



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**REGULATOR'S 2011 NATIONAL REPORT TO THE EUROPEAN  
COMMISSION**

**COMMISSION FOR ENERGY REGULATION (CER) - IRELAND**

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## 1. Foreword from CER Commissioners



*Chairperson Dermot Nolan*



*Commissioner Garrett Blaney*

The Commission for Energy Regulation (CER) is Ireland's independent energy regulator. Our continuing focus is to regulate the Irish electricity and gas sectors in the interests of consumers. Against the backdrop of another difficult year for the Irish economy, the CER feels that the energy sector, a key part of the economy, showed steady progress in 2010. In particular, policy areas such as retail competition, customer protection, electricity networks and energy safety saw significant advances. These developments, detailed in this "Regulator's 2011 National Report" to the European Commission and introduced here, should be to the benefit of energy customers both in the short-term and in the years ahead.

### **Energy Prices**

Global fuel prices, which are outside of Ireland's control and on which both electricity and gas prices are hugely dependent on, fell back significantly in late 2008 and into 2009 due primarily to the global economic downturn. Given that global fuel prices are key drivers of Ireland's energy costs, 2009 saw noticeable reductions in electricity and gas customer prices regulated by the CER, of circa 10% and 22% respectively. This was followed by another fall of 8% in average regulated gas prices in February 2010.

However, global fuel prices began to rise again in 2010 in line with the recovery in the world economy. Despite this, there was no regulated price rise for gas customers from the tariff year October 2010, due to efficiencies built into the gas tariff regime. Likewise, for electricity, there was no increase in regulated customer tariffs because the higher fuel costs were cancelled out by a fall in allowed regulated network costs. However, there was an increase in the Government's Public Service Obligation (PSO) levy. As a result there was an average 4.9% rise in domestic (residential) electricity bills from October 2010.

### **Energy Markets & European Integration**

The cost of generating electricity typically accounts for over half of a customer's electricity bill. The CER has a key role in ensuring that generation electricity costs are at competitive levels, by regulating the wholesale all-island Single Electricity Market (SEM). The SEM was established in November 2007, combining two separate jurisdictional electricity markets in the Republic and

Northern Ireland. The SEM is governed through the SEM Committee consisting of the CER, the Utility Regulator in Belfast, and an Independent Member.

The SEM continued to work well in 2010 by providing for the cheapest generators to meet customer demand at any one time across the island. Assisted by clear market rules and regulation, the SEM has encouraged modern efficient generators into the market, including two new large gas stations coming online in Co. Cork in 2010. This has helped to keep prices competitive, ensure continued security of electricity supply and provide environmental benefits. It has also helped drive competition through to the retail (supply) level as discussed next, giving consumers more choice and price discounts.

Allowing for increased integration between the SEM and neighbouring European electricity markets will be a major challenge in the coming years as physical interconnection increases and the European Union moves toward a fully functioning, interconnected, and integrated internal energy market. Hence in March 2010 the SEM Committee established a programme of regulatory work with the aim of efficiently coupling SEM with the British electricity market and maximising the efficient use of interconnectors. More broadly the SEM Committee is committed to ensuring that the future direction of the SEM design is co-ordinated with the emerging EU target models for a single European electricity market.

It is hoped that the all-island Common Arrangements for Gas (CAG), currently under development by the CER and Utility Regulator, can build on the success of the SEM, given that the necessary political commitments to introducing CAG-related legislation were provided in mid 2010. The aim of CAG is to deliver benefits to gas consumers across the island and to improve security of supply. The detailed CAG work programme is being progressed to meet an October 2012 deadline for all-island transmission operation.

## **Retail Competition & De-regulation**

One of the biggest developments during the year was the publication in April 2010 of the CER's "Roadmap" decision paper on the criteria for de-regulating ESB's electricity prices. The Roadmap was published in light of the strong electricity retail competition, not just among business customers but also, since early 2009, among domestic customers.

In fact between 2009 and 2010 over 850,000 business and domestic customers switched electricity supplier, equivalent to almost 40% of all customers in Ireland. This is one of the highest supplier switching rates ever seen in Europe, facilitated by the CER regulating the electricity market effectively and approving a free and straightforward supplier switching process. It shows that the market has been delivering for electricity customers, giving them choice and price discounts, which is of particular value in this difficult economic climate.

The CER's Roadmap enabled price de-regulation of the business markets to occur in October 2010 due to the strong competition already present. This marked a significant milestone in electricity market liberalisation. For the domestic market, the Roadmap criteria were that price-deregulation could occur once ESB met a number of criteria, including having a domestic market share of 60% or less and committing to rebrand its supply businesses. These criteria were deemed to have been met by the CER in March 2011 and, as a result, from 4<sup>th</sup> April of this year the domestic electricity market has also been de-regulated. This means that Electric Ireland, the re-branded name for ESB supply activities, can now set its own electricity prices for

all its customers without prior approval from the regulator. This should help drive further choice and competitive prices for customers.

Retail competition in gas is less developed than electricity, though about 14% of all Irish gas customers had switched supplier by end 2010, and this number is growing. As a result, in November 2010 the CER also published a consultation on the de-regulation criteria for gas prices, with a decision on this earmarked for the first half of 2011.

## **Customer Protection**

During the year the CER put further emphasis on customer protection measures to ensure that customers fully benefit from retail competition and de-regulation. In December 2010 the CER published a consultation on customer protection, which was followed up by a decision in 2011. This decided on a range of new customer initiatives including customer education campaigns, a requirement for suppliers to provide detailed consumption information, and a framework for accrediting customer tariff comparison facilities/websites.

Due to the economic situation in the country, the disconnection of energy customers by suppliers for non-payment of bills became an increasing issue during 2010. The CER continued to emphasise that disconnections should be a last resort for suppliers and customers must be given the opportunity to enter a payment plan first. In recognition of the financial pressure on customers, during the year the CER strengthened supplier requirements in this area. For example, suppliers are required to make multiple customer contacts with a customer before a disconnection, to provide more notice of disconnection and to use “plain English” in customer correspondence. In addition the CER reduced the costs faced by electricity customers for disconnection and re-connection, from €88 and €86 respectively to €35 each (all costs excl. VAT). Similarly the cost of gas disconnections and reconnections was reduced from €61.74 to €30.87. The CER also acknowledges suppliers’ voluntary moratorium on disconnections during the very cold weather before Christmas.

The CER will closely monitor the disconnection situation. Its Energy Customers Team also continues to provide energy-related information to customers through the [www.energycustomers.ie](http://www.energycustomers.ie) website, leaflets and face-to-face meetings, while it also offers a free dispute resolution service for issues that customers may have with their energy supplier. The second half of 2010 saw a pronounced increase in customers availing of these services.

## **Electricity Networks & Renewables**

November 2010 saw the CER complete its detailed review of the revenue that the electricity transmission and distribution network utilities, EirGrid and ESB Networks Ltd., can recover over a 5-year period from 2011 to 2015. These allowed network revenues and tariffs make up about 1/3 of the final price of electricity for customers. The CER’s revenue review included a decision on the utilities’ allowed network investment and operational costs to 2015, with the key emphasis on achieving “value for money” for customers.

The review approved investment which will allow for the upgrading and building of hundreds of kms of new electricity lines to 2015. This is in order for Ireland to have a high-quality electricity supply, to attract foreign direct investment and, especially, to meet the Government’s 40% renewables target for 2020, to be achieved mostly via new wind farms. However the CER

review allowed less investment than requested by the utilities, by requiring efficient management of the networks - the total capital investment allowed to 2015 is about €3.8 billion compared to the circa €4.8 billion requested. There will also be significant efficiencies in operating costs, and incentives to improve the quality of electricity supply.

Overall the CER revenue decisions provided for a cut in total network tariffs in October 2010, with gradual annual rises to 2015, largely to pay for the renewables-related network investment programme. The 40% renewables target for 2020, which is facilitated by the CER's "Gate 3" connection regime and the network investment, is enabling Ireland to become a leader in wind power. With a zero marginal cost, wind farms tend to reduce electricity prices when international fuel prices are high, helping to mitigate the impact of rising international fuel prices. During 2010 the CER continued to hold regular Gate 3 Liaison Group meetings with the industry, primarily to track the roll-out of Gate 3 connection offers.

Meanwhile, construction of the 500 MW EirGrid East-West interconnector to the UK, which is being overseen by the CER, is on target and within budget. It is expected to come into commercial operation before the end of 2012 and will help promote more cross-border trade and competition in the SEM, to the benefit of customers.

### **Smart Meters**

The CER's smart metering pilot project progressed well in 2010, with data being gathered from thousands of electricity and gas smart meters installed on a pilot basis. This includes an assessment of different smart meter technologies and the impacts of smart meters on customers' energy consumption patterns. This will help inform the potential for smart meters to be rolled out nationally, with a decision to be made on this later in 2011.

### **Energy Safety**

Energy safety has been a growing focus for the CER. In April 2010 new legislation gave the CER the role of safety regulator for petroleum extraction and exploration; the scope of the legislation includes those upstream activities, as designated by the CER, be they on-shore or off-shore. During the year the CER established a project team in the area and developed a detailed plan for implementing a new Petroleum Safety Framework in the coming years. In order to support the design of the Framework, a report on petroleum safety regimes internationally was published by the CER in December, with a review of the Irish regulatory regime published in March 2011. A high level project plan will be published later in 2011.

In relation to downstream gas and electrical safety functions, during the year the CER monitored the safety performance of the Safety Supervisory Boards for Registered Electrical Contractors and Registered Gas Installers. Following legislation passed in 2010, this safety regime will extend to Liquefied Petroleum Gas (LPG) installers in 2011. In addition, during 2010 the Safe Electric campaign was launched, on behalf of the CER, to encourage customers to always seek a Registered Electrical Contractor to carry out electrical work. In November the CER successfully prosecuted a non-registered party for illegally carrying out gas works. This was the first prosecution of its kind by the CER and shows that we will use the law to enforce customer safety standards.

2010 also saw the CER initiate its inspection regime for key downstream natural gas facilities operated by Gaslink/Bord Gáis Networks, with the commencement of on-site inspections in

early 2011. A separate report is provided to the Minister on the operation and performance of the Natural Gas Safety Regulatory Framework.

## **2011 and Beyond**

Building on the achievements of 2010, the CER will continue to carry out its duties in a cost-effective manner, endeavouring to provide a first-class regulatory service to all customers. Key areas of work in 2011 include the CAG, developing SEM for increased coupling with European electricity markets, implementing enhanced customer protection measures, deciding on a national roll-out programme for smart meters and progressing the energy safety agenda.

All of the CER's work is with a view to providing our central stakeholder, the Irish energy customer, with a safe, secure and competitive supply of energy.



Dermot Nolan  
Chairperson



Garrett Blaney  
Commissioner

## **2. Overview of the CER**

The Commission for Energy Regulation (CER) is the independent body responsible for regulating the natural gas and electricity markets in Ireland. The CER protects electricity and natural gas customers by working for a safe, secure and sustainable supply of electricity and natural gas, in a competitive market which delivers reasonable prices and a good quality service.

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:

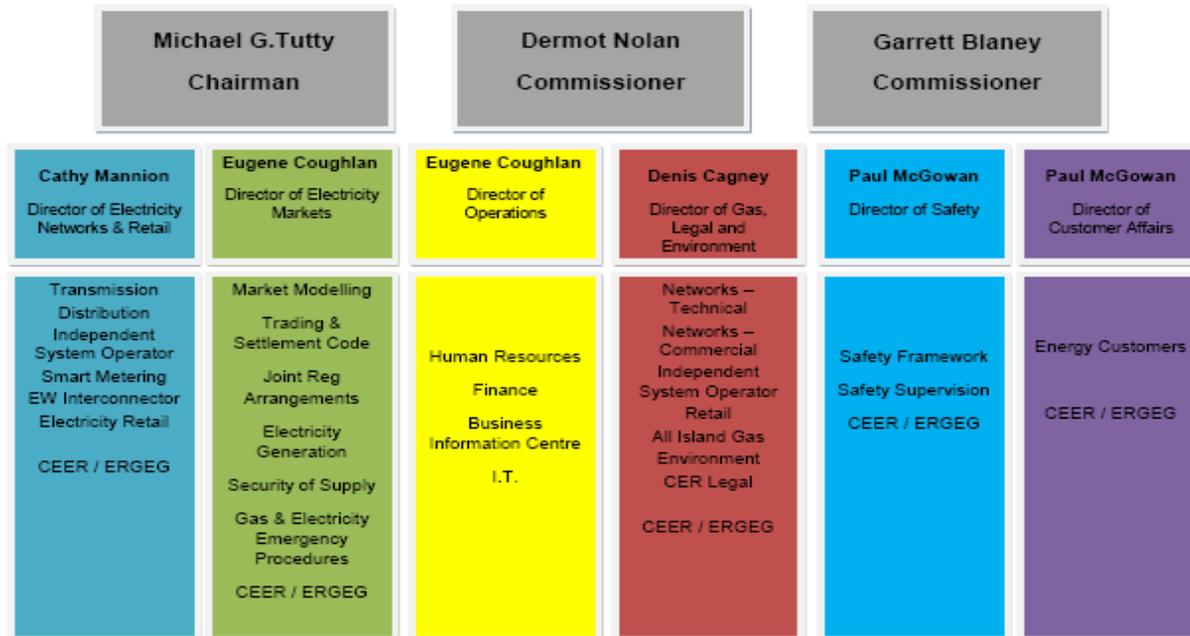
- the lights stay on;
- the gas continues to flow;
- the prices charged are fair and reasonable;
- the environment is protected; and,
- electricity and gas are supplied safely.

This “Regulator’s 2011 National Report” from the CER to the European Commission primarily focuses on work carried out in the Irish energy sector by the CER during 2010. It also covers work carried on into early 2011 for completeness, where appropriate. The format of this report broadly follows that requested in the Council for European Energy Regulator’s (CEER’s) paper detailing the requested structure of this report (C11-URB-35-03 of 2<sup>nd</sup> March 2011), taking account of the specific circumstance of the Irish sector and the structure of our market.

### **2.1 Organisational Structure**

The CER is headed by up to three Commissioners at any one time. During 2010 the Commissioners were Michael G. Tutty, Chairman, and Dermot Nolan and Garrett Blaney, with Garrett being appointed Commissioner in February 2010.

The CER is made up of six Divisions, headed up by four Directors. A diagram of the organisational structure from February to the end of 2010 is shown below. In late May 2011 Michael G. Tutty retired and Dermot Nolan was appointed the role of Chairperson.



An overview of the CER divisions is provided below.

The **Electricity Markets Division** is responsible for overseeing the electricity generation sector in Ireland and the joint regulation of the all-island Single Electricity Market (SEM) along with the Northern Ireland regulator, the Utility Regulator (UR). The division also monitors security of supply in Ireland, licensing and monitoring of new and existing generation companies, including setting the terms of licences and enforcing those terms.

The **Electricity Networks and Retail Division** oversees the regulation of Ireland's electricity transmission and distribution systems as well as the competitive retail electricity market. They are also responsible for overseeing the development of the East-West Interconnector project.

The **Gas, Legal and Environment Division** is responsible for the regulation of natural gas networks and supply. The team is also responsible for overseeing and leading the All Island Gas project – Common Arrangements for Gas (CAG) and is currently working with UR in this area. This division also includes the Environment Team which regulates aspects of the CER's work on the use of renewable and sustainable forms of energy, including promoting research and development as well as the implementation of national policy on renewables. The CER's Project Office also forms part of the Gas division. The role of the project office is to lead and support the successful implementation of major projects in the CER. It is currently involved in smart metering and managing the CER's IT.

The **Safety Division** has responsibility for the implementation of the Safety provisions of the Energy (Miscellaneous) Provisions Act 2006, which relates to the regulation of electrical contractors and natural gas installers with respect to safety and the regulation of natural gas undertakings with respect to safety. The CER was given new functions in 2010 with respect to the safety regulation of petroleum exploration and extraction activities.

The **Customer Affairs Division** has responsibility for developing and reviewing Consumer Protection Codes of Practice and Customer Charters for gas and electricity suppliers. In addition, the Division also provides an independent complaints resolution service for natural gas and electricity customers. Through complaints received, the Division monitors service in the industry and highlights areas which require further improvement at an individual supplier level or which requires industry policy to be developed.

The **Operations Division** includes the CER's operation teams including Human Resources, the Business Information Centre, Facilities, and the Finance Department. Together these areas are involved in driving efficiency gains throughout the organisation.

## 2.2 CER Functions

The functions of the CER have been built up over time, following the enactment of various pieces of legislation. Initially the CER was responsible for regulation and reform of the electricity market only, including the licensing of new entrant generators and suppliers. In 2002, the CER was also given statutory responsibility for regulation of the natural gas market, while various pieces of legislation have increased and augmented our functions in the areas of customer protection, licensing and gas and electricity safety.

Section 8 of the Electricity Regulation Act, 1999 established the Commission for Electricity Regulation. Section 9 detailed the functions of the CER with respect to its role in the Irish electricity sector. This Act came into operation and the CER was established in July 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 Commission for Electricity Regulation 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 has further added to these functions. Following the introduction in 2003 of the Internal Market in Electricity Directive (Directive 2003/54/EC) and the Internal Market in Gas Directive (Directive 2003/55/EC), various pieces of legislation were enacted to transpose these Directives, including, 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); Statutory Instrument Number 320 of 2005 (European Communities (Internal Market in Natural Gas) Regulations 2005), and Statutory Instrument Number 760 of 2005 (European Communities (Internal Market in Natural Gas) (BGÉ) Regulations 2005). Further implementing legislation can be found on [www.irishstatutebook.ie](http://www.irishstatutebook.ie).

The Energy (Miscellaneous Provisions) Act 2006 added to the role and functions of the CER, including providing for additional responsibilities in natural gas and electrical safety.

In 2007, the Electricity Regulation (Amendment) (Single Electricity Market) Act 2007 was enacted and subsequently commenced. The Act provided for the establishment of a single competitive wholesale electricity market on the Island of Ireland and its Islands and allocates certain functions to the CER to establish and facilitate the operation of the Single Electricity Market (SEM) in the State. Statutory Instrument Number 406 of 2007 (Electricity Regulation Act

1999 (Single Electricity Market) Regulations 2007) established the trading arrangements and other related matters considered necessary to establish and facilitate the operation of the SEM. The SEM is governed through the SEM Committee consisting of the CER, the Utility Regulator in Belfast and an Independent Member.

Most recently the Electricity Regulation (Amendment) (EirGrid), Act 2008 was enacted to allow for the construction, by EirGrid, of the East West Interconnector between Ireland and Wales.

In 2010 the CER's statutory safety responsibilities expanded significantly with the enactment of the Petroleum (Exploration & Extraction) Safety Act, 2010. Further legislation has seen the Registered Gas Installer scheme expand to include Liquefied Petroleum Gas (LPG) installers and legislation is planned to expand the CER's LPG safety functions to include piped LPG distribution systems, LPG incident reporting & investigations and LPG promotion and public awareness.

The functions of the CER as of 2010 can be summarised as follows:

- Ensuring sufficient capacity in the electricity and gas systems to satisfy reasonable demands for supply of natural gas and electricity;
- Protecting the interests of final customers including the disadvantaged, the elderly and those residing in rural areas;
- Promoting competition in the supply of electricity and natural gas and in electricity generation;
- Ensuring no unfair discrimination between applicants for, or holders of, licences, consents and authorisations or between them and State-owned operators;
- Promoting the continuity, security and quality of supplies and encouraging safety and efficiency in undertakings and by end users;
- Monitoring security of electricity and gas supplies and taking appropriate action to ensure satisfactory margins between supply and demand;
- Ensuring licence and authorisation holders are capable of financing their activities;
- Setting standards, enforcing compliance, settling disputes, controlling and monitoring performance and reporting regularly on these activities;
- Promoting research and the use of sustainable forms of energy that reduce, or are free of, greenhouse gas emissions as well as adopting measures to protect the natural environment in all the sectors' activities;
- Advising government on the development and regulation of the gas and electricity sectors;
- Regulating the activities of electrical contractors with respect to safety;

- Regulating the activities of natural gas undertakings and of natural gas & LPG installers with respect to safety;
- Promoting the safety of natural gas customers and the public generally as regards the supply storage, transmission, distribution and use of natural gas;
- Establishing and implementing a natural gas safety framework;
- Establishing and implementing a risk-based petroleum safety framework.

## 2.3 Main Enforcement Powers

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

- Licences: Anyone seeking to construct a generating station, generate or supply electricity in Ireland must be licensed by CER and apply to the CER for a licence. The Transmission System Operator (TSO), Distribution System Asset Owner (DAO) and the Distribution System Operator (DSO) for electricity and gas are also licensed by the CER. The electricity Transmission System Owner is also licensed;
- Directions: Under sections 23 and 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 a direction given under sections 23 or 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;
- Licence Revocation: In certain circumstances set out in the licence, the CER may revoke a licence.
- The CER has powers under Statutory Instruments 452 of 2004 and 60 of 2005 with respect to complaint and dispute resolution between customers and their supplier or network operator. A decision issued under these Instruments is binding on the supplier or network operator and may include proportionate compensation to the customer;
- Criminal Prosecutions: The CER, further to the provisions of the Energy (Miscellaneous) Provisions Act, 2006 can prosecute any unregistered party from carrying out certain gas work. The CER may also summarily prosecute unlicensed generation of supply of electricity or gas or the unlicensed carrying out of the DSO, DAO or TSO functions in relation to electricity or gas, under Statutory Instrument No. 445 of 2000 (Internal Market In Electricity) Regulations 2000 and section 2 of the Gas (Interim) (Regulation) Act 2002, respectively.

## 2.4 Interagency Agreements

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

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's 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.

The Sustainable Energy Authority of 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.

The Health and Safety Authority (HSA) has overall responsibility for the administration and enforcement of health and safety at work in Ireland. It is a State-sponsored body, established under the Safety, Health and Welfare at Work Act and it reports to the Minister for Enterprise, Trade and Employment. The HSA monitors compliance with legislation at the workplace and can take enforcement action (up to and including prosecutions). The CER and the HSA signed a Memorandum of Understanding (MoU) in June 2008. The objective of this MoU between the HSA and the CER is to facilitate cooperation between both regulators in discharging their respective statutory responsibilities for the regulation of natural gas undertakings, gas installers and electrical contractors with respect to safety. This is in order to enhance the actions of both regulators and to avoid duplication of effort by both regulators and the imposition of an unnecessary regulatory burden on the regulated entities.

Furthermore, the CER interacts with the Department of Communications, Energy and Natural Resources, which is the Government 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 Irish Government is the main shareholder in the incumbent gas and electricity companies, Bord Gáis Éireann (BGE) and the Electricity Supply Board (ESB).

Pursuant to the CER new petroleum safety functions under the Petroleum (Exploration and Extraction) Safety Act 2010, the CER is required to consult and cooperate with a number of statutory agencies and Ministers including the Environmental Protection Agency, National Standards Authority of Ireland, Irish Aviation Authority, Minister for the Environment, Heritage and Local Government and the Department of Transport (now Department of Transport, Tourism and Sport).

## **2.5 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, Energy 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 submits an annual report for approval by the Minister for Communications, Energy, and Natural Resources and is also accountable to parliamentary committees related to energy.

The CER's main source of income is through a levy on the relevant market participants. Initially the proposed principles for administration of the levies for the relevant calendar year and subsequent years were communicated to all market participants through a consultation process. On agreement with all industry participants the principles for administration of the levy were implemented. In the discharge of the CER's functions the CER must identify separately in regard to the gas, electricity and petroleum safety sectors all elements of cost and revenue. Separate levies are issued to the relevant electricity and gas industry participants.

### **3. Main Developments in the Gas and Electricity Markets**

This section provides a summary of the key developments in the Irish electricity and natural gas sectors during 2010. It broadly follows the format requested in the CEER's paper detailing the structure of this report, though account is taken for the specific structure of the Irish energy sector and market.

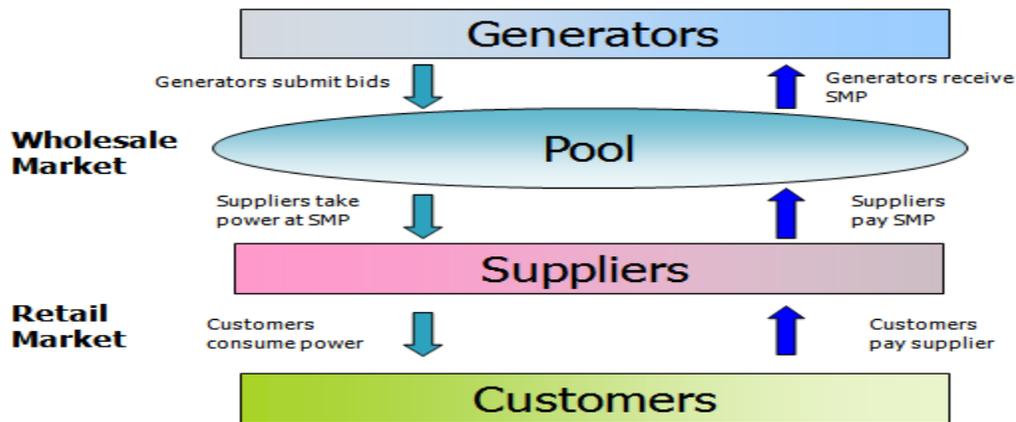
#### **3.1 Wholesale Electricity Market Developments**

##### **3.1.1 SEM - Overview**

The Single Electricity Market (SEM) is the wholesale electricity market for the island of Ireland, regulated jointly by the CER and its counterpart in Belfast, the Northern Ireland Authority for Utility Regulation (Utility Regulator), and together referred to as the Regulatory Authorities. By combining what were two separate jurisdictional electricity markets, the SEM became one of the first of its kind in Europe when it went live on 1<sup>st</sup> November 2007. The SEM is designed to provide for the least-cost source of electricity generation to meet customer demand at any one time across the island, while also maximising long-term sustainability and reliability.

The decision-making body which governs the market is the SEM Committee, consisting of the CER in Dublin, the Utility Regulator in Belfast as well as an Independent Member (who also has a deputy), with each entity having one vote.

The SEM includes a centralised all-island gross mandatory pool (or spot) market. In this pool electricity is bought and sold through a market clearing mechanism, whereby generators bid in their marginal cost and receive the System Marginal Price (SMP) for each trading period for their scheduled dispatch quantities, with the cheapest possible generators run to meet demand across the island. Generators also receive separate payments for the provision of available generation capacity through a capacity payment mechanism, and constraint payments for differences between the market schedule and the system dispatch. Suppliers (to electricity customers) that purchase energy from the pool, pay the SMP for each trading period along with capacity costs and system charges. The SEM pool is illustrated below, while the SEM rules are set out in detail in the Trading and Settlement Code.



Overall, the SEM facilitates the running of the cheapest possible generators, determined by the stack of generation bids, to meet customer demand across the island.

The Regulatory Authorities monitor and oversee the all-island SEM and the suite of regulatory rules governing it. From the setting of directed contracts to the monitoring of generators' compliance with the bidding principles to oversight of the market rules, the Regulatory Authorities have been actively supervising the SEM and representing the interests of all-island consumers.

Assisted by clear market rules and transparency, the SEM has encouraged new efficient generators into the market (in both Ireland and Northern Ireland), helping to put downward pressure on customer prices and providing security of supply and environmental benefits. The Regulatory Authorities are of the view that the SEM in the main is continuing to work well, in accordance with its objectives, and is delivering fair and cost-reflective prices. The mandatory centralised pool model in SEM, in which all key generators and suppliers must participate, differs from many other European markets in which most trade takes place bilaterally between generators and suppliers. In these bilateral markets only a residual amount of electricity is traded in an exchange, primarily for balancing purposes. In contrast all key players must trade in SEM, so there is much more transparency associated with SEM prices and market outcomes.

However, in 2010 the Regulatory Authorities launched a series of development initiatives to meet the challenges facing the market such as increasing levels of intermittent generation and the need to facilitate new interconnection with neighbouring markets. These are referred to in the following sections.

### 3.1.2 SEM Trading and Market Development

The Trading and Settlement Code team, based in CER, manages the SEM rules on behalf of the SEM Committee, with the central focus of this role being on the SEM Trading and Settlement Code (the Code). The Code is a multilateral contract which sets out the rules and procedures concerning the sale and purchase of wholesale electricity in Ireland and Northern Ireland. The Code was designated by the Regulatory Authorities in July 2007 and can be modified from time to time thereafter, in accordance with procedures set out in the Code.

The role of the Code Modifications Committee, which comprises representatives from industry participants and the Regulatory Authorities, is, among other things, to consider and report on proposed modifications to the Code.

Over the course of 2010, 43 Modification Proposals were raised and considered by the Modifications Committee. Many of these were recommended for approval by the Committee and then approved for implementation by the SEM Committee. One significant Code Modification which was recommended for approval by the Modifications Committee in 2010 and subsequently approved by the SEM Committee was Global Settlement (Mod\_34\_09). This Modification, which was implemented in the market systems in Q2 2011, seeks to achieve equal treatment in relation to all Supplier Units in relation to the Error Supplier Units.

During 2010 the Regulatory Authorities consulted on several policy-related Code parameters including the market price cap and market price floor and the Uplift parameter values to apply in 2011; these remained unchanged from the 2010 values, with the Market Price Cap set at €1,000/MWhr and the Market Price Floor set at -€100/MWhr for 2011. In addition, in 2010 the Regulatory Authorities consulted upon and approved the following operational parameters to apply in 2011:

- Credit Cover parameters;
- MSP Software parameters;
- Annual Capacity Exchange Rate;
- Uninstructed Imbalances parameters; and,
- Flattening Power Factor.

### **3.1.3 SEM - European Integration and Interconnector Trading**

#### ***Efficient Use of Interconnectors and Gradual Market Integration***

In addition to continuing its work of overseeing changes to the Code and operation of the market, the Trading and Settlement Code and Market Development Team based in CER is responsible for the area of Regional Market Integration and Interconnector Trading. The SEM Committee, as part of their work plan for 2010, tasked the Regulatory Authorities to progress market integration with neighbouring markets in light of increased interconnection (in the form of the East West interconnector due to come on stream in mid 2012) and the emerging EU blueprint for a single European electricity market.

Following extensive consultation in 2009 on the integration of the SEM with its neighbouring markets and the costs and benefits of increased interconnection, the SEM Committee issued a Decision Paper in March 2010 on the approach for integrating the SEM into the wider regional and European electricity markets. The SEM Committee's decision established a programme of regulatory work with the aim of maximising the efficient use of existing and future interconnectors between the SEM and its neighbouring markets. This was in the context of the wider integration of European electricity markets and within the parameters of the current SEM design.

During 2010, the CER, in conjunction with neighbouring regulators, drove progress on a number of cross-border policy areas including:

- The development of a within-day trading opportunities for the SEM in order to comply with EU rules and increase efficient use of SEM interconnectors as intermittent generation increases. This is achieved by allowing interconnectors to respond to changing system conditions closer to real-time;
- Overseeing the coordination and development of auction rules and common trading platform system for the East West and Moyle interconnectors; and,
- The exploration of a means of day-ahead market coupling between the SEM and the wholesale electricity market in Great Britain. Market coupling involves the setting of a common price and interconnector volume in several different markets based on the price differentials between those markets.

### ***European Single Market Target Models***

The above work areas are feeding into the SEM strategy on how it will integrate into the emerging European single electricity market.

The SEM Committee is committed to ensuring that the future direction of the SEM design is coordinated with the emerging EU target models as set out in the Framework Guidelines on Capacity Allocation and Congestion Management and associated network codes. Throughout 2010, the CER, through its representation on European Regulators' body (EREG) extensively inputted into the developing EU target models with the aim of ensuring that these take into account the specific characteristics of the electricity system and market in Ireland and Northern Ireland.

The current target for the single European electricity market is 2014 and the CER will continue to influence and input into the development of the detailed design of the associated cross-border guidelines and codes, in co-operation with regulators at regional and European level. In the coming years, as the SEM adapts to the EU models, it will be necessary to ensure in parallel that the market design remains robust to allow national and EU targets for renewable generation to be reached by 2020 and that market design changes are to the benefit of consumers through competitive prices and increased supply security.

### **3.1.4 SEM Capacity Payments Review**

#### ***Annual Review***

The Capacity Payments Mechanism (CPM) is managed within the electricity section of the Utility Regulator, with shadow management responsibilities falling to the CER.

The CPM is a fixed revenue system whereby generators are paid regulated quantities (Capacity Payments) of money for providing available generation capacity to the market. The money is sourced by concurrent Capacity Charges levied on all Suppliers that purchase energy from the pool. The core of the CPM takes the form of a fixed annual sum of money, called the Annual Capacity Payments Sum which is calculated by the Regulatory Authorities on an annual basis.

During 2010 the annual exercise took place to establish the capacity pot for 2011. This involved establishing the fixed costs of a best new entrant peaking plant in the market and also EirGrid's

calculation of the capacity requirement for the year ahead. These two numbers fed into the size of the capacity pot required. The pot decreased by 1.12% for 2011 compared to 2010. This can be seen in the table below, which shows the Annual Capacity Payment Pots for the Years 2007 to 2011.

#### **Annual Capacity Payment Pots for the Trading Years 2007 to 2011**

<b>Year</b>	<b>BNE Peaker Cost (€/kW/yr)</b>	<b>Capacity Requirement (MW)</b>	<b>Annual Capacity Pot (€m)</b>	<b>Capacity Pot Change (% Yr on Yr)</b>
2007	64.73	6,960	450.5	-
2008	79.77	7,211	575.2	27.70%
2009	87.12	7,356	640.9	11.40%
2010	80.74	6,826	551.1	-14.00%
2011	78.73	6,922	545.0	-1.12%

#### **Medium Term Review**

In April 2009 the SEM Committee published a consultation paper documenting the scope of work that the Committee proposed to carry out in relation to a medium term review of the CPM. The main purpose of this review is to examine if the current design of the CPM can be further improved to optimally meet its objectives. On 17<sup>th</sup> November 2009 the SEM Committee published an information paper which set out the various work streams that form part of the medium term review.

During 2010 work continued on the medium term review of the CPM. In July the Regulatory Authorities published a discussion paper on the historical aspects of the CPM Medium Term Review which examined the five Work Packages of the review:

- Work Package 1 - Historical Analysis of CPM;
- Work Package 2 - Review of Capacity Requirement;
- Work Package 3 - Deduction of IMR & AS & BNE Peaker Plant Options;
- Work Package 4 - BNE Peaker Plant Fuel Options; and,
- Work Package 5 - Exchange Rate for CPM.

In October 2010 the Regulatory Authorities published a Consultation Paper which examined the Best New Entrant (BNE) Calculation Methodology (Work Package 7). The BNE plant cost is a major determinant in the calculation of the capacity pot. The paper looked at potential measures to introduce more stability to the BNE calculation. One potential option put forward was to keep certain elements of the BNE calculation constant for a number of years.

In 2011, the Regulatory Authorities will progress the following remaining work packages of the medium term review:

- Treatment of Generator types in the CPM;
- Incentives for Generators;

- Timing and distribution of Capacity Payments;
- Option for Caps and Floors; and,
- Impact of the CPM on Customers.

Following on from the final Consultation Paper it is intended that a final decision will be made on the medium term review towards the end of 2011. It is currently planned that any changes to the CPM will take effect from the start of 2013.

### **3.1.5 SEM Dispatch and Relevant Matters**

In 2008 the SEM Committee published a discussion paper setting out key issues arising from increasing levels of wind generation on the island of Ireland and potential solutions to those issues in the context of the SEM. Following receipt of comments, a paper was published in Autumn of that year setting out initial responses to those comments and next steps. One area of further work identified here was the need to further consult on relevant scheduling and dispatch matters. This was progressed with the publication of a consultation paper in July of 2009 regarding principles of dispatch and the design of the market schedule under the Trading and Settlement Code. Following receipt and consideration of responses to the consultation paper, in September 2010 the SEM Committee published a proposed decision paper regarding the matters previously consulted upon.

An industry forum regarding this workstream was held on 12<sup>th</sup> October 2010 in Dundalk, affording industry and interested parties a chance to comment on the proposed decision paper and proposed positions outlined therein. A joint presentation was given by the regulatory authorities on the issues under consideration in the workstream, along with a number of presentations by attending parties regarding their views on the relevant matters. All presentations are published on the [www.allislandproject](http://www.allislandproject.com) website. A final decision paper is planned for publication in 2011.

### **3.1.6 SEMO Regulation**

The SEMO (Single Electricity Market Operator) Regulation unit, based in Belfast, is responsible for approving SEMO's revenues and tariffs, overseeing SEMO's licence compliance, and approving projects run by SEMO. During 2010, following consultation, the Regulatory Authorities determined SEMO's revenues and costs for the three-year period from October 2010 to September 2013.

### **3.1.7 SEM Market Modelling Group - Mitigation of Market Power**

#### ***Background***

The Regulatory Authorities' Market Modelling Group (MMG), based in the CER, provides market forecasts of the SEM. The majority of the MMG's forecasting is over the short term (1 to 2 years), which is used to quantify and price Directed Contracts and to feed into the work of the Regulatory Authorities. Medium and long-term forecasting is also carried out to support the Regulatory Authorities' policy decisions. Please also see section 4.4 for details on the RAs' market power mitigation strategy.

During 2010 the MMG work included:

- Validation of the forecasting model - PLEXOS - and the dataset for SEM covering 2010 and 2011;
- Quantification and Pricing of Directed Contracts (DCs), for eligible suppliers, imposed on the incumbent generators - ESB Power Generation & NIE Energy Power Procurement Business - in the SEM, covering the next tariff year, i.e. from 1<sup>st</sup> October 2010 to 30<sup>th</sup> September 2011. DCs are CfDs which are imposed by the RAs on the incumbent generators (ESB PG and NIE Energy PPB) if they have a certain level of market power in the SEM as part of the Regulatory Authorities' Market Power Mitigation Strategy. As they are "directed", it is the Regulatory Authorities who decide on the methodology, pricing and quantity of these DCs. The intent of DCs is effectively to reduce the amount of generation that those incumbents who are subject to DCs will be receiving spot-based prices from through the SEM. This means they have a reduced incentive to submit commercial bids into the SEM above competitive levels, or otherwise withhold capacity, in order to influence spot prices or future contract price, hence mitigating their market power;
- Setting of auction reserve prices for Public Service Obligation (PSO) related Contracts for Differences (CfDs);
- Monitoring the volume and prices of Non-Directed Contracts, which are typically offered by the incumbent generators (ESB Power Generation & NIE Energy Power Procurement Business) over and above the mandatory Directed Contracts, covering the tariff year 1<sup>st</sup> October 2010 to 30<sup>th</sup> September 2011;
- Estimating the wholesale price for the PSO levy covering the tariff year 1<sup>st</sup> October 2010 to 30<sup>th</sup> September 2011;
- Assisting the retail division of CER in analysing ESB Customer Supply retail tariffs for the period from 1<sup>st</sup> October 2010 to the final de-regulation of tariffs which occurred on 4<sup>th</sup> April 2011 - see key task 1;
- Modelling support to help inform Regulatory Authority policy for the SEM.
- A review of market power and contract liquidity in the SEM. The overall aim of this project has been to identify practical ways in which the RAs can further promote competition in the SEM by reducing/mitigating market power and/or improving contract liquidity over the course of the next 10 years.

The key regulatory objective is to encourage the development of a robust, transparent and cost-effective means for the trading of risk management products in the market to the ultimate benefit of All-Island consumers.

### **Directed Contracts**

The quantities of DCs imposed on the incumbent generators are set to achieve a desired concentration level in the SEM as measured by the Herfindahl-Hirschman Index (HHI)<sup>1</sup>. A HHI threshold of 1,150 was chosen by the RAs and, at this HHI level, only ESB Power Generation (ESB PG) were required to sell DCs for the 2010/11 tariff year which runs from October 2010 to September 2011 (in the second year of the market, both ESB PG and NIE PPB were required to offer DCs). Two DC products were required by the RAs to be offered by ESBPG: mid-merit and peak – in order to reduce market concentration in each segment for each quarter to a HHI of 1,150. Baseload contracts were not required to be offered as the HHI in Baseload hours was already less than 1,150 in each quarter.

The quantities of DCs which ESB PG were required by the RAs to offer to eligible suppliers to meet this HHI threshold are shown in the following table.

#### **ESB PG Directed Contract Quantities (MW)**

ESB PG Directed Contract Quantities (MW)			
Quarter	Baseload	Mid Merit	Peak
Q4 2010	0	188	306
Q1 2011	0	155	202
Q2 2011	0	312	n/a
Q3 2011	0	211	n/a

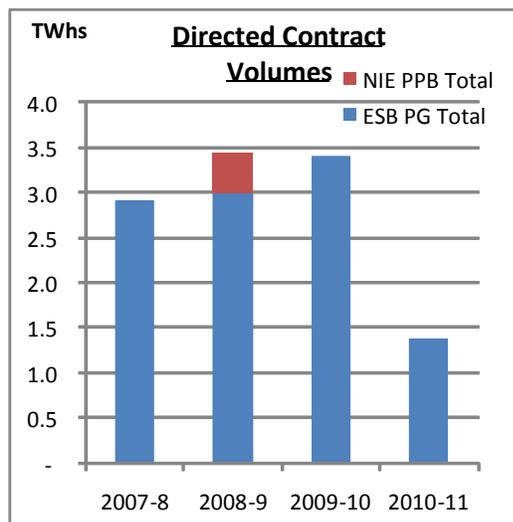
The contracts were sold to eligible suppliers in two separate subscription processes by ESB PG. These consisted of a Primary Subscription Window and a Supplemental Subscription Window in which any unsold contracts were offered to those suppliers who had bought their full share in the Primary Subscription Window.

The graph shows the total volume of DCS that ESB PG and NIE PPB were required to offer from the beginning of the SEM. The chart shows an increase in the total volume of contracts in the second and third years, followed by a significant reduction in the fourth year. This reduction was as a result of reduced forecast market share for ESB PG compared to previous years, especially in Baseload hours.

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<sup>1</sup> The Herfindahl-Hirschman Index (HHI) is defined as the sum of the squares of the market shares of the 50 largest firms (or summed over all the firms if there are fewer than 50) within an industry, where the market shares can be expressed as fractions or whole number percentages.

## DC Volumes



The prices of the DCs were determined each day during the subscription period using forward fuel and carbon prices and regression formulas determined by the RAs through econometric analysis. These formulas were designed to mimic the results of the validated SEM PLEXOS model. Using this methodology, the average prices for each DC product are shown in Euros and Sterling below in Table xx:

### Average Prices for each DC Product

Product	€/MWh	£/MWh
Baseload	56.12	48.10
Mid Merit	63.36	54.31
Peak	82.39	70.62

No Baseload contracts were offered but the Base load price from the DC Regression Formulas is shown for reference.

As shown the figure below the average price of DCs for the 2010/11 tariff year was slightly lower than the previous year, and indeed also significantly lower than the peak 2007/08 period, in line with the movements in international fuel markets.

### PSO Contracts

In addition to the above contracts, ESBPG also offered generation backed by the Irish Public Service Obligation (PSO). The RAs determine the reserve prices that these products are offered

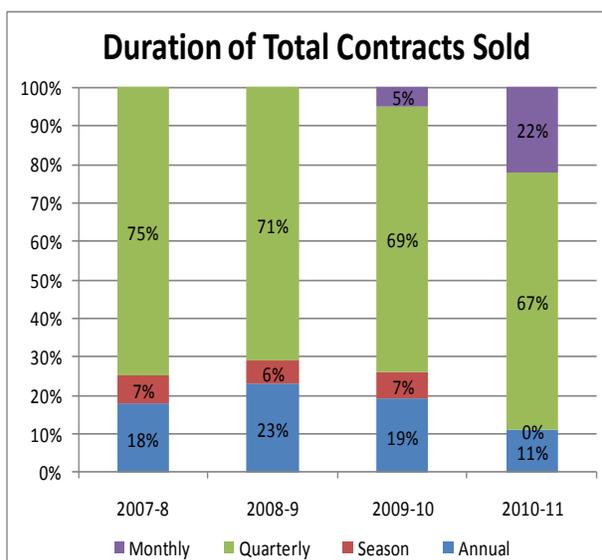
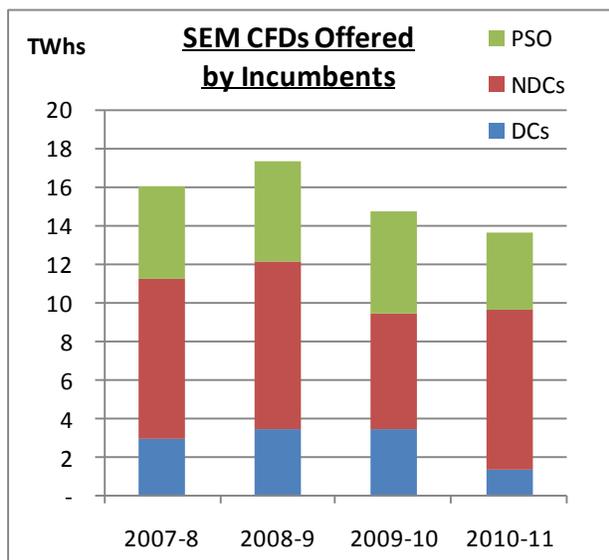
to the market at (using the Validated PLEXOS model and up-to-date forward fuel prices) and they are auctioned off to suppliers. For the 2010/11 tariff year, 1/3 of the PSO-related CfD quantity was offered annually, 1/3 bi-annually and 1/3 quarterly, with a mix of products offered between baseload, mid-merit-1 and mid-merit-2. This provided market participants with a good choice and mix of offerings/products.

**Contracts including DCs, PSO-related CfDs and NDCs**

While the Regulatory Authorities’ legal remit on behalf of the SEM Committee largely extends to DCs, licensed generators can also offer Non-Directed Contracts (NDCs) to the market. The RAs do not set the price or quantity of NDCs as they are agreed on a bilateral basis between market participants. They do however take an active role in the monitoring and development of the NDC market by assessing the reasonableness of prices during the ESB PG and NIE PPB auction processes. The RAs have also worked with participants on the development of a multi-lateral trading facility which went live in April 2009. Tests are planned in 2011 for the development of an Over the Counter (OTC) market in SEM power that will be an addition to the existing auction platform results<sup>2</sup>.

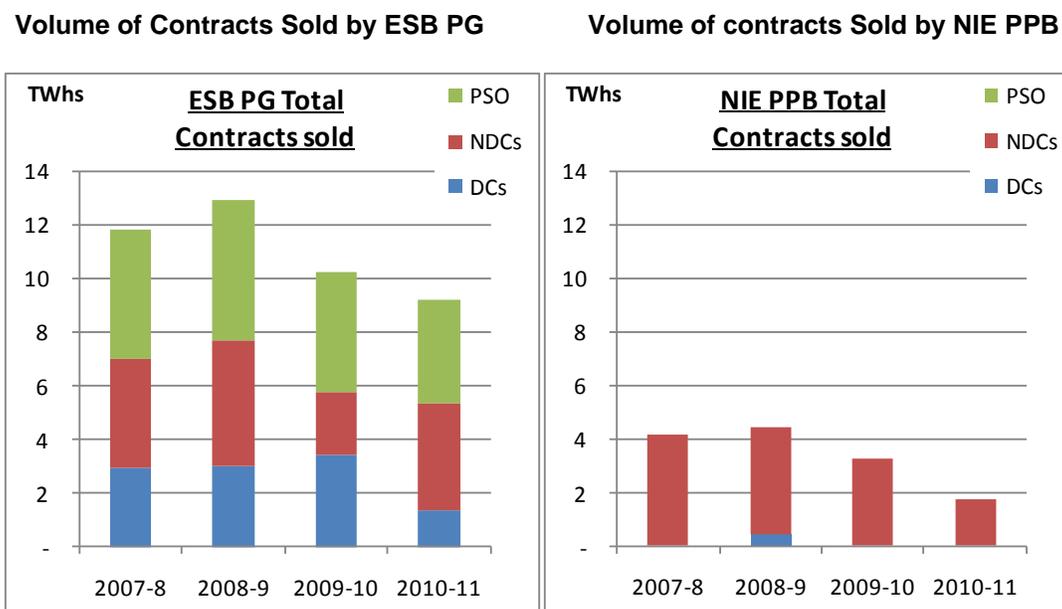
The charts below show the latest total volume of CfDs offered/sold for the 2010/11 tariff year in SEM, divided between Directed Contracts, Non-Directed Contracts and PSO-related CfDs, compared to previous tariff years. The reduction in Directed Contracts is related to a reduction in ESB PG’s modelled generation output as referred to earlier. The chart below on the right shows the duration of the contracts sold for the 2010/11 tariff year (again using latest figures), compared to previous tariff years. There was a large increase in the proportion of monthly contracts offered this year, providing suppliers with more opportunity to be flexible in the quantity of contracts purchased.

**Contracts Offered/Sold in SEM**



<sup>2</sup> [Results from 2009 NDC and PSO auctions](#)

The below figures show the latest known total volume of contracts sold by the two incumbent generators, ESB PG and NIEE PPB, for the past 3 years.



### ***Market Power and Liquidity Project***

In Q2 2010 the RAs commenced a review of market power and contract liquidity in the SEM. The overall aim of this project has been to identify practical ways in which the RAs can further promote competition in the SEM by reducing/mitigating market power and/or improving contract liquidity over the course of the next 10 years. This project included a review of the performance of the SEM market power mitigation measures in the context of experience to date and, looking forward, likely developments over the next 10 years which could alter market power. These developments include increased interconnection and new market participants (including, for example, wind generation).

The project also examined measures which might be necessary to mitigate any potential adverse effects on market power and/or liquidity resulting from the various components of ESB's proposed re-integration.

In July 2010 the RAs appointed consultants, CEPA, to assist the RAs by undertaking an independent review of market power and liquidity in SEM. In August the RAs then published a "State of the Nation" paper whose purpose was to:

- Inform market participants of the scope of the review project;
- Provide a factual overview of the design and operation of the SEM, in particular:
  - (A) The market power mitigation strategy adopted to date by the RAs; and,
  - (B) The operation of the market since the inception of the SEM, particularly levels of market power in the spot and forward contract markets, as well as forward contract liquidity; and,

- Seek any initial ideas from market participants on the policy issues being examined as part of this review project.

In December, having taken on board the comments received to the RAs' "State of the Nation" paper as well as input from the RAs on factual matters and modelling of market outcomes to 2020, CEPA completed its independent review of market power and liquidity in the SEM. CEPA's report, along with an RA cover paper, was published for consultation on 16<sup>th</sup> December 2010. The report also included contract liquidity proposals from ESB.

On 18<sup>th</sup> January 2011 the RAs held a public workshop in the CER office to explain the CEPA paper and discuss industry views. The deadline for comment to the consultation closed on the 22<sup>nd</sup> March 2011. A decision is planned for before the end of 2011.

### **3.1.8 SEM Market Monitoring Unit - Mitigation of Market Power**

The Market Monitoring Unit (MMU), located in the Utility Regulator offices, reviews generator participants' behaviour in the market including monitoring the compliance of market participants with the Bidding Code of Practice - part of the RA's market power mitigation strategy in the SEM and investigations into exercise of market power, along with DCs (see previous section). The MMU is also the point of contact for participants who wish to register complaints relating to market behaviour. Key issues for the MMU in 2010 were:

#### ***Regular Monitoring and Reporting***

The MMU conducts regular internal reports on the active monitoring of the SEM for the SEM Committee. As the SEM structure develops and competition increases, the SEM Committee and the MMU will monitor the market bidding principles and consider appropriate modifications, if needed, given that their primary aim is to detect and report the abuse of market power. It is important to emphasise that any future changes to the bidding principles will be measured against the impact on the robustness of other parts of the market design, and be considered in the light of the SEM Objectives.

#### ***Enforcement***

During 2010 the MMU have actively engaged in a number of discussions with several market participants regarding interpretation of the Bidding Code of Practice. Several informal investigations have been conducted and concluded and a number of Consultation Papers were developed on the foot of policy issues that arose.

#### ***Governance***

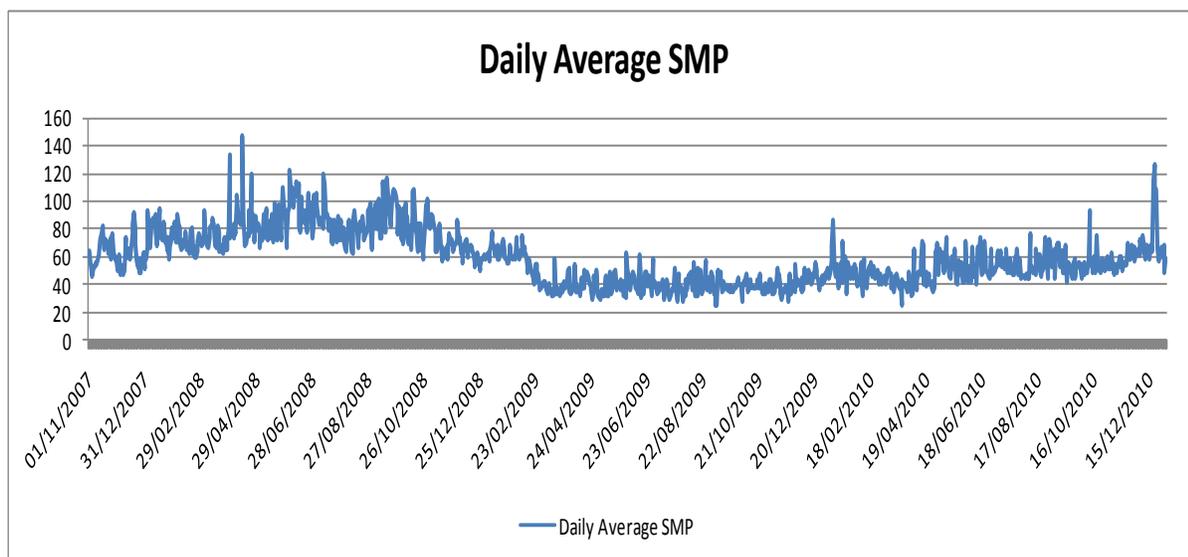
In Q4 2009 the MMU commenced a review of its Governance arrangements. After about two years since SEM Go-Live (November 2007), the aim of the review was to assess how well the Unit is performing its functions and to identify areas of monitoring that could be improved. Following this review the Regulatory Authorities published a Consultation Paper in December 2010 on the proposed processes by which the MMU will conduct formal investigations and informal inquires. It is expected that a decision on this will be made during 2011.

### **3.1.9 Price Developments in the SEM**

2010 saw the SEM System Marginal Price (SMP) - fully transparent as referred to earlier - move from the low prices of 2009 back to levels closer to those last seen since the beginning of the all-island SEM in November 2007. This is in line with expectations given rising fossil fuel prices. This is because most generation in the SEM comes from power stations that run on fossil fuels, especially gas - therefore it carries through any changes from those fuel markets into the wholesale SMP electricity price.

The figure below shows the average daily SMP from 1<sup>st</sup> November 2007 to 31<sup>st</sup> December 2010.

### SMP Price Trends in SEM



### 3.1.10 SEM Locational Signals

In January 2009, the Regulatory Authorities working in cooperation with the Transmission System Operators (TSOs) on the island - EirGrid for Ireland and SONI for Northern Ireland - initiated a review of locational signals on the all-island transmission network. These signals related to generator transmission use of system charges (G-TUoS) and transmission loss adjustment factors (TLAFs) as follows:

- **G-TUoS:** These are use of system charges paid for by generators to cover their usage of the transmission network. Presently in Ireland, G-TUoS levels paid by generators vary by location, based on load flow modelling to determine each generators use of the system. In Northern Ireland a different methodology is used with a common non-locationally varying charge per MW being applied to generators. This workstream aimed to provide for the harmonisation of G-TUoS charging on the island.
- **TLAFs:** Loss of electricity occurs as electricity is transported across networks from the point of generation to the point of demand. Transmission loss factors are applied to generators primarily to assist in delivering efficient dispatch of generation but also as a mechanism of accounting for total system losses. Harmonised all-island transmission losses arrangements

were already introduced as part of SEM implementation. However the Regulatory Authorities decided to review the current harmonised methodology due to the volatility from year-to-year in TLAF figures, an issue likely to increase with greater levels of wind on the system, as well as the fact that the TLAF figures did not always promote efficient dispatch as they were calculated in advance of each year.

In May 2009 the TSOs published a consultation paper which presented a range of potential methodology options in respect of G-TUoS and TLAFs. In November 2009 the TSOs published a further consultation paper in which they set out their preferred options for both G-TUoS and TLAFs. In September 2010 the SEM Committee published a decision paper on all-island TLAF arrangements for the tariff year 2010/2011. The SEM Committee decided that a compressed TLAF, which would reduce volatility associated with TLAFs, would be implemented for all generators from 1<sup>st</sup> October 2010.

This paper also decided that “Splitting”, which is the separation of TLAFs in the market schedule from the dispatch schedule, would be implemented from 1<sup>st</sup> October 2011 as the enduring solution for all-island TLAFs, subject to final approval by the SEM Committee based on the output and results of a Regulatory Authority-led Impact Analysis, assisted by the TSOs. The results of this Impact Analysis will be known shortly.

With regard to all-island G-TUoS, the SEMC decided in December 2010 that a part postalised/part locational charge would be introduced for all Generators from 1<sup>st</sup> October 2011. Further work by the RAs and TSOs is needed in 2011 to refine the details of the approach outlined in the G-TUoS decision paper and produce indicative tariffs.

### **3.1.11 SEM Ancillary Services & Other System Charges**

Ancillary services are services procured by the TSOs on a regulated basis from generators or others to ensure the secure operation of the transmission system. Ancillary services primarily refer to reserve, black start and reactive power. A joint Regulatory Authority/TSO project was carried out throughout 2008 and 2009 resulting in harmonisation of the arrangements for the procurement of these services across the island from 1<sup>st</sup> February 2010. The new all-island arrangements also included harmonisation of arrangements relating to generator trips and short-notice declarations and they also introduced Grid Code Performance Incentives (GPIs), which incentivised generators to comply with key Grid Code areas.

Overall, the objectives of the new harmonised all-island arrangements were to:

- Remove any potential distortion caused by differing payment rates and mechanisms;
- Create a common methodology for the provision of ancillary services that will apply on an all-Island basis;
- Promote more competitive provision of ancillary services;
- Encourage more efficient utilisation of these services by the TSOs; and,
- Ensure that the services are procured and utilised on an efficient, non-discriminatory all-island basis.

Following public consultation, the new harmonised all-island arrangements for ancillary services went live on 1<sup>st</sup> February 2010. The rates for the services are reviewed annually following public consultation. This also allows for refinement of the existing design of the services.

The introduction of these harmonised arrangements has been a success with the following results:

- Implementation of all-island arrangements;
- GPs have led to a step improvement in generator performance and reduced system costs; and,
- Improved understanding and relationship between the System Operators and ancillary service providers.

Following on from the Facilitation of Renewables Study by the TSOs, the SEM Committee formally requested in November 2010 that the TSOs provide a considered position on the implications that this Study will have on the secure and efficient operation of the power system in the coming years. This response will be considered by the Regulatory Authorities in 2011.

## **3.2 Common Arrangements for Gas - CAG**

### ***Background***

The Common Arrangements for Gas (CAG) is a cross-border project which is being led by the CER and the Utility Regulator. Its aims are to create fair and transparent arrangements across the island of Ireland, whereby all stakeholders can buy, sell, transport, operate, develop and plan the natural gas market north and south of the border effectively, on an all-island basis.

The CER and UR signed a Memorandum of Understanding (MoU) on 14<sup>th</sup> February 2008 in relation to CAG under the All Island Energy Market Development Framework. Under the MoU, the Regulatory Authorities decided to develop plans to operate the gas transmission systems in Ireland and Northern Ireland on a single, all-island network basis. Work on the CAG project commenced in 2008 and some consultations were completed in 2009.

### ***CAG in 2010***

In June 2010 the necessary political commitments to introducing legislation to give effect to CAG was given to the Regulators. In parallel the system operators got together to consider institutional arrangements for carrying out the key Transmission System Operator (TSO) functions of operating, planning and developing the all-island gas system. These arrangements will need to be underpinned by legislation in both jurisdictions and this work is being progressed by the Regulators and the authorities in Ireland and in Northern Ireland.

A number of key work streams were also progressed in 2010. A working group comprising of the two Regulatory Authorities and the Transmission System Operators worked together in developing the single CAG Code of Operations. Comparisons of the existing Codes on the island were completed and templates for a common Code of Operations were developed. As part of the tariff work-stream, the Regulatory Authorities continued analysis on the harmonisation of transmission tariffing arrangements with particular focus on potential entry asset configurations.

The Regulatory Authorities published the second annual Joint Gas Capacity Statement in July 2010. This report provides the best estimate of the adequacy of the transmission system on the island to meet demand growth in the two jurisdictions. The 2010 Joint Gas Capacity Statement differs from that produced in 2009 by extending the scope of the analysis to ten years. This change was undertaken in order to align the analysis of Ireland and Northern Ireland with that of the European 10-Year Network Development Plan produced by the European Network of Transmission System Operators for Gas. The report therefore includes updated analysis and modelling of the impact of forecast gas supply and demand on the island's transmission systems for the period 2009/10 to 2018/19.

CAG is a priority project for the CER in 2011 and the detailed work programme, published on the website is being progressed to meet an October 2012 deadline for all-island transmission operation.

### ***Related CAG Areas in 2010***

Under the CAG project umbrella both Regulatory Authorities have worked together to address the developments at the Moffat Interconnection Point affecting downstream gas markets of Ireland and Northern Ireland. These include the changes to National Grid's method of setting charges for capacity on the Great Britain side of the Moffat interconnection point, as well as capacity booking reforms and the potential for the substitution of transmission capacity away from Moffat.

In addition, both Regulatory Authorities are working with the TSOs in Ireland, Northern Ireland and Great Britain to progress the implementation of a virtual reverse flow service at Moffat which is expected to be available in October 2011. Following on from this the regulators intend to work together to progress the arrangements at Moffat which will be required under the Third Package.

### ***Regulation EU 994/2010***

In 2010 the Irish and UK government departments established a UK/Ireland/Northern Ireland group including regulators and TSOs to oversee the implementation of regulation EU 994/2010 in all jurisdictions. This group meets twice a year and has established a process for a regional approach to emergency planning and prevention. In addition the CER and OFGEM jointly met the TSOs to progress particular provisions of the regulation requiring TSO co-operation. These groups will continue to meet through 2011 to progress the work defined in the regulation. The CER was appointed as Competent Authority by the Department of Communications, Energy and Natural Resources in December 2010.

## **3.3 Electricity Retail Market Developments**

### ***Background***

One of the key objectives of regulation is to promote and secure effective market competition in the interests of customers. Regulated tariffs are imposed on the incumbents to serve as a proxy

for competition in the market, encourage new entrants and protect consumers. However, as the market develops and becomes more competitive, the presence of regulated prices can ultimately become a constraint to the development of full competition.

Following full market opening in 2005, the electricity market has seen competition develop in all market sectors. In particular, the entry of Bord Gáis and Airtricity into the domestic (i.e. residential) market in early 2009 had the effect of transforming the competitive landscape. This applied not only in the domestic market, but also to business markets where it boosted competition and increased awareness of switching options.

Given the changes in the level of competition in the marketplace, in December 2009 the CER published a consultation paper on a Roadmap for Deregulation. The primary purpose of the document was to consult with all relevant stakeholders on the circumstances under which price controls should be removed from the Public Electricity Supplier, ESB Customer Supply.

### ***Regulated Retail Tariffs***

Prior to the de-regulation of electricity tariffs (see below), on 1<sup>st</sup> September 2010 the CER approved ESB's submission on regulated domestic tariffs from 1<sup>st</sup> October 2010. With the exception of the Public Service Obligation (PSO) levy, regulated domestic tariffs remained unchanged. This was because the higher fuel costs, which would put upward pressure on tariffs, were cancelled out by a fall in allowed regulated network costs.

Hence both the ESB Customer Supply standing charges and general unit charges remained unchanged from the 2009/10 tariff year. However, the PSO levy for domestic customers, which is derived from Government-set subsidies to certain types of generators, was set at €2.73 per domestic customer per month and the impact of this was on average a 4.9% rise in domestic customer bills.

### ***De-regulation Roadmap***

Following the December 2009 Roadmap consultation, in April 2010 the CER published its decision on the Roadmap to Deregulation, setting out the criteria for the de-regulation of ESB Customer Supply's retail electricity prices.

The Roadmap decision paper defined four separate relevant markets; Large Energy Users, Medium-Sized Business including Public Lighting, Small Business and Domestic. The criteria for the price deregulation of these markets were set as follows:

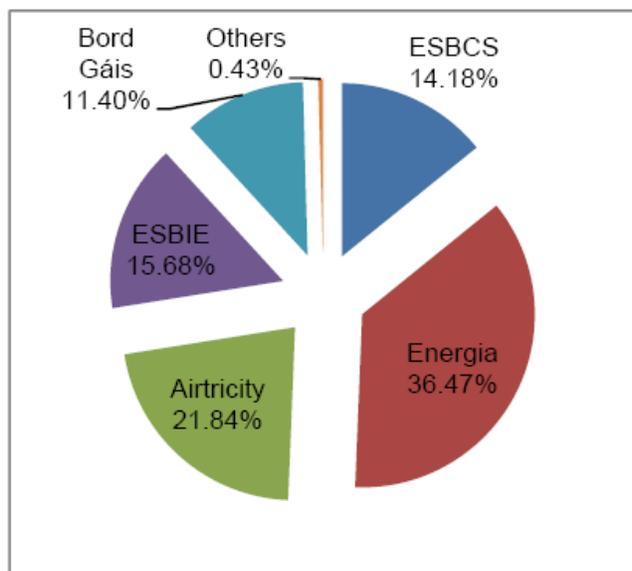
1. There are at least three suppliers active in the relevant market; and,
2. There is a minimum of 2 independent suppliers, each of which has at least 10% share of load (GWh) in the relevant market; and,
3. ESB PES and ESBIE combined serves or will serve within a specified period a defined percentage of consumption market share in a relevant market. For each of the Business markets, the percentage market share is 50% or less. In the Domestic market, the percentage market share is 60% or less.

There were two additional requirements for price de-regulation of the domestic market; switching rates must be greater than 10% and ESB must provide the CER with a satisfactory commitment for the rebranding of ESB supply companies.

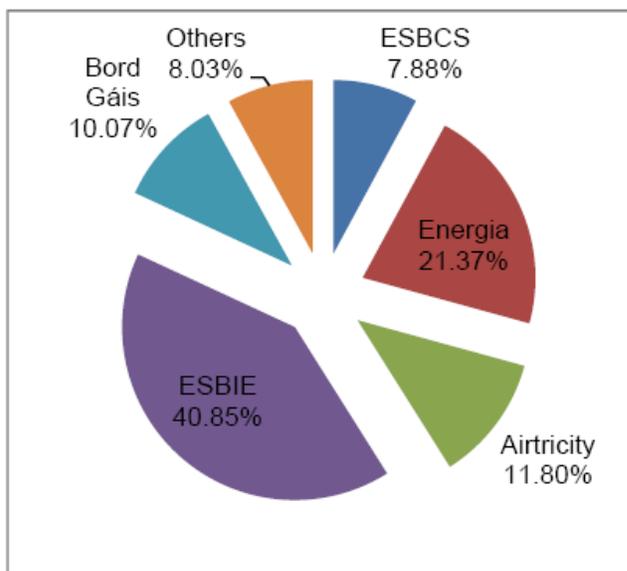
The CER also published its first Quarterly Competition Review in April 2010 which examined the level of competition in each market segment. These quarterly reviews measured a number of factors including market share and switching levels. The first review for Q1 2010 (published in April 2010) concluded that all the business markets were already strongly competitive and had already met the criteria for deregulation.

The pie charts below show the market share (in terms of demand/GWh) for Medium-Sized Businesses and Large Energy Users in Q3 2010, as measured in the Q4 2010 quarterly competition review.

**Medium-Sized Business Market Share (GWh) in Q3 2010**



**LEU Market (GWh) in Q3 2010**



Given that the criteria for de-regulation as set in the Roadmap were met, all three business market segments were fully deregulated on the 1<sup>st</sup> October 2010 bringing full price competition to business customers for the first time. This marked a significant milestone in the history of electricity market liberalisation. Since then, ESB has been free to develop its own tariff offerings for business customers. To coincide with this the CER sent an information letter to all business customers in order to assist them in understanding the deregulated electricity market and the possibilities it creates for them to reduce their electricity bill.

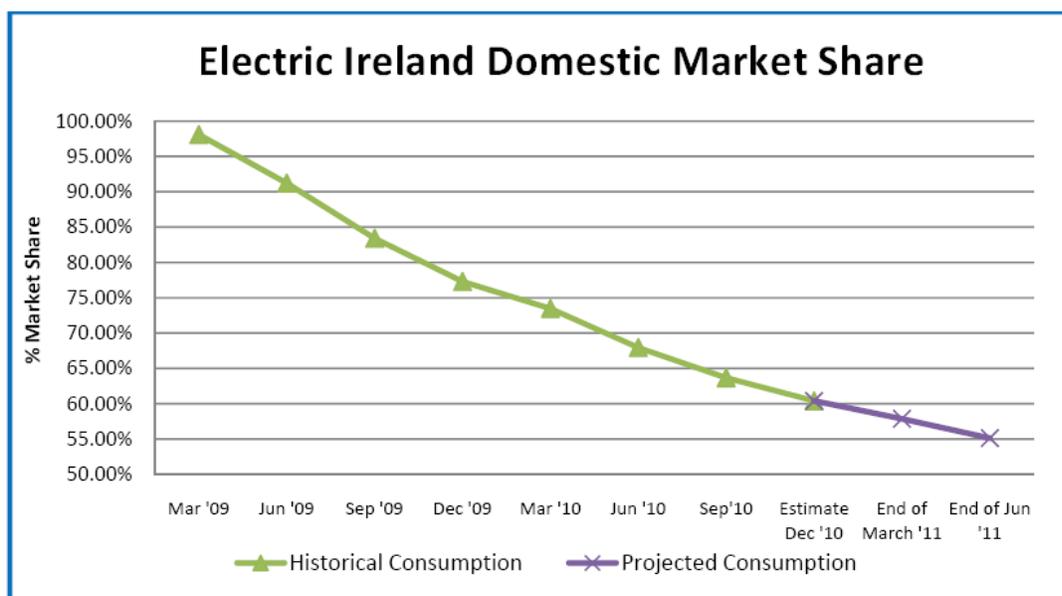
The CER continued to publish Quarterly Competition Reviews throughout 2010 in order to establish whether the criteria for de-regulation had been met for the domestic market. During this time competition continued to develop vigorously in the domestic market. Indeed, during the 2 years to end 2010 over 850,000 (domestic and business) customers switched electricity supplier. In other words almost 40% of all Irish customers had switched supplier during the 2 years to end 2010, one of the highest supplier switching rates ever seen in Europe. In addition, by late 2010 ESB Customer Supply had made a satisfactory commitment to rebrand, which was

one of the criteria for deregulation set out in the Roadmap, with the new brand name “ESB Electric Ireland” formally launched in December 2010.

In light of these developments, and following the publication of the competition review for Q4 2010 in March 2011, the CER announced that all of the criteria had been met to allow for the deregulation of the domestic market. This was because ESB had reached the 60% domestic market share threshold set and was taking actions as part of its commitment to rebrand its energy supply businesses to “Electric Ireland”.

The graph below illustrates the fall in Electric Ireland’s market share contained in the competition review published in March 2011, showing that the threshold had been reached for de-regulation to occur.

**ESB Electric Ireland Market Share**



Given that the Roadmap criteria for de-regulation of the domestic market had been met, in March 2011 the CER published a decision document setting 4<sup>th</sup> April 2011 as the date for the de-regulation of the domestic market. From this date, all segments of the Irish retail electricity market were fully de-regulated.

This means that Electric Ireland can now set its own electricity prices for all its customers without prior approval from the regulator. The CER believes that this will help provide further choice and competitive prices for customers in the long run.

***Changes Related to De-regulation***

The decision on the Roadmap to de-regulation also required the CER to undertake a number of related work items. This was in order to ensure that de-regulation of business markets could proceed on 1<sup>st</sup> October 2010 and to ensure that the necessary procedures were in place to transition to a fully competitive market, as below.

*MAR Review*

The first Quarterly Competition Review found that there was not sufficient competition in the domestic market to warrant de-regulation (see above). However, recognising the increased level of competition, changing market dynamics, and the progressive transition to a fully deregulated market, the CER published a consultation on changes to the form of tariff regulation to apply until such time as all markets were de-regulated (which occurred on 4<sup>th</sup> April 2011, as discussed above).

The final decision implemented an ex-post revenue review based on a Maximum Allowed Revenue (MAR). The MAR is calculated, *ex post*, from the sum of relevant input costs, including wholesale generation, network charges, supply costs, allowed margin and the PSO levy. ESB were required to modify its tariffs throughout the year to maintain its forecast revenue to within +/- 3% of the MAR. This approach required ESB to increase or decrease its tariffs in response to changes in the SEM spot price, the wholesale electricity price or to reflect a changing cost base due to fluctuations in demand. While this approach was more appropriate for an increasingly competitive environment, acting as a transitional step towards a de-regulated market, it also ensured that the CER retained the appropriate regulatory controls to support competition, protect domestic consumers and set tariffs on a cost-reflective basis.

#### *Licence and Legislative Changes*

A third licence was issued to ESB in August 2010 in order to facilitate the supply to business customers who were deregulated on the 1<sup>st</sup> October 2010. However ESB remains as the licensed Public Electricity Supplier (PES), which carries a duty to supply as well as a requirement to be the Supplier of Last Resort. The CER will issue a decision in 2011 on the role of the PES in a deregulated market, which examines the obligations such as the SOLR and duty to supply.

There were also a number of legislative changes required in advance of the de-regulation of business markets. The CER worked in partnership with colleagues in the Department of Communications, Energy and Natural Resources in order to draft the necessary legislative changes. S.I. No. 450 of 2010 was the first phase of the transposition of European legislation in the 3<sup>rd</sup> Package. This S.I. introduced the necessary legislative changes to allow the de-regulation of electricity markets to proceed, while also placing a number of obligations on the CER in terms of monitoring and reporting the level and effectiveness of market opening and the development of competition in the supply of electricity to final customers.

#### *Market Monitoring*

The CER recognised that the de-regulation of the electricity market requires the development of an effective market monitoring framework. This is required by Section 9(1)(da) of the Electricity Regulation Act 1999 which requires the CER to “monitor the level and effectiveness of market opening and the development of competition in the supply of electricity to final customers” and underpinned by Article 36 of the EU’s 3rd Package on electricity and gas markets, which requires the regulatory authorities to monitor market opening and competition at the retail level. In 2011 the CER will consult on a more comprehensive market monitoring framework for a de-regulated market, with reference to European best practice.

Customer protection measures are discussed in section 3.5.

### **3.4 Gas Retail Market Developments**

The CER is responsible for the regulation of BGE's gas tariffs, promoting the development of competition in the gas market and overseeing the development of consumer policy to ensure consumers have adequate levels of service and protection provided to them by their suppliers.

Competition in the gas market for industrial and commercial customers has been in place since 2004. The CER has been working with industry participants to develop market processes to support full market opening and the development of competition for the benefit of all customers. Full market opening in the Irish natural gas market took place on 1<sup>st</sup> July 2007.

#### ***Regulated Revenues & Tariffs***

The CER carried out two reviews of the Revenue Control Formula (RCF) during 2010 for residential and small industrial and commercial customers (who are Non-Daily Metered). The first review was carried out in early 2010. The aim of the interim review was to keep gas tariffs more cost reflective and to minimise the effect of the "K factors" between years while attempting to reduce tariff volatility for end customers. This interim review resulted in the CER directing Bord Gáis Energy to decrease its customer unit rate by an average of 8% from 1<sup>st</sup> February 2010.

The second review took place in Summer 2010 and concluded that there should be no change to the unit rate tariff offered by BG Energy for the gas year from October 2010 to September 2011. This was despite the increase in wholesale gas prices on the international markets, and was for 3 reasons:

- As approved by the CER, Bord Gáis Energy purchased gas using a benchmark (or laddered) approach which spreads the purchases of gas over a period of time. Thus some of the gas for the year-ahead would have been purchased when prices were lower;
- The margin earned by Bord Gais Energy from higher than predicted gas sales during the cold winter period of early 2010 was returned to the customer; and,
- Savings achieved by Bord Gáis Energy beating the "benchmark" price have been included.

During 2010 the CER carried out two reviews of the Bord Gáis Energy Fuel Variation Tariff (FVT) for mid-sized industrial and commercial customers on Non-Daily Meters (e.g. many schools and shops). The FVT regime is to provide a transparent tariff which reflects the underlying cost of procurement and delivery of gas to Bord Gáis Energy's larger Non-Daily Metered customers. Following the structural review of the FVT in 2009 the CER introduced reviews twice yearly in order to reflect market and commodity changes. The first review took place in February 2010 and concluded in March 2010 resulting in a decrease of 4.4% to the then current commodity charge and 1.8% increase in the "cost to serve" charge. The second

review took place in August 2010, with the decision in early September 2010, allowing for a 5.3% increase in the commodity charge and a 4.2% increase in the “cost to serve” charge. The capacity discount allowed remained at 10%.

The Regulated Tariff Formula (RTF) for Bord Gáis Energy was for large industrial and commercial customers who are Daily Metered (DM). It involved a price regulation formula which is reflective of monthly wholesale prices and the cost of delivering gas to the customer’s premises. The intention of the RTF regime was to provide a clear target for new market suppliers to match/benchmark against in providing supplies to customers. Since its inception in 2003, the CER has regarded the RTF as a stepping-stone to building effective competition in the wider industrial and commercial supply segment.

Near the end of 2009 the CER published a consultation on the future of the RTF. Following extensive review, the CER decided to remove regulation in the RTF sector given that it had become very competitive. Hence, after October 1<sup>st</sup> 2010, Bord Gáis Energy is no longer obliged to offer the RTF product to customers in the 5.5 to 264 GWh consumption category. In other words this segment of the retail gas market has been de-regulated.

### ***Supplier Switching***

2010 saw a large increase in customers (largely residential) switching gas supplier. Approximately 95,000 or 14.6% (of which 90,413 were residential) of gas customers switched supplier. The large movement in the residential sector in 2010 can be attributed to the entrance of Airtricity into the domestic gas market in May 2010.

### ***Roadmap to Gas De-regulation***

Following on from the publication of the electricity Roadmap decision and the increase in gas customers switching, the CER published the consultation paper titled: “Proposals on a Roadmap for Deregulation in the Non-Daily Metered Retail Gas Market” in November 2010. The document consulted on the circumstances under which price and revenue controls should be removed from Bord Gáis Energy, along with related matters. A decision is due in Q2 2011.

Customer protection measures are discussed in section 3.5 below.

## **3.5 Public Service Obligations & Consumer Protection**

### **3.5.1 Public Service Obligations**

This section outlines the legislative framework for the implementation of PSOs and the specific policies that have been implemented with respect to PSOs in Ireland.

#### ***PSO Legislation***

Under Section 39 of the Electricity Regulation Act 1999 (as amended) the Minister is empowered to, by order, direct the CER to impose certain public service obligations on the ESB, electricity suppliers and the TSO.

Statutory Instrument No. 217 of 2002 (Electricity Act 1999 (Public Service Obligations) Order 2002) (S.I. 217 of 2002) was the order made by then Minister for Public Enterprise under Section 39 of the Electricity Regulation Act 1999. SI 217 of 2002 sets out more detail in relation to the duties of certain parties, including the CER, in respect of the PSO. The PSO Order specifies the role of the CER and the collection and other duties of suppliers, the distribution system operator and the transmission system operator. S.I. No. 217 of 2002 provides, inter alia, for the imposition on ESB of public service obligations which will require ESB to purchase, up until 31 December 2019, the output of certain peat and renewable, sustainable or alternative electricity generating stations, in the interests of security of supply and environmental protection respectively. The order provides for the calculation of the PSO levy by the CER to provide for the recovery of costs by all relevant parties in accordance with the notifications to the EU Commission regarding the various mechanisms supported by the PSO.

The original PSO Notification of November 2000 (“the Notification”) to the European Commission sets out the broad areas that may be covered by the PSO (as listed in Section 39 of the Electricity Regulation Act 1999), namely security of supply, use of indigenous fuel sources and environmental protection. It refers specifically to the schemes envisaged to be covered by the PSO at that juncture, i.e. the imposition on ESB of a requirement to have available to it the output of electricity generating stations using peat and stations using renewable, sustainable or alternative forms of energy.

Subsequent to the Notification, new schemes have been notified to the EU Commission in accordance with Article 88(3) of the Treaty and Directive 2003/54/EC and have received state aid clearance. S.I. No. 217 has been amended by nine subsequent orders to provide for the recovery of costs under the PSO for such schemes. These included the recovery of costs associated with peaking plant and plant that entered the market under a competition held by the CER due to security of supply concerns. Renewable Energy Feed-In Tariff (REFIT) was notified to the EU in 2005 and received state aid clearance. S.I. No. 217 of 2002 (as amended by the subsequent orders) also takes account of suppliers receiving support under the PSO.

The CER is obliged to approve the costs associated with the above under Article 9 of S.I. No. 217 of 2002.

### ***PSOs - Environmental Protection & Security of Supply***

In Ireland, obligations placed on suppliers and ESB Power Generation 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, to ensure a secure and reliable electricity supply, and to promote renewable energy sources to help protect the environment and contribute to Ireland’s security of supply.

The PSO is imposed by the Department of Communications, Energy and Natural Resources on the ESB PES and ESB Power Generation.

The ESB PES is obliged under the PSO as wholesale purchaser of energy from renewable and a peat-generating source. The ESB PES purchases electricity from a peat generating station through a Power Purchase Agreement (PPA) under the terms of the Notification referred to previously. ESB Power Generation receives support under the PSO in relation to the energy it is obliged to produce from its peat generation plant.

The ESB PES purchase energy from renewable sources under the Alternative Energy Requirement (AER) scheme, as notified to the EU.

The REFIT scheme (as notified to the EU) was introduced in 2006 and guarantees all suppliers participating in the scheme a minimum price in return for the support of renewable generation through PPAs. The price is appropriate to the category of generation supported. The REFIT scheme is paid out under the PSO mechanism.

The ESB PES is also engaged in a Capacity and Differences Agreement (CADA) with two generators. The CADA scheme was notified to the EU Commission in October 2003 in order to secure additional capacity to meet an anticipated generation capacity shortfall in 2005, and were cleared by the EU Commission at the end of 2003.

The PSO is funded by a levy which is imposed on all electricity customers. The implementation of the PSO levy commenced on the 1<sup>st</sup> January 2003. The costs of purchasing the relevant energy (subject to the terms and conditions of the scheme/support involved) – above-and-beyond a modelled, estimated, time weighted *ex ante* value of anticipated market revenues – are levied on all customers via their supplier. The *ex ante* PSO levy figures are corrected *ex post* once actual market revenues, costs, inflation and plant output are verified and notified to the CER. Costs relating to the administration of the scheme are also included in the levy. At present, all suppliers, the DSO, ESB PES and EirGrid as TSO are notified of the final determination of the above levy no later than two months in advance of the commencement of the levy period in a decision paper published on the CER's website.

Based on modelled market conditions and estimates of costs, plant output and inflation for the period 1<sup>st</sup> October 2010 to 30<sup>th</sup> September 2011, the CER determined the PSO levy for that period to be €157 million. The breakdown of this is shown below.

#### PSO Levy 2010/11

Customer category	Annual levy amount	Monthly Levy amount
Domestic customers	€32.76 per customer	2.73 per customer
Small commercial (maximum import capacity of less than 30kVA)	€99.03 per customer	€8.25 per customer
Medium and large customers (maximum import capacity equal to or greater than 30kVA)	€13.82/kVA	€1.15/kVA

### 3.5.2 Consumer Protection

Consumer protection policy initiatives taken in 2010 by the CER are referred to below. Please also see section 6 for a background on customer protection legislation and obligations.

### ***Customer Protection Policy***

International experience of retail deregulation has shown that without the necessary market monitoring and customer protection measures in place customers, including often the most vulnerable, may not always have a positive experience and that it is necessary to implement a range of measures to ensure that all customers can benefit from retail competition.

In light of the de-regulation in the Irish electricity retail sector during 2010/11 (see section 3.3) and new European “3<sup>rd</sup> package-related” legislation on customer protection for National Regulatory Authorities, the CER published a consultation paper in December 2010 on Customer Protection in the De-regulated Electricity Market, covering both electricity and gas. A final decision paper was published in April 2011. This set out a number of new measures covering customer education and information, codes of practice for suppliers, accessibility and protection measures for vulnerable customers including the obligation for suppliers to ensure that vulnerable customers are on the most economic tariff rate for the customer’s chosen payment method, and a framework for accrediting tariff comparison facilities/websites.

### ***Customer Disconnections***

In addition to the above customer protection measures, the CER also introduced a number of measures to address the costs of disconnection facing domestic customers. Due to the economic circumstances the number of disconnections had increased in 2010. In response to this the CER published a decision reducing the charges for disconnection and reconnection as well as ensuring that no more than 50% of the cost can be passed on to domestic customers, with suppliers absorbing the remainder of the charge. Effectively the electricity disconnection and reconnection cost was reduced from €88 and €86 respectively to €35 each (all costs excl. VAT). Similarly the cost of gas disconnections and reconnections was reduced by the CER from €61.74 to €30.87.

In addition the CER published a decision paper setting out new guidelines for the Code of Practice on Disconnections. This required suppliers to specify conditions for renewal and termination of services or contract (or both) including the connection and disconnection of final customers. The CER stated that disconnection of a customer should only be carried out as a last resort by a supplier and customers must be given the opportunity to enter a payment plan first. The CER set a number of minimum requirements with respect to a supplier’s Code of Practice on Disconnection. This covered the way in which suppliers must communicate with customers, including vulnerable customers and those experiencing financial hardship. For example, suppliers are required to make multiple customer contacts with a customer before a disconnection, to provide more notice of disconnection and to use “plain English” in customer correspondence. It also set out certain obligations around repayment plans.

### ***Ongoing Customer Service***

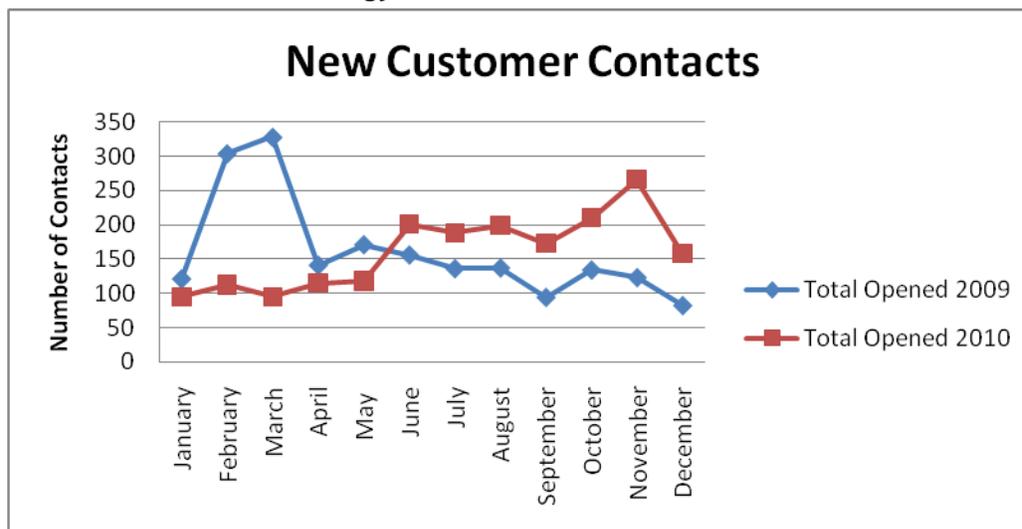
In addition to policy development in the area of customer protection, the CER has a statutory responsibility to provide a complaints resolution service to customers with an unresolved complaint with their supplier or network operator. The Energy Customers Team fulfils this role

for domestic and small business customers on the CER’s behalf through a dedicated complaints resolution service.

Additionally, the Team provides a customer awareness and information service via its [www.energycustomers.ie](http://www.energycustomers.ie) brand and website. The [www.energycustomers.ie](http://www.energycustomers.ie) website provides a transparent, free and easy to use complaint resolution service for domestic and small business customers with unresolved complaints. In addition the website [www.energycustomers.ie](http://www.energycustomers.ie) aims to provide clear information, to empower customers to make informed choices as competition develops in the energy industry. This includes information on their rights, energy suppliers’ Codes of Practice and also explains what to do if they experience problems with their bills, their connection to the electricity or natural gas network or other energy supply related issues.

While the Energy Customers Team concentrated on raising awareness of the brand in 2009, in 2010 the Team’s focus was on maintaining an adequate level of service for customers who contacted it. At one level, the year-on-year contact levels between the Team and customers were similar across 2009 and 2010, with 1,925 customers contacting the Team in 2009 and 1,930 customers in 2010. The monthly breakdown of customer contacts is provided in the graph below, which shows that the dissimilarity in the timing of contacts between the two years. 2009 saw a peak in customer contacts towards the end of February and beginning of March due to specific media coverage in relation to energy bills; much of this contact comprised enquiries for explanations about price changes and submission of general complaints on the matter. Such “event driven” peaks in enquiries were not observed in 2010. Rather, 2010 saw a sustained increase in the numbers of customers contacting it on a monthly basis, across the range of matters dealt with by the Team. The notable exception was December and this is probably explained by the severe weather as the trend of increased levels of contact has continued into the first quarter of 2011.

#### Customer Contacts With Energy Customers Team



In addition to dealing with customer contacts, the Energy Customers Team contributed to the development of a number of consumer protection policies introduced by the CER. The Team consulted on and published Code of Practice guidelines for electricity suppliers offering Budget Controllers to their customers and also issued a revised version of the Code of Practice on

Disconnection guidelines for natural gas and electricity suppliers towards the end of the year (see section 3.3). These guidelines support the existing customer protection framework which requires suppliers to put in place a number of Codes of Practice and Customer Charters setting out their service levels to their customers.

## **3.6 Infrastructure and Network Tariffs**

### **3.6.1 Tariffs**

#### ***Background***

The CER's responsibilities involve regulating the level of revenue which the monopoly electricity network operators and owners can recover from customers to cover their costs. ESB Networks owns the entire network; it also operates the lower voltage distribution network, while EirGrid operates the higher voltage transmission network. If unregulated, these monopolies could be inefficient and impose prices that were too high so, as set out in legislation, the CER regulates the network utilities' activities and income. This is in order to protect the interest of electricity consumers, while ensuring that they can fulfil their obligations and deliver secure electricity supplies.

The nature of such regulation is that every five years the CER sets the amount of money that the utilities can collect from electricity customers for the following five years. The revenue is set at a level that would allow a well-run business to fund its activities. It is set through a combination of examining the specific underlying costs of the relevant utility and benchmarking against best international companies in this field. Through this review the utilities are incentivised to operate efficiently, to make cost reductions, and to provide high levels of customer service. The allowed revenue is collected from suppliers via Transmission and Distribution Use of System charges - TUoS and DUoS - which are then recovered from final customers. These form approximately 7% and 25% of the final electricity bill respectively.

This five year approach is best international practice, and is used by nearly all other energy regulators (such as Ofgem in Great Britain) as well as in a number of other regulated sectors. It ensures that consumers are protected, while offering the regulated businesses a clear and stable environment. This allows the network utilities to make the necessary investments to ensure modern and efficient transmission and distribution systems and high levels of customer service.

#### ***5-Year Revenue Review***

In November 2010, the CER completed its review of the revenue that the electricity transmission and distribution network utilities can recover from their customers over the 2011 to 2015 period. The review involved an assessment of the utilities' investment plans and operational costs for that period, and an assessment of their performance over the previous five years.

When coming to its decision on this matter the CER engaged in a lengthy consultation process with the utilities and the wider public. An initial consultation paper, or information note, on this matter was published in April 2009. The CER then undertook an extensive process of engagement with the utilities. This involved the analysis of multiple submissions by the utilities

on both their historic and forecast costs, site visits to network installations and the customer call centre, and the benchmarking of the utilities' costs and performance against international best practice.

To provide advice and complete analysis over the course of the review, the CER engaged the services of Sinclair Knight Mertz (a leading international engineering, sciences and project delivery firm) to review efficiency levels, and both historic and forecast operating costs and capital investment. Europe Economics (a London based consultancy with expertise in economic regulation) was engaged to provide advice on the allowed rate of return required on capital investments to ensure that the capital programme can be funded.

The CER then published a further consultation paper and a proposed decision prior to coming to its decision in November 2010. The decision sets out the revenue which the network utilities can recover from their customers through Use-of-System charges over the 2011 to 2015 period. It also provides information on the work or investments underlying that revenue, the efficiencies which the CER has built into the approved revenue, and incentives on the utilities to provide a high quality of service to their customers. The main outcomes of this review are provided here:

### ***Allowed Capital Investment***

- The revenue approved for the transmission utilities provides for the major transmission investment programme required over the next five years. EirGrid had requested an investment allowance of €2.1 billion but, conscious of the need for value for money, the CER determined that the transmission investment programme can be delivered for €1.45 billion through efficient and optimal management of the network.
- Significant additional wind capacity will connect to the system between now and 2020 in line with national policy on renewable targets. The revenue approved by the CER provides for ongoing investment in the network to ensure it is capable of adapting to these high levels of intermittent generation and to reduce system constraints, thereby leading to a more efficient electricity system. This investment will enable the country increase the proportion of its electricity consumption coming from renewable generation from about 15% currently to 40% by 2020.
- Another driver behind the revenue approved for the transmission utilities is the cost of the 500 MW East-West interconnector, which is being developed by EirGrid. The construction of this interconnector is overseen by the CER and it is on target and within budget. It is expected to be completed and come into commercial operation before the end of 2012.
- For the distribution utility, a €2.31 billion investment programme has been approved. This has been reduced, relative to the €2.66 billion requested by ESB Networks, based on, among other things, the CER's requirement for further productivity and efficiency improvements, the deferral of certain expenditure and the disallowance of other items. Generally the CER agreed with the ESB Networks' capital programme, specifically the need to reinforce the network and the necessity of renewal programmes.
- The capital revenue approved by CER for the distribution network includes €500m during the later years of the period to cover costs associated with the national roll-out of smart

meters to customers. A trial is currently being conducted in this area. Assuming the trial is successful, the roll out of smart meters could begin towards the end of the period.

### **Allowed Operating Costs**

- The CER decision also requires ESB Networks and EirGrid to introduce efficiencies (similar to those required for capital work) within operational costs. For ESB Networks, the distribution utility, the operating costs approved for 2015 are (in real terms) €25.2 million or 10.6% less than those approved for 2010 (and €37.4 million or 14.9% less than the 2006 value). The total approved for the five year period represents a €146.4 million or 11.9% reduction relative to that requested by ESB Networks. With regards to the transmission utilities, the total operating costs approved by the CER for the 2011 to 2015 period is €719 million, a reduction of €183 million relative to the €902 million approved for the previous five year period. The €719 million does not include a new charge for the East-West Interconnector, which EirGrid is expected to be subject to from the 2012-2013 tariff period onwards.
- For both the transmission and distribution utilities, efficiencies relate to anticipated decreases in contractor costs were also built into the various costs where applicable (the utilities utilise a significant proportion of contractors to complete some operational and capital work, for example, in areas such as tree cutting, metering, etc).
- The CER has allowed ESB Networks an €18.2 million fund to carry out research and development and sustainability activities. This is the first time the CER has made such a provision. The provision will allow ESB Networks to explore technological advances in areas such as smart grids, generation integration and adaption of new network devices to support the integration of renewable generation into the network and to improve quality of supply.
- The CER decision also provides for incentives to encourage the utilities to improve the quality of their service to customers, in terms of the quality of electricity supply, the level of customer service, the timeframe for connection to the network, etc. The incentives provide financial rewards (or penalties) for exceeding (or failing to meet) some targets.

### **Network Tariffs**

- Although annual updates are completed each year, to correct for more accurate assumptions regarding items such as the level of demand on the system, the revenue decision for the utilities essentially sets the network Use of System charges for the 2011 to 2015 period.
- The CER decision provided for a 6.5% *real* decrease in DUoS charges in the first year of the period, with a 2.8% *real* increase for each of the remaining four years. Note that these charges form approximately 25% of the final electricity bill to customers. The real increase will be adjusted by Inflation, measured by the HICP (Harmonised Index of Consumer Prices), to derive the nominal change per annum in DUoS charges.
- The decision implemented a rebalancing of the Use of System charges, which resulted in a once off 45% decrease in the network tariffs (TUoS and DUoS) charged to Large Energy

Users. This change was implemented on 1<sup>st</sup> October 2010 and means that the network charges paid by these users are 45% lower than would otherwise have been the case.

- The CER decision provided for a 3% *real* increase in TUoS charges in the first year of the period, with a 5% increase for each of the remaining four years. The real increase will be adjusted by Inflation, measured by the HICP (Harmonised Index of Consumer Prices), to derive the nominal change per annum in TUoS charges.
- As discussed above, a key reason for proposed higher network tariffs over the 2011 to 2015 period is the network upgrade and expansion programme. This is needed for Ireland to have a high-quality electricity supply, to attract new foreign direct investment (such as high-tech factories) and to meet Ireland’s target of increasing the proportion of our electricity consumption coming from renewable generation - mostly in the form of wind power - to 40% by 2020. We are also driving efficiencies in how this upgrade programme is delivered, to ensure value for money, as referred to above.

### 3.6.2 Infrastructure Developments

#### ***East-West Interconnector***

The CER is actively involved in promoting the development of the East West Interconnector (EWIC) between Ireland and Great Britain. EWIC is a 500 MW HVDC Interconnector which will have both importing and exporting capacity and be able to transmit Direct Current between the two converter stations, proposed for Woodland, in Ireland and Deeside in Wales. It is 256 km in length – 185 km of marine (under sea) cable and 71 km of terrestrial cable (above sea). The converter stations will convert the current to the usual form of Alternating Current for onward transmission on the transmission network in the UK and Ireland. The features of EWIC are provided below.

#### **East-West Interconnector Features**

<b>East-West Interconnector Feature</b>	<b>Detail</b>
Capacity	500 MW
Ownership	EirGrid
Delivery date	2012
Connection Point on Irish System	Woodlands sub-station, south Meath.

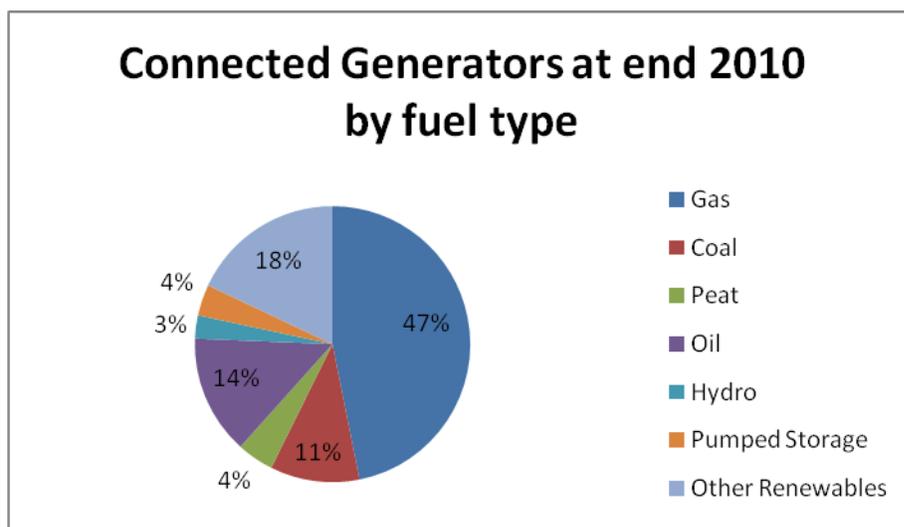
The advancement of this project continues to remain a key priority for the CER, with significant progress being made to date. The CER and EirGrid, the Transmission System Operator, are working closely together to ensure the completion of this project on schedule.

The project is on target and within budget. It is expected to be completed and come into commercial operation before the end of 2012.

### **Conventional Generation**

2010 saw the connection of three new large thermal plants to the system. Bord Gáis Energy commissioned a new 445 MW CCGT at Whitegate in Co. Cork. Bord Na Móna commissioned a new 116 MW distillate peaker at Edenderry in Co. Offaly and ESB commissioned a new 430 MW CCGT at Aghada in Co. Cork.

The graph below shows the approximate installed generation capacity by fuel type Ireland at the end of 2010.



### **Shannon LNG**

Shannon Liquefied Natural Gas (LNG) proposes to construct a regasification terminal on a 104 hectare site located on the Shannon Estuary between Tarbert and Ballylongford in Co. Kerry. The site, which is zoned industrial by Kerry County Council, is owned by Shannon Development and Shannon LNG has an option to purchase the site subject to obtaining planning approval. Shannon Development has reserved the site as a national strategic location for large-scale maritime related industry, such as an LNG re-gasification terminal, primarily because of its access to relatively sheltered deep water in the Shannon Estuary. The terminal is planned by Shannon LNG to be operational in 2015/16 at the earliest.

In 2008, Shannon LNG applied to the CER for an LNG licence and a full capacity exemption from regulated Third Party Access (rTPA) pursuant to Article 22 of Directive 2003/55/EC for the LNG terminal in Tarbert, Co. Kerry. The CER published on the 3<sup>rd</sup> December 2010 an Exemption Order granting Shannon LNG an exemption from rTPA under Article 22 of Directive 2003/55/EC subject to certain conditions. These conditions had been discussed and agreed by the European Commission.

### **Connection Offers to Renewable & Non-Renewable Generators**

The Irish Government target for renewable energy of October 2008 requires that 40% of electricity consumed by the year 2020 should be generated from renewable sources.

Following extensive public consultation, in December 2008 the CER set out a connection policy direction for renewable generators seeking to connect to the network in Ireland known as “Gate 3”, followed by a related direction in December 2009 on the treatment of non-renewable - known as “conventional” - generator and interconnector connection applications. Both of these CER policy decisions are designed to ensure that a high capacity of renewable and conventional projects can connect to the Irish network over the next decade in a way that is efficient, maintains Ireland’s security of supply, promotes competition and achieves the 40% renewables target by 2020.

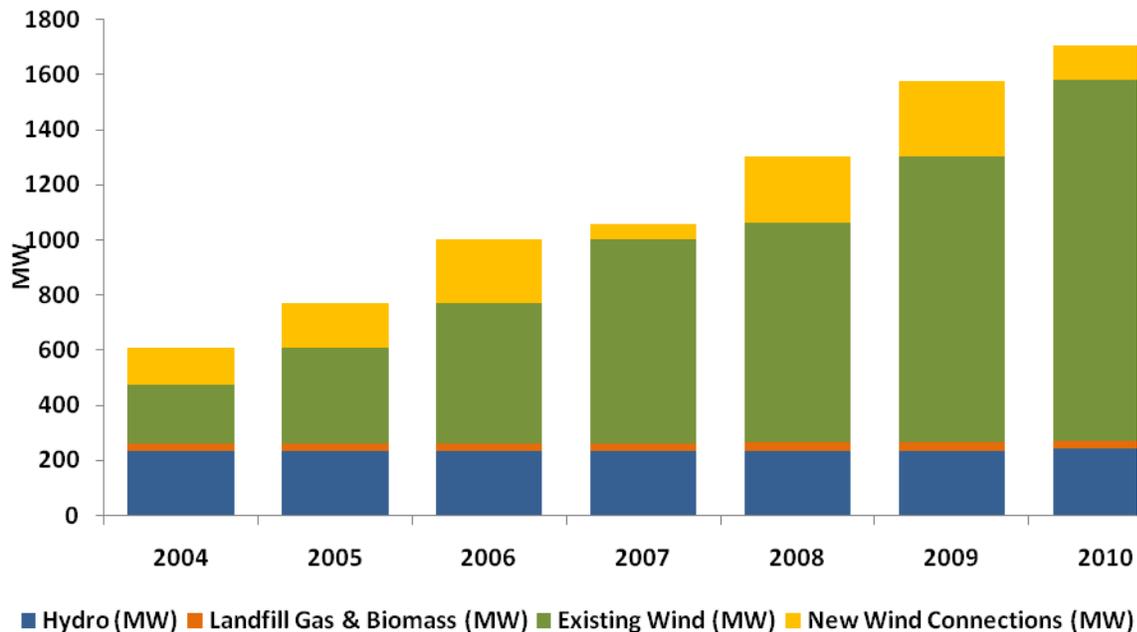
#### *Progress to Date - “Wind Power Expansion”*

There is a large volume of proposed new generation projects, especially wind farms, seeking to connect to the electricity network, which has limited capacity. Against this background, in 2005 the CER approved a new connection policy known as the Group Processing Approach (GPA) for the connection of generator applicants to the network by EirGrid as Transmission System Operator and ESB Networks Ltd. as Distribution System Operator. The GPA allows for generator applicants to be processed for connection (by EirGrid and ESB Networks Ltd.) together, with lines designed to connect a geographic group of wind farms instead of the one-by-one connection process used previously for renewable generators. This results in fewer lines being built than would otherwise be the case and means that the network is developed more efficiently, to the benefit of generators, consumers and environment.

To date the CER has developed policy for three batches - what we call “Gates” - of generator connection applications to be processed for connection through the GPA. These Gates involve a certain number of generator applicants being offered to connect to the network by EirGrid and ESB Networks Ltd., under criteria determined by the CER.

The first Gate was launched by the CER at the end of 2004 and provided for network connection offers issuing to over 30 wind farms, with a combined capacity of 365 MW. Gate 2, launched by the CER in 2006, involved connection offers issuing to about 120 renewable generation projects across the country, equivalent to 1,300 MW in capacity. Almost all of these renewable generators were wind farms. Most of the Gate 1 and 2 wind farm projects have either already connected to the network or are in the process of being connected as the connection wires are being built. As a result of Gates 1 and 2, Ireland has already recently seen a dramatic rise in the amount of renewable generation connected to the network, rising from circa 600 MW at the end of 2004 to about 1,700 MW by end 2010. This increase is shown below.

## Renewable Generation in Ireland



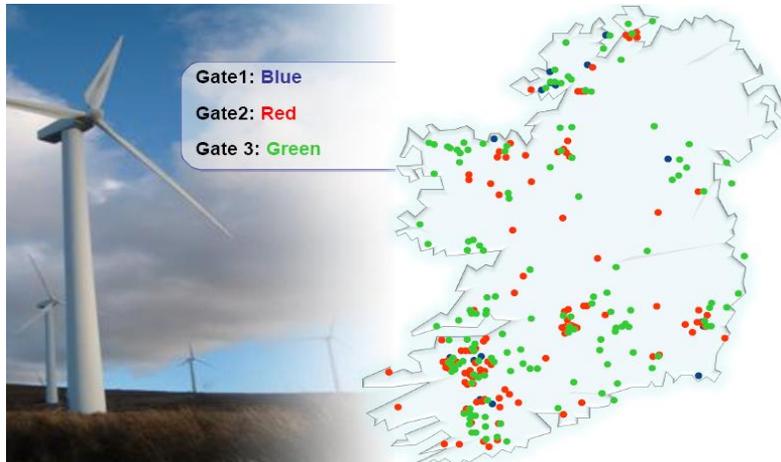
Following this increased connection of wind farms, currently about 15% of the island's (Republic of Ireland and Northern Ireland) electricity came from renewable sources. It means that, for a small network, Ireland is now becoming a world leader in wind power. With more Gate 2 wind farms continuing to connect, we expect the amount of renewable generation in Ireland to continue to increase significantly over the next couple of years. This increase is before any consideration is given to the CER's Gate 3 decisions, which will drive big industry changes as discussed below.

### *Gate 3 Policy*

In the Gate 3 policy decision of December 2008, the CER directed the System Operators – EirGrid as TSO and ESB Networks Ltd. as DSO – to issue circa 3,900 MW of renewable generator connection offers in accordance with a detailed rule-set. This was with a view to achieving the Government's 40% renewable target for 2020.

Under a complex system decided on by the CER, Gate 3 wind farms will be granted full scheduled firm access to the transmission system for their output over the coming years in line with the available capacity already on the grid and the grid upgrades planned for the areas in which they are connecting. These Gate 3 renewable generator connection offers are being issued from EirGrid and ESB Networks to over 150 wind farm projects around the country over an 18 month period, from December 2009 through to mid 2011. The following map shows the location of Gate 1, Gate 2 and the proposed Gate 3 renewable generators around Ireland.

## Location of “Gate” Renewable Generators in Ireland



Source: ESB Networks

If all of these Gate 3 wind farms are built, Ireland will have more than 6,000 MW of wind farms connected over the next decade or so. Gate 3 will therefore reduce Ireland’s reliance on fossil fuels, provide for the achievement of the 2020 40% renewables target and drive a dramatic “greening” of Ireland’s electricity industry.

To help complement this very large rise in wind farms, in December 2009 the CER published a related direction which decided on the criteria for which conventional (non-renewable) generator and interconnector applicants will receive a connection offer in tandem with the Gate 3 wind farms. This CER direction followed extensive public consultation throughout 2009. It allows for connection offers to be issued to about 1,350 MW of conventional generation projects across the country. These projects will be offered scheduled firm access to the transmission system using a similar system to that of the Gate 3 wind farms. They include flexible gas-fired power stations and pumped storage hydro plant, in addition to the 500 MW EirGrid interconnector already under construction to the UK. These new projects, if constructed, will help modernise Ireland’s electricity generation fleet, enhance its security of supply, facilitate the increased connection of wind power and provide for more competition in the supply of electricity, to the benefit of the Irish electricity customer.

In January 2010 the CER published the transmission scheduled firm access connection dates for the Gate 3 renewable and conventional applicants eligible for a connection offer, covering the years 2010 to 2023. These dates were derived by EirGrid in line with rule-set decided on by the CER in the two Gate 3-related directions.

### *Gate 3 Liaison Group and Ongoing Work*

To help keep the Gate 3 renewable and conventional offer programme on track, the CER set up a Gate 3 Liaison Group with industry in early 2009 and this continued through 2010. The Group

meetings, which are held monthly, are organised and chaired by the CER, and include representatives from the system operators and from the renewable and non-renewable generation sectors - minutes from meetings are available at [www.cer.ie](http://www.cer.ie). So far, the Gate 3 project for the issuance of offers is broadly running according to schedule and the Gate 3 project is on track to provide for meeting the target of 40% electricity consumption from renewable sources by 2020.

In response to the needs of key stakeholders and the system operators, the CER has progressed many consultations during 2010 relating to connection policy and Gate 3 offers, as summarised below.

### Connection-related CER Papers

CER Policy Decision or Direction	Brief Description	Date of Decision
Relocation of Capacity	The rules-for and conditions which apply-to relocation of generation capacity.	December 2010
Modifications to DSO connection contracts	Modifications to DSO connection contracts primarily related to the introduction of contestability at distribution level and the inclusion of additional text related to TSO liability.	January 2011
Charter for “fixed date with payments” approach to connection	Charter for “fixed date with payments” approach to connection.	September 2010
Contestability for Distribution & Transmission Level Connections to the Electricity System	Decision regarding Distribution and Transmission Contestability.	April 2010
Losses policy for distribution connected generators	Losses policy for distribution connected generators.	January 2010

### Smart Metering

The CER established the Smart Metering Project Phase 1 in late 2007 with the objective of setting up and running smart metering behavioural & technology trials and undertaking a cost benefit analysis (CBA) of smart metering. The project is managed by CER, with the support of the Department of Communications, Energy and Natural Resources, Sustainable Energy Authority of Ireland, ESB Networks, Bord Gáis Networks and the electricity and gas industry in Ireland.

The key objective of the Smart Metering Project in 2010 was to progress Phase 1 of the project. Phase 1 began in 2008 and has focused on setting up and running Smart Metering Customer Behaviour Trials (CBTs) for both electricity and gas and a Smart Metering Technology Trial.

Findings from these trials, as well as other preparation work, will feed into the CBA which will inform decisions relating to a national full rollout of an optimally designed smart metering solution in Ireland.

The Economic and Social Research Institute (ESRI) are working with the CER to deliver this CBA which was published for electricity smart metering in May, along with the electricity customer behaviour trials findings report & technology trials findings report. Broadly, the CBA found that electricity Smart Meters were net positive and deliver savings for customers. A gas addendum is due to be completed by September 2011.

Overall, Phase 1 progress has been very positive with all key milestones having been achieved. The main highlights achieved during 2010 were:

- Completion of the technology trials by ESB Networks in September 2010. The electricity technology trials provide findings which have informed the assumptions being made in the smart metering CBA. An overview of the findings was published by the CER in November 2010. The detailed findings report from these trials is due to be published in May 2011 along with the completed electricity smart metering CBA.
- Completion of the electricity customer behaviour trials for residential and SME customers in December 2010. The electricity customer behavioural trials tested a range of smart metering enabled initiatives based on time-of-use tariffs in tandem with a number of informational stimuli, including more detailed and frequent billing and in-home displays (IHD), to measure their impact on peak shifting and overall load reduction. The findings from these trials is due to be published in May 2011 along with the completed electricity smart metering CBA.
- Initiation of the gas customer behaviour trial for residential customers in June 2010, due to complete in May 2011. A number of smart metering enabled energy efficiency initiatives, such as more detailed and frequent billing and in-home displays, are being tested to measure their effect on overall load reduction.
- Initiation of smart metering-enabled electricity prepayment trial in October 2010, which subsequently completed in February 2011. The findings from this trial are due to be published in May 2011 as part of the electricity customer behaviour trial findings report.
- Initiation of a process in early 2010 with ESB Networks & electricity suppliers to collate smart metering costs & benefits to be input into the CBA. There was a first public consultation on the issue undertaken during Summer 2010, followed up by a second refined consultation during Winter 2010. The feedback received from these consultations has been taken into account in finalising the underlying assumptions of the smart metering CBA. This process concluded in March 2011 & included an audit by an independent third party consulting firm. The final CBA for electricity smart metering is due to be published in May 2011. A gas addendum is due to be completed by September 2011.

### ***Corrib***

The Corrib Gas field is currently under consideration off the west coast of Ireland. During 2010 work was progressed on the construction of the Bellanaboy terminal in Co. Mayo, which is

proposed to process the gas from the Corrib field. Operational qualification testing of the terminal facilities using gas from the BGÉ network was also commenced. At the Corrib field, five wells are completed and ready for production, while the 83km long offshore pipeline was completed during 2009. A network tariff (Bellanaboy Entry Tariff) will have to be developed for this new entry point prior to any commencement.

## **3.7 Security of Supply**

This section provides information on the current security of supply situation in Ireland with regard to electricity and gas supplies.

### **3.7.1 Electricity**

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. 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 is also discussed.

#### ***CER & TSO's Role***

The CER has a role in monitoring security of supply/generation adequacy and, together with the 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.

The CER's legal functions and duties in relation to security of supply are contained primarily in Directive 2003/54/EC and Directive 2005/89/EC. The Directives have been transposed into Irish law by SI 60 of 2005. The continued monitoring of security of supply remains a key priority for the CER.

As part of its monitoring arrangements, 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 generation statistics and demand levels. The CER also produces a bi-annual report on security of supply for the European Commission while an annual update is provided in the CER Annual Report. The TSO produces an annual forecast statement (covering the forthcoming seven year period) which is also approved by the CER.

In consultation with the DCENR and other relevant parties, the CER can decide on any necessary actions, as 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.).

### ***CER Report to EU Commission on Security of Electricity Supply***

Under European Directives 2003/54/EC and 2005/89/EC, which have been transposed into Irish Law by Statutory Instrument No. 60 of 2005, the CER is required to prepare and submit a report to the European Commission every two years. The third such report fell due on 31<sup>st</sup> July 2010.

The report describes the security of supply situation in Ireland with reference to the following key areas:

- (a) The CER's Monitoring Activities;
- (b) Fuel and Other Power Sources;
- (c) The Balance Between Supply and Demand;
- (d) Supply and Demand-Side Measures;
- (e) Transmission Networks; and,
- (f) Issues Identified and Measures Undertaken.

Some of the key points from that 2010 report are summarised below:

- In 2008, across the island (Ireland and Northern Ireland) 82% of electricity generation came from imported fuels of which 61% was natural gas, 17% was coal and 4% was oil;
- Ireland imports more than 90% of gas requirements and 100% of oil and coal requirements;
- Based on the TSO's assessment of supply and demand of electricity there is expected to be an increase in surplus capacity in the coming years, peaking in 2015.

The 2010 Security of Supply Report is available on the CER website.

As stated above, the Security of Supply Report indicates a heavy reliance on fossil fuels for electricity generation, primarily natural gas, coal and oil. The continued supply of natural gas is an important consideration for the CER given that natural gas accounted for over 61% of Ireland and Northern Ireland's generation fuel mix in 2009.

To protect the security of electricity supplies the CER has made a decision in relation to the fuelling capabilities of generators. The decision essentially requires generators with gas as a primary fuel to be able to run on a secondary fuel for a period of time and also for non gas fired generation stations to hold fuel in storage to run for a defined number of days. The key decisions from the paper are as follows:

## Secondary Fuel Requirements

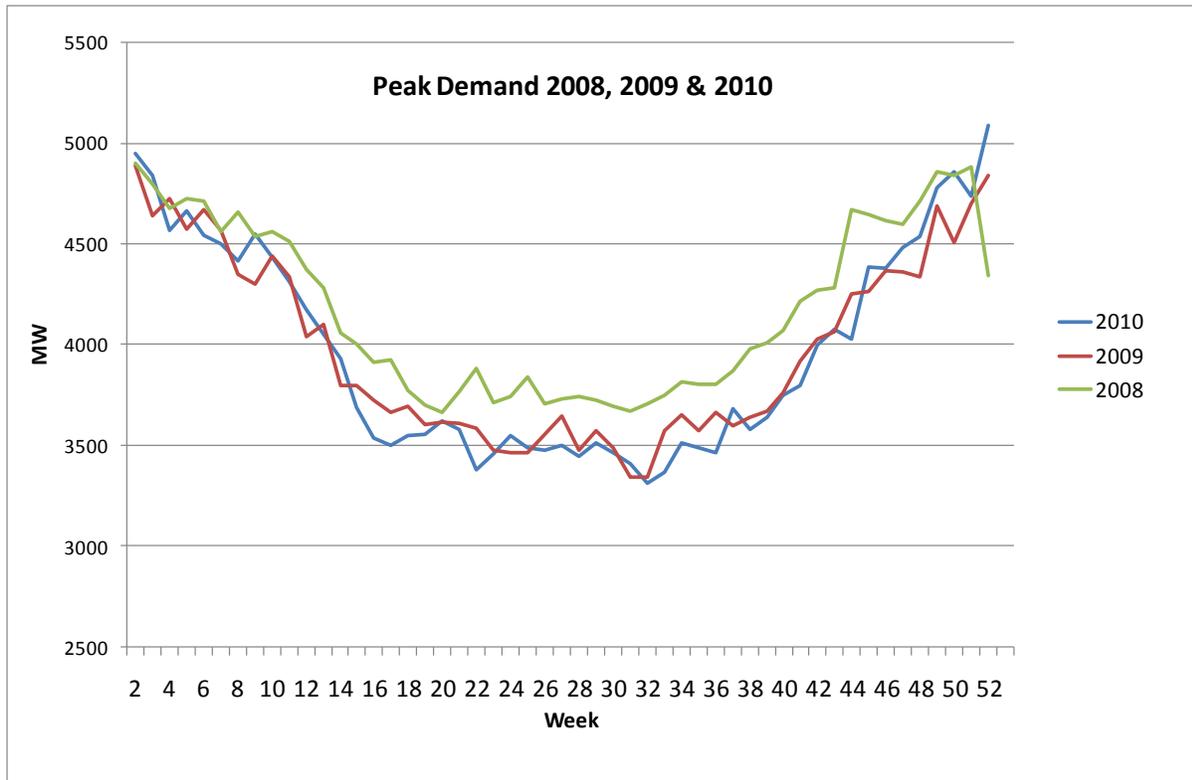
Primary Fuel Type of the Generating Unit	Requirement to be capable of running on a secondary fuel	Requirement to hold stocks of that fuel	Number of Days Storage Required (Continuous running at primary fuel rated capacity)	
Gas units and CHP units of more than 10MW	Yes (At 90% of units capacity)	Requirement to hold secondary fuel	Higher Merit	5
			Lower Merit	3
			CHP>10MW	1
Non-gas units such as oil and coal (excluding renewable and peat units)	No requirement	Requirement to hold primary fuel	Higher Merit	5
			Lower Merit	3
Renewable <sup>3</sup> units	No requirement	No requirement	N/A	
CHP units of 10MW and less	No requirement	No requirement	N/A	
Peat units	No requirement	No requirement	N/A	

## Security of Supply Indicators

Mainly due to the weak economic climate, total electricity demand across the country reduced from 2008 to 2009 by approximately 5%. From 2009 to 2010 there was a 0.9% year-on-year rise, with much of this driven by the unusually cold weather towards the end of 2010. Peak demand in Ireland reduced significantly from 2008 to 2009. However due to colder weather conditions at the start and end of 2010 peak demand was actually higher than 2008. The graph below shows the weekly peak demand for the years 2008, 2009 and 2010.

<sup>3</sup> Renewables is as defined in the Electricity Regulation Act, 1999

## Peak Electricity Demand 2008, 2009 and 2010

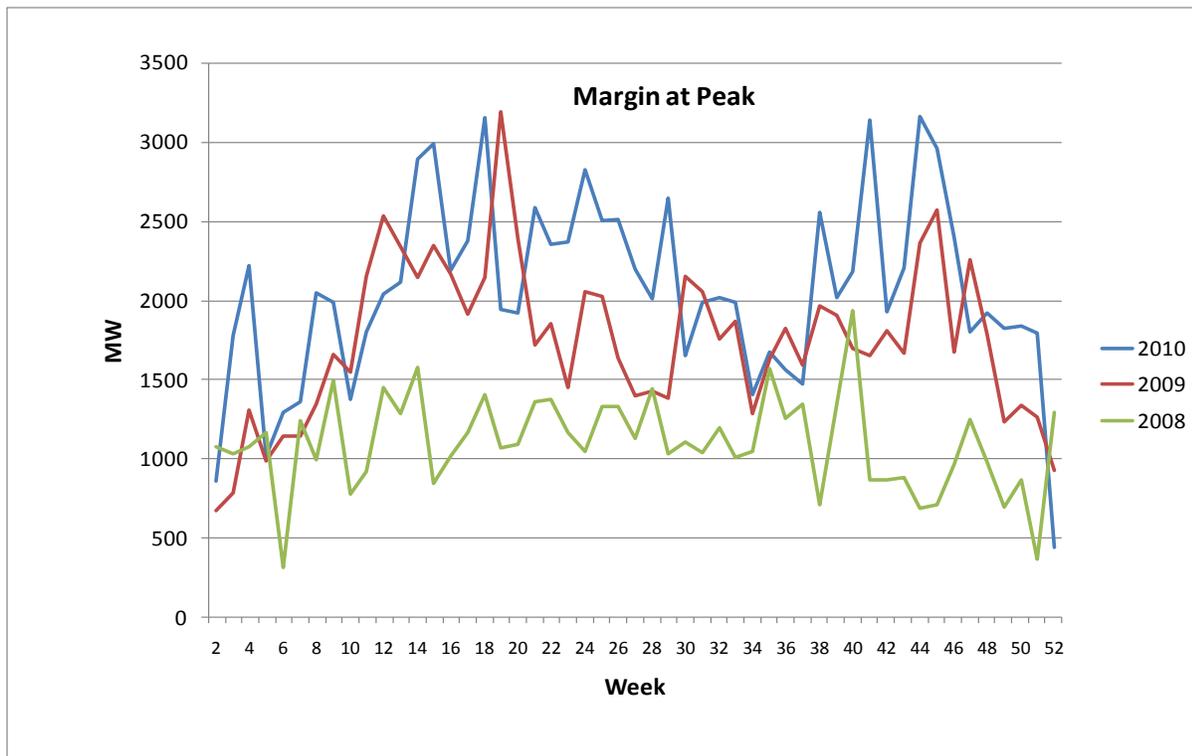


2010 saw two new all time weekly system peak demand records. 5<sup>th</sup> January saw a peak demand of 4,950 MW, while on Tuesday 21<sup>st</sup> December 2010 another weekly peak record was set. Details of the system performance on that day are below:

- The system peak demand on Tuesday 21<sup>st</sup> December at 17:45 was 5,090 MW;
- The total available plant at the peak demand was 5,219 MW;
- Wind at the peak demand was 45 MW;
- Flows were from South to North reported at peak demand at 270 MW;
- The margin at the peak was 444 MW.

Overall the decrease in total demand from 2008, along with new generation entry (see next) has helped result in an increased weekly margin of available plant at the peak. The figures below show this. With the exception of the cold spells at the start and end of the year, the margins at peak (i.e. the difference between the sum of plant availability, wind and interconnector flows; and peak demand) remained high throughout 2010, and was generally higher than 2008 and 2009.

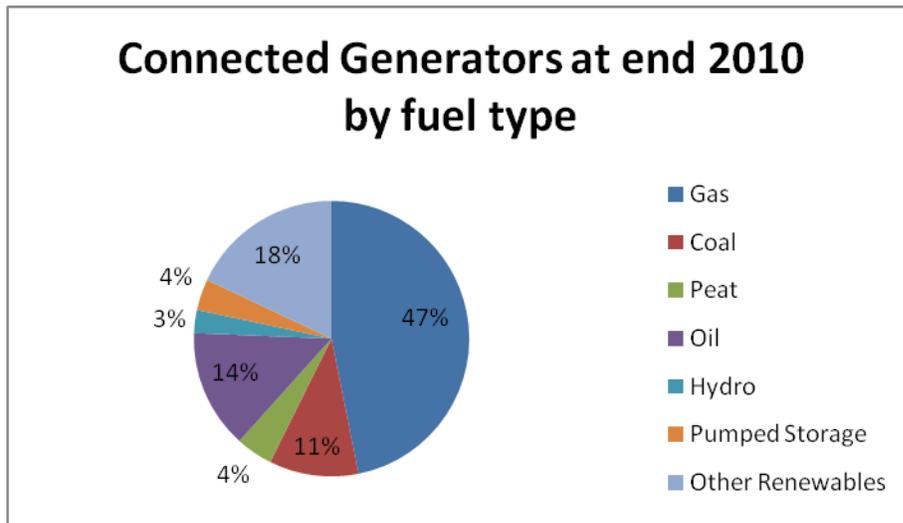
## Electricity Margin at Peak 2008, 2009 & 2010



2010 saw the connection of three new large thermal plants to the system. Bord Gáis Energy commissioned a new 445 MW CCGT at Whitegate in Co. Cork. Bord Na Móna commissioned a new 116 MW distillate peaker at Edenderry in Co. Offaly and ESB commissioned a new 430 MW CCGT at Aghada in Co. Cork.

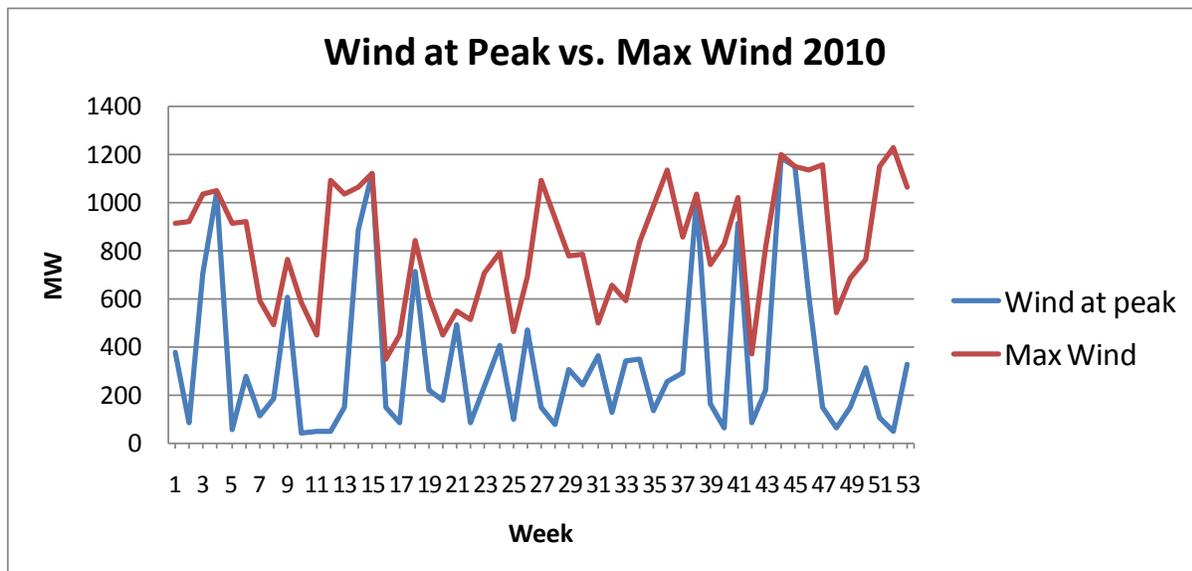
The graph below shows the approximate installed generation capacity by fuel type in Ireland at the end of 2010.

**Connected Generators by Primary Fuel Source, December 2010**



Finally, 2010 saw numerous new records in wind generation. On Sunday 26<sup>th</sup> December 2010, maximum wind generation was recorded at 1,228 MW. This is not surprising given the increase in installed wind capacity. The graph below shows peak wind during 2010 and also the level of wind at the peak each week.

**Maximum Wind vs. Wind at Peak 2009**



**Plant Licensing**

The CER has the statutory function/duty of issuing Licences to Generate and Authorisations to Construct pursuant to sections 14 and 16 of the Electricity Regulation, Act, 1999. In 2010, the following authorisations for conventional (i.e. “non-renewable”) generation capacity were issued by the CER:

### Authorisations to Construct Issued to Conventional Generators in 2010

Licensee	Unit	Date Licence was Issued
Endesa Ireland	CCGT, 431 MW, Great Island	22 <sup>nd</sup> October 2010

The CER's Environment Team is responsible for the grant of Authorisations and Licences for renewable and CHP projects. A summary of Authorisations and Licences granted by the Environment Team in 2010 is set out in the table below.

### Authorisations and Licences Granted to Renewable and CHP Generators in 2010

	Number of stations	Total Installed capacity
<b>Authorisations Granted</b>	<b>18</b>	<b>125.85</b>
of which wind	14	119.80
of which CHP	1	2.00
of which waste	2	2.05
Of which diesel	1	2.00
<b>Licences Granted</b>	<b>32</b>	<b>186.36</b>
of which wind	21	164.00
of which CHP	4	5.70
of which waste	5	10.16
of which diesel	2	4.50
of which hydro	1	2.00

### *CER's Role with respect to Authorisation of Generation*

Under the relevant legislation, generation plants are 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:

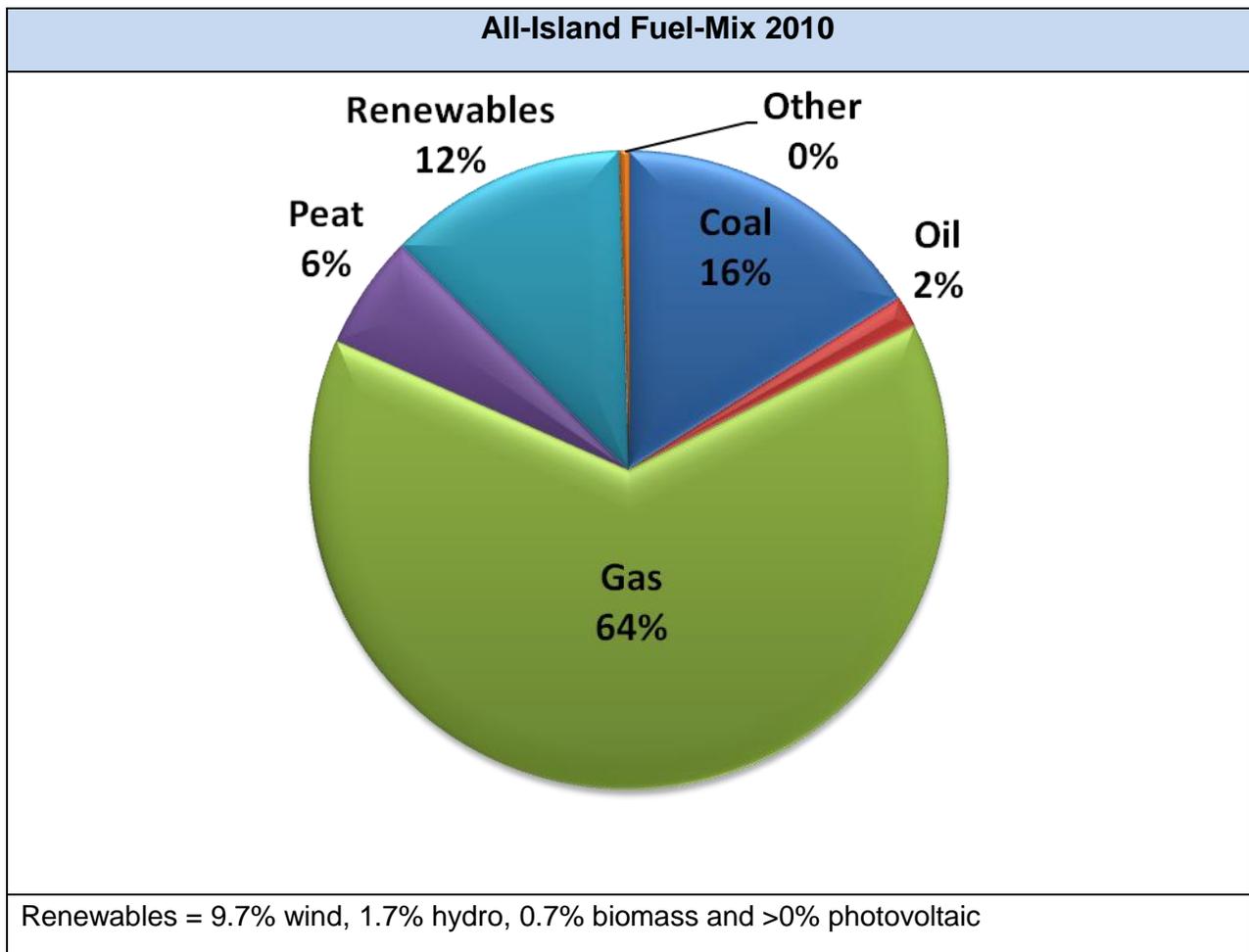
- Suitability of the Applicant (correctly constituted body, managerial competency, solvency, etc.);
- Suitability of Project – technical assessment (generation plant and technology proposed, construction and commissioning programme, plant engineers, network connection agreements, etc.);
- Compliance with relevant legislation (environmental regulations, planning permissions, other permits (Water Extraction Licence, Integrated Pollution Prevention Control Licence, etc);

- Project business plan (project financing, business plan, off-take arrangements, accounts projections, etc.).

### 2010 Generation Fuel Mix

The fuel mix for the SEM (Ireland and Northern Ireland) is set out below. This shows that gas is by far the most predominant fuel in electricity generation, followed by coal, with renewables also playing an important role - see also section 3.6.

#### All-Island Fuel Mix 2010



### 3.7.2 Progress on Major Electricity/Gas Infrastructure Projects

See section 3.6 for information on infrastructure developments such as the east-west interconnector.

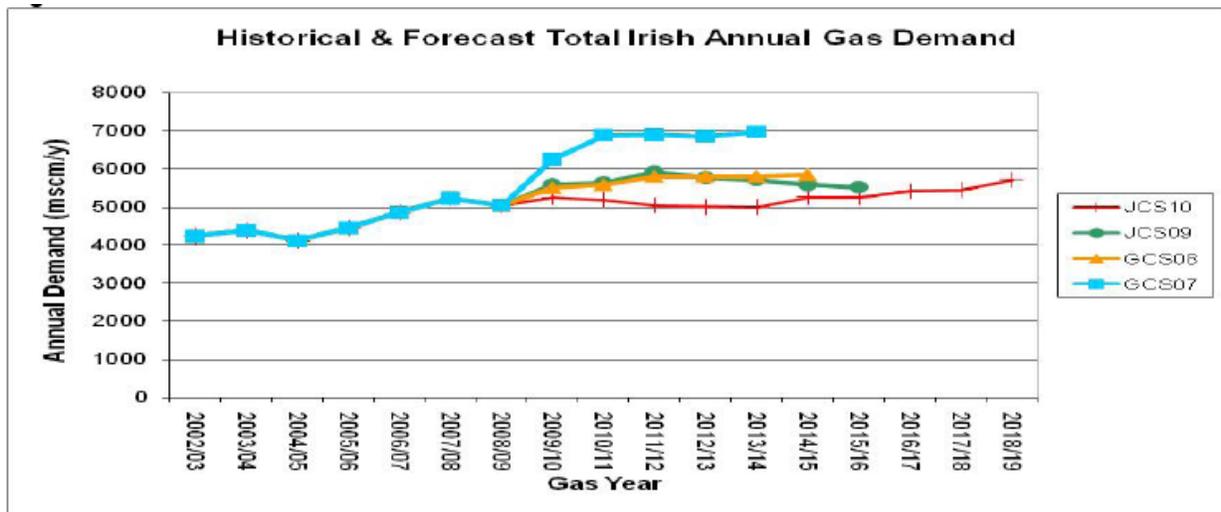
### 3.7.3 Gas Security of Supply

In 2010 the CER and UR co-operated in the production of the second Joint Gas Capacity Statement (JGCS) for Ireland and Northern Ireland. The 2010 JGCS differs from that produced last year by extending the scope of the analysis to ten years. This change was undertaken in order to align the analysis of Ireland and Northern Ireland with that of the European 10-Year Network Development Plan produced by the European Network of Transmission System Operators for Gas every two years under EC Regulation N° 715 of 2009. The 2010 JGCS therefore includes updated analysis and modelling of the impact of forecast gas supply and demand on the island's transmission systems for the period 2009/10 to 2018/19. The study provides the best estimate of the adequacy of the transmission system on the island to meet demand growth in the two jurisdictions.

The report shows that the high pressure transmission systems in Ireland and Northern Ireland have sufficient capacity for supplies to meet both forecast demand and severe winter 1-in-50 peak-day demand over the period. The outlook for security of gas supply on the island remains positive given the potential introduction of new supply sources in the coming years. The forecast gas demand of the island is lower than that published in the 2009 JGCS mainly on account of the economic downturn but also because of the projected decrease in electricity demand and improved energy efficiency targets.

The historical and forecast total Irish Annual Gas demand for the period is shown below.

#### Irish Gas Demand



Overall, the outlook for the island’s security of gas supply remains relatively positive due to the various gas infrastructure projects which may provide significant supplies into Ireland and Northern Ireland in later years.

## 3.8 Regulation / Unbundling Developments

### 3.8.1 Electricity

#### *Distribution - Overview*

EU Directive 2003/54/EC unbundling requirements have been transposed into Irish law through European Communities (Internal Market in Electricity) (Electricity Supply Board) Regulations 2008 (SI 280 of 2008).

In line with the model for distribution unbundling adopted in SI 280, ESB will remain the owner of the distribution system and a wholly owned subsidiary of ESB is required to undertake the functions of the operator. To progress the separation of the businesses, the CER consulted on the necessary modifications to the Distribution System Operator (DSO) licence to take account of this new situation. Given the timeframe for the legal unbundling process offered the CER felt it appropriate to carry out a full review of the DSO and Distribution System Owner (DAO) licences in light of the developments in the electricity market. The unbundled regime came into operation in January 2009. The DSO has put in place a compliance programme which was reviewed and approved by the CER.

The CER has reviewed and published a compliance report for 2010. This report details the actions taken by the DSO during 2010 to ensure it follows its compliance programme. No significant non-compliances were reported.

#### *Transmission - Overview*

ESB currently owns the electricity transmission network. In 2001, the CER issued a Transmission System Owner (TAO) licence to ESB. A TSO licence was issued to EirGrid. An Infrastructure Agreement, detailing the arrangements between TSO and TAO, was formulated in 2001 and was fully implemented in July 2006.

#### *Transmission & Distributions - Detail*

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

#### **Electricity Unbundling Arrangements**

<b>Electricity Unbundling</b>		
	Transmission	Distribution
	Yes/No	Yes/No

Separate headquarters	Y	Y
Separate corporate presentation	Y	N
Unbundled regulatory accounts with guidelines	Y	Y
Audit of unbundled accounts	Y	Y
Publication of unbundled accounts <sup>4</sup>	Y	Y
Separate board of Directors without Directors from other group companies	Y	N

The relevant unbundling provisions of the TSO, TAO and DSO 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 under taken by ESB Networks Ltd, a wholly owned subsidiary of ESB. EirGrid undertakes operation of the transmission system and the wholesale market. EirGrid was legally separated from ESB in July 2006. In July 2011 the Irish Government announced that, in the context of the EU’s “Third Energy Package”, the ownership of the electricity transmission assets is to remain with ESB while the operation and development of the transmission system will continue to be the responsibility of EirGrid. In light of this, a process of certification, under Article 9 (9) of the relevant EU Directive, to demonstrate compliance with the Third Energy Package of these arrangements for electricity transmission in Ireland, is expected to commence in late 2011. This is expected to be a matter for the CER and the European Commission.
- **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 the TAO is separated from the production and supply arms of ESB, ESB PES and ESB PG. ESB Networks Ltd is a wholly own subsidiary of ESB and undertakes the functions of the DSO.

In terms of location, EirGrid has its own separate offices. ESB Networks premises are also 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](http://www.EirGrid.com). ESB Networks presents itself as the DSO and TAO. ESB Networks does not use a separate logo or corporate website. The electricity supply business within the ESB Group is now separately branded.
- **Publication of TSO/TAO/DSO Accounts:** There is a requirement on parties to submit audited accounts. A short version of the regulatory accounts are published.

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<sup>4</sup> Unbundled accounts are published in a summarised format.

- Regulatory Accounting Guidelines ('RAGs'): In 2002 the CER issued detailed guidelines on the recording of accounts for regulatory purposes. These were amended to take account of the distribution unbundling.

The regulatory accounts submissions under Condition 14 ('Separate Accounts for the Separate Businesses') of ESB Networks' Transmission System Owner Licence, Condition 22 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 Regulatory Accounts: 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 for business separation 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 concerning business separation.
- 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 Ltd 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 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).

### **3.8.2 Gas**

BGE owns the gas transmission and distribution networks in Ireland and is wholly-owned by the Irish Government. In July 2008 Gaslink was established as an Independent System Operator for the BGE Transportation System to facilitate competition in supply activities. This is required under European Communities (Internal Market in Natural Gas) (BGE) Regulations, SI NO 760 of 2005. The relationship between BGE as asset owner and Gaslink as system operator is set out in the Operating Agreement approved by the CER. This enables Gaslink to discharge the

functions of independent transmission and distribution system operators as provided for in Directive 2003/55/EC.

There are ring-fencing arrangements in place between BGE Networks and BG Energy. These businesses are not fully separated and share some IT systems. BGE also has one “shared services” division.

The network operator is branded as BGÉ Networks, while the supply arm is presented to customers as Bord Gáis Energy Supply. The system operator Gaslink, is an independent subsidiary of BGÉ. They do not operate under the parent company umbrella and have their own brand and website.

The Compliance Officer provides an annual report to the CER on compliance issues. Additionally in 2010 the CER requested BGE to investigate two compliance complaints received from suppliers and report on these allegations to CER. The CER was satisfied in both cases that there was no discrimination; nevertheless the CER required BGE to put in place a number of recommendations following these investigations.

In accordance with their licence conditions, separate accounts are provided for each of BGEs separate businesses.

In 2010 the Department of Communications, Energy and Natural Resources decided that BGE would adopt the ITO unbundling model in compliance with Directive 2009/73/EC. The CER is working with BGE to ensure that they implement the model in accordance with the requirements of the Directive. As BGE own assets in the UK, Northern Ireland and Ireland they will need to be certified by the regulators in each jurisdiction. The CER, OFGEM, and Utility Regulator (Northern Ireland regulator) are working together in assessing the compliance of BGE and meet together regularly with BGE for this purpose. This will continue throughout 2011.

### **3.8.3 Third Package Transposition**

In September 2009 the EU’s “Third Energy Package” of new legislation was passed. The two Directives and three Regulations are aimed at further liberalisation of the EU electricity and gas markets.

During 2010, work on transposition of legislative provisions into Irish law which had been initiated at the end of 2009, was advanced by the Department of Communications, Energy and Natural Resources. In September 2010, Statutory Instrument 450 of 2010 was made. These Regulations provided for a new role for the CER in monitoring and regulating electricity retail markets and taking action where necessary in the interests of competition and consumers. The decision of the Minister for Communications, Energy and Natural Resources during 2010 to adopt the independent transmission system operator (ITO) model for gas, allowed work on the transposition of provisions relating to the unbundling of the transmission system operator for gas to be progressed.

In tandem with this workstream the Department also progressed transposition of consumer protection measures and provisions to strengthen the powers and functions of the Commission for Energy Regulation. This work, conducted in consultation with stakeholders, continued into 2011.

## 3.9 Safety Developments

### ***Background***

The Petroleum (Exploration and Extraction) Safety Act, 2010, (the “2010 Act”), passed on 3<sup>rd</sup> April 2010, confers upon the CER the role of safety regulator for designated petroleum activities. In essence this means that specific exploration and extraction activities carried out by petroleum undertakings/companies in Ireland will be regulated by the CER as regards safety. In order to fulfil the role of safety regulator, the 2010 Act requires the CER to establish and implement a risk-based Petroleum Safety Framework, which will describe the system that will be used to regulate the safety of petroleum undertakings/companies.

The 2010 Act and the requirement to implement a risk-based Petroleum Safety Framework gives effect to a key recommendation of the report produced by Advantica following its safety review of the Corrib gas pipeline. The Advantica Report recommended that a new risk assessment-based safety framework with respect to gas pipelines and related infrastructure, in line with best international practice, should be developed and implemented in Ireland.

The 2010 Act expands on this concept to provide that petroleum activities generally would be governed by the new Petroleum Safety Framework. The Framework will set out the scope of the petroleum activities and associated infrastructure that will be regulated by the CER. It is envisaged that the Framework will cover a wide range of activities, including the construction, operation, maintenance, modification and decommissioning of petroleum infrastructure. It will also include the systems and procedures to be operated by the CER in regulating these activities and infrastructure, including a permissioning regime and an ongoing system for audit and inspection.

### ***Petroleum Safety Framework***

A CER *Petroleum Safety Framework Implementation Project* has been established to ensure that all the provisions of the 2010 Act are implemented in a timely manner. Given the importance of these new safety functions, one of the CER’s key tasks in 2010 was to begin the process of implementing the new Petroleum Safety Framework. The design and implementation of the Framework will be a challenging and complex project that will take approximately 3-4 years to complete.

The key benefits to be delivered by the *Petroleum Safety Framework Implementation Project* are:

1. The State will have a risk-based system for regulating designated petroleum activities with respect to safety that is in line with best international practice;
2. It will engender confidence and assurance amongst the general public and the industry that the safety regulation of designated petroleum activities protects the public and is in line with the public interest; and,

3. It will bring greater clarity and transparency to the regulation of petroleum activities with respect to safety in Ireland.

In 2010 the emphasis was to undertake the initial planning and scoping of the Petroleum Safety Framework Implementation Project, including the establishment of a project team to manage the design and full implementation of the Petroleum Safety Framework. In order to support the design of the Framework, two reports were published by the CER in late 2010 and early 2011. These reports were: “The Review and Comparison of Petroleum Safety Regulatory Regimes”, published in December 2010, and “Status Analysis Review of the Existing Legislative and Regulatory Regime for Petroleum Exploration and Extraction in Ireland”, published in March 2011.

The “Review and Comparison of Petroleum Safety Regulatory Regimes” examines the safety regulation of onshore and offshore petroleum activities by various regulators. The regimes that have been reviewed are: UK, Denmark, Norway, Australia and Canada – Nova Scotia. The purpose of this review is to identify international practice for petroleum safety regulation. The CER will use the review as the basis to develop a Petroleum Safety Framework that is consistent with international regulatory regimes and commensurate to established international best practice.

The “Status Analysis Review of the Existing Legislative and Regulatory System for Petroleum Exploration and Extraction in Ireland” describes the current safety regulatory regime in operation in Ireland. The review describes the existing international, European and national legislation currently in place, and illustrates that there are a high number of statutory agencies with both regulatory and investigative responsibilities in the petroleum sector in Ireland. The areas of responsibility primarily depend on location (onshore/offshore), type of infrastructure, and type of petroleum activity. The high number of statutory agencies means that the number of potential interfaces between regulatory agencies is high and complex. This Status Analysis Review will provide an important touchstone for the high level design of the Petroleum Safety Framework in 2011.

The CER has also undertaken a considerable amount of detailed planning in 2010 detailing the execution of the Petroleum Safety Framework Implementation Project. A high level version of the project plan will be published in 2011.

### ***Existing Safety Functions***

In 2010 the CER also completed a number of tasks in relation to its existing safety functions regarding gas and electrical safety responsibilities as established under the Energy (Miscellaneous Provisions) Act 2006. For these functions, following the establishment of the gas and electrical safety regulatory frameworks, the CER’s primary safety focus for 2010 is itemised below.

### ***SSB Performance Management Framework & Compliance Audit***

Given that the Safety Supervisory Bodies (SSBs), i.e. the Electrical Contractors Safety and Standards Association (ECSSAI), Register of Electrical Contractors of Ireland (RECI) and Register of Gas Installers of Ireland (RGII), are responsible for carrying out safety functions on behalf of the CER, the CER requires assurance that the SSBs are fulfilling their obligations as envisaged under the relevant Criteria Document. Specifically, the Criteria Documents set out the

obligations and procedures to be followed by participants operating within the electrical and gas safety industries, including the SSBs.

Consequently, as part of its strategy for the regulation of the SSBs, the CER developed a Performance Management Framework document which involves the SSBs reporting against a series of safety metrics on a quarterly basis to the CER. Based on information contained in the Performance Management Reports, the CER has been able to identify trends across both the electrical and gas registration schemes.

Notably, the Reports show that there has been a decline in the number of Electrical Contractors registering with the electricity SSBs. 2010 has also seen a reduction in the number of certificates sold by SSBs; these certificates are required for completed electrical installation work. This development can be attributed directly to the decline in new builds and the overall downturn in the construction industry.

However, the Reports also show that the RGII scheme for gas installers has seen a steady increase in the number of parties registering to the scheme throughout 2010, with the sale of certificates, particularly those relating to the servicing of gas appliances, remaining buoyant. The CER will continue to monitor throughout 2011 developments in these areas through the SSBs' ongoing reporting to the CER under the Performance Management Framework.

Recognition of the Registered Gas Installer scheme increased significantly during 2010. A survey carried out by Bord Gáis in 2009 highlighted that the awareness of the scheme at that time by the public was at 38%; however following the continued and developing media campaign by the CER, Bord Gáis Networks and RGII, that figure has risen to 64% for natural gas customers and 52% for the general public. This is an encouraging statistic that reflects the positive nature and scope of the advertising campaign. This survey also highlighted a 37% awareness in 2010 of the Registered Electrical Contractor Scheme. These figures will continue to be monitored throughout 2011.

Additionally, in 2010 the CER appointed external auditors to undertake independent audits of the electrical and gas SSBs to verify whether they are operating in compliance with the Criteria Document and their Terms and Conditions of Appointment. Following a period of on-site inspections by the CER's external auditors, the CER were notified of any non-compliances identified. Following the commencement of a remediation process, these non-compliances have been or are in the process of being rectified by the SSBs. Follow-up audits are planned for 2011.

## **LPG**

In June 2010 legislation for the inclusion of Liquefied Petroleum Gas (LPG) installers into the Registered Gas Installer scheme was enacted. The CER will consult in early 2011 with industry to define what LPG work will be regulated. Similarly to natural gas, LPG installers will be required to register with RGII in order to legally carry out LPG works. In preparation for registration, which will commence in mid 2011, RGII are communicating with LPG installers regarding the registration process and requirements.

The CER continues to work with the Department of Communications, Energy and Natural Resources on the draft Phase 2 legislation for the regulation of LPG undertakings (rather than only installers). This legislation will provide for the safety regulation of LPG distribution

networks, LPG appliance-related incident reporting in a domestic setting and the promotion of LPG safety by the CER. It is envisaged the publication of this legislation will take place mid 2011.

### ***Common Performance Evaluation Scheme for Registered Electrical Contractors***

In order to ensure a common and consistent approach to monitoring the performance of Registered Electrical Contractors (RECs), the Criteria Document places an onus on the SSBs to carry out audits and inspections of RECs, based on a common Performance Evaluation Scheme. Following a series of workshops, the CER in conjunction with representatives from ECSSAI and RECI agreed a Common Performance Evaluation Scheme document in December 2010. This will ensure a standardised approach to inspections of RECs across both SSBs.

### ***Launch of Safe Electric Campaign***



In April 2010 Minister Eamon Ryan launched the Safe Electric campaign on behalf of the CER - see [www.safeelectric.ie](http://www.safeelectric.ie). The Safe Electric logo and subsequent media campaign, which included television and radio advertisements, were designed to encourage customers to always seek a Registered Electrical Contractor to carry out electrical work and to seek a certificate upon completion of the work.

### ***Prosecutions***

As part of its safety function the CER has the power to prosecute people, who are not registered as RGIs with the RGII, for carrying out Gas Work. Gas Work is defined as the repair, replacement or maintenance of a Natural Gas appliance used or designed to be used in a domestic setting.

In 2010 the CER successfully prosecuted a non-registered party for illegally carrying out Gas Works. This was the first prosecution by the CER and the first prosecution to take place for an offence under the Safety enforcement provisions of the Electricity Regulation Act, 1999, as amended. The courts convicted the individual of the offence and imposed a fine.

## **4. Regulation and Performance of the Electricity Market**

Access conditions, connection charges and use of system tariffs imposed by the transmission and distribution operators are also regulated. For electricity, this concerns EirGrid as TSO and ESB Networks Ltd. as the DSO. Further, the CER has introduced a number of ring-fencing requirements between and within the incumbents' regulated businesses to ensure that certain business units/subsidiaries 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 businesses from its generation and supply businesses was completed in late 2005, with subsequent legal unbundling carried out at the start of 2009.

### **4.1 Electricity Network Operators**

There is one TSO, EirGrid, and one DSO, ESB Networks Ltd. ESB Networks (a business unit of ESB Group) is the owner of transmission and distribution system.

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), asset values, business and system performance.

The CER carried out a review of the network operators' revenue during 2009 and 2010 for the period 2011 to 2015. Further details are available in section 3. The CER approves any changes to transmission and distribution 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. 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.

### **4.2 Electricity Network Tariff Structure**

The CER reviewed and approved the total allowed transmission revenue for 2010 - €237 million - and the respective tariffs for the transmission year 1<sup>st</sup> October 2009 to 30<sup>th</sup> September 2010. Transmission tariffs are designed to fully recover the TUoS revenue requirement from transmission "users" including both generators and demand users connected directly to the transmission system or indirectly via the distribution system.

Transmission tariffs consist of postalised demand tariffs and locational generator tariffs, which recoup 75% and 25% of the "wires component" of the allowed transmission revenue (the vast bulk of the revenue) respectively. All allowed "non-wires" costs, such as ancillary services, are recovered through demand tariffs.

The network charge recovered from demand customers is not recovered solely on a capacity basis but is split between energy and capacity. 40% is recovered on an energy basis and 60% is recovered on a capacity basis through the 'Network Capacity Charge'. This is allocated on a

fixed basis through a per MW, Network Capacity Charge. This amounts to approx 45% of wire costs being allocated to the network capacity charge.

The 40% of wire related costs that is allocated on an energy basis is recovered through an MWh Network Transfer Charge, as a result demand users are charged consistent with their associated usage.

There is also a capacity margin charge in place for recovering costs associated with demand side management schemes. This is recovered fully from demand users and does not form part of the TUoS revenue.

The 25% of the total allocation of network related costs that is allocated to generation users is recovered through the Generation Capacity Charge. Generators connected directly to the transmission system or indirectly via the distribution system pay locational use-of-system charges which are capacity based (Reverse MW-mile methodology).

Distribution connected generators with a capacity <10 MW have a locational Network Capacity Charge rate of zero. Generators equal to or greater than 10 MW pay a site specific Generator Network Capacity Charge.

Generators who can be called upon to offset flows and who have the potential to reduce the need for future investments are credited by the TSO. This could result in some of these generators having a negative overall TUoS charge however a lower bound of zero has been set for generators who do not provide system security from a planning perspective – wind generation and ‘emergency’ generators.

The CER recently conducted its annual review of distribution revenue and tariffs for 2010. The CER has allowed the DSO to collect €679.2 million (2010 prices) for the year 2010 and €675.7 million for 2011 (in 2011 prices). This revenue is collected from demand customers through cost reflected tariffs.

There is a requirement on the DSO 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 table below provides information on the total duration (minutes/yr) of interruption for the average customer for the period 2005 – 2010:

#### Duration of interruption for average customer 2005-2009 (minutes/year)

SAIDI	2005	2006	2007	2008	2009	2010
Planned interruptions - Min per customer/Yr	375	269	79	61	59.3	64.1
Unplanned interruptions - Min per customer/Yr	154	124	115	94	81.3	82.1
Planned and unplanned interruptions - Min per customer/Yr	529	393	194	155	141	146.1

### 4.3 Unbundling of Electricity Networks

Please see section 3.8 for details.

### 4.4 Description of Wholesale Market - SEM

The SEM consists of a gross pool market into which all electricity generated or imported onto the island of Ireland must be sold, and from which all wholesale electricity for consumption or export from the island of Ireland must be purchased. The SEM combined the two previously separate wholesale markets of the Republic of Ireland and Northern Ireland into one cross-border market and was developed with the goal of creating a single market that benefits all consumers through; greater competition, better investment opportunities, enhanced security of supply, and improved efficiencies.

More details of the SEM, including developments in 2010 are shown in Section 3.1.

#### ***Regulatory Environment***

The SEM Committee is the decision-making body which governs the exercise of regulatory functions on SEM matters. Legislation was enacted in both jurisdictions to establish and to give effect to the SEM Committee:

- Republic of Ireland – the Electricity Regulation (Amendment) (Single Electricity Market) Act 2007 which amends the Electricity Regulation Act 1999 to provide for the establishment and operation of a single competitive wholesale electricity market on the island of Ireland.
- Northern Ireland - the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 provides a legal framework for the establishment and operation of the SEM in NI.

Under law, the primary function of the SEM Committee is the taking of decisions as to the exercise of relevant functions of the CER or the UR in relation to SEM matters on behalf of the Regulatory Authorities. A matter is a SEM Matter if the exercise of certain “relevant functions” by either Regulatory Authority in relation to that matter materially affects, or is likely to materially affect, the SEM.

The objectives and functions of the SEM Committee in carrying out their functions in relation to the SEM are set out in Sections 7 and 9 of the Electricity Regulation (Amendment) (Single Electricity Market) Act 2007. They are mirrored in the Northern Ireland legislation.

The SEM Committee is supported by an Oversight Committee, a Secretariat and a number of Joint Management Units (JMUs) which supervise and co-ordinate key regulatory workstreams. The Oversight Committee is responsible for:

- the management and recommendation of resources across both Regulatory Authorities to ensure both Regulatory Authorities give effect to decisions of the SEM Committee;
- the co-ordination and development of proposals on SEM matters for consideration by the SEM Committee;
- the management of key regulatory functions through JMUs, as outlined below; and,
- such other matters as determined by the SEM Committee.

Four key SEM regulatory functions have been identified and a Joint Management Unit (“JMU”), assigned to each:

- Trading and Settlement Code;
- Market Modelling Group;
- Market Monitoring Unit;
- Single Electricity Market Operator Regulation.

Agreed internal joint working principles, called Joint Regulatory Arrangements, have been developed by the Regulatory Authorities for the operation of the oversight arrangements, the exercise of roles in the management of each JMU, and the exercise of any delegated functions from the SEM Committee.

The CER has lead responsibility for two of the JMUs; the Trading & Settlement Code and the Market Modelling Group, and also a shadow role in the other two JMUs; SEMO Regulation and the Market Monitoring Unit, as follows.

#### *Trading & Settlement Code*

The Code is a multilateral contract which sets out the rules and procedures concerning the sale and purchase of wholesale electricity in Ireland and Northern Ireland. The Code was designated by the Regulatory Authorities on 3rd July 2007 and can be modified from time to time thereafter in accordance with procedures set out in the Code. This JMU is based in the CER.

#### *Market Modelling Group*

The Market Modelling Group (MMG), also based in the CER, provides market forecasts of the SEM to the RAs. The majority of the MMG’s forecasting is over short term (1 to 2 years), which is used to feed into the work of other JMUs and departments within the RAs. Medium and long-term forecasting is also carried out to support RA policy decisions.

## *Market Monitoring Unit*

The Market Monitoring Unit (MMU), based in the UR, reviews generator participant behaviour in the market; this includes investigations into the exercise of market power, monitoring the compliance of market participants with the bidding code of practice and other market rules. The MMU is also the point of contact for participants who wish to register complaints of market behaviour. The MMU also has responsibility for setting the SEM Capacity Payment Mechanism (CPM). The CPM attaches a value to the provision of capacity by generators within the market. The CPM was developed with a view to ensuring the reliability of the system, giving some degree of price and revenue stability and sending efficient signals to the market for long term investment. Taken together, the SEM's SMP and the CPM reward generators for the value of energy and capacity.

## **SEM Market Power Mitigation**

### ***Market Power Definition***

*The ability of a market participant, acting independently, to raise market prices consistently and profitably above competitive levels for a sustained period of time.*

As part of the development of the SEM the Regulatory Authorities developed a robust market power mitigation strategy to prevent market power being abused or distorting the SEM. The major focus of this strategy comprised the imposition of Directed Contracts on generators with significant market power, the imposition on generators of licence conditions to adhere to a Bidding Code of Practice and the setting up of a bespoke Market Monitoring Unit to monitor participants bidding behaviour.

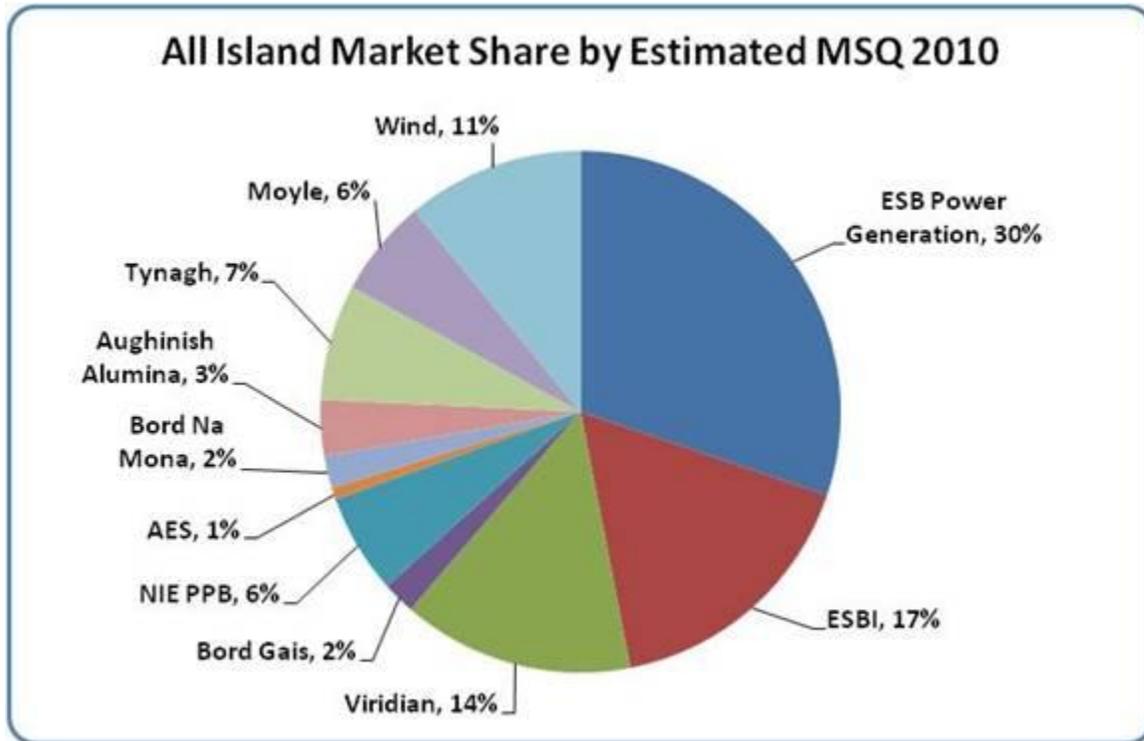
Directed Contracts form a cornerstone of the market power mitigation strategy in the SEM. These contracts (to be in the form of Contracts for Difference at a regulated price based on the Regulatory Authorities' forecast of spot market prices in a market absent any market power) mitigate market power by reducing the incentives for the market participants to submit bids above competitive levels, or otherwise withhold capacity, in order to influence current spot prices or future contract prices. On an annual basis the Regulatory Authorities direct generators with market power to offer a portion of their output as Directed Contracts to all suppliers eligible to avail of it.

In 2010 only ESB PG were required to offer Directed Contracts – its market share in 2010 is shown in the pie chart below. The prices of these contracts are determined largely by forward fuel prices and a pricing formula established by the Regulatory Authorities. Suppliers bid the volume of MWs they require during the directed contracts auctions held. The entire volumes of directed contracts were sold during the auctions and therefore fulfilling this element of the market power mitigation strategy. Please see section 3.1 for further details.

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<sup>5</sup> Ref: US Department of Justice & Federal Trade Commission, Horizontal Merger Guidelines 1997. See also, definition of dominant position in *United Brands v Commission of the European Communities* Court of Justice of the European Communities, Case 27/76 [1978] ECR 207, judgment of 14 February 1978.

All Island 2010 Market Share by Market Schedule Quantities (MSQ) \*



\* Wind in the above chart is an approximate figure of all wind output (not only market scheduled wind).

### Bidding Principles

As another key element of the market power mitigation strategy, the Regulatory Authorities (during the development of the SEM) drew up and consulted on a set of Bidding Principles and a Bidding Code of Practice for generators bidding into the SEM. As part of this, market participants must adhere to principles that price bids be submitted to the SEMO at Short Run Marginal Cost (SRMC). This requirement to bid SRMC is reflected in a condition in all electricity licences in both Northern Ireland and Ireland.

## 4.5 Electricity and Gas Retail

Please see section 3.3 and 3.4 for electricity and gas retail developments in 2010.

## **5. Regulation and Performance of the Natural Gas Market**

Under the Gas (Interim Regulation) Act, 2002 the CER is responsible for the regulation of the Irish gas network and the supply or retail market. While the Minister for Communications, Energy and Natural Resources retain responsibility for the licensing and regulation of offshore exploration.

The CER regulates the charges, tariffs and access conditions imposed by BG Energy and conducts five-year reviews of revenue earned by the gas network operators. There are also annual price controls in place for the supply arm of BGE. Access conditions, connection charges and use of system tariffs imposed by the transmission and distribution operators are also regulated. In gas, this concerns BG Networks as owner of the gas transmission and distribution systems and Gaslink as TSO.

Further, the CER has introduced a number of ring-fencing requirements between and within the incumbents' regulated businesses to ensure that certain business units/subsidiaries are autonomous and independent of one another. These requirements are enforced by way of licence conditions and business separation implementation programmes.

### **5.1 Regulation of Gas Transmission and Distribution Companies**

BGE owns the gas networks in Ireland which are now operated by Gaslink, a legally separate subsidiary of BGE. The relationship between Gaslink as the system operator and BGE as asset owner is managed through the Operating Agreement approved by the CER. These arrangements are in accordance with Irish legislation SI 760 of 2005, which was introduced to give legal effect to Directive 2003/55/EC.

#### **5.1.1 Gas Network Tariffs**

BG Networks (BGN) proposes network transmission and distribution tariffs to the CER as part of the annual tariff review exercise. 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 BGN costs, including the benchmarking of costs against the same activities in other countries. BGN's allowed costs are decreased as appropriate to reflect efficiencies that should be achieved. The most recent revenue reviews for transmission and distribution run from 2007/08 to 2011/12.

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 Interruption Information 2010

Gaslink Performance Report		
	Number of regulated companies	Interruptions
Transmission	1	100% Compliant <sup>6</sup>
Distribution	1	88.5% Compliant <sup>7</sup>

### 5.1.2 Gas Balancing

Natural gas market balancing arrangements are included in the Irish gas Code of Operations, as approved by the CER. There is a daily balancing regime which is based on the aggregate portfolio of each individual shipper. Tolerance ranges are based on customer category (i.e. smaller customers have larger tolerances). Market participants can trade out their 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

<b>Gas Balancing Mechanism Characteristics</b>	
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 imbalances outside the appropriate tolerance range that are not traded out. The regime is market based as the prices are based on the UK NBP price. First tier imbalances (i.e. within the tolerance range) are cashed out at the NBP price and have no additional penalties. Shippers are penalised if the imbalance is in excess of the tolerance at the Second tier imbalance price by paying a multiple of the market price.

<sup>6</sup> This refers to no Unscheduled Maintenance / Interruptions or Interruptions due to maintenance occurring in 2010.

<sup>7</sup> The target set out in BGN's Customer Charter approved by the CER is to restore gas supply by midnight of the following day in the event of an unplanned interruption. Of the 12,568 no gas incidents, 1,451 were restored outside the 24 hour criteria.

Existence of tolerance levels	Tolerance levels are set on a customer category basis. Gaslink, 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	Gaslink procures energy through an annual tender for balancing and shrinkage.
System Requirements	Gaslink 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 Ireland, there is a single transmission/ distribution system, which corresponds with the single balancing area.
Interaction between areas	It is anticipated that a single balancing area will be created for the island of Ireland (Republic of Ireland and Northern Ireland) following the full implementation of CAG8
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.

<sup>8</sup> CER and the Northern Ireland regulator (UR) are undertaking a programme of work designed to integrate the Irish and Northern Irish gas markets under the Common Arrangements for Gas (CAG) project.

Imbalance timetable	Settlement	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.
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### 5.1.3 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

Gaslink publishes in a generalised format the criteria used to determine when an action is necessary. Gaslink will also publish (possibly in arrears to allow for validation) the location, date, and volume (buy/sell) for balancing actions taken. Gaslink 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

Gaslink 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.

### 5.1.4 Unbundling of Gas Networks

Please see section 3.8 for information on this.

### 5.1.5 Management & Allocation of Interconnection Capacity & Congestion

The Transmission and Distribution systems are operated by an Independent System Operator, Gaslink. The Transmission and Distribution assets remain in the ownership of BGÉ.

Currently 95% of gas is imported through the two interconnectors with the UK (IC1 and IC2). There is sufficient capacity available through the interconnectors at the current time and therefore there is no congestion. Neither is there any congestion on the on-shore system as the system is centrally planned. Investments are approved by the CER and included in the regulated asset base with revenues recovered through the tariffs.

While there is no congestion in the Irish system in practice, rules have been developed to deal with congestion should the situation arise. These rules for congestion management are in line with Directive 2003/55/EC, and are outlined in the Irish gas Code of Operations.

As there is currently adequate capacity available on the Irish gas transmission system capacity is allocated on a first-come first-served basis. 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:

- Short-term capacity products: Three short-term firm capacity products were introduced during the 2007/08 gas year; monthly, weekly and within-day products are now available for shippers to plan and adjust their capacity bookings as appropriate throughout the gas year;
- Secondary market for capacity: The secondary market for capacity operates on a bilateral basis. While the Transporter, Gaslink, is not a party to these capacity trades, it does recognise and facilitate these trades on its systems;
- Interruptible Capacity: Shippers can nominate in excess of active capacity which is de-facto an interruptible capacity. A specific interruptible product is in place at the storage entry point at Inch. Principles and business rules have been developed for an enhanced interruptible product at the entry, these will be developed further and implemented as part of the CAG project;
- 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 may be transiting in the future. The specific arrangements have not yet been finalised;
- Assessment of maximum technical capacity: The TSO methodology on the maximum technical capacity is assessed in the *Joint Gas Capacity Statement (JCS)* prepared by the CER and the UR. The JCS estimates the gas capacity of the Ireland and Northern Ireland systems and in addition acts as an independent check on the TSO methodology;
- Publication of capacity availability and capacity bookings: The transporter has developed a transparency website for the publication of information regarding the level of capacity booked and the level of capacity available at certain relevant points on the system. This information is available publicly through the transporter's website ([www.gaslink.ie](http://www.gaslink.ie))

## 5.2 Wholesale Gas Market

### ***Common Arrangements for Gas***

The CAG project between the Ireland and Northern Ireland includes the development of a common all-island gas market arrangements going forward. Details of this are provided in section 3.2.

## ***Indigenous Production and Storage***

The Moffat entry point in Scotland connects the Irish natural gas system to that belonging to National Grid in GB, and allows for the importation of GB gas to Ireland and Northern Ireland via two sub-sea interconnectors and an onshore pipeline in Scotland. It is the primary source of gas for the gas markets in Ireland (circa 95%), Northern Ireland and the Isle of Man.

Ireland's only indigenous gas supplies at present are located off the South coast of Ireland at Kinsale and are brought ashore through the Inch entry point. These existing fields are largely depleted and the production accounts for only about 5% of demand.

The main possible source of additional indigenous production in the short term is the proposed Corrib gas field off the West coast of Ireland. The Corrib gas field is estimated to contain circa 23 bcm of gas and would supply circa 53% of the Irish gas demand for 6 years.

The only storage facility currently in Ireland is the depleted South West Kinsale (SWK) gas field has been converted for this purpose. It has a working volume of c. 200mscm (2,093GWh), a maximum withdrawal rate of 2.8 mscm/d (29.3 GWh/d) and a maximum injection rate of 1.8 mscm/d (18.8GWh/d). It mainly operates as a seasonal storage facility but can also accommodate within-day gas withdrawals and injections. There is potential for expansion of the storage facility.

## **5.3 Retail Gas Market**

### **Shipper / Supply Licence Provisions**

All shippers/suppliers in the market require a Shipper/Supply Licence<sup>9</sup> 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

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<sup>9</sup> Natural Gas customers in Ireland may be supplied by a shipper or a supplier.

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 Supply Tariffs**

BG Energy's allowed revenue – relating to the Domestic and Small 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**

<b>BG Energy Supply Revenue Control Formula</b>	
<i>Component</i>	<i>Basis</i>
Transmission & Distribution costs (pass-through)	These figures are calculated by the multiplication of estimated capacity and commodity figures of BG Energy'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)	Condition 17 of the BG Energy Licence obliges BG Energy to procure gas at the best effective and most obtainable price. In its latest decision regarding the revenue control period 2007/08 – 2011/12, the CER added financial incentives to the revenue control formula to incentivise BG Energy to purchase gas more efficiently.
BG Energy's own supply costs	Indexed to growth/decline in numbers of BG Energy's customers and in GWh sales.

In addition, new tariff structures for domestic and small and medium sized businesses have been implemented by BG Energy since 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 and actual usage than in the past.

### **Large Customers (consumption level between 5.5 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.

Near the end of 2009 the CER published a consultation on the future of the RTF, which stated that the CER was minded to remove regulation in the RTF sector from October 2010. The CER also wrote to all RTF customers seeking their views on whether the RTF should be retained, amended or abolished. The consultation examined the merits of the RTF and the current state of play in the sector under certain criteria. The CER decided in June 2010 that BG Energy will no longer be obliged to offer this tariff from 1<sup>st</sup> October 2010; this sector is now open to full competition.

### **Medium Customers (consumption level above 73,000kWh and SPC greater than 3,750kWh)**

The Fuel Variation Tariff (FVT) is a price regulation regime which came into effect as of 1 October 2007. Similar to that of the RTF, the FVT is based on a formula, approved by the CER, which reflects the cost to serve of each customer. It consists of four components:

- *Gas Commodity Charge (c/kWh)*: reflecting the monthly unit cost of wholesale gas purchased;
- *Fixed Rate Charge (c/kWh)*: incorporating transmission commodity tariffs, distribution commodity tariffs, swing, flexibility and an approved margin on costs (2.75%);
- *Site Charge (€ per month)*: incorporating transmission capacity tariffs, distribution capacity tariffs, administration costs; and,
- *Shrinkage Gas Charge (c/kWh)*: reflecting the monthly unit cost of transmission shrinkage gas costs incurred with respect to FVT volumes. This charge is common to all customers.

**BG Energy FVT Products**

<b>BG Energy FVT Products</b>	
<i>Product</i>	<i>Description</i>
Monthly Floating Price	This is the default pricing option which applies to all FVT customers of BG Energy where no alternative pricing arrangements have been put in place. The gas commodity price is calculated as the average of the last five 'ICE' daily settlement prices for month M during month M-1 as published in the European Spot Gas Markets (ESGM).
Fixed FVT	This product is offered for terms of 3, 6, 9 and 12 months. The gas commodities charge for each month in the contract period is calculated as the published 'ICE' settlement price for the day immediately prior to the booking window.

***Roadmap to Gas De-regulation***

Following on from the publication of the electricity Roadmap decision and the increase in gas customers switching, the CER published the consultation paper titled: "Proposals on a Roadmap for Deregulation in the Non-Daily Metered Retail Gas Market" in November 2010. The document consulted on the circumstances under which price and revenue controls should be removed from Bord Gáis Energy, along with related matters. A decision is due in Q2 2011.

## **6. Public Service Issues & Consumer Protection**

In this section a summary of the requirements placed on market participants on issues related to public service and consumer protection is provided.

### **6.1 Public Service Issues**

In Ireland, the term “Public Service Obligation” (PSO) generally refers to the obligations placed on suppliers and ESB Power Generation 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 and contribute to Ireland’s security of supply. The policy, detail and operation of PSO backed support schemes relating to environmental protection and security of supply are determined by the Government. The cost of meeting these environmental and security of supply PSOs is met by all customers based on charges calculated by the CER in accordance with its duties with respect to PSO.

Please see section 3.5 for more information on this area.

### **6.2 Consumer Protection**

Consumer protection measures apply to all parties 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.

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. 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.

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.

The legislative frameworks and specific policies/measures that have been put in place with respect to consumer protection are discussed below.

Developments during 2010 in this area are highlighted in section 3.5.

### **6.3 Consumer Protection Legislation**

The Electricity Regulation Act, 1999, and the Gas (Interim) Regulation Act, 2002, transposed into Irish legislation the various public service obligations outlined in Internal Market in Electricity and Gas Directives 96/92/EC and 98/30/EC.

Statutory Instrument Number 60 of 2005 (European Communities (Internal Market in Electricity) Regulations 2005) (SI 60 of 2005) transposed the obligations and consumer protection measures included in the Internal Market in Electricity Directive 2003/54/EC. Equivalent measures in gas stemming from the Internal Market in Gas Directive 2003/55/EC were transposed by Statutory Instrument Number 452 of 2004 (European Communities (Internal Market in Gas) (No.2) Regulations 2004) (SI 452 of 2004).

### ***Electricity***

Regulation 31 of Statutory Instrument Number 445 of 2000 (European Communities (Internal Market in Electricity) Regulations 2000) conferred on the CER the duty to examine and approve electricity supply charges levied by the ESB Public Electricity Supplier.

S.I. 60 of 2005 provides for inter alia, better consumer protection measures and also added Directive 2003/54/EC 'Annex A' consumer protection measures and transposed the universal service obligation. SI 60 of 2005 also provides for the labelling of energy sources on electricity bills and standards of performance of the PES, TSO and DSO in relation to supply.

### ***Gas***

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 by S.I. 452 of 2004.

In S.I. No. 452 it is stated in regulation 6 (inserting section 21A into the Gas (Interim) (Regulation) Act 2002) 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; and,
- there are adequate safeguards to protect vulnerable customers (including the elderly and disabled) which shall include measures to help such customers avoid disconnection;

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

## **6.4 Consumer Protection Obligations**

This section outlines specific consumer protection measures which have been put in place by the CER for the benefit of consumers. Customer protection obligations 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.

### ***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. To facilitate legal unbundling as required by 2003/55/EC the CER granted Transmission and Distribution Operator licences to Gaslink the newly established Independent System Operator in 2008.

### ***Supplier Codes of Conduct & Customer Charters - Gas & Electricity***

Suppliers are currently required to produce the following Codes of Practice in order to provide their customers with a level of customer protection:

- Code of Practice for Marketing;
- Code of Practice for Billing, Payment and de-energisation / disconnection;
- Code of Practice on Complaints Handling;
- Code of Practice for Vulnerable Customers – if serving domestic customers;
- Code of Practice for Budget Controllers/ Prepayment metering – if serving domestic customers; and
- Customer Charter – if serving domestic customers.

The CER issued guidelines in relation to all of these Codes of Practice and the Customer Charter to ensure consistency in their production. The early 2007 the first version of these codes were published by suppliers and they have been operating for the duration of this report.

### ***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. In 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.

### ***Complaints Arbitration - Gas & Electricity***

Statutory Instrument SI 452 of 2004 for Natural Gas and SI 60 of 2005 for Electricity increased the CER's responsibility in the area of customer protection. In particular both SI 452 and SI 60 provide the CER with the legal remit to independently resolve disputes between customers and licensed suppliers, the distribution system operator in electricity and, in the case of natural gas, natural gas licence holders.

The CER has established a dedicated Energy Customers Team which provides this independent complaints resolution service for small business and domestic customers. If a customer cannot resolve their complaint with their supplier or network operator following completion of their complaints handling process, they may refer their complaint to the Energy Customers Team for consideration. The team examines the complaint interacting with suppliers and network operators to determine the root of the problem. Following completion of any necessary investigation the Energy Customers Team issues a decision in relation to the matter on behalf of the CER. Where appropriate the CER may direct a supplier or network operator to undertake an action or compensate a customer in relation to their complaint.

The Energy Customers Team spoke or corresponded with over 1,900 customers during 2010 with respect to their queries or complaints; this included 212 complex complaints on which the CER issued formal decisions. The table below provide a breakdown of the type of issues these customers raised.

## Customer Complaints 2010

<b>Standard Complaints</b>		<b>Complex Complaints</b>	
Billing / High Cost	53	Billing / Incorrect	100
Supplier Charges	28	Network Charges	11
CER Policy	14	Estimated Meter Reads	14
Account Problems	65	Meter issues	30
Tariffs	51	Account Problems	23
Switching	48		
Network Problems	14	Switching	10
Network Charges	25	Network Problems	11
Non CER issues	26	Supplier Charges	13
<b>Total</b>	<b>324</b>	<b>Total:</b>	<b>212</b>

### ***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 (SoLR) 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 BGE as SoLRs for the electricity and gas markets respectively.

The CER consulted on possible changes to SoLR 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 on this matter was issued prior to the commencement of the SEM.

### ***Universal Service / Supply Obligation***

Under S.I. 60 of 2005 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 BGE 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.

### ***Network Access for Rural Customers***

The Electricity Regulation Act, 1999, states that the CER should take into account the needs of rural customers. Condition 2 of the Distribution System Operator’s licence (Connection to and use of the distribution system) stipulates that the 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 BGE in the gas market.

### ***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 July 2009 the SEM Committee published a decision on the Interim Arrangements for fuel mix disclosure. The interim arrangements have been implemented and are the basis of the 2008, 2009 and 2010 disclosure figures. Hence this is the basis for the calculation of the all-island fuel mix for 2010 shown in section 3.7 of this report.

These interim arrangements will be superseded by the arrangements which will be introduced following the transposition of the new RES directive (2009/28/EC) into Irish and UK law.

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