 of the gas supply/shipping licence states that all suppliers of domestic customers must supply the CER with all relevant contracts or arrangements set out in a standard form, which shall be approved by the CER.

Condition 7 of the electricity supply licence underlines that detailed terms 'as are appropriate for the purpose of the agreement' are to be set out by the licensee in making an offer to enter into an agreement for the provision of relevant metering equipment. Also condition 19 of the electricity supply licence states that all suppliers of customers, 'whose consumption of electricity at any single premises in any 12 month period is estimated and calculated to be or likely to be less than 10,000 kWh or such other figure as the CER may substitute must supply the CER', must supply the CER with all relevant contracts or arrangements set out in a standard form, which shall be approved by the CER.

6.2.1.3 Customer Charter – Gas & Electricity

Natural gas S.I. 452 contained the requirement for suppliers to produce a customer charter specifying conditions relating to the supply of natural gas to household customers. The CER has now approved all suppliers' Customer Charters and is working with suppliers to implement the terms of their charters. Customer Charters and Codes of Practice for each gas and electricity supplier operating in the domestic market and for the network operators were officially launched in March 2007.

The following information on the customer charter is contained within S.I. 452:

- The conditions issued in this charter should be 'fair, transparent, readily accessible and given in clear and comprehensive language in advance of the making of a contractual commitment'.

- Shippers and suppliers are required (through licence conditions) to develop, publish, adhere to and keep up to date a customer charter in respect of household customers. This charter should be reviewed at regular intervals by the relevant supplier and shipper and be approved by the CER. After approval by the CER of this charter, it is of the suppliers to ensure that all household customers are provided a copy of this charter. This charter should include conditions that provide that all customers:

  - are informed of their the statutory right to be supplied with natural gas of a specified quality at reasonable prices and have a right to a contract with a natural gas supplier;
  - are aware of their right of withdrawal when a notice of any intention to modify contractual conditions and that they are informed of these intentions with adequate notice;
  - receive direct notification of any increase in charges no later than one normal billing period after the increase was implemented;

- are informed in a fair and transparent way of applicable prices and tariffs and on term and conditions, with regard to access to and use of natural gas services;
- have the choice of a wide range of payment methods and that any difference in charges applied for these various methods are reflective of the relevant costs to the supplier;
- are protected from misleading, unfair or predatory selling methods;
- are not penalised or charged for changing supplier and are facilitated in the relevant processes;
- have their complaints settled in a fair and prompt manner. Their complaints will be dealt in a transparent, simple and inexpensive process. A system for reimbursement and compensation should be implemented where warranted.

The contents of the electricity customer charter are equivalent to that for the natural gas sector described above. There will also be a requirement for service guarantees for suppliers.

6.2.1.4 Complaints Arbitration –Gas & Electricity

Within both S.I. 452 and S.I. 60 is the requirement for the CER to establish a dispute resolution mechanism for customers with unresolved complaints. This project is underway.

6.2.2 Supplier of Last Resort for Electricity & Gas

Further to S.I. 60 of 2005, the CER may appoint and direct an electricity Supplier to Last Resort to serve customers where either a supplier has exited the market or where specific exceptional circumstances (i.e. safety concerns) warrant such a direction. It is anticipated that similar conditions will be legislated for in the gas market.

In April 2005, the CER published a paper of SoLR options for both the electricity and gas markets including proposed rules for the allocation and duration of the role, as well as principles governing the recovery of extraordinary costs by the SoLR(s). In addition this paper specified the circumstances that would trigger such this process. The CER considered that 'triggers' such as abrupt supplier exit, supplier bankruptcy and supply licence revocation would be considered here.

A decision on this matter was issued in April 2006 which appointed ESB PES and BGS as SoLRs for the electricity and gas markets respectively.

In July 2007, the CER published a consultation on possible changes to Supplier of Last Resort rules and policy in the electricity sector to take account of changing

market rules and conditions arising from the commencement of the SEM in November 2007. A decision will made on this issue prior to the commencement of the SEM.

6.3 Electricity-Specific PSOs

6.3.1 'Universal Service'/ Supply Obligation

Under S.I. 60 and under its supply licence, ESB PES, as the 'default supplier', must meet all reasonable requests for supply. The CER determines what constitutes a reasonable request for supply. No such obligation to supply is placed on the BGS in the gas market. As noted above the ESB PES must serve customers according to standard terms and conditions and shall charge tariffs approved by the CER.

6.3.2 Network Access for Rural Customers

The Electricity Regulation Act, 1999, states that the CER should have regard to customers located in rural areas. Condition 2 of the ESB Distribution System Operator's licence (Connection to and use of the distribution system) stipulates that the ESB DSO shall publish, and make available on their website, a statement of charges for connection to the distribution system. These charges include standardised connection charges for domestic rural customers and are approved by the CER.
Again, no such obligation to supply is placed on the BGS in the gas market.

6.3.3 Environmental Protection/Fuel & Generation Security of Supply

In Ireland, the term – 'Public Service Obligation' – refers to the obligations placed on suppliers in the areas of environmental protection and security of supply.

The objectives of the 'PSO' are to:

- ensure reasonable self-sufficiency in electricity generation capacity by utilising peat as a primary fuel source;
- promote renewable energy sources to help protect the environment.

This 'PSO' is imposed by the Department of Communications, Energy and Natural Resources (DCENR) on the ESB PES as wholesale purchaser of energy from renewable, peat-generated energy and emergency generation. The CER is obliged to approve these costs under section 9(2) and (3) of the Electricity Regulation Act 1999, as amended by S.I. 217 of 2002. The implementation of the PSO levy commenced on the 1st January 2003 and will terminate no later than the 31st December 2021.

The costs of purchasing this energy – above-and-beyond a regulated *ex ante* 'Best New Entrant' market price – are levied on all customers via their supplier. Costs relating to the administration of the scheme are also included in this levy. All suppliers, the ESB DSO, ESB PES and Eirgrid as TSO are notified of the final determination of the above data no later than the August 1st in the year immediately preceding the levy period.

For 2007, the CER has calculated the PSO levy to be €0.

Information on Energy Sources for Electricity

As required by Directive 2003/54/EC and S.I. 60 of 2005 all suppliers must provide reliable information on all bills/ promotional material sent to customers regarding the contribution of each energy source to the overall fuel mix of the supplier concerned over the preceding year. In June 2006 the CER published a decision on how suppliers must publish this information. This decision stated that the following categories of energy source must be used for the purposes of fuel mix disclosure; Coal, Gas, Peat, Pumped Storage, Renewables, CHP, Heavy Fuel Oil, Distillate Oil and Other.

When this requirement is implemented this measure will help customers to make informed decisions regarding the electricity supplied to them, particularly in relation to electricity supplied from green or sustainable sources.

6.4 Regulated Supply Tariffs

Another form of customer protection imposed is placed on ESB PES and BGS as incumbent suppliers in the electricity and gas markets respectively. Tariffs for all customer categories, except power producers purchasing gas, are proposed on an annual basis by both suppliers and are subsequently approved by the CER.

6.4.1 Electricity Supply Tariffs

Regulation of end-user tariffs in the electricity market is the responsibility of the CER under S.I. 445 of 2000 and S.I. 60 of 2005. This responsibility concerns the setting of the revenue of ESB PES.

End-user tariffs are charged to the following customer categories;

1. Domestic Urban (residential customers served by three-phase low voltage network);
2. Domestic Rural (residential customers served by single-phase low voltage network);
3. Residential Business (connections where a customer is both residential and commercial);
4. Small (a) Commercial & (b) Industrial (General Purpose: customers with a maximum import capacity of less than 50kVA);

5. (a) Commercial & (b) Industrial Low Voltage Max Demand (customers with a maximum import capacity of 50kVA or above);

There are also three other categories of customer in the market (see below). The CER no longer publishes tariffs for these customer categories. ESB PES does not supply customers in these categories unless the customer does not receive a reasonable offer of supply from another supplier.

6. (a) Commercial & (b) Industrial Medium Voltage Maximum Demand (customers connected to medium voltage 10kV or 20kV network);
7. High (38kV) Maximum Demand (customers connected to 38kV network);
8. Extra-high (110kV) Maximum Demand (customers connected to 110kV network).

All ESB PES customers pay bundled tariffs based on pass-through generation, transmission, supply, and public service obligation costs approved annually by the CER for each of the regulated businesses. Customers connected to the distribution system also pay distribution charges.

The majority of regulated ESB PES supply tariffs are formulated based on the characteristics of customers connected to a given network voltage level. Therefore, for the most part, tariff categorisation is not based on energy usage. The main exception to this is the division between domestic customers, small businesses and medium sized businesses all of whom are connected to the low voltage network. Small business customers are commercial customers with a connection capacity of less than 50kVA. Medium-sized business customers are those commercial customers with a kVA of 50 or above[21].

Each tariff structure comprises a two-month standing charge and variable kWh charge. Larger customers also pay capacity charges and maximum demand charges. These tariffs are based on legacy tariff structures – changes in costs result in 'top-down' adjustment of supply tariff components.

These ESB PES supply tariffs are calculated annually based on demand and customer forecasts and are published at the beginning of September for application from January 1st of the following year. Any deviation in these demand and customer figures is included in subsequent tariff reviews.

These tariffs are set for all categories of customer. As such, all customers making reasonable requests for supply are entitled to be charged by ESB PES according to these regulated tariffs.

[21] It should be noted that this differentiation between small and medium-sized businesses is purely illustrative and does not supersede the definition of these customers as defined in electricity Directive 2003/54/EC.

6.4.2 Natural Gas Supply Tariffs

Regulation of charges in the natural gas market is the responsibility of the CER for Energy regulation under the Gas (Interim) (Regulation) Act, 2002. This responsibility concerns the setting of BGS revenue and charges.

The Irish gas market consists of the following major categories;

- Large end user market (over 264 GWh pa);
- Gas Fired Generation Market;
- The Regulated tariff formula market (5.3GWh – 264GWh);
- The market for customers paying industrial and commercial tariffs (up to 5.3 GWh).
- Domestic customers.

BGS gas supply tariffs to final customers are segregated into two categories:

- Customers with a consumption level of less than 5.3 GWh per annum:
  - the *revenue control formula* is applied to this sector;
- Customers with a consumption level of between 5.3 GWh and 264 GWh per annum at a single supply point:
  - the *regulated tariff formula* is applied to this sector;
- However gas customers within this consumption level that utilise the gas to produce electricity, including combined heat and power, have the choice between a RTF tariff and an 'unregulated' tariff.

6.4.2.1 Small Customers (consumption level < 5.3 GWh/annum)

BGS' allowed revenue – relating to the Domestic and Industrial & Commercial markets – is calculated by the application of a revenue control formula. The overall level of gas procurement and operating costs and a suitable margin on costs is approved through this revenue control formula by the CER.

The table below outlines the separate components of the revenue control formula:

BGE Energy Supply Revenue Control Formula	
Component	*Basis*
Transmission & Distribution costs (pass-through)	These figures are calculated by the multiplication of estimated capacity and commodity figures of BGS's customers by the transmission and distribution tariffs. The CER examines these forecasted figures and reconciled at the end of the year once an outturn value is known.
Gas procurement costs (pass-through)	BGS must procure gas economically, in line with condition 17 of the BGS Gas Supply Licence.
BGS's own supply costs	Indexed to growth/decline in numbers of BGS's customers and in GWh sales.

The CER also carried out a revenue review project in relation to Bord Gáis Energy Supply (BGS) during 2007. A decision on the allowed revenues for BGS for the control period of 2007/08 – 2011/12 as well as targets and incentives for the business to achieve will be published by the CER in September 2007.

In addition, new tariff structures for domestic and small and medium sized businesses will be implemented by BGS on 1 October 2007. This follows a review of tariff structures carried out by the CER during 2007. These new tariff structures have been designed to ensure greater levels of cost reflectivity as well as improving levels of choice for natural gas customers. They also provide a more transparent tariff against which other suppliers may wish to compete. In addition the new tariffs have been designed to encourage improved efficiency. Levels of fixed or standing charges in the tariff have been reduced significantly which means that the final level of a customer's bill is more closely linked to unit charges than in the past.

6.4.2.2 Large Customers (consumption level between 5.3 GWh/annum & 264 GWh/annum)

The *Regulated Tariff Formula* (RTF) applies to this customer category. However gas customers within this consumption level that utilise the gas to produce electricity, including combined heat and power have the choice between a RTF tariff and an 'unregulated' tariff.

BGE RTF Products	
Product	*Description*
Fixed RTF	This product is offered for terms of 3, 6, 9 and 12 months. The gas commodities are fixed for each month when the RTF offer is accepted. It is stated in CER/04/306 of the 30th September 2004 that 'BGS must use the International Petroleum Exchange (IPE) futures settlement prices for each month of the RTF contract period as quoted on the IPE on the first business day immediately proceeding the date on which the customer is quoted'.
Variable RTF	This product does not last for a limited time period. This product continues until either a switch in supplier occurs or a fixed term RTF is accepted. The average of the relevant International Petroleum Exchange (IPE) prices for a month is utilised to determine the price a customer is charged in the subsequent month. It is stated in CER/04/306 of the 30th September 2004 that "the IPE index term is calculated as the average of the IPE settlement prices for month M for each business day up to and including the second last business day of month M-1".
Default RTF	This is put in force when a customer isn't supplied by an independent supplier and has not indicated in writing its acceptance of either of the other two RTF products. This product is the same as the variable RTF product except that the

	price the customer is charged in the first month is set as the market price. It is stated in CER/04/306 of the 30th September 2004 that 'the IPE index for the first month of the period will be set at the IPE price on the last business day of the previous month'.

BGS is required to submit the standard RTF supply contract for approval by the CER. The RTF is based on the following formula:

*P = [(IPE Index + Tgb + Psw) *EUR/GBP] + Tti + Tdi + Si + Fixed Charges*

P	the price of gas for the customer
IPE Index	the monthly International Petroleum Exchange price index at the national balancing point in Great Britain (GB)
Tgb	GB transportation charges
Psw	Swing Premium
EUR/GBP	the Euro Sterling exchange rate
Tti	Transportation charges for the Irish Interconnectors and on-shore Ireland Transmission System
Tdi	Transportation charges for the Irish Distribution System
Si	Shrinkage charges on the Irish System
Fixed Charges	Fixed charge to cover BGS operating costs and margin

Appendix A: Functions of the Commission for Energy Regulation

Section 8 of the Electricity Regulation Act, 1999 established the Commission for Electricity Regulation (CER). Section 9 detailed the functions of the new Commission with respect to its role in the Irish electricity sector. This Act came into practical effect in September 1999.

Section 5 of the Gas (Interim) (Regulation) Act, 2002 extended this legal role and the functions of the CER to the gas sector, thereby renaming the CER as the Commission for Energy Regulation. This Act also extended the functions of the CER in the electricity industry.

Subsequent pieces of secondary legislation, or statutory instruments, have been enacted since 1999, which have further added to these functions. Following the introduction in 2003 of electricity Directive 2003/54/EC and gas Directive 2003/55/EC, three pieces of legislation amended these functions. One of these concerned the CER's electricity functions and two concerned the gas sector – Statutory Instrument Number 60 of 2005 (European Communities (Internal Market in Electricity) Regulations 2005); Statutory Instrument Number 452 of 2004 (European Communities (Internal Market in Natural Gas) Regulations 2004) (Number 2), and Statutory Instrument Number 320 of 2005 (European Communities (Internal Market in Natural Gas) Regulations 2005).

In addition, the enactment of the Energy (Miscellaneous Provisions) Act 2006 has expanded the functions of the Commission to include the development and regulation of an all island energy market and the regulation of natural gas and electricity with respect to safety.

As such, the consolidated legal 'Functions of Commission', as contained in section 9 of the Electricity Regulation Act, are as follows:

"9.—(1) The Commission shall have the following functions, namely—

(a) to publish, pursuant to a policy direction or directions of the Minister, which shall be made publicly available when given to the Commission, proposals for a system of contracts and other arrangements, including appropriate rights and obligations, for trading in electricity,

(b) It shall be, and be deemed always to have been, a function of the Commission to participate in the development of an all-island energy market, including the preparation of proposals and the provision of

advice to the Minister in regard to any part or aspect of the establishment, management and operation of such a market,[22]

(c) It shall be a function of the Commission to regulate the activities of electrical contractors with respect to safety.

(d) The Commission may appoint a person or persons to be a designated body for the purposes of this section and such body may be referred to as an Electrical Safety Supervisory Body,

Details of function 9 (c) above are contained in the Energy Miscellaneous Provisions) Bill 2006, Section 4, 9D (1) – (28),

(e) to engage in a public consultation process on the Procedures to be adopted by the Commission to implement the proposals drawn up under paragraph a),

(f) to regulate the activities of natural gas installers undertakings and natural gas installers, with respect to safety,[23]

(g) to advise the Minister on the impact of electricity Generation in relation to sustainability, and international agreements on the environment to which the State is or becomes a party,

(h) following the public consultation process referred to in Paragraph (b) and taking account of matters raised in the public consultation process, to make regulations, subject to the consent of the Minister, establishing a system of trading in electricity, including the supervision and review of such a system by the Commission, and

(ha) to facilitate arrangements, to apply until 19 February 2005, approved of by the Commission, which have the effect of securing that the public electricity supplier is able to satisfy demand for electricity from final customers, who are not supplied in accordance with a licence issued under paragraphs (b), (c) or (d) of *section 14(1)*, in the first instance from generation stations currently owned by the Board,

(hb) to examine charges, and the costs underlying such charges, or any proposals to alter such charges, for electricity supplied by the public electricity supplier in accordance with paragraph (da) to final customers who are not being supplied in accordance with a licence issued under paragraphs (b), (c) or (d) of *section 14(1)*,

(hc) following an examination pursuant to paragraph (db) and where the Commission considers it necessary, to issue directions or approvals to the public electricity supplier in relation to either or both the nature and the amount of any charge or proposed charge referred to in paragraph (db),

(hd) to facilitate arrangements on an economic basis after 19 February 2005, approved by the Commission, which have the effect of securing that the public electricity supplier is able to satisfy demand for electricity from final customers, who are not

[22] Details of this function are outlined in the Energy (Miscellaneous Provisions) Act 2006, Part 2, Section 3, 9B (2) – (6).

[23] Details of this function are outlined in the Energy (Miscellaneous Provisions) Act 2006, Part 3, Sections 12 & 13.

supplied in accordance with a licence issued under paragraphs (b), (c) or (d) of *section 14(1)*,

(he) to examine charges, and the costs underlying such charges, or any proposal to alter such charges, for electricity supplied by the public electricity supplier to final customers who are not supplied in accordance with a licence issued under paragraphs (b), (c) or (d) of *section 14(1)*,

(hf) following an examination pursuant to paragraph (de) and where the Commission considers it necessary, to issue directions or approvals to the public electricity supplier in relation to either or both the nature and the amount of any charge or proposed charge referred to in paragraph (de),

(hg) to ensure such arrangements are in place, as the Commission deems appropriate, which have the effect of securing the extent to which each generating station, group of generating stations or all generating stations, owned by the Board, supplies electricity to or is supplied with electricity by, either or both, the public electricity supplier, suppliers and generators licensed under *section 14(1)*,

(hh) to examine charges, and the costs underlying such charges, or any proposal to alter such charges, as the Commission deems appropriate, for electricity supplied from each generating station, group of generating stations or all generating stations, owned by the Board, to the public electricity supplier, suppliers and generators licensed under *section 14(1)*,

(hi) following an examination pursuant to paragraph (hh) and where the Commission considers it necessary, to issue directions or approvals to the Board in relation to either or both the nature and the amount of any charge or proposed charge referred to in paragraph (hh),

(i) to advise the Minister on the development of the electricity and gas industries, as appropriate, and on the exercise of the functions of the Minister under this Act.",

(j) to contribute towards the development of the internal market by co-operating with other national regulatory authorities and with the European Commission,

(k) to grant, monitor the performance of, modify, revoke and enforce licences and authorisations pursuant to this Act,

(l) to publish information and advice and settle disputes in accordance with the provisions of this Act,

(m) to carry out the role assigned to it by *section 39,* and

(n) to ensure that there is, in accordance with Article 3.5 of the Directive, a high standard of protection for final customers in their dealings with licensed suppliers,

(1A) For the purposes of this Act, the functions of the Commission under the European Communities (Internal Market in Electricity) Regulations 2000 and 2005 shall be deemed to be functions of the Commission under this Act.

(1B) The Commission shall be responsible for ensuring non-discrimination, effective competition and the efficient functioning of the natural gas market, by monitoring in particular –

(a) the rules on the management and allocation of interconnection capacity, in conjunction with the regulatory authority or authorities of those Member States with which the interconnection exists;
(b) any mechanisms to deal with congested capacity within the natural gas system;
(c) the time taken by transmission and distribution system operators to make connections and repairs;
(d) the publication of appropriate information by transmission and distribution system operators concerning interconnectors, grid usage and capacity allocation to interested parties, taking into account the need to treat non-aggregated information as commercially confidential;
(e) the effective unbundling of accounts to ensure that there are no cross subsidies between transmission, distribution, storage, LNG and supply activities;
(f) the access conditions to storage, linepack and to other ancillary services;
(g) the extent to which transmission ad distribution system operators fulfil their functions;
(h) the level of transparency and competition.

(1BA)

(a) Any dispute between a transmission, distribution or LNG system operator and a person as respects–
    (i) the matters specified in section 9(1B),
    (ii) the terms and conditions for the provision of balancing services or the methodologies used to calculate such terms and conditions, or
    (iii) the terms and conditions, including tariffs or the methodologies used to calculate or establish such terms and conditions for connection and access to the national networks

shall, upon the application of such person, be determined by the Commission, and the Commission shall issue a direction regarding its determination and the system operator shall comply with and be bound by any such determination.

(b) The Commission shall issue the determination referred to in paragraph (a) within 2 months from the date of the receipt of the complaint. This 2 month period may be extended by 2 months where the Commission seeks additional information in the matter, and such further extension as may be consented to by the applicant.

(c) This section does not apply to a dispute between a final customer and a system operator where the dispute concerns a refusal to offer to enter into a third party access agreement within the meaning of section 10A or 10B of the Gas Act 1976.

(1C) The Commission shall in its annual report under paragraph 25(c) of the Schedule, include details on the outcome of their monitoring activities of the natural gas market referred to in subsection (1B).

(1D) The Commission shall in relation to electricity monitor:

(a) the rules on the management and allocation of interconnection capacity, in conjunction with the regulatory authority or authorities of those Member States with which interconnection exists,
(b) any mechanisms to deal with congested capacity within the national electricity system,
(c) the time taken by the transmission system operator and the distribution system operator to make connections and repairs,
(d) the publication of appropriate information by the transmission system operator and the distribution system operator concerning interconnectors, grid usage and capacity allocation to interested parties, taking into account the need to treat non-aggregated information as commercially confidential,
(e) the effective unbundling of accounts to ensure that there are no cross-subsidies between generation, transmission, distribution and supply activities,
(f) the terms, conditions and tariffs for connecting new producers of electricity to guarantee that these are objective, transparent and non-discriminatory, in particular taking full account of the costs and benefits of the various renewable energy sources technologies, distributed generation and combined heat and power,
(g) the extent to which the transmission system operator and the distribution system operator fulfil their functions in accordance with statutory requirements, and
(h) the level of transparency and competition.

(1E) The Commission shall in its annual report under paragraph 25(c) of the Schedule, include details on the outcome of its monitoring activities referred to in subsection (1D).

(1F) It shall be a function of the Commission to ensure that there are adequate safeguards to protect vulnerable customers (including the elderly and disabled) which shall include measures to help such customers avoid disconnection and the Commission may give, to the holder of a licence issued under *section 14*, such directions as it considers necessary to carry out its functions under this subsection.

(2) Notwithstanding the generality of *subsection (1)(a)*, a policy direction of the Minister shall include a direction that procedures of the Commission enable the implementation of orders made by the Minister under *sections 39* and *40*.

(3) It shall be the duty of the Minister and the Commission to carry out their functions and exercise the powers conferred on them under this Act in a manner which—

(a) in relation to electricity, does not discriminate unfairly between holders of licences, authorisations and the Board or between applicants for authorisations or licences,
(b) in relation to gas, does not discriminate unfairly between holders of licences, consents and Bord Gáis Eireann or between applicants for consents or licences, and
(c) the Minister or the Commission, as the case may be, considers protects the interests of final customers of electricity or gas or both, as the case may be.

(4) In carrying out the duty imposed by subsection (3), the Minister and the Commission shall have regard to the need:

(a) to promote competition in the generation and supply of electricity and in the supply of natural gas in accordance with this Act;",
(b) to secure that all reasonable demands by final customers of electricity for electricity are satisfied;
(c) to secure that licence holders are capable of financing the undertaking of the activities which they are licensed to undertake;
(d) to promote safety and efficiency on the part of electricity and natural gas undertakings;
(e) to promote the continuity, security and quality of supplies of electricity;
(f) to promote the use of renewable, sustainable or alternative forms of energy;
(g) to secure that there is sufficient capacity in the natural gas system to enable reasonable expectations of demand to be met; and
(h) to secure the continuity, security and quality of supplies of natural gas.

(5) Without prejudice to subsections (3) and (4), it shall be the duty of the Commission:

(a) to take account of the protection of the environment;
(b) to encourage the efficient use and production of electricity;
(c) to take account of the needs of rural customers, the disadvantaged and the elderly;
(d) to encourage research and development into—
(i) methods of generating electricity using renewable, sustainable and alternative forms of energy and combined heat and power, and
(ii) methods of increasing efficiency in the use and production of electricity;
(e) to require that the system operator gives priority to generating stations using renewable, sustainable or alternative energy sources when selecting generating stations, and

(f) to take account of the rights of customers, particularly household customers and small enterprises, to be supplied with electricity of a quality specified by the Commission pursuant to Regulation 26 of the European Communities (Internal Market in Electricity) Regulations 2005 at reasonable, easily and clearly comparable and transparent prices.,

(6) In carrying out its functions pursuant to this Act, the Commission shall:

(a) act in as consistent a manner as practicable, and
(b) unless it considers it impractical to do so, give in writing its decisions together with the reasons for reaching such decisions."