NOTE TO MINISTERS

To: Mr Denis Naughten, TD, Minister for Communications, Climate Action and Environment

In accordance with paragraph 25 (b) of Schedule 1 to the Electricity Regulation Act, 1999, as amended by Section 10 Energy (Miscellaneous Provisions) Act, 2006, we are pleased to present to you the Annual Report of the Commission for Regulation of Utilities, in respect of the period from 1st January 2017 to 31st December 2017.

Cc: Eoghan Murphy, TD, Minister for Housing, Planning, Community and Local Government

Paul McGowan
Chairperson

Garrett Blaney
Commissioner

Aoife MacEvilly
Commissioner
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Introduction

2017 was a significant year as we completed our name change to the Commission for Regulation of Utilities ("the CRU"). Our name now represents the work of all the CRU teams in regulating water, energy and energy safety in the public interest.

Alongside the name change, we also took the opportunity to update our website (www.cru.ie) to make it more accessible for consumers and easier for our stakeholders to find information. The name change and website launch were major projects and all CRU operational and sectoral teams contributed to their successful delivery.

A key focus in 2017 was working with the OECD as it conducted its Performance Assessment of CRU. This international peer review process, conducted in line with the OECD framework for assessment of economic regulators, was a hugely interesting and positive experience for CRU. The process culminated in early 2018 with the launch of the final report: Driving Performance at Ireland’s Commission for Regulation of Utilities.

Overall the OECD found CRU to be a high performing regulator and provided key recommendations to enhance performance, particularly in the areas of developing our leadership role, improved accountability and communications. The CRU is already working to implement these recommendations.

The CRU is an active participant at an EU level. We were delighted that Commissioner Garrett Blaney was elected Chairman of the Board of Regulators of the Agency for Cooperation of European Regulators (ACER) and President of the Council of European Energy Regulators (CEER) in 2017.

Below we outline some key sectoral developments for 2017, alongside some positive outcomes that the CRU has delivered for the public, the economy and society. This was only possible with the knowledge, expertise and commitment of the CRU team. The Commissioners would like to express our gratitude for their ongoing dedication; they are our greatest asset.
Energy Sector Highlights

The energy sector is currently undergoing transformational change on a national and global basis. In addition to the delivery of decarbonisation measures, further integration of EU energy markets, and technological changes, the Irish energy sector is also facing up to the challenges of Brexit and its potential impacts for the all-island and regional energy markets. Within this dynamic landscape, the CRU's aim is to ensure that competitive electricity and gas markets work in the interest of consumers and that regulated energy networks deliver services efficiently.

Irish electricity and gas retail markets are increasingly active, with new suppliers entering and increased customer switching and renegotiating activity. This is increasingly important as rising wholesale gas and electricity costs resulted in increases to electricity and gas retail prices in 2017.

The Irish energy sector continues to play its part in the global response to climate change. 2017 saw increasing levels of renewable electricity generation, and new records in the levels of renewable penetration (up to 65% of renewable generation on the system at one time). Ireland is becoming a world leader in this area through the implementation of the DS3 system services programme.

CRU KEY ACHIEVEMENTS IN 2017 INCLUDE:

- Undertaking a major review of competition in retail energy markets, focussed on ensuring that consumers benefit from competition.
- Enhancing consumer protection with a significant update of the Supplier Handbook, including new measures to promote active consumers.
- Launching a new, phased approach to the national smart metering project, which will commence roll-out in 2019.
- Transforming competitive wholesale electricity markets by progressing, through the all-island SEM Committee, the integrated I-SEM project, with a revised Go-Live date of 1st Oct 2018.
- Successfully completing the first I-SEM Capacity Market auction, following EU State aid clearance, which delivered major savings over the previous capacity mechanism.
- Facilitating greater penetration of renewable generation, including the launch of the new DS3 system services procurement.
- Deciding on the new enduring connection policy for the electricity network.
- Completing the gas network price control, which sets allowed revenues, investments and customer performance indicators for Gas Networks Ireland for the next 5 years.
- Extending the benefits of natural gas with new grid connection for New Ross.
- Promoting decarbonisation of transport by issuing the first licenses to providers of Compressed Natural Gas to CNG powered vehicles.
- Contributing at an EU level to CEER/ACER policy advice for the new Clean Energy Package and to market monitoring and reporting.
- Increasing transparency through enhanced market monitoring and reporting activities, including quarterly retail reports, our annual retail consumer survey and more accurate household consumption figures to improve price comparison.
- Ensuring the consumer voice is core to our decision-making through the energy Consumer Stakeholder Group meetings and our customer complaints function.
Energy Safety Highlights

The CRU has a key role in protecting lives through our safety remit. This work is continuing to expand as we prepare to extend the gas installer safety scheme to non-domestic work. In 2017, CRU worked with key stakeholders to successfully manage a major incident of un-odorised gas entering the natural gas network. This involved our gas networks team participating in the emergency response to this incident. It also involved both our upstream and downstream safety teams investigating the causes of the incident, with a public report on this to be issued in 2018.

Also in 2017, a number of LPG distribution networks which had not previously been part of the CRU’s safety remit were brought to our attention. The CRU undertook immediate action to successfully address identified safety issues in one such network and followed up with a major inspection programme of all such networks in 2018.

CRU KEY ACHIEVEMENTS IN 2017 INCLUDE:

• Ongoing audits and inspections of gas undertakings including GNI, gas shippers / suppliers and LPG undertakings.
• Investigating and prosecuting unregistered electrical contractors and gas installers with 6 successful gas safety prosecutions and 4 successful electrical safety prosecutions.
• Ongoing safety inspections of work carried out by electrical contractors and gas installers by RECI and RGII.
• Transitioning all Registered Electrical Contractors to the Safe Electric register.
• Working with ETCI to transition its work on electrical standards / wiring rules to the NSAI.
• Monitoring reported Petroleum safety incidents.
• Increasing public awareness with three successful campaigns for Safe Electric, Registered Gas Installers Ireland (RGII) and Carbon Monoxide Awareness Week.
Water Highlights

The policy environment for water regulation continued to evolve in 2017. The CRU fully engaged with the work of the Joint Oireachtas Committee on the future funding of domestic water services and continues to work with key stakeholders on the implementation of new legislation and policies for the water sector. The Water Services Act 2017 expanded the role of the CRU, including participation in the Water Advisory Board, and provided for a new funding model for Irish Water. We also worked with Irish Water to improve reporting and transparency on the delivery of the crucial investment programme in national water and waste water services. Our continued focus is on protecting the interests of Irish Water customers.

CRU KEY ACHIEVEMENTS IN 2017 INCLUDE:

- Extensive work to prepare for two major consultations on the transformation of Irish Water’s Connection charging regime and its Non-Domestic charging regime.
- Driving efficiencies by requiring Irish Water to reduce operational costs by 20% between 2015 and 2018, while delivering better outcomes for customers.
- Ongoing monitoring of Irish Water’s implementation of the CRU’s Customer Handbooks, setting minimum standards of service for domestic and non-domestic customers.

Operational and Cross-Cutting Highlights

The economic and safety regulation work of the CER is supported by our Operations functions. Our Operations team help us fulfil our strategic goal of ensuring regulation is best in class as well as delivering on the public sector reform agenda. The resourcing and delivery of our business plan is based on our integrated business planning and reporting tool.

Compliance with the new code of governance for public sector bodies was a key operational focus for CRU in 2017 as we updated and enhanced our governance processes to align with the new code. In addition to the change of name to CRU, the delivery of the new CRU.ie website, the OECD review and other operational developments, the CRU also launched new ICT and HR Strategies, intended to better position CRU and its team to deliver on its expanding and challenging remit.

Thank You

The Commissioners would like to thank all of our stakeholders who contributed constructively to our formal consultation processes, industry and consumer fora and other formal and informal discussions on sectoral developments. We do listen and your contribution enhances our decision-making processes.

The Commissioners are once again deeply grateful to the CRU team, who have worked hard to deliver in the public interest and have made a positive difference. Through their efforts, the CRU has continued to deliver on its mission, vision and values throughout 2017.
Ireland’s Utility Regulator

In 2014, the CRU commenced a review of its Strategic Plan and priorities for the period 2014-2018.

The CRU is the independent body in Ireland with a mission of ‘regulating water, energy and safety in the public interest’.

As part of our vision, the short and long run interests of the public are protected by ensuring:

- Energy is supplied safely;
- The lights stay on;
- The gas continues to flow;
- A reliable supply of clean water and efficient treatment of wastewater;
- Consumer prices for energy and water are fair and reasonable, and
- Regulation is to best international practice.

In fulfilling our mission and our statutory functions, it is vital that the CRU develops and adheres to key values for the organisation so that all stakeholders, and particularly the public, trust us and have faith that we will serve them properly as an independent regulator.

In regulating we stress that:

- We are committed to public service – we will always act in the public interest;
- We act with integrity in everything we do;
- We are professional in our dealings with stakeholders;
- We are accessible to stakeholders – we listen to what people have to say;
- We are proportionate and objective – we take balanced decisions;
- We are transparent – we are open to scrutiny and are committed to explaining our decisions;
- We are accountable for our decisions and for the way we spend our resources, and
- We value and develop our staff – they are our chief resource.

For detailed information on our work please see our website at www.cru.ie.

CRU Duties & Functions

The CRU is Ireland’s independent energy and water regulator. The CRU was originally established in 1999 as the Commission for Electricity Regulation, changing its name to the Commission for Energy Regulation in 2004. To reflect its widened remit that has included the economic regulation of water since 2013, the Commission changed its name to the Commission for Regulation of Utilities in October 2017. The Commission is financed by means of a levy on regulated entities. An overview of the CRU’s current key functions is as follows:

- Economic Regulation of Energy: Our aim is to protect the interests of energy customers, maintain security of supply, and to promote competition covering the generation and supply of electricity and supply of natural gas. We jointly regulate the all-island wholesale Single Electricity Market (SEM) with our counterpart in Northern Ireland, the Utility Regulator through the Single Electricity Market Committee (SEMC), the joint decision-making body responsible for all matters relating to the all-island wholesale electricity market.

- Economic Regulation of Water: The CRU is the economic regulator for the public water and wastewater sector, covering the services provided by Irish Water. Our primary aim is to protect the interests of customers of Irish Water.

- Customer Complaints (Energy & Water): The CRU has an important function in customer protection by resolving complaints that customers have with energy companies and with Irish Water.

- Energy Safety Regulation: Our core focus is to protect lives across a range of areas in the energy sector. This includes safety regulation of electrical contractors and gas installers (covering both natural gas and Liquefied Petroleum Gas (LPG). We are the safety regulator of the downstream natural gas industry (covering storage, transportation and supply) and LPG piped distribution systems. We are also safety regulator of upstream petroleum extraction and exploration activities; this includes oil and gas activity both onshore and offshore.
The following are some of the key pieces of legislation underpinning CRU’s duties and functions:

- The CRU was originally established under the Electricity Regulation Act, 1999, and has taken on significant additional responsibilities since. Responsibility for the regulation of the natural gas market was conferred on the CRU under the Gas (Interim) Regulation Act, 2002.
- The Energy (Miscellaneous Provisions) Act 2006 added to the role and functions of the CRU, including providing for additional responsibilities in natural gas and electrical safety.
- The Electricity Regulation Amendment (SEM) Act, 2007 outlined the CRU’s functions in relation to the Single Electricity Market (SEM) for the island of Ireland.
- In 2010, the CRU’s statutory safety responsibilities expanded significantly with the Petroleum (Exploration & Extraction) Safety Act, 2010. Further legislation has seen the Registered Gas Installer scheme expand to include Liquefied Petroleum Gas (LPG) installers.
- The Water Services Acts in 2013, 2014 and 2017 provide the legislative basis for CRU’s role as economic regulator for public water and waste water services as provided by Irish Water. This legislation, and the CRU’s role, is continuing to evolve in line with national policy.

CRU Organisation

The CRU is led by up to three Commissioners at any one time. In 2017 the Commissioners were Garrett Blaney, Paul McGowan (Chairperson) and Aoife MacEvilly. The Commissioners are assisted in their duties by a staff of about 100, including 4 directors.

The chart below summarises the current organisational structure of the CRU (as of 31 December 2017).
Information Provision

The CRU is committed to providing a high quality, user-friendly and easily accessible service to our customers in all of our areas of responsibility, as set out in our customer charter which is available on www.CRU.ie.

In making decisions on policy matters, the CRU regularly carries out formal consultations with stakeholders on its website www.CRU.ie and the associated website for all-island energy regulatory issues, at www.semcommittee.com Responses to these consultations are considered in the formulation of decision papers. The CRU also regularly communicates and meets with industry and customer stakeholders.

The CRU also delivers energy information to the general public and provides a dispute resolution service for electricity and gas customers, through the CRU website, www.CRU.ie and through face-to-face meetings with stakeholder representative groups and published documents.

CRU 2017 Work Plan

In its work programme for 2017, published on the CRU’s website on 26 January 2017, the CRU identified the key strategic tasks for commencement, progression or delivery during 2017, all of which would allow the CRU to fulfil its mission statement. These tasks are summarised in the Executive Summary and are also discussed in detail in the main section of this Report.
Energy Efficiency

The CRU, as a public sector agency, is fully committed to playing its part in the achievement of energy efficiency (reduction) targets – currently 33% - across the public sector by 2020. Since 2011 the CRU has appointed an Energy Manager and an Energy Management Team. The CRU’s Energy Policy was updated in June 2016.

The CRU is participating in SEAI’s Public Sector Programme “The Public Sector Energy Partnership”. The CRU is an active member of Sustainable Energy Ireland (SEAI’s) Energy Consumption in the Public Sector Programme.

The CRU’s objective for 2017 in this area continues to be exemplary performance in energy management and energy efficiency in the public sector and has set its own target of 50%, which is based on its gross energy consumption as reported to the SEAI.

Based on the results from the SEAI monitoring and reporting system, the CRU has made strong progress in terms of achieving this ambitious energy efficiency target and to date the CRU has reduced its total final energy consumption by 46%.

Energy Usage

During 2017, a total of 177.1 MWh of energy (gross energy consumption) was consumed, consisting solely of electricity. This represents an increase of 1% compared to 2016.

With regards to the work undertaken during the year, a number of projects were progressed by the CRU to address both behavioural change and energy consumption. These included a survey to understand the behavioural trends among staff members and a new lighting project which will replace CFL lighting with LED. Additionally, the CRU’s Energy Management Team held a successful energy awareness week in October which included an SEAI presentation on energy grants, a discussion on electric vehicles, a presentation on behavioural change and economics (by Dr. Pete Lunn of the ESRI) and an energy efficiency themed University Challenge Quiz.
# WHAT WE’VE DONE IN ENERGY SAFETY

## PETROLEUM

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Safety Permits Live</td>
<td>3</td>
</tr>
<tr>
<td>New Safety Permit Application</td>
<td>1</td>
</tr>
<tr>
<td>Material Change Applications</td>
<td>2</td>
</tr>
<tr>
<td>Petroleum Safety Incidents</td>
<td>17</td>
</tr>
<tr>
<td>Enforcement Actions</td>
<td>2</td>
</tr>
</tbody>
</table>

## GAS UNDERTAKINGS

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Cases Assessed</td>
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</tr>
<tr>
<td>Audits and Inspections of Transmission, Distribution, LPG and Suppliers</td>
<td>16</td>
</tr>
<tr>
<td>Gas Safety Incidents</td>
<td>13</td>
</tr>
<tr>
<td>Enforcement Actions</td>
<td>2</td>
</tr>
</tbody>
</table>

## GAS INSTALLERS

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Gas Installers</td>
<td>2,952</td>
</tr>
<tr>
<td>Inspections of RGI’s</td>
<td>3,326</td>
</tr>
<tr>
<td>Gas Undertakings Investigations</td>
<td>70</td>
</tr>
<tr>
<td>Successful Gas Safety Prosecutions</td>
<td>7</td>
</tr>
</tbody>
</table>

## ELECTRICAL CONTRACTORS

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Electrical Contractors</td>
<td>4,153</td>
</tr>
<tr>
<td>Inspections of RECs</td>
<td>4,740</td>
</tr>
<tr>
<td>Electrical Undertakings Investigations</td>
<td>78</td>
</tr>
<tr>
<td>Successful Electrical Safety Prosecutions</td>
<td>4</td>
</tr>
</tbody>
</table>
The CRU is the safety regulator for upstream (offshore and onshore) petroleum exploration and extraction activities in Ireland. As part of these responsibilities, the CRU established and implemented a risk-based Petroleum Safety Framework (PSF) as the overall system to regulate the safety of petroleum activities. Under the framework, the regulated entities are required to reduce risks to a level that is as low as is reasonably practicable (ALARP).

Safety Case Assessments during 2017

In order for petroleum undertakings, operators and owners to carry out a designated petroleum activity a safety case must be submitted to the CRU and subsequently accepted. There are three classes of designated petroleum activities, each with their own Safety Permit: Well Work (exploration), Production and Decommissioning. On acceptance of the safety case, the CRU issues a safety permit with conditions where determined appropriate.

The CRU received three Safety Permit applications in 2017, one new application and 2 material changes to existing permits. They were:

- Well work: Providence Resources, Capricorn Ireland and Sosina Exploration Ltd. (Issued June 2017).

Acknowledgement of Compliance (AoC) is an assessment process implemented by the CRU as part of the PSF to give offshore platform owners an early indication that the information submitted in their non-production safety case satisfies the CRU’s Safety Case requirements. However, an AoC does not in itself allow petroleum activity and does not constitute a formal acceptance of a safety case.

Three AoCs were in place in 2017:
- Ocean Valiant (issued 2016)
- Ocean Guardian (issued 2016)
- Stena IceMax (issued 2017).

One AoC applications accepted in 2017
- Stena Drilling Ltd. (MSV Stena IceMAX)

Two AoC applications received by the CRU in 2017 remain under assessment:
- Helix Energy Solutions (MSV Well Enhancer)
Audits and Inspections

In order to determine both Safety Case applications and compliance with Safety Permits, the CRU decides an annual audit and inspection plan for each facility. In 2017, the CRU carried out seven planned and six enforcement inspections, with one inspection postponed until 2018. For each of the inspections, the CRU issues Reports of Audit and Inspection (ROAIs) to the petroleum undertakings/operator as appropriate. Within one month of receipt of an ROAI the undertakings/operator must submit a plan to the CRU setting out how they will address the findings. The CRU tracks the findings of the inspections as part of its ongoing monitoring function. This ensures all actions and findings are closed out.

Petroleum Incidents

When an incident occurs operators and owners are required to notify the CRU. Each petroleum incident notification is reviewed and a determination made as to the extent of the incident investigation required on a case-by-case basis. The CRU reviews petroleum incidents as part of its overall regulation of petroleum activity.

All petroleum incidents reported to CRU are set out in S.I. 166/2016; Petroleum Safety (Petroleum Incident) Regulations 2016 and the guidance on reporting under the 2016 regulations is provided in the CRU Guidance for Notification of Incidents (CER/16/037). In 2017, safety permit holders notified the CRU of 17 petroleum safety incidents table 1.2 below.

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Number reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total incidents in 2017</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Table 1.2: Number and type of incidents submitted to the CRU in 2017.

Enforcement Actions

Where, following an audit, inspection or as a result of an incident, the CRU identifies a breach, it decides on the appropriate enforcement action.

The CRU issued a Prohibition Notice in 2017 to SEPIL, Statoil Exploration and Vermillion Energy Ireland Limited against Production Safety Permit SP01C related to the petroleum incident type ‘unintended release of oil, gas or other hazardous substances’. As part of the investigation, an inspection was carried out to ensure compliance of the petroleum undertaking. Following issuance of a report of audit and inspection at the facility, and a response from SEPIL, the CRU notified the petroleum undertakings that they were satisfied with the remedial action being carried out pursuant to the prohibition notice. The CRU also issued a Direction to Submit an Improvement Plan against the Production Safety Permit in 2017. Identification of the non-compliance was part of the CRU’s ongoing compliance assurance activities. It related to the undertaking not ensuring all task instructions were complete or fit for purpose in identifying and documenting safety critical tasks. Following a review of the Improvement Plan, the CRU agreed to the remedial action proposed by the undertaking.

International and National Engagement

To ensure regulation meets international best practice, the CRU continued to engage with national and international regulators and governmental agencies throughout 2017.

The CRU sustained its participation with European safety regulators through the North Sea Offshore Authorities Forum (NSOAF), by attending and hosting a number of meetings. These included attendance at the Plenary Meeting and hosting of the Wells Working Group and EU Legislation Network. The CRU also carried out a multi-nation audit in conjunction with other NSOAF members. The main objective for the NSOAF “Maintaining Safe Operations” Multi Nation Audit was to ensure that all relevant lessons with respect to maintenance of safety critical barriers learned by the NSOAF members, are communicated to the industry, and implemented amongst NSOAF members.
The main objective for the NSOAF “Maintaining Safe Operations” Multi Nation Audit was to ensure that all relevant lessons with respect to maintenance of safety critical barriers learned by the NSOAF members, are communicated to the industry, and implemented amongst NSOAF members. The focus of the multi nation audit was on old offshore installations that had experienced a change in operatorship/duty holder. Results of the audit were communicated to other member states at meeting in Q4 2017. Full results of the multi-nation audit will be published in 2018\(^1\).

In addition to the NSOAF, the CRU represent Ireland at the European Offshore Authorities Group (EUOAG), the formal group established under Directive 2013/30/EU. As well as attending a number of EUOAG meetings, the CRU facilitated the training of an inspector from an EU Safety regulator inspection team as part of a CRU production inspection in 2017. The CRU consulted with the Bureau of Safety and Environmental Enforcement (BSEE), the Canada- Nova Scotia Offshore Petroleum Boards and the Canada-Newfoundland and Labrador Offshore Petroleum Board as part of further continuous improvement actives.

Interactions with groups such as NSOAF, EUOAG and international regulators ensure the CRU regularly shares knowledge with European and international counterparts to maintain high standards of safety regulation.

Furthermore, the CRU interacts with the Irish Coast Guard (IRCG) on a regular basis. To issue a safety permit the CRU requires IRCG’s acceptance of the oil spill contingency plan. In 2017, it was decided that a member of the IRCG would attend the completeness check for all offshore safety cases submitted to the CRU.

The CRU continued to hold meetings with the Irish Offshore Operators Association (IOOA) in 2017. These meetings facilitated information sharing on safety regulation aspects of the petroleum industry in Ireland.

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\(^1\) NSOAF Summary Report Multinational audit Maintaining Safe Operations

**Downstream Energy Safety Regime**

**Gas Installers**

The CRU regulates domestic gas installers to ensure safety. The Gas Safety Supervisory Body (GSSB) carries out this function on behalf of the CRU. The GSSB’s duties and responsibilities are set out in the Gas Safety Supervisory Criteria Document, and the Terms and Conditions of Appointment.

In 2015, following a competitive public procurement process, the Register of Gas Installers of Ireland Limited (RGII) was reappointed to the role of GSSB. RGII’s contract runs for seven years from January 2016.

At present, the GSSB only covers domestic gas works but from January 2019 will extend to cover non-domestic gas works.
Statistics for Gas Installers
A core part of gas safety is that only RGIs can undertake domestic gas works. RGII affirm the competence of individual installers at entry to the scheme and through an ongoing inspection process. There were 2,952 RGIs in the regulatory scheme at the end of 2017. The number of registrations has remained relatively steady at 3,000 +/- 2% since 2012. RGIs are inspected twice in their first year of registration and at least once per annum thereafter. RGIs may also be subject to additional checks if inspections show unsatisfactory safety performance. During 2017, the RGII carried out 3,236 inspections in comparison to the 3,174 planned for the year.

Gas Safety Prosecutions
Domestic gas works can legally only be carried out by an installer registered with the RGII. Unregistered installers who work on domestic appliances, or misleadingly suggest they are an RGI, face penalties of a fine up to €15,000 or imprisonment for up to three years, or both.

In 2017, the CRU initiated 70 investigations into reported breaches of the regulations. Six successful prosecutions were taken, bringing the total to 35 since the introduction of the regulatory scheme in 2009. The remaining reports received are either still under investigation or were not taken forward due to lack of evidence an offence had taken place in the Republic of Ireland.

Gas Safety Promotion and Public Awareness
An objective of the CRU is to ensure the public’s awareness of gas safety in general, and on the dangers of carbon monoxide in particular. It is also important owners and occupiers are cognisant of responsibilities for the maintenance of gas fittings and appliances.

Under the Gas Safety Regulatory Framework, the responsibility for awareness raising lies with both individual gas undertakings such as suppliers and the industry as a whole. The CRU’s role is to co-ordinate activities. Implementation is through a combination of individual and coordinated safety promotion activities.

The 2017 promotion programme continued to focus on developing awareness among the public of gas escapes, carbon monoxide, ‘dial before you dig’ and the RGI scheme, as outlined.

1. Gas Escapes
To monitor public awareness and the effectiveness of advertising, all calls to the emergency ‘gas escapes’ phone number are logged. During 2017, there were 25,107 calls, down from 23,191 in 2016. 65% of calls regarded gas escapes with the remainder classified as related but non-emergency, regarding carbon monoxide or bill enquiries:
- Natural Gas Escapes advertising campaign has run since 2014, raising awareness of what to do/who to call if a gas leak is suspected;
- The Campaign targets customers in natural gas supply areas with advertising activity in January, June, August, and October on TV, radio and through digital channels.

2. Carbon Monoxide
There were 1,012 calls to the carbon monoxide (CO) phone number and 66,364 visits to the website - carbonmonoxide.ie - during 2017, down 4% and 13% respectively on 2016.

- The Campaign raises awareness of dangers, signs, symptoms and preventative measures for CO through targeting all adults nationally
- Advertising activity takes place in February, September (National CO Awareness Week Radion and TV advertisement & campaign literature inserted in all consumer bills) and October/November (i.e. the heating season)
- ‘Tommy McAnairey’ is the popular CO ‘spokesperson’ since 2014 on TV, radio, press and digital.
3. Dial Before You Dig

The ‘Dial Before You Dig’ awareness raising campaign has been running since 2009. It encourages small to medium sized contractors, builders, farmers or anyone undertaking excavations to contact GNI to check whether they will be working in the area of gas pipelines.

- The Campaign targets plant operators, construction contractors, small & large builders, planners, designers, local authorities, utilities, landowners and farmers.
- Advertising activity takes place in March and August (historical peak third party damage times).
- The Campaign targets customers through trade press, digital, calendar issued to all landowners and golden pages advertising.

4. RGI Scheme

A new advertising campaign for the RGI Scheme was started in 2016 and continued through 2017. This covered TV, press radio and digital channels and featured well known personality Daniel O’Donnell.

- The Campaign raises awareness of the importance of using a RGI and how to find one.
- The Campaign targets existing and potential gas customers with advertising activity in March and October/November on TV, radio, press and digital.

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Electrical Safety Supervision

The CRU has a statutory obligation to regulate the activities of electrical contractors. It fulfils this through the designation and regulation of a single Electrical Safety Supervisory Body (ESSB). The ESSB operates under the Safe Electric brand.

Following a competitive public procurement process, the Register of Electrical Contractors of Ireland Limited (RECI) has operated as the ESSB from January 2016. Its contract runs until 2022.

Statistics for Registered Electrical Contractors (RECs)

The total number of RECs on the Safe Electric register at the end of 2017 was 4,153, down slightly on the 4,213 registered in 2016. With a variation of +/- 12.5% of 4,000 between 2012 and 2017, the number of RECs tends to fluctuate more on an annual and seasonal basis than RGIs.

New RECs are required to have two inspections in their first year of registration, followed by at least one per annum. In 2017, Safe Electric carried out 4,740 inspections on RECs compared to a planned 5,121. This is an increase of 8% when compared to inspections completed in 2016.

Electrical Safety Prosecutions

Since October 2013, it is a criminal offence for an individual or company to undertake certain electrical works without registration or to describe themselves as a REC or to act in a manner likely to suggest they are a REC without being registered. This could result in a fine up to €15,000 or imprisonment for up to three years, or both.

The CRU undertakes investigations into reports alleging illegal electrical works. During 2017, the CRU commenced 78 investigations and four successful prosecutions were undertaken. The status of the remaining reports are either still under investigation or were recommended not to be prosecuted due to lack of evidence an offence had taken place in the Republic of Ireland.

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2 Safe Electric’s functions are set out in the 1999 Act, the Electrical Safety Supervisory Criteria document V 3.0 (CER/16/001), and the Terms and Conditions of Appointment.
Electrical Safety Promotion and Public Awareness

The CRU runs an annual Safe Electric public awareness campaign across a range of media.

The main messages are to highlight that only RECs should carry out most domestic electrical works and to ensure they issue a Certificate of Completion.

- The Campaign publicises that only RECs should carry out most electrical works in the home
- The main target of the Campaign are homeowners.
- The Campaign delivers advertising activity in March and October/November across, radio, press and digital channels

Gas Safety Framework

The CRU regulates the safety performance of the downstream Irish natural gas and LPG industry. The scope of the relevant legislation includes the safety regulation of all natural gas and LPG undertakings, including storage, transmission, distribution, supply, and shipping.

Safety Case Assessments during 2016

Natural Gas and LPG undertakings are required to submit a safety case to the CRU as part of their licence application in accordance with the Gas Safety Regulatory Framework Safety Case Guidelines.

In 2017, the CRU accepted a material change to GNI’s transmission and distribution system operators’ safety cases to take account of the introduction of Compressed Natural Gas (CNG) assets into the GNI gas network. The CRU also accepted a material change in relation to emergency response arrangements from Flogas Ireland Ltd.

One safety case for a new shipper/supplier was also accepted; Go Power, along with two safety cases for new shippers; ElectroRoute, Danske Commodities.

Auditing and Inspections

As part of its annual work programme, the CRU agrees an audit and inspection programme for natural gas and LPG undertakings.

The review topics are decided by taking into account previous audit and inspection findings, incident reports and safety case risk ratings.

Gas Networks Ireland

GNI - performing the functions of Distribution and Transmission System Operator (DSO/TSO) - were subject to eight audits and inspections in 2017. GNI followed up on the findings and recommendations from the audits and inspections within specified timeframes. The CRU monitors GNI’s progress through a programme of scheduled verification meetings.

Licensed LPG Undertakings

Four audits were undertaken by the CRU of licenced LPG undertakings in 2017. Calor Teoranta and Flogas Ireland Ltd had their system extension and internal audit, and emergency responses audited. As with the DSO/TSO, all findings and recommendations have been reported to the LPG undertakings for follow up within particular timeframes. Again, the CRU monitors implementation through a series of verification meetings.

Shippers/Supplier Audits

A total of four gas shipper/supplier audits were completed in 2017; Prepay power (supplier) and Aughinish Alumina; Huntstown Power station and Tynagh Energy (shippers). The purpose of these audits is to ensure compliance with the GSF and to verify previously raised actions have been addressed satisfactorily.

Gas Safety Incidents

The CRU monitors all licensed undertakings’ safety performance and investigates incidents. The CRU reviews all reported incidents reported for appropriate learnings for incorporation into the GSF to help prevent reoccurrence.

The criteria for natural gas incident reporting has been operational since 2009. Furthermore, regulations in 2014 made it a legal requirement for certain LPG incidents to be reported to the CRU. The specified incident types for natural gas and LPG are:

- A – Involves a fatality
- B – Injury requiring hospitalisation
- C – Property damage in excess of €6,348.69 (natural gas) or €6,500 (LPG).

15 incidents were reported to the CRU during 2017, on further investigation, two did not meet the CRU’s

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reporting requirements. A breakdown, by category of the remaining incidents is set out in Table 1.3 below.

<table>
<thead>
<tr>
<th>Type A/B/C</th>
<th>RuG</th>
<th>N/A</th>
<th>Voluntary Reported LPG</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>0</td>
<td>11</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>LPG</td>
<td>0</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1.3: Incidents Reported to the CRU in 2017.

Table 1.3 also shows Reportable under Guidelines (RuG) for natural gas incidents and Voluntary Reported LPG incidents which do not fall under Type A, B or C but the undertaking wishes to report.

There were no Type A, B or C incidents reported in 2017. Two RuG incidents occurred but were found on investigation were found to not be related to natural gas.

Gas Safety Enforcement
Following an investigation into the Corrib non-odourised gas incident, the CRU issued GNI an Intent to Serve an Improvement Notice in November 2017. Having considered representations made by GNI, the CRU proceeded to serve an Improvement Notice on them in January 2018. The enforcement action is ongoing, and the CRU will issue a full report on the incident in due course.

An enforcement action was taken against GNI regarding a GNI asset in a CNG installation in Shannon. GNI were served with a direction to submit an improvement plan in August 2017. This was submitted and the action was closed.

In June 2017, following a routine audit of Calor Teoranta Ltd, the CRU issued an intent to serve an improvement notice regarding emergency response arrangements. An improvement notice was served in December 2017 and enforcement action was ongoing at the end of 2017.

LPG 3rd Party Distribution
“The Electricity Regulation Act 1999, as amended, makes no provision for a party other than an “LPG undertaking” to apply for a LPG Safety Licence. Furthermore, it is an offence for a person to make available LPG by way of a piped LPG distribution network for use by individual domestic final customers unless a LPG safety licence is in force in respect of the activity.

In 2017, the CRU wrote to both Calor and Flogas, asking for details of customers where the LPG undertaking fills the tank but another party owns and operates a piped LPG distribution network. The response identified 63 networks. The CRU has developed a plan for inspections of the LPG networks, which aims to be completed by May 2018.”

Emergency Response Programme
The National Gas Emergency Plan (NGEP) is prepared by GNI under the direction of the CRU and in consultation with the Government and the gas and electricity sectors. The purpose of the plan is to establish procedures to effectively manage supply and safety issues in the event of a Natural Gas emergency in Ireland.

During 2017, three emergency exercises were carried out by GNI to test NGEP procedures. In addition, there were exercises in conjunction with the Department of Communications, Climate Action and Environment and Eirgrid. Such exercises are essential for ensuring emergency preparedness.
### 2017 KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Safety Report to Minister showing key trends in Gas Safety Framework, Petroleum Safety Framework and Safety Supervisory Bodies (SSBs).</td>
<td>Q2 2018</td>
<td>The Safety Report was submitted to the Minister was subsequently published on the CRU website.</td>
</tr>
<tr>
<td>Compliance demonstrated through the completion of the planned number of audits and inspections of Undertakings/Owners/Operators.</td>
<td>Q4 2017</td>
<td>For PSF, CRU carried out seven planned and six enforcement inspections, with one inspection postponed until 2018. For GSF, DSO/TSO had eight audits and inspections, four of LPG and four of shippers/suppliers.</td>
</tr>
<tr>
<td>Improved safety achieved by the close out of non-conformances by undertakings and SSBs within agreed timelines.</td>
<td>Q4 2017</td>
<td>All identified non-conformances apportioned to the relevant SSBs and undertakings for completion are being monitored by the CRU.</td>
</tr>
<tr>
<td>Key trends recorded in annual survey of awareness amongst the general public of key safety messages.</td>
<td>Q4 2017</td>
<td>Customer surveys show an increase in the awareness of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the Safe Electric brand up from 56% in 2016 to 60% in 2017, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the RGII brand up from 64% in 2016 to 66% in 2017.</td>
</tr>
<tr>
<td>All reports of illegal activity relevant to regulation of gas installers and electrical contractors investigated to improve public safety.</td>
<td>Q4 2017</td>
<td>The CRU investigated 78 reports of alleged illegal activity relevant to electrical safety offences and 70 reports of alleged illegal activity relevant to gas safety offences during the year.</td>
</tr>
<tr>
<td>Taking of enforcement action under the PSF, GSF or Electrical and Gas Safety Supervisory Schemes, as necessary to improve public safety.</td>
<td>Q4 2017</td>
<td>Enforcement action was taken as appropriate. There were two PSF and three GSF Actions. There were six gas prosecutions and four electrical prosecutions in 2017.</td>
</tr>
<tr>
<td>Decisions on safety cases (including for the introduction of Compressed Natural Gas and Biogas) that are timely and in line with the principles of better regulation.</td>
<td>Q4 2017</td>
<td>Safety case decisions were made in a timely manner. Four PSF safety Cases were submitted, with three Safety Permits issued and one continuing to be assessed. For GSF, all Safety Cases resulted in Safety Permits being granted: the CNG safety Permit was granted, alongside two for new shippers and one for a shipper/supplier.</td>
</tr>
<tr>
<td>Successful implementation of a voluntary Scheme for Non-Domestic Gas Installers in line with the project timeline.</td>
<td>Q4 2017</td>
<td>Introduction of the scheme is going well. The provisional register was opened in Autumn 2017 and awareness programme was put in place.</td>
</tr>
</tbody>
</table>
WHAT WE’VE DONE IN
ENERGY NETWORKS

GAS

The CRU issued its decision outlining the allowed revenues that Gas Networks Ireland can recover over the next 5 years.

The CRU approved the connection of New Ross to the natural gas network.

The CRU published a decision on a revised set of customer performance indicators for Gas Networks Ireland.

ELECTRICITY

The CRU published its proposed decision on an enduring connection policy for the electricity network in Ireland.

Decision published and procurement launched for the DS3 System Services Tariffs and Scalar regulated arrangements.

The last three Network Codes from the Third Energy Package were entered into force.

ANNUAL TARIFFS PUBLISHED FOR GAS AND ELECTRICITY
ENERGY NETWORKS

KEY PRIORITIES FOR 2017

1. Complete the regulatory components of the ‘Delivering a Secure, Sustainable Electricity System’ (DS3 Programme) necessary to support the evolution of DS3 system services in 2017.

2. Progress the creation of an enduring electricity connection policy.


Gas

The CRU is responsible for the economic regulation of the Irish gas network and the supply of gas to end customers. The CRU aims to ensure that the gas network in place meets the needs of the Irish gas customer at a reasonable and efficient cost. The CRU sets the tariffs for access to and the use of the gas distribution and transmission systems. The tariffs for the natural gas system are paid by gas customers connected to the gas network.

The CRU also has duties to protect and monitor the security of supply of natural gas, to establish policies to ensure there is adequate gas levels to meet customer needs and maintain integrity of the gas network.

The following details some of the work completed by the CRU’s gas networks team during 2017.

Price Control 4

Every five years, the CRU sets the amount of money that Gas Networks Ireland (GNI) can collect from gas customers for the following five years, referred to as a price control. In 2017, the CRU published a consultation and decision on Price Control (PC4) which set out the allowed revenues for the GNI transmission and distribution business for the period of October 2017 to September 2022.

GNI charges gas customers an amount towards the cost of safely operating and maintaining the gas network through gas customers’ bills.

One of the CRU’s roles is to protect gas customers by ensuring GNI spends customers’ money appropriately and efficiently to deliver necessary services.

The key points of the Price Control decision by the CRU were:

**Total Revenue**

The CRU decided to allow GNI a total revenue of €1,913.3m (2015/16 prices) over the period of PC4 (2017-2022) with a Weighted Average Cost of Capital (WACC) of 4.63%. This represented a saving of €264.4m when compared to GNI’s request.

**PC4 Tariffs**

Given the forecast gas demands, the CRU’s decision will lead to a 2.30% increase in 2017/18 distribution tariffs (15/16 monies) and a 3.83% decrease in 2017/18 transmission tariffs. This will result in the average annual residential customer’s bill rising by €2.89 which is an increase of less than half a percent.

**Ongoing Efficiency**

As with previous price controls the CRU has set an annual ongoing efficiency to be applied to GNI’s transmission and distribution business. In this case, this is a 1% improvement in efficiency each year.

**Catch-up Efficiency**

However in this price control and following a review of GNI’s relative efficiency to other gas network distribution operators the CRU has decided on an annual catch-up efficiency target of 0.75% to be applied to GNI’s distribution business.

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4 This level of renewable integration on a small synchronous system is unprecedented and presents significant challenges for the real-time operation of the power system. The DS3 Programme puts in place the key policies, procedures and system tools to facilitate an increase of variable non-synchronous renewable generation over the coming years.

5 CRU Price Control 4
Innovation
The CRU has decided to allow funding of €20.0m for innovation over PC4. The CRU will ensure that GNI report annually on the outputs and outcomes of the innovation funding and benefits it will bring to gas customers. This funding is provided against the backdrop of the decarbonisation of the economy by 2020 and with a view to ensuring that the gas network will continue to be utilised to the benefit of gas customers.

Growth Incentive
The CRU is mindful that continued utilisation of the gas network continues so that customer tariffs can be contained. With this in mind, the CRU decided to introduce an incentive mechanism to challenge GNI to reach their original proposed connection targets for PC4. This will be reviewed in the last year of PC4 and will carry a reward/penalty for GNI. There will be a cap on the amount of money, which will be the subject of the reward or penalty, this will be €4m.

Customer Performance Indicators
In April 2017, the CRU published a decision paper on a number of customer performance indicators against which GNI will be incentivised over the course of PC4. As part of PC4, the CRU has decided that the financial incentive will equal +/- 0.25% of allowed revenues for the remaining three years of PC4.

Weighted Average Cost of Capital
The CRU has set a WACC of 4.63% pre-tax real. This is intended to cover the financing cost associated with capital expenditure. The WACC is used to derive a fair return for GNI on its efficiently incurred capital investments.

New Towns
In August 2017, the CRU approved a submission from GNI regarding the connection of New Ross to the natural gas network.

The CRU assesses the connection of new towns to the natural gas grid based on submissions from GNI. The economic viability of a new town connection is determined by an economic test. In carrying out the economic test, the following are reviewed:
- the value of the full pipeline, ancillary capital equipment and operating costs (both transmission and distribution) attributable to meeting the projected load;
- capital costs including local authority charges associated with road openings;
- the value of any attributable upstream (deep) reinforcement costs; and
- the value of in all cases 100% of distribution and transmission (entry and exit) tariff revenue attributable to the projected load.

Gas and Electricity Security of Supply
The CRU actively participated in EU Gas and Electricity Co-ordination group meetings throughout 2017, which resulted in the CRU providing input to the replacement Gas Security of Supply Regulation 2017/1938. The CRU also participated in the regional coordination of UK-Ireland Gas Emergency Planning Group. The CRU submitted its Annual Report to the Minister for Communications, Climate Action, and Environment regarding the CRU’s implementation of Regulation (EU) 994/2010. The CRU also submitted its biennial Electricity Security of Supply Report to the Minister for Communications, Climate Action, and Environment.

Additionally, during 2017, the CRU hosted the Gas Electricity Emergency Planning Group meetings, winter and summer outlook meetings, and the CRU participated in emergency planning exercises in order to facilitate a co-ordinated approach to emergency planning by Ireland’s gas and electricity Transmission System Operators (TSOs).
Electricity

The CRU has a wide range of functions related to the operation of the electricity networks in Ireland. The CRU is responsible for the economic regulation of the Irish electricity network and the safe and secure supply of electricity to end customers. The CRU aims to ensure that the electricity networks across Ireland meet the needs of the Irish electricity customer at a reasonable and efficient cost.

The CRU regulates the allowed revenues and network charges of the monopoly utilities that operate and own the distribution (ESB Networks) and transmission (EirGrid) electricity networks (Electricity Network Revenue Review).

The CRU sets the policy for a fair and non-discriminatory access to the network, and resolves disputes that network users may have with network companies with respect to connection to and use of the networks (Electricity Connection Policy). Recently this has also included the processing of wayleave applications for contestable works – opening up the market for constructing connections to the regulated networks.

Further, in line with achieving Government policy regarding 2020 renewable targets the CRU regulates innovation by the network companies to manage the challenges to the electricity system brought by high levels of non-synchronous renewable energy. One of the major strands of this work is the DS3 Programme – Delivering a Safe and Secure Electricity System. In addition, the CRU oversees any amendments to the transmission and distribution codes and ensures that the operation and certification of the Irish electricity system is in line with the European regulations. During 2016-2019 this will involve particular focus on the implementation of six European Network Codes.

During 2017, the CRU’s Electricity Networks team focused on the following areas:

Electricity Networks Revenue Review

Every five years, the CRU sets the amount of money that the utilities can collect from electricity customers for the following five years, referred to as a price control. The current Price Control (PR4) runs from 2016 to 2020. Each year, the CRU carries out an annual update to determine any required adjustments for the year ahead.

During the PR4 period, yearly updates are to be completed using the arrangements determined under PR4. As a result, in 2017, the CRU carried out an annual update; the CRU reviewed the revenues that can be recovered by EirGrid and ESB Networks for the 2018 calendar year.

The allowed revenues are collected from suppliers via Transmission and Distribution Use of System charges - TUoS and DUoS - which are then recovered from final customers. These form approximately 8% and 25% of the final residential electricity bill respectively.

In 2017, the tariffs increased by 8.23% for transmission and decreased by 1.07% for distribution from the previous tariff period. These movements reflected, among other things, forecast new connections and DS3 System Services.
Reporting, Monitoring and Incentives under PR4

As part of the Price Control programme, the CRU published a consultation paper on reporting, monitoring and incentives in relation to the electricity network companies. The proposals also create a robust platform for the continuing development of reporting and incentives for PR5. The CRU expects to publish a decision on Electricity PR4 Reporting, Monitoring and Incentives in Q2 2018.

Electricity Connection Policy

The CRU sets the policy for a fair and non-discriminatory access to the electricity network in Ireland. In 2017, the policy for connection of exporting generators to the electricity network in Ireland was captured under two broad processing approaches: (1) the group processing approach (GPA), also known as the "gate system", and (2) the non-group processing approach (non-GPA).

1. Group processing approach (GPA) - the gate system

The GPA process was designed for larger renewable and conventional generators. Under GPA, the system operators issued connection offers to these generators in separate lots known as "gates". Eligibility for inclusion in a gate was based on certain qualifying criteria set out by the CRU in its decisions on each of the three gates to date; gate 1 in 2004, gate 2 in 2006 and gate 3 in 2008 and 2009. Generators included in a given gate were processed together and were further divided into specific groups and subgroups based on their level of interaction and geographic location. This allowed the applicants to share planned connection methods and reinforcements, connection charges and shallow connection assets.

The first two gates of the GPA were relatively small in size (gate 1 was 400MW, gate 2 was 1300MW) and connection offers under those gates were processed in relatively short timeframes in comparison to the last gate, gate 3, which was much larger and therefore took significantly more time than the previous two gates.

Gate 3 was driven by Ireland’s objective to move to a low-carbon economy. Under gate 3, the system operators issued an unprecedented number of offers to renewable projects (149 offers, mostly wind, amounting to 4,147MW) in order to meet the 40% RES-E target. In addition, 10 conventional projects received a connection offer (1,139MW).

2. Non-group processing approach (non-GPA)

The non-GPA process was established in 2009 (CRU/09/099) to enable smaller renewable and low carbon generators as well as experimental technologies to connect to the system outside the gate process. Certain classes of generation were preapproved for non-GPA processing as connecting them was considered to be in public interest. This included:

- Small scale wind (<0.5MW);
- Combined heat and power (CHP);
- Bioenergy;
- Hydro;
- Solar;
- Wave;
- Geothermal;
- Autoproducers, and
- Experimental/emerging technologies

In line with CRU/09/099, non-wind renewable projects with maximum export capacity (MEC) below 5MW and small scale wind projects (MEC less than 500kW) are processed without interaction studies.

In 2015, the CRU began a process of reviewing the GPA and the non-GPA connection approaches and set out its initial thinking in a consultation paper CRU/15/284. For the most part, the CRU sought comments on the development and implementation of an Enduring Connection Policy (ECP), a new and integrated policy for connection to the electricity system.

In CRU/15/284, the CRU also proposed a number of transitional arrangements to be introduced ahead of ECP and made a decision in that respect in October 2016 (CRU/16/284).

Throughout 2017, the CRU worked on the development of detailed proposals for the first stage of the enduring connection policy (ECP-1). This process involved a series of workshops with EirGrid and ESB Networks taking place between February and October 2017 and extensive engagement with the relevant stakeholders. In October 2017, the CRU published a proposed decision on ECP-1. A final decision on ECP-1 is expected in Q1 2018.
In 2017, the CRU continued to chair the Generator Connections Liaison Group (former “Gate 3 Liaison Group”), a group comprising of the TSO, the DSO and industry participants.

**DS3 Programme - Delivering a Secure, Sustainable Power System**

Increasing levels of wind generation on the system poses significant challenges to system operation. In 2012, Transmission System Operators (TSOs) in Ireland and Northern Ireland (EirGrid and SONI) began a multi-year programme, ‘Delivering a Secure, Sustainable Electricity System’ (DS3 Programme). The aim of the DS3 Programme is to meet the challenges of operating the electricity system in a secure manner while achieving Ireland’s target of 40% of electricity coming from renewable sources by 2020.

This level of renewable integration on a small synchronous system is unprecedented and presents significant challenges for the real-time operation of the power system. The DS3 Programme puts in place the key policies, procedures and system tools to facilitate an increase of variable non-synchronous renewable generation over the coming years.

This metric is referred to as SNSP – System Non-Synchronous Penetration. This refers to the amount of renewable generation that the system is securely able to absorb at any given point in time. At the start of the programme the TSOs are only allowed up to 50% instantaneous penetration of renewables. Through successful delivery of DS3, it is aimed to increase this to 75%.

The DS3 programme is made up of multiple work streams focusing on system performance, system policies and operational tools, the development of a System services market and the implementation of changes to generator controls, known as the RoCoF workstream, all focused on enabling the TSOs to operate the system in a safe and secure manner at high levels of renewable penetration.

Some of these work streams are industry focused and require engagement and delivery by industry e.g. implementing RoCoF compliance changes, participating in System Service delivery, and others are more focused on internal TSO delivery for example, operational policies. The CRU is involved in overseeing the entire project and is involved in policy design with respect to the DS3 System Service programme and market creation.

**Progress in 2017**

The DS3 programme successfully delivered upon a number of work streams including control centre upgrades and enhanced operational tools which enabled the trialling of an increased operational threshold from 55% SNSP to 60% SNSP which became operational policy during 2017. The DS3 System Services programme saw an intense level of work during 2017. In March 2017, following collaborative working with the TSOs, the SEM Committee published a DS3 System Services Future Approach paper, outlining the approach to future procurement of system services. This established the extension of the contracts completed during the 2016 interim arrangements from October 2017 to April 2018, putting in place a structure for the establishment of more enduring tariff arrangements and outlining future work on competitive based procurement.

This was followed in July 2017 with the publication of the SEM Committee Decision paper on the tariffs for the period from Oct 2017-April 2018. Following intensive engagement with the TSOs and industry the SEM Committee Decision paper on regulated contracts was published in October 2017. This paper outlined the high level principles the TSOs had to employ when conducting tariff based procurement mechanisms. This set in motion the contracting phase for a new procurement of DS3 System Service providers by May 2018, and for the first time, allowed Demand Side Units (DSUs) and wind generators to provide valuable system services to the TSO.

In November 2017, the TSOs published the learnings from the Qualification Trials process undertaken during 2017 whereby DSUs, wind and other novel technologies were trialled in the provision and accurate measurement of system services. This marked a progressive step by the TSOs in their acceptance of a much wider range of technologies to provide services to the TSO to maintain system security.

The OJEU tendering for the new providers of System Services was started in December 2017 and designed to allow go-live of the next phase of System Services by May 1st 2018.

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1 RoCoF stands for Rate of Change of Frequency. As more renewables connect to the system the frequency of the system will change more than it did in the past. The RoCoF programme is designed to ensure that generators can cope with these changes in frequency and stay connected to the grid during these changes.
Rate of Change of Frequency (ROCoF)
One of the key projects within DS3 is to resolve increased Rate of Change of Frequency (RoCoF) events that may arise on the system following large system disturbances. Analysis has indicated that high RoCoF events could threaten the security of the power system during times of high wind penetration. To resolve this issue, TSOs proposed increased RoCoF standards for generators connected to the power system.

The increased RoCoF standard will reduce the level of curtailment for wind farms and will deliver significant savings to consumers through lower wholesale energy prices. In April 2014, the CRU decided in principle to approve the RoCoF modification and to introduce a RoCoF standard of 1 Hz/s (calculated over 500 ms) for all connections to the grid. The new standard will only be implemented if this is possible from a security of supply perspective. To determine this, the CRU commenced a RoCoF Implementation Project that includes three strands:

1. Generator Studies
   Each generator on the system has been categorised as high, medium, or low priority with a deadline to complete their studies by the end of May 2016, November 2016, or November 2017 respectively. This involves electrical and mechanical studies to determine whether the generators can comply with the new RoCoF standard of 1 Hz/s over 500ms.

   The RoCoF Implementation Project formally commenced on 21 November 2014 and the 36-month deadline was 21 November 2017. The majority of units have completed the testing phase and are RoCoF compliant. Engagements with the outstanding generators on the RoCoF project are ongoing. The CRU will continue to closely monitor progress of the outstanding generators.

2. DSO Implementation Project
   In parallel, ESB Networks is progressing the DSO Implementation Project to ensure that the distribution system can operate safely if the TSO operates the system to the new 1Hz/s RoCoF standard. There is good progress with changes to settings for wind farms in Ireland, with 95% of wind farm settings changed. The level of non-wind generators compliance has reached 155MW. ESB Networks will continue to engage with all customers in an effort to complete the remaining 185MW quantum of settings in 2018.

3. Alternative / Complementary Solution
   The third strand of the RoCoF Implementation Project was completed in 2016. In May 2016, as part of the DS3 RoCoF Alternative/Complementary Solutions project, and following significant industry engagement, the TSOs published the final report “RoCoF Alternative Solutions Phase 2” on EirGrid’s website. This report sets out the alternative and complementary solutions that can be taken to assist with the implantation of the new RoCoF standard. However, given the progress to date on the other elements of the project – the generator studies and DSO implementation – the CRU does not consider it necessary to take additional action at this time. This will be reviewed in 2018 following the TSOs review of the final set of generator studies.

Transmission and Distribution Codes
The CRU has continued through 2017 to oversee the transmission and distribution grid codes, including making decisions on Grid Code and Distribution Code modifications and derogation applications. In particular, work in this area focused on taking account of developments in Demand Side Participation, DS3 and the future transposition of European Network Codes into the Irish codes.

EU Network Codes
Work started in 2017 on the implementation of the EU Network Codes, with the Networks Division responsible for the implementation of six EU Network Codes;
- Requirements for Generators (RfG);
- Demand Connection Code (DCC);
- High Volume DC;
- Emergency Restoration (ER);
- System Operation (SOGL) and
- Electricity Balancing (EB)

Several industry stakeholder events were organised and chaired by the CRU, to inform industry regarding progress of EU Network Code implementation. The CRU consulted upon and issued decision papers regarding the derogation criteria to be used when determining derogation decisions for the RfG, DCC and HVDC codes during 2017. In addition, as per the requirements of the RfG the CRU established
a process to allow industry to submit applications for classification of Power generating modules as Emerging technologies. In July the CRU published its decision paper which allowed three manufacturers of technologies to be designated as “emerging technology”. All of the technologies approved were micro-CHP units, based on Stirling Engine technology. A regular reporting mechanism was established to meet the Code’s requirements of publication of installed capacity, which is updated every two months.

Electric Vehicle Charging Infrastructure
In October 2017, the CRU published a decision paper on the ownership of the Electric Vehicle Charging Assets installed as part of a Pilot Study approved by the CRU in 2014. The treatment of Electric Vehicle charging infrastructure in Ireland will be finalised in 2018 following the ESB Networks review of the CRU’s decision paper.

Legal
In 2017, the legal team provided legal advice as required by the CRU to the Commissioner, Directors, Managers and Analysts. In addition, the legal team managed the Freedom of Information (FOI) and Access to Information on the Environment (AIE) function for the CRU and ensured that sufficient training was provided to CRU staff members who deal with FOI and AIE matters.
## 2017 KEY PERFORMANCE INDICATORS

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<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement new monitoring and reporting framework for gas and electricity networks by Q3 2017</td>
<td>Q3 2017</td>
<td>The CRU published a consultation on the monitoring and reporting framework for electricity networks in December 2017 and plans to publish a decision in 2018</td>
</tr>
<tr>
<td>Progress all network disputes in accordance with statutory timelines.</td>
<td>Q4 2017</td>
<td>All disputes progressed as per statutory timelines.</td>
</tr>
<tr>
<td>East-West Interconnector (EWIC) certification Decision.</td>
<td>Q3 2017</td>
<td>The EWIC certification decision has been deferred pending receipt of EirGrid Interconnector DAC’s application.</td>
</tr>
<tr>
<td>Implementation of relevant statutory requirements relating to the European Network Codes in Gas and Electricity</td>
<td>Q4 2017</td>
<td>In 2017 the three remaining Network Codes entered into force; the System Operation Guidelines (September); Emergency and Restoration Guidelines (December) and Electricity Balancing Guidelines (December). The CRU has continued its implementation of the Network Codes and has published Consultation papers on: Derogation Criteria for RfG (February), for DCC (April) and for HVDC (August). Also, the CRU has published Decision papers on: Derogation Criteria for RfG (April), for DCC (June) and for HVDC (October). In 2017, the CRU continued its work with industry on implementing the remaining network codes for Gas. This work is due to be completed by 2019.</td>
</tr>
<tr>
<td>Finalisation of all regulatory policy documents relating to DS3.</td>
<td>Q4 2017</td>
<td>The CRU, with the SEM Committee, published decision papers on the DS3 System Services Future Programme Approach, System Services Tariffs and Scalars and the System Services Contractual Principles for the regulated arrangements due to go-live in May 2018.</td>
</tr>
<tr>
<td>Discharge monitoring and reporting obligations relating to gas and electricity security of supply</td>
<td>Q4 2017</td>
<td>All monitoring and relevant national and European reporting functions related to gas and electricity discharged during 2017.</td>
</tr>
</tbody>
</table>
WHAT WE’VE DONE IN WATER

EXPANDED ROLE FOR CRU

NEW LEGISLATION
Water Services Act 2017, enacted in November 2017, expanded the role of the CRU

NEW STAKEHOLDERS
National Water Forum, Water Advisory Board

NEW FUNDING MODEL
Domestic water use to be funded through general taxation

PUBLICATIONS

THE CRU PUBLISHED ON 15 OCCASIONS IN 2017
(report, information papers, customer information notes, consultation, revised water charges plans etc.)

STAKEHOLDER ENGAGEMENT

JOINT OIREACHTAS COMMITTEE, CUSTOMER STAKEHOLDER GROUPS, WAREG

MONITORING

- The CRU continued to protect customers by monitoring Irish Water’s implementation of the CRU
- Domestic and Non-Domestic Customer Handbooks
- The CRU published Irish Water’s First Performance Report in August 2017
- The CRU published first report on Irish Water’s Delivery of Capital Investments in June 2017

PROJECT PROGRESSION

EXTENSIVE RESEARCH, ANALYSIS AND PREPARATION CONDUCTED IN ADVANCE OF TWO MAJOR CONSULTATIONS:

- Irish Water’s Connections Charging Policy
- The Non-Domestic Tariff framework
As the independent economic regulator of Irish Water the CRU’s primary aim is to protect the interests of customers of Irish Water.

Our key function, provided for in legislation, is to protect the interests of Irish Water’s customers. Some measures in which we achieve this include:

- Approving Irish Water’s revenue and charges through revenue control processes;
- Approving Irish Water’s codes of practice;
- Advising the Minister on matters related to the delivery of water services;
- Providing a dispute resolution service for customers of Irish Water;
- Ensuring that Irish Water provides water services economically and efficiently and operates in a commercially viable manner and
- Ensuring Irish Water performs its functions in an open and transparent manner.

In 2016, the Minister for the Environment, Community and Local Government established an Expert Commission to make recommendations on a sustainable long-term funding model for domestic water and wastewater services.

In November 2016, the Expert Commission submitted its report to the Joint Oireachtas Committee (JOC) on the Future Funding of Domestic Water Services. The JOC was established to consider the report of the Expert Commission and report with recommendations to both Houses of the Oireachtas. In response to requests relating to the work of the Committee, the CRU, as economic regulator of Irish Water, provided documents and presented on relevant areas.

The JOC’s final report was published on 12th April 2017 and subsequently, on the 17th November 2017 new water legislation passed in the form of the Water Services Act 2017.

This new legislation would impact the CRU and customers of Irish Water in a number of ways including:

- Domestic customers who paid any or all of their water charges would be refunded;
- Direct water charges for domestic customers have been discontinued. Domestic Customers will now only have to pay for water services if their water usage exceeds a ‘threshold amount’ decided by the Minister for Housing Planning and Local Government (having first reviewed and considered a report to be provided to the Minister by the CRU);
• The CRU will set the charges for water usage above the threshold amount;
• Additional steps are to be completed in advance of each CRU revenue control process;
• The Act strengthens the CRU’s role in complaint handing;
• The Public Water Forum is replaced by the National Water Forum and
• The Act establishes a Water Advisory Body, of which the CRU is required to be a member.

The CRU continued its work in 2017 to ensure that Irish Water delivers benefits for customers, the environment and society. The CRU progressed its analysis and preparation for significant consultations planned for 2018, namely, establishing Irish Water’s Connections Charging policy and establishing Irish Water’s Non-Domestic Charging Framework.

The CRU also challenged the company to be more transparent about its performance by monitoring the utility’s outcomes and outputs against those outlined in its investment plans, while also examining Irish Water’s delivery of service for customers against key performance metrics and its implementation of the requirements in the CRU’s Domestic and Non-Domestic Handbooks.

The following information details the work completed by the CRU’s water regulation team during 2017.

Connections Policy
Since the 1st January 2014, Irish Water has been responsible for charging for the cost of connections to the water and wastewater network. Before Irish Water was established, connection charging policy was set out by the Department of the Environment, Community and Local Government (DECLG) and implemented by 34 (now 31) Local Authorities. In September 2014, the CRU directed Irish Water to continue to apply the existing connection charging policies and related charges, which were in place on 31st December 2013 until such time as a new connections policy could be developed and consulted upon.

At present, there are over 900 different connection charges (including development contribution levies) in existence across the 34 (now 31) Local Authorities. These charges can vary in level, underlying costs and categorisation, are complex and difficult to understand. The purpose of establishing an enduring connection charging policy for all Irish Water customers is to generate a more harmonised methodology of charging customers which will benefit customers in terms of transparency, simplicity and equity.

The CRU’s approach to reaching an enduring water connection charging policy was to first issue Irish Water with a set of guiding principles to be taken into account when developing its policy proposals. Irish Water then submitted its proposed Connection Charging Policy to the CRU for review and analysis during autumn 2017. The CRU then finalised its consultation paper in 2017 for publication and public consultation in early January 2018. The CRU will consider all the submissions made in response to the consultation before reaching a final decision on approving Irish Water’s Connection Charging Policy. In October 2017, the CRU published an Information Note for customers detailing important information relating to Irish Water’s Proposed Connection Charging Policy, and signalled the CRU’s intention to consult.

Non-Domestic Tariff Framework
The establishment of Irish Water’s Non-Domestic Tariff Framework is a key priority for the CRU. At present, non-domestic customers of Irish Water continue to pay tariffs for water and wastewater services which were previously determined and charged by 44 billing authorities (34 local authorities and 10 town councils). Each billing authority developed its own method of collecting data from its customers and charging for water services. This has led to a wide range of non-domestic tariff levels, tariff categories, charging methodologies, billing arrangements and billing cycles across the country. Introducing a harmonised approach to charging non-domestic customers will benefit customers in terms of transparency, simplicity and equity.

During 2017, Irish Water continued developing its non-domestic tariff proposals in preparation for its submission to the CRU and the subsequent 2018 public consultation phases of the project. As this project will represent a significant change to the approach to the charging of non-domestic customers, and due to the level of complexity of such a large scale project, the CRU has continued to proactively engage with business groups, non-domestic stakeholders and the CRU’s Non-Domestic Water User Group.
This engagement has allowed the CRU to better understand the needs and priorities of businesses and will continue to provide insights as regulatory policies are progressed.

**Setting Irish Water’s Revenue and the Enduring Funding Model**

One of the most significant recommendations of the Joint Oireachtas report was that domestic water charging (as provided for under the Water Services Act 2014) be discontinued. The Committee recommended that domestic water use be funded through general taxation and under such an arrangement, changes to the model by which Irish Water sourced funding were necessary.

Following the publication of JOC report, the CRU participated in a working group, set up to examine future funding model and the options available. The members of the working group were the CRU, the Department of Public Expenditure and Reform, the Department of Finance, the Department of Housing, Planning and Local Government (DHPLG), New Economy and Recovery Authority (NewERA) and Irish Water. The group examined how funding is provided to Irish Water with consideration given to capital contributions, equity and borrowing.

Under the new funding arrangements, the CRU retains its key role in setting the level of revenue which Irish Water can receive (through Government subvention and from customers) in order to cover its efficiently incurred costs. Irish Water will be given certainty of multi-year funding through the CRU’s normal regulatory review process. Normal domestic consumption will be funded through the DHPLG Vote through the Government’s budgetary process, and non-domestic revenue will continue to be sourced through tariffs.

The Water Services Act 2017 alters the way in which the CRU carries out its revenue controls. Under this legislation, additional steps need to be completed in advance of a CRU decision on the revenue that Irish Water can receive. These steps include the development of a Water Services Policy Statement (by the Minister) and a Strategic Funding Plan (by Irish Water), and will provide some certainty regarding the level of Government funding that will be available to Irish Water over a multi-year period. The CRU’s revenue control decision then needs to be in place in sufficient time in order to feed into the Government’s budgetary process (i.e. by Q2 of the preceding year).
To allow the CRU complete its normal regulatory process, the CRU extended the current revenue control (IRC2) by one year, so that it will cover the period from the start of 2017 until the end of 2019. Preparatory work on this one-year revenue control extension commenced during 2017 with the publication of an Information Paper on the CRU’s proposed approach to setting 2019 allowed revenues.

This also means that the next revenue control will start from January 2020 and it is envisaged that this will cover a five period and comply with the process set out in the Water Services Act 2017. This will allow Irish Water to plan for and complete the work necessary to drive cost efficiencies and service improvement over a number of years.

**Domestic demand for water services**

Under the Water Services Act 2017, the CRU was required to report to the Minister for Housing Planning & Local Government, on the rate of demand over a 12-month period, for water services provided by Irish Water to dwellings. The CRU was also required to consider the estimated rate of demand by an individual for provision of water services and to consider the estimated rate of demand for provision of water services to dwellings, and the impact on that demand where the number of individuals who reside in the dwelling exceeds four.

The CRU examined metered data of customers of Irish Water in order to discharge its statutory responsibilities, along with considering data published by the CSO and considering trends and patterns evident from Irish Water’s studies.

The CRU’s findings, which were published in our report to the Minister dated 15th December 2017 determined:

- The average rate of demand to dwellings;
- The estimated annual rate of demand by an individual per year and
- The estimated average incremental demand per year for each additional occupant above four in a dwelling.

The Minister then set a threshold amount for water demand based on the CRU’s findings. Irish Water customers that use water above the threshold may, in time, be charged for water demand above this threshold.
Irish Water Customer Handbook
In 2014 the CRU published its first Irish Water Customer Handbook to set out the specific standards of service that Irish Water must provide to its customers, both domestic and non-domestic. In November 2017, the CRU took the decision to separate the original combined domestic/non-domestic handbook into two separate handbooks, a handbook for domestic customers and another handbook for non-domestic customers. This was done for the purpose of simplicity and ease of reference for customers, and it also allows for effective and efficient review of each handbook over time. The new handbook contents remained identical to the previous version reflecting only changes required to split the domestic and non-domestic requirements. In November 2017, the CRU also publically consulted on proposed additional service level requirements to enhance the service Irish Water must offer when billing its non-domestic customers.

The CRU regularly engaged with Irish Water throughout 2017 and monitored the company’s implementation of the handbook requirements. Both the Domestic and Non-Domestic Handbooks are evolving documents and kept under review by the CRU to ensure they remain relevant, are fit for purpose and the service standards are appropriate for customers.

Complaints
The CRU has a legal obligation to provide and independent dispute resolution service to customers of Irish Water. Where customers have completed Irish Water’s complaints process and remain unsatisfied with how the complaint was handled or the resolution offered by Irish Water, the customer can then refer their complaint to the CRU’s Customer Care Team. The CRU’s Customer Care Team offer a free complaints resolution service for Irish Water customers. Where the complaint is upheld the CRU may direct Irish Water to resolve the complaint in a set fashion and where appropriate, may direct Irish Water to pay a refund or compensation to the customer. The CRU regularly monitored and engaged with Irish Water throughout 2017 on the type/categories of complaints received by Irish Water, along with the type and number of complaints referred to the CRU’s Customer Care Team.

There were approximately 12,000 customer complaints logged by Irish Water in 2017, a large decrease from the 23,500 complaints logged with the company in 2016.

Customer Information
The Water Division in the CRU publish periodic ‘Customer Information Notes’ for customers of Irish Water. These notes provide customers with information on the CRU’s role in protecting customers and provide information on schemes implemented by Irish Water which can bring benefits to customers. The CRU published two such information notes in 2017.

Monitoring Irish Water’s Capital Investments
The CRU allows Irish Water revenue to support necessary and efficient investment in capital projects and programmes in order to support delivery of appropriate services to its customers. Monitoring and reporting on Irish Water’s delivery of capital investments supports transparency and helps provide the CRU with appropriate oversight of Irish Water’s performance.

During 2017, the CRU commenced monitoring and reporting of Irish Water’s delivery of its Investment Plans. The CRU published its first report on Irish Water’s delivery of capital investments in June 2017. The report provided an overview of Irish Water’s performance in delivering its projects and programmes and focussed on key outputs and outcomes delivered by Irish Water in the period since its establishment to the end of 2016. Some tangible benefits for customers included; the removal of long-term boil water notices for over 20,000 people, 66 supplies (serving over 350,000 people) removed from the EPA’s Remedial Action List in, and over 850 km of new or renewed water mains was laid.

Irish Water Performance Assessment
In November 2016, the CRU established a framework of reporting metrics against which Irish Water’s overall performance could be assessed. This is an important aspect of the CRU’s work in that enables monitoring of Irish Water’s performance over time and ensures that Irish Water’s revenue is spent appropriately to improve services for customers.
The framework looks across five broad categories:
• Customer service; including response to complaints and ease of contact;
• Environmental performance; including sludge disposal and wastewater pollution incidents;
• Water supply – quality of service; including unplanned interruptions and water quality parameters;
• Security of water supply; including leakage reduction and
• Sewerage service; including sewer flooding.

In August 2017, the CRU received and reviewed Irish Water’s first submission under the Performance Assessment framework, and subsequently published its first commentary on same. Irish Water provided data regarding its performance under eight of the nineteen metrics. For the remainder of the metrics Irish Water is gathering the necessary data to report on its performance. It can take utilities a significant length of time to put in place the systems and processes needed to report on certain metrics. Introducing this monitoring framework ensures that this data will become available over time.

Water Services Innovation Fund
As part of the first revenue review process, the CRU created the ‘Water Services Innovation Fund’ to allow Irish Water to invest funding in innovative projects in order to explore novel technologies and operating arrangements designed to deliver benefits for customers.

At the end of 2017, the CRU published a paper on the activity to date of the five projects approved under the Water Services Innovation Fund. It provided a description of each project, as well as information on the objectives, the planned outputs, and the partners for each project.

Stakeholder Engagement
• Joint Oireachtas Committee (JOC) - The Joint Committee on the Future Funding of Domestic Water Services was established on 24 November 2016. Its remit was to consider the report of the Expert Commission on the Future Funding of Domestic Water Services and report with recommendations to both Houses of the Oireachtas. The CRU, in its role as economic regulator, engaged with the JOC throughout 2017, made two public appearances, presented to the Committee, and provided 16 detailed submissions on various focus areas as requested. The JOC’s final report was published on 12th April 2017.

• CRU’s Non-Domestic Water User Group - In order to engage businesses and other interested parties, the CRU established the CRU Non-Domestic Water User Group. The CRU proactively seeks the views of all customers and this group allows the CRU to better understand the needs and priorities of businesses as regulatory policies are progressed, in particular Irish Water’s Non-Domestic Tariff Framework and Connection Charging Policies. The group met 3 times during 2017.

• WAREG (European Water Regulators Group) - The European Water Regulators Group (WAREG), are a group of economic regulators who assemble to learn from each other’s experiences and support the development of effective regulation of the water and wastewater industry in Europe. WAREG was established in December 2017, and the CRU is one of its founding members.

• Environmental Protection Agency (EPA) - In 2017, the CRU and EPA signed an updated version of the Memorandum of Understanding between the two organisations to reflect our respective roles as economic and environmental regulator of Irish Water. The CRU engaged with the EPA throughout 2017 regarding Irish Water’s performance and Irish Water’s commitments to improving the safety and security of drinking water supply and in providing wastewater collection and treatment.

On 18 April 2017, the CRU published an updated version of Irish Water’s Water Charges Plan to reflect an extension (through legislation) of the period for which domestic water charges were suspended.
• **National Water Forum (Previously Public Water Forum)** - One of the CRU's main priorities for 2017 was to support the administration of the Public Water Forum, the independent consumer consultative forum established under the Water Services Act 2014. The CRU no longer have an administrative role in supporting the Public Water Forum as the Water Services Act 2017 replaced the ‘Public Water Forum’ with a ‘National Water Forum’. The National Water Forum will advise the Minister in relation to Government water policy and have regard to water conservation, rural water services and the interests of the customers of Irish Water. The CRU engaged with the Public Water Forum (now National Water Forum) throughout 2017 on various water service and policy issues, and will continue to do so in 2018.

**First Fix Free Scheme**
This scheme was first approved by the CRU in 2015. Under this scheme, Irish Water assists customers by notifying them of a suspected leak occurring within the boundary of their property. Following investigation by Irish Water, leaks which are identified on the external supply pipe serving a property will be offered a free leak repair. As at the end of Q3 2017, Irish Water estimates that over 109.8 million litres of drinking water per day has been saved as a result of scheme, with a total of 43,548 leak investigations undertaken and 8,532 repairs completed.

The CRU has a role in monitoring this scheme and Irish Water is required to report to the CRU on a quarterly basis in relation the number of first fix notifications issued, responses received and investigations and repairs completed by geographical location. In addition, Irish Water is required to submit to the CRU, a detailed breakdown of the overall scheme expenditure and water savings achieved on a quarterly basis. The CRU continued its monitoring work in this area throughout 2017.

**Water Charges Plan**
Under the Water Services (No 2) Act 2013, the CRU approves Irish Water’s Water Charges Plan, which sets out water services charges with regard to new connections, special meter reads, meter testing, and charges for provision of water and wastewater services to non-domestic customers. As per the Water Services Act 2017, water charges for domestic customers have been discontinued, however charges will apply in cases where household water usage exceeds the threshold amount set out by the Minister. The Water Charges Plan must make provision for such charges.

On 18 April 2017, the CRU published an updated version of Irish Water’s Water Charges Plan to reflect an extension (through legislation) of the period for which domestic water charges were suspended. Another version of the Water Charges Plan was then published on the 10th August 2017 to extend the suspension period by five months to 31 December 2017. Each version of the water charges plan published, supersedes any previous versions of Water Charges Plan.
### 2017 KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing Irish Water’s Connection Charging Policy</td>
<td>Ongoing - preparation for 2018 consultation</td>
<td>Throughout 2017, the CRU conducted extensive research and engaged with stakeholders in preparation for the 2018 consultation on Irish Water’s connection charging proposals. An information note containing key details relating to the project was published in October 2017. Irish Water’s initial policy proposals were received and reviewed in Q3 2017 with final proposals received by CRU in Q4 2017.</td>
</tr>
<tr>
<td>Establishing Irish Water’s Non-Domestic Tariff Framework</td>
<td>Ongoing - preparation for 2018 consultation</td>
<td>The development of the Non-Domestic Tariff Framework continued in 2017 in preparation for public consultation in 2018. An information note was published in Q3 2017, outlining key project details and plans. As this complex project will bring about significant change, the CRU continued to proactively engage with those to be impacted including business groups, non-domestic stakeholders and the CRU’s Non-Domestic Water User Group.</td>
</tr>
<tr>
<td>Monitoring Irish Water’s Capital Investments</td>
<td>Q2 2017</td>
<td>The first report on Irish Water’s delivery of its capital investments was published in June 2017. This report provided an overview of Irish Water’s investments and focused on key outputs and outcomes.</td>
</tr>
<tr>
<td>Monitoring Irish Water’s Overall Performance against key metrics</td>
<td>Q3 2017</td>
<td>In August 2017, the CRU received, reviewed and published Irish Water’s first submission under the Performance Assessment framework. Irish Water provided data regarding its performance under eight of the nineteen metrics. For the remainder of the metrics Irish Water is gathering the necessary data to report on its performance.</td>
</tr>
<tr>
<td>Transparent Engagement with Stakeholders</td>
<td>Throughout 2017</td>
<td>The CRU continued to engage with many stakeholders during 2017 including Government, the Public Water Forum/Water Forum, Non-Domestic Water User Group and WAREG. Customer information notes were also published throughout the year.</td>
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## 2017 KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Complaints</td>
<td>Quarterly Monitoring</td>
<td>The CRU continued to provide a dispute resolution service to customers of Irish Water. The CRU also monitored the number, type and duration of complaints received by Irish Water from its customers a quarterly basis.</td>
</tr>
<tr>
<td>Irish Water Revenue Control</td>
<td>Preparation for 2018 consultation</td>
<td>The Water Service Act 2017 impacts the way the CRU is to conduct revenue controls in future and necessitated that the current revenue control period (IRC2, 2017-2018) be extended by one year to include 2019. In December 2017, the CRU published an information paper which set CRU’s decision to extend the current revenue control period. A public consultation will take place in 2018 on Irish Water’s allowed revenue for 2019, once the CRU has received and analysed a submission from Irish Water.</td>
</tr>
<tr>
<td>Assisting &amp; Supporting Government Objectives &amp; Policy</td>
<td>Throughout 2017</td>
<td>In response to requests relating to the work of the JOC, the CRU, as economic regulator of Irish Water, provided the JOC with documents and presented to the committee on relevant areas relating to Water regulation. The CRU published these documents and presentations on its website. The CRU participated in a Government working group, set up to examine the future funding model for Irish Water and the options available. In December 2017, the CRU published its report to the Minister for Housing Planning and Local Government on its review of demand for water service detailing the average rate of demand to dwellings, estimated demand by an individual, and average incremental demand per year for each additional occupant above four in a dwelling.</td>
</tr>
</tbody>
</table>
The CRU carried out its annual review of monitoring the electricity and gas retail markets.

The CRU completed an in-depth review of competition in the electricity and gas retail markets, to assess the extent competition is benefit customers.

The CRU approved the phased approach to transition the smart meter upgrade project from design to implementation stage.

The CRU updated the methodology used to calculate the allocation of the PSO Levy to Customers.

The CRU completed all regulatory decisions to enable I-SEM to energy market trials to commence in December.

The CRU completed all regulatory decisions to enable the first CRM Transition Auction to take place in December 2017.

The CRU continued to work with the Utility Regulator (UR) Northern Ireland, as a member if the SEM Committee to oversee regulation of the Single Electricity Market.

The CRU continued to contribute to the CEER/ACER market monitoring reports on the developments in wholesale and retail markets.
Energy Markets

Key Priorities for 2017

2. Decide on Capacity Mechanism Code (CMC), parameters and support Department of Communications, Climate Action and Environment on state aid clearance of the capacity market design.
3. Complete assessment for the scope, scale and timing of the national smart metering programme.
4. Consult and decide on the Public Service Obligation (PSO) Levy.
5. Implement outstanding decisions from the Supplier Handbook review process.
6. Update process for Supplier of Last Resort for Pay As You Go (PAYG) meters.

The CRU has an important statutory role to protect energy consumers and to monitor the electricity and gas retail markets to ensure that customers are benefitting from competition. A key strategic goal of the CRU is to protect consumers so they can benefit from competition through fully competitive wholesale and retail markets.

The CRU has a number of tasks in this area, including:
- Oversight of the Single Electricity Market and implementation of the pan-European internal energy market;
- Retail and consumer protection policy development;
- Licensing energy suppliers and compliance with license and regulatory obligations;
- Monitoring of the retail gas and electricity markets;
- Oversight of a National Smart Metering Programme, and
- The accreditation of price comparison web sites.

Developments in the Energy Market

Competition is continuing to develop in the electricity and gas markets, and energy customers have a range of suppliers, payment options and price plans to choose from. Since deregulation of the electricity and gas markets, a number of new suppliers have entered the market, with a total of 9 electricity suppliers and 8 gas suppliers active.

Electric Ireland remained the largest electricity supplier in terms of customers and MWhs across all segments. In Q4 2016, Electric Ireland held the greatest domestic electricity market share with 51.35% of total consumption. However, its market share decreased by 1.82% between 2016 and 2017, to 49.53% in Q4 2017. Energia gained the greatest increase in market share of 1.83%.

Bord Gáis Energy maintained the greatest market share in the domestic gas market with 47.22% of the market by customer numbers. However, its market share decreased by 3.75% between 2016 and 2017. PrePayPower gained the greatest increase in gas market share of 0.71%.

The total number of switches completed in the electricity market in 2017 was 313,843. This represented an increase of 1.22% from 2016. The total number of switches completed in the gas market in 2017 was 124,419. This represented a decrease of 33.16% compared to 2016.

Switching rates in both the electricity and gas markets were consistently above 10% in both markets for 2017. New data on internal switching (where a customer remains with their existing supplier, but switches to a new tariff) and dual fuel switching shows that there are also a significant number of internal switches on a monthly basis. Approximately 20-30% of switches per month are dual fuel switches.
Wholesale gas and electricity prices declined in the first half, then increased in the second half of 2017. For domestic customers, the price of both standard and discounted retail plans increased between 2016 and 2017. This was due to a combination of increased wholesale prices and an increase in the PSO Levy at the end of 2017. Switching to alternative offers can provide significant savings as on average there is a 10% difference between the average annual standard tariff and average annual discount tariff across suppliers in electricity and gas.

There were 4,092 PAYG financial hardship meters installed for electricity and 1,662 for gas in 2017. This compares to 5,846 and 4,423 installed in 2016 respectively.

European Union Regulation

The CRU is an active member of various working groups and task forces established by the Council of Energy Regulators (CEER) and Agency for the Cooperation of Energy Regulators (ACER), covering gas and electricity wholesale and retail markets.

As in previous years, the CRU contributed to the CEER-ACER market monitoring reports, covering a range of information on national indicators on the developments in the wholesale and retail markets.

The CRU also actively contributed to a number of CEER working groups and task forces, including the Customers and Retail Markets Working Group. A key work stream was the development of Clean Energy Regulatory White Papers outlining regulators’ positions on proposed new energy legislation in the clean energy package. The White Papers broadly welcomed the proposals and provided commentary to assist in its further development.

Review of Competition in the Electricity and Gas Retail Markets

The CRU carried out an in-depth review of the development of competition in the electricity and gas retail markets since full deregulation. This was to assess the extent to which competition is providing beneficial outcomes for consumers. This review also aligned with the 2015 White Paper on energy policy, published by the Department of Communications, Climate Action and Environment. Under which the CRU committed to publish a focused assessment of the development of competition in the electricity and gas retail markets. The results of this review was published in February 2017 with the following key findings:

- Overall the energy market is functioning well in terms of the choice of suppliers and competition among suppliers with increased focus on customer retention by suppliers;
- Switching levels by customers remained high in comparison to other European Union countries, with some concern that a higher percentage of consumers could benefit by switching supplier or being on a better tariff;
- Customer satisfaction and trust with suppliers is high, with improvements seen across the majority of suppliers as they become more customer focused;
- Retail prices are close to the European averages and have decreased over time due to competition and reductions in wholesale costs and
- While wholesale energy costs and retail prices fell during this review period, network costs and supplier costs increased.

In relation to the final finding, the CRU were clear on the level of network costs contributing to supplier costs, as these are regulated and the cost drivers for increases in these costs are understood and transparent. The supplier cost element was not clear and the CRU committed to undertaking a more detailed examination of supplier costs to understand the components of these and supplier’s responsiveness to changes in wholesale gas and electricity prices.

To facilitate this, the CRU requested additional information from electricity and gas suppliers seeking a further breakdown of the total costs faced by suppliers in 2015 and 2016 to allow this analysis to be carried out and provide a clearer picture of the final
components of bills for electricity and gas customers to increase understanding and transparency in the energy market.

An Information Paper on Energy Supply Costs was published in October 2017. The conclusions of this analysis were:

- **Advertising/Sales and Customer Acquisition** – 3% of total costs: These costs appear to be driven by economies of scale, with larger suppliers (above 5% market share in terms of customer numbers) spending less than suppliers with less than 5% market share. Some increase in these costs have been observed since deregulation of the electricity and gas retail markets.

- **Bad Debt** – 1% of total costs: Customer bad debt appears to be a significant cost for suppliers but has decreased between 2015 and 2016, which may reflect improving economic conditions.

- **Obligatory costs** – 1% of total costs: These costs include statutory and regulatory obligations, but are a small component and make up just under 1% of total supplier costs and have increased between 2015 and 2016. These are primarily due to energy efficiency obligations, customer protection and audit requirements.

- **Inferred Supplier Margins**: The CRU has also derived inferred margins across suppliers from the review of costs. These inferred margins are comparable with other utilities, the CRU noted an increase in margins from 2015 to 2016. These levels may suggest that, as wholesale prices began to decrease from 2014, the corresponding decrease in the final retail tariff may have initially been conservative in 2015, driven in part by the existence of forward contracts hedged at wholesale prices. In 2016, as wholesale prices continued to drop, retail prices continued to decline, reflecting the pass through of the wholesale price reductions to customers. Whilst the inferred retail margins appear higher than when regulated tariffs applied, this is reflective of the additional risk that suppliers face in an open competitive market. The CRU is of the view that these supplier margins are not a cause for concern at this time but will continue to monitor margins to ensure that customers are benefiting from competition.

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### Consumer Survey

Each year the CRU conducts a survey of the retail and SME electricity and gas markets in the Republic of Ireland to measure customer experiences and attitudes and to help inform policy in the area of customer protection. This research has been ongoing since 2011.

**CONSUMER SURVEY RESULTS**

<table>
<thead>
<tr>
<th><strong>ELECTRICITY</strong></th>
<th><strong>GAS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SWITCHING</strong></td>
<td></td>
</tr>
<tr>
<td>64% have previously switched</td>
<td>62% have previously switched</td>
</tr>
<tr>
<td>Only 44% of these are likely to switch when their contract ends</td>
<td>Only 52% of these are likely to switch when their contract ends</td>
</tr>
<tr>
<td><strong>UNDERSTANDING</strong></td>
<td></td>
</tr>
<tr>
<td>11% find comparing tariff offers difficult</td>
<td>7% find comparing tariff offers difficult</td>
</tr>
<tr>
<td><strong>SATISFACTION</strong></td>
<td></td>
</tr>
<tr>
<td>90% overall supplier satisfaction</td>
<td>88% overall supplier satisfaction</td>
</tr>
<tr>
<td><strong>BILLS</strong></td>
<td></td>
</tr>
<tr>
<td>90% claim to read their bills in detail</td>
<td></td>
</tr>
<tr>
<td><strong>DUAL FUEL</strong></td>
<td></td>
</tr>
<tr>
<td>58% have the same supplier for electricity and gas</td>
<td></td>
</tr>
<tr>
<td><strong>SMART METERING</strong></td>
<td></td>
</tr>
<tr>
<td>43% are interested in smart metering</td>
<td>45% are interested in smart metering</td>
</tr>
<tr>
<td><strong>SMART ENERGY DEVICES</strong></td>
<td></td>
</tr>
<tr>
<td>18% already have smart energy devices</td>
<td>17% already have smart energy devices</td>
</tr>
<tr>
<td>60% have no interest in smart energy devices</td>
<td>61% have no interest in smart energy devices</td>
</tr>
</tbody>
</table>

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Supplier Compliance

The CRU has a statutory mandate underpinned by primary and secondary legislation to protect the interests of energy customers and promote competition in retail markets. The CRU has implemented specific customer protection measures through the development of requirements and guidelines for energy suppliers and network companies, reflected in Standard Terms and Conditions of Supply, Codes of Practice and Customer Charters, the Supplier Handbook, gas and electricity supply licences and market design rules. The CRU regularly conducts audits of compliance to ensure that suppliers are meeting their regulatory obligations. In 2017, the CRU audited suppliers’ adherence to the rules in relation to Complaint Handling.

The CRU audited suppliers’ complaints-handling in 2017. The audit examined:

- How a customer can raise a complaint;
- Forms of redress or compensation available;
- Complaints raised by third parties and
- Procedures for escalating and resolving complaints and timescales associated with same.

No suppliers were found to be in breach of compliance requirements for audits.

Review of Supplier Handbook

The Supplier’s Handbook sets out minimum service requirements that suppliers must adhere to in their dealings with energy customers. The Suppliers’ Handbook acts as the ‘rulebook’ covering key areas of interaction between energy customers and energy suppliers. The review of the Suppliers’ Handbook began in 2015 and the CRU published a consultation paper on proposed changes in February 2016.

In November 2016, the CRU published a decision and further consultation paper on a revised Supplier Handbook, which included a range of new measures to protect consumers and promote competition. New requirements were introduced for suppliers including an obligation on suppliers to issue a written notification on an annual basis to prompt those customers who have been on the same tariff or a non-discounted tariff for 3 years or more to consider alternative offers.

Suppliers are now required to send customers a written notification 30 days prior to the expiry of a fixed term contract, and display an estimate of the annual average bill based on typical consumption values on all advertising and marketing material to make it easier for customers to compare offers. The introduction of an Estimated Annual Bill EAB) was supported by research undertaken by the Economic and Social Research Institute (ESRI).

The ESRI’s research concluded that the Estimated Annual Bill “is likely to make it easier for consumers to choose cheaper electricity packages from among available offerings” and that “it is likely to be beneficial for consumers’ decision-making.” In tandem with the suite of decisions introduced in November 2016, the CRU also sought feedback from interested stakeholders regarding the specific content of the 30 Days’ Notice and the Annual Prompt. The CRU also sought views on the calculation methodology for the EAB. Responses informed the CRU’s final decision with regard to the specific content and application of the 30 Days’ Notice, the Annual Prompt and the EAB.

The CRU published its final decision on the Supplier’s Handbook in April 2017 bringing to a close an extensive process of engagement and consultation. As part of its final decision, the CRU gave all electricity and gas suppliers a 6 month window to implement the majority of the requirements contained in the update Supplier’s Handbook.

As part of its role to ensure compliance with the updated Supplier’s Handbook, the CRU initiated a process with all electricity and gas suppliers to review compliance with the requirements in the Supplier’s Handbook. This process commenced in October 2017.
Renewables

The CRU is required to ensure that all suppliers provide reliable information on bills and promotional materials in relation to their fuel mix.

The fuel mix for suppliers licensed in Ireland and operating in the Single Electricity Market (SEM) for 2016 was published on the 6th of October 2017. The purpose of the Fuel Mix Disclosure is to provide consumers with information to allow them to understand the environmental impact of the electricity that they buy and to choose between suppliers based on their fuel mix and emissions information.

For the purposes of the Fuel Mix disclosure, suppliers can purchase renewable Guarantees of Origin (GOs). These GOs are certificates that provide customers with certainty that the electricity has been generated from a renewable source. As a result, the renewable share of the supplier fuel mix in this report is higher than the renewable sources used in the production of electricity in Ireland. The fuel mix for suppliers for 2016 is shown in the table below.

The CRU and Single Electricity Market Operator (SEMO) carry out an independent verification process and publish the results of suppliers’ green source products each year to validate their 100% renewable credibility. Green source products are tariff plans offered by suppliers guaranteeing the source of electricity to be 100% renewable for any customer on that plan. The Green Source Product review for 2016 was carried out and subsequently published in early 2018. All suppliers offering green source products in 2016 passed the verification process with no shortfall in GOs and REGOs.

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Coal</th>
<th>Gas</th>
<th>Peat</th>
<th>Renewable</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-Island</td>
<td>13.76%</td>
<td>39.66%</td>
<td>5.35%</td>
<td>40.09%</td>
<td>1.14%</td>
</tr>
<tr>
<td>Bord Gais (Ireland)</td>
<td>0.00%</td>
<td>74.51%</td>
<td>0.00%</td>
<td>25.49%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Electric Ireland (Ireland)</td>
<td>13.54%</td>
<td>51.10%</td>
<td>5.26%</td>
<td>28.98%</td>
<td>1.12%</td>
</tr>
<tr>
<td>Energia (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Flogas (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>LCC Power Limited T’s Go Power (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Panda Power (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>SSE Airtricity (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Vayu (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>BRI Green Energy Supply (Ireland)</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
Smart Metering

Smart meters are the next generation of electricity and gas meter and are being rolled out across Europe and internationally. Similar to the upgrades which have already taken place in other sectors, such as television and mobile communications, the rollout of smart meters marks a shift away from analogue to digital for electricity and gas retail markets in Ireland. This move to upgraded digital meters will bring many benefits for energy customers by enhancing competition, making bills more accurate, providing customers with better information on their energy consumption and empowering consumers with new tools to make more informed choices about their energy needs. The rollout complements domestic energy policy and is an important element of the Department of Communications, Climate Action and Environment’s ‘Ireland’s Transition to a Low Carbon Energy Future, 2015-2030.’

Smart Meter Project Re-plan

In early 2017, ESB Networks (ESBN) submitted to the CRU an updated delivery plan for the rollout of smart meters to energy consumers. This plan is based on a staggered implementation of the smart metering solution or ‘High Level Design’ (HLD) and its associated functionality. The proposal put forward by ESBN attempts to limit the technical complexity associated the smart meter upgrade and also builds in more flexibility to the overall delivery of smart meters to consumers.

Phased Approach

Following a period of extensive engagement with key stakeholders and analysis of ESBN’s proposal, the CRU approved the phased approach to delivery of the smart meter upgrade project in September 2017. The approval of the phased approach marked a major milestone for the smart meter upgrade project. The project has now transitioned from the design stages to implementation. As part of this transition, the CRU’s role will be limited to coordination and oversight with primary responsibility for delivery residing with ESBN for Phases One and Two. Gas Networks Ireland will assume joint responsibility for delivery of Phase Three working closely with ESBN.

Smart Meter Cost Benefit Analysis

The CRU conducted a cost benefit analysis (CBA) for the new phased approach for smart metering. This was done by updating previous CBAs for the smart metering programme, including updated cost data from ESBN. Findings of this updated analysis were presented in a paper published in November. In total, three CBAs have been carried out for the smart metering upgrade programme. Each iteration of the CBA has been updated taking into account policy, technology and market developments. The preparation of the CBA involved input and close working with the major stakeholders of the smart meter programme for input assumptions and technical support. This CBA informed the CRUs approval of the phased approach for smart meter delivery.

Oversight of Single Electricity Market

During 2017, the CRU continued to oversee regulation of the existing wholesale energy market, the Single Electricity Market (SEM) through its role as a member of the SEM Committee.

Some of the SEM Committee decisions in 2017 relating to the current market included an update of the SEM Trading and Settlement Code (the Code) policy and operational parameters which are determined by the Regulatory Authorities (RAs) as required on an annual basis.

In 2016, the CRU and UR published a decision, SEM RoCoF Remuneration Mechanism decision to incentivise early compliance with the new RoCoF standard. In 2014, the CRU and UR respectively decided in principle to introduce a Rate-of-Change-of-Frequency (RoCoF) Grid Code standard of 1 Hz/s for Ireland and Northern Ireland (calculated over 500 ms). This new standard is required to facilitate the increased penetration of renewables on the system and is a key part of the DS3 Programme.

Directed Contract Determination

As part of the SEM market power mitigation strategy, ESB Power Generation is required to offer Directed Contracts (DCs) products for sale to eligible electricity suppliers on a quarterly basis.

The prices for these contracts are set by the Regulatory Authorities (i.e. CRU & UREGNI), as well as the quantity of DCs to be offered by ESB Power Generation.
During 2017, the CRU continued to oversee regulation of the existing wholesale energy market, the Single Electricity Market (SEM) through its role as a member of the SEM Committee.
On average, the DC prices sold to date for 2018 are 12% higher than those sold for 2017, and 6% lower than those sold for 2016. Additionally, the DC volumes sold for 2017 were 2% higher than 2016 and 5% above 2015.

**PSO Levy**

The Public Service Obligation (PSO) levy is an annual levy charged to all electricity customers in Ireland, with the objective of supporting the Irish Government policy objectives relating to renewable energy, indigenous fuels and security of energy supply. The proceeds of the levy are used to contribute to the additional relevant costs - incurred by PSO-supported electricity generators - which are not recovered in the electricity market.

In accordance with Section 39 of the Electricity Regulation Act 1999 (as amended), the CRU is responsible for the calculation and administration of the PSO levy on an annual basis to help ensure that the scheme is administered appropriately and efficiently.

On the 28th of July 2017, the CRU published a decision paper setting out the PSO levy to apply to electricity customers from 1st October 2017 to 30th September 2018. The decision paper confirmed that the PSO levy for the 2017/18 PSO period equated to €471.9 million, which was approximately a 20% increase in the PSO levy (relative to 2016/17).

The increase in the 2017/18 PSO levy is in part attributed to increased renewable generation and an increase R-factor arising from the 2015/15 PSO period.

From a customer impact perspective, the 2017/18 PSO levy will result in a monthly charge of €7.69 and €26.55 for domestic and small commercial customers respectively.

**I-SEM Detailed Design and Implementation**

During 2017, the CRU continued working with the Utility Regulator (UR) Northern Ireland, Government Departments and stakeholders to implement the High Level Design, developed in 2014, on the Integrated Single Electricity Market project to meet the requirements of the EU Internal Energy Market. The CRU monitors developments and actively participates in the internal energy market policy design at an EU level to ensure alignment between I-SEM design and EU development.

Currently, the I-SEM project is in its final phase, namely the detailed design and implementation work needed to Go-Live with the new market. During 2017, systems development by the Transmission System Operators (TSOs – EirGrid and SONI) were progressed, along with market participants are carrying out their own readiness activities. Execution of the Market Trial commenced on 1 December 2017 leading up to the Go-live date in 2018.
The RAs produced a number of significant consultations and decisions on key detailed policy issues regarding the I-SEM in 2017 some of which include:

- The Trading and Settlement Code (TSC) Amendments Decision Paper which was published in April 2017 concluding on a consultation from 2016;
- The TSC operational parameters and policy and settlement dispatch parameters which would be determined by the Regulatory Authorities (RAs) on an annual basis;
- Balancing Market Principles Code of Practice Decision Paper in July 2017, and
- The approval in June 2017 of the SEMOpx rules which set the arrangements via which the Irish designated Nominated Electricity Market Operator operates the ex-ante markets.

Parallel to this as part of the CRM the Capacity Market Code (CMC) was developed and this work culminated in the publication of I-SEM CRM Capacity Market Code Decision published June 2017. The decision sets out the arrangements whereby market participants can qualify for, and participate in, auctions for the award of capacity and participate in secondary trading of awarded capacity. Further CRM decisions include:

- Publication of the CRM Parameters Decision in April 2017. The decision sets the CRM related parameters which refer to the first capacity auction for delivery in 2018/19, and
- CRM Locational Capacity Constraints Decision in July 2017 which adds to the complement of CRM detailed design decision papers published to date and represents the decision associated with the methodology for the Locational Capacity Constraint.

A significant milestone of the new market design was reached with the first CRM Transitional Auction that took place successfully on 15th December 2017 and covers the delivery period from market Cutover Time to 30th September 2019. The Auction Clearing Price (€/MW per year) was set at 41,800.00 €/MW per year with an Average Price of Awarded Capacity (€/MW per year) was 42,774.84 €/MW per year.

**I-SEM Readiness**

The role of the I-SEM Readiness work-stream is to assess the progress of the TSOs and market participants towards readiness for live operation of the I-SEM market arrangements, and to ensure that senior decision makers are informed of this progress before key Go-Live decisions are made. The I-SEM Readiness Criteria, Governance and Contingency Information Paper was published in May 2017. This Information Paper outlines the key interactions and Stage Gates leading up to each of the I-SEM Go-Live Events; the decision-making process as to whether an event can ‘go-live’ or ‘no-go-live’; and provides views on contingency should a ‘no-go’ decision be made at any stage.

**REMIT**

REMIT, the Regulation on Wholesale Energy Market Integrity and Transparency, entered EU law on 28 December 2011 and provides for an EU-wide market rules and monitoring framework related to wholesale energy markets in electricity and gas. As part of the REMIT Implementing Regulation, market participants are required to register with the relevant National Regulatory Authority, including the CRU. The number of participants who had registered with the CRU by the end of 2017 was 149. The reporting, by market participants, of transactions under REMIT commenced in 2015.

**ACER-CEER**

The development of the European internal energy market continues and the CRU is actively contributing to this policy development.

The CRU is a member of various working groups and task forces established by the Council of Energy Regulators (CEER) and Agency for the Cooperation of Energy Regulators (ACER), covering gas and electricity wholesale and retail markets. The CRU is co-chair of the CEER working group looking at the future of distribution systems with associated task forces looking at cyber security, smart grids and networks benchmarking. The CRU is also a member of a number of ACER working groups and task forces including the Electricity Working Group that covers market and network issues. In 2017, the CRU contributed to the CEER/ACER market monitoring reports, covering a range of information on the national indicators on the developments in the wholesale and retail markets.
## 2017 KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance Competitiveness of electricity and gas markets by robustly monitoring retail markets, and publish quarterly and monthly monitoring reports</td>
<td>Q1- Q4 2017</td>
<td>The CRU published a Customer Switching Report for the Electricity and Gas Retail Markets on a monthly basis throughout 2017. Retail Market monitoring reports were published. Providing analysis upon a number of indicators of the electricity and gas retail markets. In 2017 an Annual report for the year of 2016 was published alongside reports on Quarters 1, 2 and 3 of 2017. A review of competition in the electricity and gas retail markets was published upon the results of an in-depth review by the CRU of the development of competition over time since full deregulation of the gas and electricity retail markets to assess the extent to which competition is providing beneficial outcomes for consumers. Publication of Bridging paper in December to present a summary and response to comments received by the CRU from respondents to the ‘Review of Competition in the Electricity and Gas Retail Markets: A Consumer Focused Assessment’ paper that was published by the CRU in February 2017. Carried out annual consumer survey targeted at measuring consumer engagement, experience and attitudes in the residential and SME electricity and gas markets in Ireland. Results published in 2018. The CRU and SEMO carried out their annual verification process for 2016 of any supplier offering green source products to confirm they have sufficient green attributes to cover their sales of green source products. The results of this process were published in September. The CRU carried out its annual audit of suppliers. 2017 focused upon complaint handling. The results were published in December. The CRU analysed the components of supplier costs in the gas and electricity markets, in October the resulted were published in an Information Paper.</td>
</tr>
<tr>
<td>Provide certainty to customers consulting and deciding on the PSO levy by 1st August 2017</td>
<td>Q2 2017</td>
<td>In June the CRU published a Proposed Decision paper (CRU17115) regarding the Public Service Obligation Levy (2017/2018) alongside industry responses.</td>
</tr>
</tbody>
</table>
## 2017 KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compile consultation on a new methodology for the allocation of costs for the PSO levy, and apply the most appropriate methodology according to the outcome of the consultation for the 2017/2018 levy period</td>
<td>Q1 2017</td>
<td>In March the CRU published an update to the methodology used to calculate the allocation of the PSO Levy to customers (CRU17073). Publication of I-SEM Trading and Settlement Code Amendments Decision Paper in April 2017.</td>
</tr>
<tr>
<td>Compile all regulatory decisions to allow capacity market auction to be trialled before implementation in December 2017</td>
<td>Q1- Q4 2017</td>
<td>Publication of CRM Parameters Decision in April 2017; Publication of CRM Terms of Reference for Capacity Market Auditor and Monitor Decision in April 2017 Publication CRM Capacity Market Code Decision in June 2017 Publication of CRM Initial Auction Information Pack and Exception Application and Opt-out Notification Templates in July 2017 First CRM Transitional Auction took place December 2017</td>
</tr>
<tr>
<td>Programme management of the National Smart Metering Programme including oversight of the elements of the programme led by ESB Networks and Gas Networks Ireland; completion of the scope validation/cost benefit analysis (CBA) to establish scope, scale and timing of the upgrade of electricity and gas meters to facilitate smart services</td>
<td>Q1-Q4 2017</td>
<td>The CRU carried out an extensive CBA upon the revised scope, scale and timing of the upgrade to the electricity and gas meters to facilitate smart services. A number of sensitivities and scenarios were ran under this model and it helped inform the CRUs decision upon the final rollout design of smart meters. The results (including the input assumptions used in the model) were published in an information Paper in November 2017. The CRU continued an oversight role in the delivery and advancement of the National Smart Metering Programme. This involved extensive engagement to finalised and approve a replan that offers best value to Irish energy customers.</td>
</tr>
</tbody>
</table>
The CER is responsible for the assessment and granting of licenses for all power generation facility construction and supply and gas network pipeline construction and supply.

During 2017, the following applications were received and processed by the CRU.

**Electricity Generation Application Assessments and Licenses**

The licensing Team received 24 applications for an Authorisation to Construct or Reconstruct a Generation Station and 24 applications for a Licence to Generate. 19 Authorisations to Construct or Reconstruct a Generation Station and 21 Licences to Generate were issued by the team within the year. Details of all issued Authorisations to Construct or Reconstruct a Generation Station and Licences to Generate are posted to the Licensing section of the CRU website each quarter.

### Station Type

<table>
<thead>
<tr>
<th>Station Type</th>
<th>Wind Farm</th>
<th>CHP</th>
<th>Natural Gas</th>
<th>Blogas</th>
<th>Gas/Diesel</th>
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</thead>
<tbody>
<tr>
<td>Authorisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>applications</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>issued</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licence</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>applications</td>
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<td>18</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>issued</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Non-Grid Connected Applications**

In 2017 the team processed three applications that included generation units that were not developed for connection to the grid. This included applications for two data centres.

**Application Assessment Review 2017**

In 2017 the Licensing team with responsibility for the issuance of Authorisations to Construct or Reconstruct a Generation Stations and Licences to Generate under the Act, undertook a review of the internal application assessment process in an effort to introduce efficiencies and reduce assessment timelines. This process was concluded in Q4 and the updated application forms and associated guidance documents were scheduled for publication to the CRU website in January 2018.

**Compliance Assurance**

In accordance with the conditions of their consents, holders of the above CRU authorisations and licences are required to inform CRU of a change of control of the holder of the consent as soon as possible after the change of control has taken place. In 2017 CRU received 17 such change of control notifications, for the most part ahead of the actual change of control taking place. Receiving notification ahead of the proposed change enables CRU to carry out an assessment.

**Gas Network Application Assessments and Licenses**

In 2017 the team received 0 applications for a consent to construct a pipeline and one application to grant compulsory acquisition orders, which is currently being processed.
Information and Communications Technology

The Information and Communication Technology (ICT) Department launched a new ICT Strategy covering the period 2017 – 2020. During the development of the new ICT Strategy, a full assessment was carried out to review ICT Governance, application and infrastructure portfolio, data management and information needs, and on completion of this review, an optimal service delivery model was created. The new ICT Strategy sets out key initiatives for delivery for each year over a 3 year period.

Some of the key ICT Strategy initiatives delivered during 2017 include;
- A new and enhanced organisational website to reflect the new brand;
- Enhancements to some of the existing key business enterprise solutions and the introduction of new business enterprise solutions;
- Introduction of new video conferencing and collaboration solutions to enable staff to work more effectively and efficiently;
- Introduction of a new secure corporate enterprise printing solution;
- Introduction of a new Security Management Framework (SMF);
- Introduction of Cyber-security solutions and associated staff training; and
- Introduction of QMS process and procedures.

The ICT Department continue to work on enhancing the organisations ICT systems in order to provide staff with secure, reliable and robust platforms. The key driver is to ensure that all staff are provided with business enablement tools through IT in order to deliver greater value and a high standard of service to the organisations stakeholders.

OPERATIONS, CORPORATE SERVICES AND CUSTOMER CARE TEAM

KEY PRIORITIES FOR 2017

1. Provide core services and operational support across CRU divisions to enable delivery of the CRU strategic plan and work programme objectives
2. Delivery of a project during 2017 to change the CER name to Commission for the Regulation of Utilities (CRU), project to encompass development of a consumer focused web-site
3. Finalisation and implementation during 2017 of CRU HR Strategy in line with best practice across public service
4. Work with parent department to agree appropriate compliance with Revised Code of Practice for Corporate Governance
5. Delivery of ICT strategy to support the work of the CRU
6. Deliver an accessible and effective customer resolution function for water and energy customers
**Human Resources**

The Human Resources Department closely monitored best practice in the public sector and ensured that the CRU remained fully in line with this while carrying out its corporate services activities. One of the key deliverables was the development and launch of a new HR strategy to cover the period of 2017-2019.

The HR strategy was prepared following a thorough process with a number of important features:

- A careful consideration by the Senior Management Team (SMT) of the key strategic goals of the CRU over the coming period and of the human resource implications of those goals;
- An extensive process of externally facilitated consultation with our staff, through a series of workshops at all levels and in all areas;
- The design and administration of a culture audit, which explored the key human resource issues identified in the workshops.

In developing the four key pillars of the CRU’s HR strategy, the CRU took account of the valuable feedback received from staff through focus groups and a culture audit. Best practice in developing human resource strategies was also observed, recognising the life cycle of a staff members career is of critical importance to them and that the CRU strategy to be realistic and achievable.

The four pillars of the CRU Human Resources Strategy are:

- Recruitment and Selection: This will provide the focus for us as to how we effectively plan and resource our work.
- Leadership, Talent and People Development: This will provide the focus on how we develop our staff.
- Performance, Reward and Effectiveness: This will provide the focus on how we manage performance and reward and retain our staff.
- Organisation Development: This will provide the focus on how we operate effectively through our structures, processes, roles and contributions.

In addition to developing and implementing the new HR Strategy the Human Resources Department carried out several recruitment campaigns during 2017, at all times ensuring that they were conducted in line with current recruitment and selection legislation. Key performance indicators were established for each work area prior to performance management and development objectives being set, so as to align with the overall 2017 CER work plan.

**Communications and Public Affairs**

The CRU continued to develop its internal and external practices to enhance communication with consumers and wider stakeholder groups.

The Communications and Public Affairs function oversaw the implementation of a new name and identity of the organisation. Following the commencement of the Energy Act 2016, the CER was required to change its name to fully incorporate all aspects of its expanded role across the regulation of energy, energy safety and water.

This included the development of a new corporate identity, engagement with stakeholders to support the integration of the new identity across all regulated entities and consumer groups and the development of a new consumer focused website to provide a more comprehensive resource for energy and water customers, as well as industry stakeholders.

The Communications and Public Affairs Function continued to provide support to the communication of all external consultations and decisions of the CRU to the general public.
The Customer Care Team (CCT) was set up in 2006 and has a very important role in providing a mandatory complaint resolution service within the CRU. This complaint resolution service is for customers with an unresolved dispute with their energy supplier, network operator or Irish Water.

The CCT have powers to issue determinations and directions to suppliers, network operators or Irish Water, which can include instructions to issue a refund or proportionate compensation. The CCT also provide an information resource for all customers, which provides general information, as well as information on customer rights and obligations.

During 2017, the CCT continued to improve service levels. Complex complaint resolution timeframes have improved and the average complaint resolution time in 2017 was 90 days. This represents a 25% improvement in resolution times since 2015.

A complex complaint is a complaint that has gone through a supplier, network operator or Irish Water’s full complaint process and which has not been resolved to the customer’s satisfaction. Complex complaints require full investigation by the CCT. Overall there has been a decrease in the number of contacts and complex complaints received by the CCT in 2017. The CCT broadly welcome the overall fall in complaint numbers as evidence of improved adherence by suppliers, network operators and Irish Water with the relevant CRU supplier and customer handbooks.

The number of customer contacts closed by the CCT in 2017 fell to 2,987. This is down from a total of 3,468 in 2015 and represents a 14% decrease. The number of complex complaints are also down, with 278 complex complaints logged by the CCT in 2016. This is a 7% decrease from the number of complex complaints logged in 2016.

38% of complex complaints were ‘Upheld’ by the CCT in 2017. The number of early settlement offers that were accepted in 2017 was 5%.

The levels of customer contacts made through electronic means continues to rise and increased from 35% in 2016 to 38% in 2017. Conversely the level of postal correspondence received in 206 was 16% and this has dropped to 9% in 2017. In 2018 the CCT will continue to drive customer accessibility through on-going communication and website improvements. In 2017 the ability to log complaints and customer queries directly through the CRU website was introduced.

A full breakdown of the Customer Care Team activities in 2017 will be contained in the CCT Annual Report.
Implement an integrated business planning process which will provide a clear link between individual objectives and the Commission’s goals.

Facilitate and enhance effective business decisions and the attainment, utilization, and allocation of financial resources for all business units by providing relevant and responsive financial, procurement and administrative support services.

Human Resources operational activities developed in line to support work of organisation. Ensure identification of skills and competency requirements to support organisations strategic goals is aligned to our staff. Continue to implement a best practice Performance Management and Development system.

Continue to pursue a co-operative and mutually beneficial engagement with a broad range of statutory and non-statutory stakeholders across national, All-Island and international groups.

Implement the key objectives of the communications strategy. Deliver consumer focused campaigns and materials to inform the public how their energy is produced, safeguarded and priced. Provide an efficient media relations service to ensure accurate information is provided to inform media.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement an integrated business planning process which will provide a clear link between individual objectives and the Commission’s goals.</td>
<td>Q4 2017</td>
<td>Integrated planning process delivered with quarterly reporting and change controls</td>
</tr>
<tr>
<td>Facilitate and enhance effective business decisions and the attainment, utilization, and allocation of financial resources for all business units by providing relevant and responsive financial, procurement and administrative support services</td>
<td>Q4 2017</td>
<td>Ongoing maintenance of the CER’s financial records &amp; reporting, development of financial strategy, analysis and policy. Preparation of annual budget, management of audit process, calculation and collection of industry funding levies. Co-ordinate procurement processes on in terms of transparency and value for money.</td>
</tr>
<tr>
<td>Human Resources operational activities developed in line to support work of organisation. Ensure identification of skills and competency requirements to support organisations strategic goals is aligned to our staff. Continue to implement a best practice Performance Management and Development system.</td>
<td>Q4 2017</td>
<td>Human resources operational activities were completed ensuring their deliverance was achieved taking account of Employment Legislation and best practice in public sector. Implemented a new HR strategy covering the period 2017-2019. Commenced the process of developing a new skills and training matrix to support the delivery of CRU objectives. Co-ordinated the use of the CRU’s performance management and development system.</td>
</tr>
<tr>
<td>Continue to pursue a co-operative and mutually beneficial engagement with a broad range of statutory and non-statutory stakeholders across national, All-Island and international groups.</td>
<td>Q1-Q4 2017</td>
<td>Stakeholder management strategy in place and reviewed quarterly</td>
</tr>
<tr>
<td>Implement the key objectives of the communications strategy. Deliver consumer focused campaigns and materials to inform the public how their energy is produced, safeguarded and priced. Provide an efficient media relations service to ensure accurate information is provided to inform media.</td>
<td>Q4 2017</td>
<td>Delivery of communications campaigns to inform consumers and support identified stakeholders in both electrical and gas safety. New communications materials to support reporting on energy sector delivered. New Consumer focused website delivered to support wider name change process and greater communication with utility customer. Process in place to provide information to media and general public on energy market place and related issues.</td>
</tr>
</tbody>
</table>
### Objective

Review and continuously improve Information and Communications Technology (ICT) Systems and Solutions to assist and enhance staff in their duties.

### Delivery

**Q4 2017**

Information & Communication Technology operational activities & project support delivered ensuring ICT supported the organisational activities as effectively and efficiently as possible. Implemented a new ICT Strategy covering period 2017 - 2020. Implemented enhanced ICT enterprise solutions to support the organisational activities. Implemented cyber-security solutions, enhancing policies, procedures and training. Implemented QMS processes and procedures delivering SOPs in key business areas.

### Objective

To continue to provide a high quality, efficient complaints resolution service for domestic and small business customers through the CER’s Customer Care Team (CCT)

### Delivery

**Q4 2017**

Number of complex customer complaints opened by the CCT each year from 2009 to 2017:
- 2009: 276
- 2010: 239
- 2011: 502
- 2012: 508
- 2013: 651
- 2014: 435
- 2015: 359
- 2016: 278
- 2017: 257

### Objective

To monitor customer usage and awareness of the services provided by the Customer Care Team

### Delivery

**Q4 2017**

Below is the number of contacts received by the Customer Care team each year from 2009 to 2017
- 2009: 1927
- 2010: 1930
- 2011: 2860
- 2012: 3067
- 2013: 5567
- 2014: 5554
- 2015: 3884
- 2016: 3392
- 2017: 3009

### Objective

Customer Service: 80% or higher of “non-complex” customer complaints resolved by the CER within 10 working days.

### Delivery

**Q4 2017**

91% of non-complex complaints resolved within 10 working days.

---

**2017 KEY PERFORMANCE INDICATORS - OPERATIONS AND CORPORATE SERVICES**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Delivery</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| To continue to provide a high quality, efficient complaints resolution service for domestic and small business customers through the CER’s Customer Care Team (CCT) | **Q4 2017** | Number of complex customer complaints opened by the CCT each year from 2009 to 2017:  
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Financial Statements for the Year Ended 31 December 2017

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GENERAL INFORMATION

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Paul McGowan, Chairperson
Garrett Blaney, Commissioner
Aoife MacEvilly, Commissioner

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Dublin 4

Website
www.cru.ie
I have pleasure in presenting the audited financial statements of the Commission for Regulation of Utilities for the year ended 31 December 2017.

Principal Activities
The Commission for Regulation of Utilities (CRU) was initially established as the Commission for Electricity Regulation under the Electricity Regulation Act, 1999. The functions of the Commission along with its name were changed by the Gas (Interim Regulation) Act, 2002. Under this Act, the functions of the Commission were expanded to include the regulation of the natural gas sector and the name was changed to the Commission for Energy Regulation (CER). Following the commencement of the Energy Act 2016, the CER was required to change its name to fully incorporate all aspects of its expanded role, namely the Commission for Regulation of Utilities (CRU).

As well as these founding pieces of legislation, the functions and duties of the CRU have been altered and expanded significantly by legislation transposing EU directives into Irish law and the introduction of new primary legislation, including the Energy (Miscellaneous Provisions) Act 2006, Electricity Regulation (Amendment) (Single Electricity Market) Act 2007 and the Petroleum (Exploration and Extraction) Safety Act 2010. Among other matters, these pieces of legislation have given the Commission powers in relation to the all-island Single Electricity Market (SEM) and they have also given the Commission safety-related responsibilities in the energy sector. The Commission’s functions and duties in the water sector are set out in the Water Services Act 2013, the Water Services (No.2) Act 2013 and in more recent legislation in the Water Services Act 2017.

Income
The Commission is funded by levy, safety case fees and licence income received from the relevant electricity, gas, LPG, water, and petroleum safety regulated entities. The Petroleum Safety function is funded in two ways: an annual industry levy and safety case assessment fees. The safety case fees cover the costs associated with assessment of a safety case. The petroleum undertaking that submits the safety case for assessment is liable for the associated safety case fee. As the CRU will not know the final safety case fee until the assessment is completed, the petroleum undertaking will submit an initial safety case fee with its safety case submission. Once the final fee is determined, the CRU will reimburse the petroleum undertaking where the final fee is lower than the initial fee paid, or bill the petroleum undertaking for the additional costs where the final costs are higher than the initial fee.

Financial Results
Details of the financial results of the Commission for the year are set out in the Financial Statements and in the related notes.

Auditor and Accounts
Paragraph 25 of the Schedule to the Electricity Regulation Act, 1999 as amended requires the Commission to prepare financial statements in such form as may be approved by the Minister for Communications, Climate Action and Environment with the concurrence of the Minister for Public Expenditure and Reform. The Commission submits accounts in respect of each year to the Comptroller and Auditor General. As soon as may be subsequent to the audit the Commission is required to present to the Minister for Communications, Climate Action and Environment a copy of such accounts together with the audit report of the Comptroller and Auditor General.

Audit and Risk Committee
The Audit and Risk Committee members at the end of December, 2017 are

Chairperson: Tom O’Higgins (external) – term of appointment ended 31 December 2017, replaced by Tony Weldon (external) on 1st January 2018.

Members: Tom Mason (external); Dr. Tom Ward (external), Garrett Blaney, CRU Commissioner and Aoife MacEvilly, CRU Commissioner

The secretary of the Committee is a staff member of the CRU, and the Senior Finance Manager also attends all meetings of the Committee.

The role of the Audit and Risk Committee, as set out in the Committee Charter, is to assess how the Commission is managing key financial and operational risks, to evaluate the effectiveness of internal controls, to oversee the internal audit function, and to monitor implementation of Commission decisions arising from Audit and Risk Committee recommendations.
During 2017, the Audit and Risk Committee met on four occasions. The Committee places significant importance on reports and assurance on governance matters such as internal controls, risk management and internal audit reports/ findings. The Committee's work during the year included:

- Scrutiny and endorsement of internal audit reports for Commission approval, as follows:
  - Review of governance arrangements (monitoring, reporting and oversight structures);
  - Review on integrated business planning process;
  - Review of the operation of the Single Electricity Market Committee governance structures;
  - Governance review: 2016 Code of Practice for the Governance of State Bodies;
  - Review of System of Internal Financial Controls – 2017; and
  - A follow-up review of the IT Strategy.
- Input to the development and approval of CRU’s Internal Audit Plan for the period 2017 to 2019 including oversight of its implementation;
- Liaised regularly with management in relation to the conduct of risk management, discuss key risks and mitigation work within the CRU; and
- Developing knowledge of areas of priority within the CRU by receiving regular briefings from senior management.

Going Concern
The Commissioners, after making enquiries, believe that the Commission has adequate resources to continue in operation for the foreseeable future and it is appropriate to adopt the going concern basis in preparing the financial statements.

Prompt Payment of Accounts
The Commission acknowledges its responsibility for ensuring compliance, in all material respects, with the provision of the European Communities (Late Payments in Commercial Transactions) Regulations 2012. Procedures have been implemented to identify dates upon which invoices fall due for payment and to ensure payments are made by applicable dates. Such procedures provide reasonable assurance against material non-compliance with the provisions as referred to above. The payment policy for the year under review was to comply with the requirements as specified in the Regulations.

On behalf of the Commission
Paul McGowan, Chairperson
Date: 12 July 2018
Commission for Regulation of Utilities

Opinion on financial statements
I have audited the financial statements of the Commission for Regulation of Utilities for the year ended 31 December 2017 as required under the provisions of paragraph 25 of the schedule of the Electricity Regulation Act 1999 (as amended). The financial statements comprise
• the statement of income and expenditure and retained revenue reserves
• the statement of comprehensive income
• the statement of financial position
• the statement of cash flows and
• the related notes, including a summary of significant accounting policies.

In my opinion, the financial statements give a true and fair view of the assets, liabilities and financial position of the Commission for Regulation of Utilities as at 31 December 2017 and of its income and expenditure for 2017 in accordance with Financial Reporting Standard (FRS) 102 – The Financial Reporting Standard applicable in the UK and the Republic of Ireland.

Basis of opinion
I conducted my audit of the financial statements in accordance with the International Standards on Auditing (ISAs) as promulgated by the International Organisation of Supreme Audit Institutions. My responsibilities under those standards are described in the appendix to this report. I am independent of the Commission for Regulation of Utilities and have fulfilled my other ethical responsibilities in accordance with the standards.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Report on information other than the financial statements, and on other matters
The Commission for Regulation of Utilities has presented certain other information together with the financial statements. This comprises the report of the Commission, the governance statement and the statement on internal control. My responsibilities to report in relation to such information, and on certain other matters upon which I report by exception, are described in the appendix to this report.

I have nothing to report in that regard.

Patricia Sheehan
For and on behalf of the Comptroller and Auditor General

16 July 2018
Responsibilities of Board members
The governance statement and report of the Commission sets out the Commission’s responsibilities. The Commission is responsible for:

• the preparation of financial statements in the form prescribed under paragraph 25 of the schedule to the Electricity Regulation Act 1999 (as amended)
• ensuring that the financial statements give a true and fair view in accordance with FRS102
• ensuring the regularity of transactions
• assessing whether the use of the going concern basis of accounting is appropriate, and
• such internal control as they determine is necessary to enable preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Responsibilities of the Comptroller and Auditor General
I am required under paragraph 25 of the schedule to the Electricity Regulation Act 1999 (as amended) to audit the financial statements of the Commission for Regulation of Utilities and to report thereon to the Houses of the Oireachtas.

My objective in carrying out the audit is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement due to fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the ISAs, I exercise professional judgment and maintain professional scepticism throughout the audit. In doing so,

• I identify and assess risks of material misstatement of the financial statements whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

• I obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.

• I evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures.

• I conclude on the appropriateness of the use of the going concern basis of accounting and, based on the audit evidence obtained, on whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Commission for Regulation of Utilities ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to date of my report. However, future events or conditions may cause the Commission for Regulation of Utilities to cease to continue as a going concern.

• I evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Information other than the financial statements
My opinion on the financial statements does not cover the other information presented with those statements, and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, I am required under ISAs to read the other information presented and, in doing so, consider whether the other information is materially inconsistent with the financial statements or with knowledge obtained during the audit, or if it otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.
Reporting on other matters

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation. I report if there are material matters relating to the manner in which public business has been conducted.

I seek to obtain evidence about the regularity of financial transactions in the course of the audit. I report if there is any material instance where public money has not been applied for the purposes intended or where transactions did not conform to the authorities governing them.

I report by exception if, in my opinion,

- I have not received all the information and explanations I required for my audit, or
- the accounting records were not sufficient to permit the financial statements to be readily and properly audited, or
- the financial statements are not in agreement with the accounting records.
GOVERNANCE STATEMENT

The Commission was initially established as an independent regulator by the Electricity Regulation Act 1999; however, as its mandate increased, the Commission updated its name to become the Commission for Regulation of Utilities (CRU) in 2017. The sectoral responsibilities of the CRU, include the following:

**Electricity:** Electricity Regulation Act, 1999 and later the Energy (Miscellaneous Provisions) Act 2006 and Electricity Regulation (Amendment) (Single Electricity Market) Act 2017;

**Gas:** Gas (Interim) (Regulation) Act, 2002;

**Energy Safety:** Gas (Interim) (Regulation Act, 2002; Energy (Miscellaneous Provisions) Act 2006; Petroleum (Exploration and Extraction) Safety Act 2015;


As the CRU is a regulatory body, the standard board structure for State Bodies is not applicable. Under its founding legislation CRU was set up as a Commission and consists of at least one but not more than three members. CRU currently has three Commissioners in place. The Chair of the Commission is selected by the Minister from the serving Commissioners on a rotating basis for a defined term.

The Commission is responsible for ensuring good governance and performs this task by setting strategic objectives and targets and taking strategic decisions on all key business issues. The Commissioners and senior management team follow the strategic direction set by the Commission in the CRU Strategy Statement 2014 to 2018. The Commission ensure that all members of the senior management team have a clear understanding of the key activities and decisions related to CRU, and of any significant risks likely to arise. The regular day-to-day management, control and direction of CRU are the responsibility of the Chairperson, the Members of the Commission and the senior management team.

CRU falls under the aegis of the Department of Communications, Climate Action and Environment (DCCAE) for all activities except water services, which is governed by the Department of Housing, Planning and Local Government (DHPLG). An Oversight Agreement which sets out the broad governance framework within which the CRU operates and clearly defines its relationship with the two Departments was agreed in December 2017. As the CRU is independent in the performance of its functions under the provisions of the Electricity Regulation Act, 1999 (as amended), it is not subject to a Performance Delivery Agreement with DCCAE and DHPLG.

Under paragraph 26 of the Schedule to the Electricity Regulation Act 1999, CRU shall, whenever so requested, account for the performance of its functions to a Joint Committee of the Oireachtas and shall have regard to any recommendations of such Joint Committee relevant to its functions.

**Commission Responsibilities**

The CRU has a three-person Commission which is responsible for setting the strategic direction for the CRU, monitoring its performance, and ensuring CRU’s compliance with its legislative provisions as well as the organisation’s constitution and policies. The Commissioners make all key policy decisions, which are taken collectively and, in the case of a vote, by simple majority. Commission decisions are normally based on proposals and recommendations prepared by CRU Directors and staff. Clear and predictable functioning of the Commission is set out in the Commission Rules and Procedures, approved on 1 May 2013 (updated June 2018). Commissioners delegate authority to Directors as appropriate for technical decision making.

Paragraph 25 of the Schedule to the Electricity Regulation Act, 1999 as amended requires the Commission to keep, in such form as may be approved by the Minister for Communications, Climate Action and Environment with the consent of the Minister for Public Expenditure and Reform, all proper and usual accounts of moneys received and expended by it.

In preparing these financial statements, the Commission is required to:
- select suitable accounting policies and apply them consistently,
• make judgements and estimates that are reasonable and prudent,
• prepare the financial statements on the going concern basis, unless that basis is inappropriate to presume that it will continue in operation, and
• state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements.

The Commission is responsible for keeping adequate accounting records which disclose, with reasonable accuracy at any time, its financial position and enables it to ensure that the financial statements comply with the Electricity Regulation Act 1999, as amended. The maintenance and integrity of the corporate and financial information on the CRU’s website is the responsibility of the Commission.

The Commission is responsible for approving the annual work-plan and budget. An evaluation of the performance of CRU by reference to the annual work-plan and budget was carried out on 28 November 2017.

The Commission is also responsible for safeguarding its assets and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Commission consider that the financial statements of CRU give a true and fair view of the financial performance and the financial position of CRU at 31 December 2017.

**Risk Management**

The main purpose of the CRU Risk Management Framework, is to integrate the process for managing risk into the organisation’s various governance and operational processes. These include strategy and planning, management, reporting, policy development, and our values and our culture.

An integrated and holistic approach to risk management is one of the keystones to achieving effective corporate governance. In applying the policy framework principles, the CRU can respond appropriately to significant business, strategic, operational, finance, compliance and other risks that threaten the successful achievement of strategic and operational objectives.

The Commission provides leadership in promoting risk management, addresses key risks in the context of the organisational Strategic Plan and determines the CRU’s risk appetite. The focus of the Commission is on the key business risks/ principal risks and uncertainties. The CRU maintains centralised records about the key identified risks and uncertainties in the corporate Risk Register. The register is the primary tool for risk tracking, containing the overall schedule of risks, their up to date assessment and the status of any risk mitigation actions. The corporate Risk Register informs the principal risks and uncertainties faced by the CRU. These risks are monitored on a bi-monthly basis by the Commission. Other risks are monitored and reported on at other levels within the CRU. However, assurance in the management of these risks is provided to the Commission through oversight of the Divisional Risk Registers on a bi-monthly basis.

As part of the Risk Management Framework, the CRU have developed a Risk Appetite Statement which states that the CRU has an overall conservative risk appetite. The CRU acts in accordance with this Risk Appetite Statement to achieve its strategic objectives. The CRU employs robust risk management principles, transparent decision-making, and effective communication to prioritise risk. The CRU operates with integrity, maintains strong ethical standards, and adheres to applicable legal requirements. The CRU recognises that it is not practicable or desirable to avoid all risk. Accordingly, the CRU tolerates some risk in pursuit of its mission and values. Acceptance of any risk is subject to ensuring that potential benefits and risks are fully understood and that measures to mitigate risks have been established. The Risk Appetite Statement establishes a risk tolerance in a number of categories and the CRU have considered a number of factors to determine its tolerance for each of these risks.

**Commission Structure**

The CRU is structured into the Commission (formed by three Commissioners) and four divisions that combine technical and cross-cutting operational functions. The Senior Management Team (“SMT”) within CRU consists of the three Commissioners (one being the Chairperson) and four Directors. The Senior Manager – Finance and Governance fulfils the role of Secretary to the Commission.
The Organisation for Economic Co-operation and Development (OECD) on 21 February 2018 published the findings of a peer review of the CRU that was conducted in 2017. The peer review report is entitled “Driving Performance at Ireland’s Commission for Regulation of Utilities” and represents an independent assessment of the CRU’s governance; including structures, accountability and process. Details of the review are available on the CRU’s website at https://www.cru.ie/OECDReviewCRU. The CRU will incorporate the main recommendations made, into its priorities as a multi-sector economic and safety regulator, as part of its next Strategic Plan (2019-2021).

The SMT has a formal scheduled meeting each week. Meetings are chaired by the Chairperson and are attended by other employees of the CRU as required. Minutes are maintained of all meetings which include decisions made.

The Members of the Commission are appointed by the Minister, the terms of appointment are prescribed in legislation as being no less than five and not more than seven years, usually five. Their mandates can be renewed once, for a total of ten years. The Chair of the Commission is selected by the Minister from the serving Commissioners on a rotating basis for a period of typically two to three years, but there is no prescribed term for this.

The SMT completed a self-assessment evaluation on 8 November 2017.

The table below details the appointment period for current Members of the Commission:

<table>
<thead>
<tr>
<th>Commission Member</th>
<th>Role</th>
<th>Date Appointed from/to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul McGowan</td>
<td>Chairperson</td>
<td>From 1 March 2013 to 28 February 2018; re-appointed 1 March 2018 to 28 February 2023</td>
</tr>
<tr>
<td>Garrett Blaney</td>
<td>Commissioner</td>
<td>From 15 February 2010 to 14 February 2015; reappointed 15 February 2015 to 14 February 2020</td>
</tr>
<tr>
<td>Aoife MacEvilly</td>
<td>Commissioner</td>
<td>From 6 October 2014 to 5 October 2019</td>
</tr>
</tbody>
</table>

The Organisation for Economic Co-operation and Development (OECD) on 21 February 2018 published the findings of a peer review of the CRU that was conducted in 2017. The peer review report is entitled “Driving Performance at Ireland’s Commission for Regulation of Utilities” and represents an independent assessment of the CRU’s governance; including structures, accountability and process. Details of the review are available on the CRU’s website at https://www.cru.ie/OECDReviewCRU. The CRU will incorporate the main recommendations made, into its priorities as a multi-sector economic and safety regulator, as part of its next Strategic Plan (2019-2021).

The SMT completed a self-assessment evaluation on 8 November 2017.

The Commission has established two committees, as follows:
- **Audit and Risk Committee**: comprises of two Commissioners, and three external members, one of whom is the chairperson for the committee. The role of the Audit and Risk Committee (ARC) is to support the Commission in relation to its responsibilities of risk, control and governance and associated assurance. The ARC is independent from the financial management of the organisation. In particular the Committee ensures that the internal control systems including audit activities are monitored actively and independently. The ARC reports to the Commission after each meeting. In addition to the ARC, the CRU Risk Management team meetings are held bi-monthly. The CRU Risk Management team meetings are attended by the 3 Commissioners and 4 Directors, the Risk Team (comprising of the Risk Officer and a Senior Business Analyst), and 4 other members of management. The role of the Risk Management team is to review and approve the risk management framework and review and update the CRU risk register at each meeting and then report to the ARC.
The Electricity Regulation (Amendment) (Single Electricity Market) Act 2007 came into effect in 2007 and provided for the establishment and operation of a single competitive wholesale electricity market on the island of Ireland. This Act also required the establishment of Single Electricity Market (SEM) oversight structure the form of a SEM Committee. A Memorandum of Understanding was signed between the Northern Ireland Utility Regulator (“UR”) and the CRU on 5 December 2006. The SEM Committee was established and consists of three CRU and three UR representatives along with an independent member and a deputy independent member. Under the SEM Act, the SEM Committee is responsible for any decision as to the exercise of a relevant function of the CRU Commission in relation to a SEM matter. The Act defines a SEM matter as a matter that materially affects or is materially likely to affect the Single Electricity Market.

The members of the SEM Committee are: Aoife MacEvilly, Paul McGowan, Garrett Blaney, Bill Emery (Chair), Jenny Pyper, Jon Carlton, Odd Hakon Hoelsaeter, Professor David Newbery. There were 12 meetings of the ARC in 2017.

**Finance and Governance Committee:**
comprises the CRU Chairperson, the Director of Operations and the Senior Manager – Finance and Governance. The role of the Finance and Governance Committee (FGC) is to support the Commission in meeting legal and statutory requirements, as well as adopting good practice.

The members of this internal CRU advisory committee are: Paul McGowan (Chairperson), Sheenagh Rooney and Breda Coss. There were 7 meetings of the FGC in 2017.

### Schedule of Attendance

A schedule of attendance at the Commission and ARC meetings for 2017 is set out below including the fees and expenses received by external committee members:

<table>
<thead>
<tr>
<th>Title</th>
<th>Commission</th>
<th>Commission (Safety)*</th>
<th>Audit &amp; Risk Committee</th>
<th>Fees 2017 €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul McGowan</td>
<td>Chairperson</td>
<td>45 (48)</td>
<td>8 (8)</td>
<td></td>
</tr>
<tr>
<td>Aoife MacEvilly</td>
<td>Commissioner</td>
<td>44 (48)</td>
<td>6 (8)</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Garrett Blaney</td>
<td>Commissioner</td>
<td>36 (48)</td>
<td>6 (8)</td>
<td>3 (4)</td>
</tr>
<tr>
<td>Tom O’Higgins</td>
<td>External Member</td>
<td>4 (4)</td>
<td>4 (4)</td>
<td>€5,400</td>
</tr>
<tr>
<td>Tom Mason</td>
<td>External Member</td>
<td>4 (4)</td>
<td>4 (4)</td>
<td>€4,059</td>
</tr>
<tr>
<td>Dr. Tom Ward</td>
<td>External Member</td>
<td>1 (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One external committee member of the ARC, Dr. Tom Ward, appointed on 1 December 2017 for a three year term, does not receive a fee under the One Person One Salary (OPOS) principle. Mr. Tom O’Higgins’ term of appointment ends on 31 December 2017.

* Commission (Safety): Not a decision making meeting, attended by the Commission, Director of Safety, members of staff of the Safety division; to provide an overview of key activities, issues, and performance metrics.

**SEM Committee**
The Electricity Regulation (Amendment) (Single Electricity Market) Act 2007 came into effect in 2007 and provided for the establishment and operation of a single competitive wholesale electricity market on the island of Ireland. This Act also required the establishment of Single Electricity Market (SEM) oversight structure the form of a SEM Committee. A Memorandum of Understanding was signed between the Northern Ireland Utility Regulator (“UR”) and the CRU on 5 December 2006. The SEM Committee was established and consists of three CRU and three UR representatives along with an independent member and a deputy independent member. Under the SEM Act, the SEM Committee is responsible for any decision as to the exercise of a relevant function of the CRU Commission in relation to a SEM matter. The Act defines a SEM matter as a matter that materially affects or is materially likely to affect the Single Electricity Market.

The members of the SEM Committee are: Aoife MacEvilly, Paul McGowan, Garrett Blaney, Bill Emery (Chair), Jenny Pyper, Jon Carlton, Odd Hakon Hoelsaeter, Professor David Newbery. There were 12 meetings of the SEM Committee in 2017.

**Key Personnel changes**
There were no personnel changes impacting the Commission and the Senior Management Team in the 2017 financial year.
Statement of Compliance
We wish to state that the CRU continues and will continue to adopt best practice in the area of corporate governance in carrying out its functions and duties. In this regard, the Commission has adopted the Code of Practice for Governance of State Bodies (“the Code”), as published by the Department of Public Expenditure and Reform in 2016. The following disclosures are required by the Code, with a reference to the relevant disclosure note in the 2017 CRU Financial Statements;

<table>
<thead>
<tr>
<th>Disclosure</th>
<th>Notes to the Financial Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Short-Term Benefits Breakdown</td>
<td>Note 3 (b)</td>
</tr>
<tr>
<td>Consultancy Costs</td>
<td>Note 5 (a)</td>
</tr>
<tr>
<td>Legal Costs and Settlements</td>
<td>Note 5 (a) &amp; (b)</td>
</tr>
<tr>
<td>Travel and Subsistence Expenditure</td>
<td>Note 3 (a)</td>
</tr>
<tr>
<td>Hospitality Expenditure</td>
<td>Note 4</td>
</tr>
</tbody>
</table>

Statement of Compliance
We wish to state that the CRU continues and will continue to adopt best practice in the area of corporate governance in carrying out its functions and duties. In this regard, the Commission has adopted the Code of Practice for Governance of State Bodies (2016) and has put procedures in place to ensure compliance with the Code. The CRU was in compliance with the Code of Practice for the Governance of State Bodies for 2017, with the following exception:

CRU do not operate under a Board structure and as a result some of the provisions laid out in the Code are not deemed by CRU to be applicable, as agreed with the Department of Communications, Climate Action and Environment (“the Department”). In accordance with the “comply or explain principle” as set out in the Code, CRU has agreed an approach on 24 November 2017 with the Department to provide detail of its level of compliance with the provisions of the Code to the greatest extent that its organisational structure allows. The CRU will report compliance with the Code through submitting an agreed governance checklist to the Department annually.

Ethics in Public Office
We hereby confirm that we are not directly engaged in, concerned in or interested in any electricity generating business or in any electricity or natural gas transmission, distribution or supply business or in any energy business, whether as participator, investor, consultant or otherwise. In addition, in respect of the period covered by this report, there are no registerable interests, as specified in the Ethics in Public Office Acts 1995 and 2001 and the Gas (Interim) (Regulation) Act, 2002, of our own, or, to our actual knowledge, of a spouse or child, which could materially influence us in, or in relation to, the performance of the functions of our position.

On behalf of the Commission
Paul McGowan, Chairperson
Date: 12 July 2018
Scope of Responsibility
On behalf of the Commission for Regulation of Utilities (CRU) I acknowledge the Commission’s responsibility for ensuring that an effective system of internal control is maintained and operated. This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

Purpose of the System of Internal Control
The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore provide only reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform has been in place in the CRU for the year ended 31 December 2017 and up to the date of approval of the financial statements.

Capacity to Handle Risk
CRU has an Audit and Risk Committee (ARC) comprising two Commissioners and three external members, with financial, governance, risk and audit expertise, one of whom is the Chair. The ARC met four times in 2017.

CRU has also established an internal audit function, outsourced to a company with the requisite experience, which is adequately resourced and conducts a programme of work agreed with the ARC. In 2017, the internal auditors concluded 6 reviews which were presented to the ARC at each meeting.

The CRU in consultation with the ARC has developed a risk management policy which sets out its risk appetite, the risk management processes in place and details the roles and responsibilities of staff in relation to risk. The policy has been issued to all staff who are expected to work within CRU’s risk management policies, to alert management on emerging risks and control weaknesses and assume responsibility for risks and controls within their own area of work.

Risk and Control Framework
CRU has implemented a risk management system which identifies and reports key risks and the management actions being taken to address and, to the extent possible, to mitigate those risks.

A risk register is in place which identifies the key risks facing CRU and these have been identified, evaluated and graded according to their significance. The register is reviewed and updated by the CRU Risk Management Team on a bi-monthly basis. The outcome of these assessments is used to plan and allocate resources to ensure risks are managed to an acceptable level. The ARC keep under review the effectiveness of the Commission’s internal controls and risk management systems and reports from the Risk Management Team in relation to the risk register. A scrutiny and review of the risk register is a standing agenda item for each ARC meeting held on a quarterly basis, focusing on key risks. As part of its oversight role, the ARC periodically review the Commission’s Risk Management Framework which includes the Risk Appetite statement and provide observations and recommendations to the Commission if required.

The risk register details the controls and actions needed to mitigate risks and responsibility for operation of controls assigned to specific staff. I confirm that a control environment containing the following elements is in place:

- procedures for all key business processes have been documented,
- financial responsibilities have been assigned at management level with corresponding accountability,
- there is an appropriate budgeting system with an annual budget which is kept under review by senior management,
- there are systems aimed at ensuring the security of the information and communication technology systems, and
- there are systems in place to safeguard the assets.

Ongoing Monitoring and Review
Formal procedures have been established for monitoring control processes and control deficiencies are communicated to those responsible for taking corrective action and to management and the Commission, where relevant, in a timely way.
I confirm that the following ongoing monitoring systems are in place:
- key risks and related controls have been identified and processes have been put in place to monitor the operation of those key controls and report any identified deficiencies,
- reporting arrangements have been established at all levels where responsibility for financial management has been assigned, and
- there are regular reviews by senior management of periodic and annual performance and financial reports which indicate performance against budgets/forecasts.

**Procurement**
I confirm that CRU has procedures in place to ensure compliance with current procurement rules and guidelines and that during 2017 CRU complied with those procedures.

**Review of Effectiveness**
I confirm that CRU has procedures to monitor the effectiveness of its risk management and control procedures. CRU’s monitoring and review of the effectiveness of the system of internal control is informed by the work of the internal and external auditors, the Audit and Risk Committee which oversees their work, and the senior management within CRU responsible for the development and maintenance of the internal control framework.

I confirm that the Commission conducted an annual review of the effectiveness of the internal controls for 2017.

**Internal Control Issues**
No significant weaknesses in internal control were identified in relation to 2017 that require disclosure in the financial statements.

*On behalf of the Commission*
*Paul McGowan, Chairperson*
*Date: 12 July 2018*
**STATEMENT OF INCOME AND EXPENDITURE AND RETAINED REVENUE RESERVES**

For the year ended 31 December 2017

<table>
<thead>
<tr>
<th>Notes</th>
<th>Electricity '000</th>
<th>Gas '000</th>
<th>LPG '000</th>
<th>Petroleum '000</th>
<th>Water '000</th>
<th>Total '000</th>
<th>Total '000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levy</td>
<td>2</td>
<td>9,613</td>
<td>2,739</td>
<td>72</td>
<td>957</td>
<td>1,898</td>
<td>15,279</td>
</tr>
<tr>
<td>Licensing Fees</td>
<td></td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Other Income</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>448</td>
<td>0</td>
<td>450</td>
</tr>
</tbody>
</table>

**Gross Income**

9,634 2,750 72 1,405 1,898 15,759 14,830

**Net Income**

9,709 2,812 72 1,408 1,906 15,907 14,919

**EXPENDITURE**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Electricity '000</th>
<th>Gas '000</th>
<th>LPG '000</th>
<th>Petroleum '000</th>
<th>Water '000</th>
<th>Total '000</th>
<th>Total '000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renumaration and Other Pay</td>
<td>3</td>
<td>3,366</td>
<td>1,602</td>
<td>40</td>
<td>753</td>
<td>1,164</td>
<td>6,925</td>
</tr>
<tr>
<td>Retirement Benefit Costs</td>
<td>13(a)</td>
<td>1,041</td>
<td>490</td>
<td>9</td>
<td>227</td>
<td>381</td>
<td>2,148</td>
</tr>
<tr>
<td>Office Accommodation Expenses</td>
<td></td>
<td>433</td>
<td>192</td>
<td>0</td>
<td>85</td>
<td>143</td>
<td>853</td>
</tr>
<tr>
<td>IT &amp; Communications</td>
<td></td>
<td>253</td>
<td>104</td>
<td>0</td>
<td>48</td>
<td>76</td>
<td>481</td>
</tr>
<tr>
<td>Office Service Costs</td>
<td></td>
<td>15</td>
<td>7</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>Insurance Premiums</td>
<td></td>
<td>34</td>
<td>16</td>
<td>0</td>
<td>7</td>
<td>12</td>
<td>69</td>
</tr>
<tr>
<td>Advertising</td>
<td></td>
<td>102</td>
<td>28</td>
<td>0</td>
<td>5</td>
<td>8</td>
<td>143</td>
</tr>
<tr>
<td>Professional &amp; Consultancy Fees</td>
<td>5(a)</td>
<td>3,284</td>
<td>871</td>
<td>11</td>
<td>669</td>
<td>169</td>
<td>5,004</td>
</tr>
<tr>
<td>Judicial Review Costs</td>
<td>5(b)</td>
<td>1,021</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,021</td>
</tr>
<tr>
<td>Audit Fees</td>
<td>5(c)</td>
<td>25</td>
<td>9</td>
<td>0</td>
<td>5</td>
<td>7</td>
<td>46</td>
</tr>
<tr>
<td>Public Water Forum</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>8</td>
<td>87</td>
</tr>
<tr>
<td>Other Expenses</td>
<td></td>
<td>49</td>
<td>14</td>
<td>0</td>
<td>16</td>
<td>8</td>
<td>87</td>
</tr>
<tr>
<td>Depreciation</td>
<td></td>
<td>103</td>
<td>69</td>
<td>0</td>
<td>6</td>
<td>13</td>
<td>191</td>
</tr>
</tbody>
</table>

9,726 3,402 60 1,824 1,994 17,006 16,214

Surplus/(Deficit) for the year

(17) (590) 12 (416) (88) (1,099) (1,295)

Surplus brought forward

2,826 1,126 21 1,140 1,495 6,608 7,844

Retirement Benefits Cost Reserve

360 172 0 67 142 741 59

Operating Surplus/(Deficit) at 31 December

3,169 708 33 791 1,549 6,250 6,608

All income and expenditure for the year relates to continuing activities at the reporting date.
The Statement of Cash Flows and Notes 1 to 17 form part of these Financial Statements.

*On behalf of the Commission*

*Paul McGowan, Chairperson*

*Date: 12 July 2018*
# STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2017

<table>
<thead>
<tr>
<th>Notes</th>
<th>2017 Total €’000</th>
<th>2016 Total €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus/(Deficit) for the Year</td>
<td>(1,099)</td>
<td>(1,295)</td>
</tr>
<tr>
<td>Return on plan assets greater/(less) than discount rate</td>
<td>1,124</td>
<td>685</td>
</tr>
<tr>
<td>Actuarial gain/(loss) during the period</td>
<td>1,119</td>
<td>(6,975)</td>
</tr>
<tr>
<td><strong>Actuarial Gain/(Loss)</strong></td>
<td>2,243</td>
<td>(6,290)</td>
</tr>
<tr>
<td><strong>Total Recognised Gains/(Losses) relating to the Financial Year</strong></td>
<td>1,144</td>
<td>(7,585)</td>
</tr>
</tbody>
</table>

*On behalf of the Commission*

Paul McGowan, Chairperson

*Date: 12 July 2018*
## STATEMENT OF FINANCIAL POSITION

For the year ended 31 December 2017

<table>
<thead>
<tr>
<th>Notes</th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plan and equipment</td>
<td>7</td>
<td>1,737</td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receivables</td>
<td>8</td>
<td>401</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>8,488</td>
<td>8,786</td>
</tr>
<tr>
<td></td>
<td><strong>8,889</strong></td>
<td><strong>9,288</strong></td>
</tr>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Amounts falling due within one year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payables</td>
<td>9</td>
<td>(1,889)</td>
</tr>
<tr>
<td><strong>Net Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>7,000</strong></td>
<td><strong>6,608</strong></td>
</tr>
<tr>
<td><strong>Long Term Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision for Liabilities and charges</td>
<td>10</td>
<td>(750)</td>
</tr>
<tr>
<td><strong>Retirement Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred funding asset for pensions</td>
<td>13 (bii)</td>
<td>776</td>
</tr>
<tr>
<td>Retirement Benefits Liability</td>
<td>13 (bi)</td>
<td>(9,715)</td>
</tr>
<tr>
<td><strong>Total Net Assets/Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>(952)</strong></td>
<td><strong>(1,948)</strong></td>
</tr>
<tr>
<td><strong>Financed by</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Account</td>
<td>12</td>
<td>1,737</td>
</tr>
<tr>
<td>Retained Revenue Reserves</td>
<td>14(b)</td>
<td>6,250</td>
</tr>
<tr>
<td>Pension Reserve</td>
<td>14(a)</td>
<td>(8,939)</td>
</tr>
<tr>
<td></td>
<td><strong>(952)</strong></td>
<td><strong>(1,948)</strong></td>
</tr>
</tbody>
</table>

The Statement of Cash Flows and Notes 1 to 17 form part of these Financial Statements.

*On behalf of the Commission*

*Paul McGowan, Chairperson*

*Date: 12 July 2018*
### STATEMENT OF CASH FLOWS

For the year ended 31 December 2017

<table>
<thead>
<tr>
<th>Description</th>
<th>2017 Total €’000</th>
<th>2016 Total €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Cash Flows from Operating Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess Expenditure over Income</td>
<td>(1,099)</td>
<td>(1,295)</td>
</tr>
<tr>
<td>Depreciation and Impairment of Fixed Assets</td>
<td>191</td>
<td>199</td>
</tr>
<tr>
<td>(Increase)/Decrease in Receivables</td>
<td>101</td>
<td>1,169</td>
</tr>
<tr>
<td>Increase)/(Decrease) in Payables</td>
<td>(41)</td>
<td>119</td>
</tr>
<tr>
<td>Transfer from Capital Account</td>
<td>(148)</td>
<td>(89)</td>
</tr>
<tr>
<td>Bank Interest</td>
<td>(2)</td>
<td>(4)</td>
</tr>
<tr>
<td>Difference between Pension Costs and Employer Contributions</td>
<td>741</td>
<td>59</td>
</tr>
<tr>
<td><strong>Net Cash Inflow/(Outflow) from Operating Activities</strong></td>
<td>(257)</td>
<td>158</td>
</tr>
<tr>
<td><strong>Cash Flows from Investing Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments to acquire Property, Plant &amp; Equipment</td>
<td>(43)</td>
<td>(110)</td>
</tr>
<tr>
<td><strong>Net Cash Flows from Investing Activities</strong></td>
<td>(43)</td>
<td>(110)</td>
</tr>
<tr>
<td><strong>Cash Flows from Financing Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Interest received</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Net Cash Flows from Financial Activities</strong></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Net Increase/(Decrease) in Cash and Cash Equivalents</strong></td>
<td>(298)</td>
<td>52</td>
</tr>
<tr>
<td>Cash and cash equivalents at 1 January</td>
<td>8,786</td>
<td>8,734</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at 31 December</strong></td>
<td>8,488</td>
<td>8,786</td>
</tr>
</tbody>
</table>
NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 December 2017

1. Accounting policies

The basis of accounting and significant accounting policies adopted by the Commission, are set out below. They have all been applied consistently throughout the year and for the preceding year.

a) Establishment of the Commission
The Commission for Electricity Regulation was initially established on 14 July 1999 under the provisions of the Electricity Regulation Act 1999 (No. 23 of 1999). The enactment of the Gas (Interim) (Regulation) Act 2002 expanded the Commission’s jurisdiction to include regulation of the natural gas market on 30 April 2002. The Commission was renamed the Commission for Energy Regulation (CER) to reflect this increased responsibility. Following the commencement of the Energy Act 2016, the CER was required to change its name to fully incorporate all aspects of its expanded role, namely the Commission for Regulation of Utilities (CRU).

The Minister for Communications, Climate Action and Environment, with the agreement of the Minister of Public Expenditure and Reform expanded the Commission to a three member Commission on 13 October 2004, as provided under Schedule 1 of the Electricity Regulation Act 1999. Commissioner Paul McGowan was appointed as Chairperson on 15 February 2017. The other Members of the Commission are Commissioner Garrett Blaney and Commissioner Aoife MacEvilly.

b) Statement of Compliance
The financial statements of the Commission for the year ended 31 December 2017 have been prepared in accordance with FRS 102, the financial reporting standard applicable in the UK and Ireland issued by the Financial Reporting Council (FRC), as promulgated by Chartered Accountants Ireland.

c) Basis of Preparation
The financial statements have been prepared under the historical cost convention, except for certain assets and liabilities that are measured at fair values as explained in the accounting policies below. The financial statements are in the form approved by the Minister for Communications, Climate Action and Environment with the concurrence of the Minister for Public Expenditure and Reform under paragraph 25 of the Schedule to the Electricity Regulation Act, 1999 as amended. The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the Commission’s financial statements.

d) Income Recognition
Electricity, Gas, LPG Safety, Petroleum Safety and Water levy income is brought to account over the period to which it relates. Licence income from authorisations to construct, generate and supply energy is brought to account in the year in which the licence is issued.

Petroleum safety case fee income is brought to account in the year during which expenditure is incurred on assessment of the safety case.

e) Property, Plant and Equipment
Property, Plant and Equipment are stated at cost less accumulated depreciation. Depreciation is calculated in order to write off property, plant and equipment on a straight-line basis over their estimated useful lives at the following rates:

- Fixtures and Fittings 15% per annum
- Office Equipment 15% per annum
- Computer Hardware 33 1/3% per annum
- Computer Software 50% per annum
- Leasehold Improvement 4% per annum

f) Foreign Currencies
Transactions denominated in foreign currencies relating to revenues and costs are translated into Euro at the rates of exchange ruling on the dates on which the transactions occurred.

Monetary assets and liabilities denominated in foreign currencies are translated into Euro at the rates of exchange at the Statement of Financial Position date.
g) Retirement Benefits
A defined-benefit pension scheme is in place for all employees of the Commission for Regulation of Utilities (“CER Pension Scheme”). The scheme is funded by contributions from the Commission and employees which are transferred to a separate trustee administered fund. The Commission also operates the Single Public Service Pension Scheme (“Single Scheme”) for staff who joined the Single Scheme on or after 1 January 2013. Single Scheme members’ contributions are paid over to the Department of Public Expenditure and Reform.

The retirement benefit charge in the Statement of Income and Expenditure and Retained Revenue Reserves comprises the current service cost plus the difference between the expected return on scheme assets and the interest cost of scheme liabilities less benefits paid in the year.

Actuarial gains and losses arising from changes in actuarial assumptions and from experience surpluses and deficits are recognised in the statement of comprehensive income for the year in which they occur.

Retirement benefit scheme assets are measured at fair value. Retirement benefit scheme liabilities are measured on an actuarial basis using the projected unit’s method. An excess of scheme liabilities over scheme assets is presented on the Statement of Financial Position as a liability.

The Retirement Benefit Reserve represents the funding deficit on the defined benefit pension scheme.

h) Taxation
The Commission is not liable for Corporation Tax. Provision is made for taxation on deposit interest received. Income raised by the Commission is not subject to VAT.

i) Capital Account
The capital account represents the unamortised value of income used for capital purposes.

j) Allocation of costs
In the discharge of the Commission’s functions under section 20 of the Petroleum (Exploration and Extraction) Safety Act 2010, the financial statements identify separately all elements of cost and revenue in regard to the electricity, gas and petroleum sectors. In discharge of the Commission’s functions under the Water Services Act 2013, the financial statements identify separately all elements of costs in regard to the water sector.

In drawing up the separate accounts of the Commission, a set of accounting procedures for the allocation of assets, liabilities, income and expenditure is adhered to:

Revenues, expenses and capital expenditure directly incurred by each sector are recorded in the separate accounts of the electricity, gas, LPG safety, petroleum and water sectors. Shared costs are allocated to each sector in proportion to the staff numbers engaged in the relevant sector.

k) Receivables
Receivables are recognised at fair value, less a provision for doubtful debts. The provision for doubtful debts is a specific provision, and is established when there is objective evidence that the Commission will not be able to collect all amounts owed to it. All movements in the provision for doubtful debts are recognised in the Statement of Income and Expenditure and Retained Revenue Reserves.

l) Operating Leases
Rental expenditure under operating leases is recognised in the Statement of Income and Expenditure and Retained Revenue Reserves over the life of the lease. Expenditure is recognised on a straight-line basis over the lease period, except where there are rental increases linked to the expected rate of inflation, in which case these increases are recognised when incurred. Any lease incentives received are recognised over the life of the lease.
m) Employee Benefits

**Short-term Benefits:** Short-term benefits such as holiday pay are recognised as an expense in the year, and benefits that are accrued at year-end are included in the Payables figure in the Statement of Financial Position.

n) Critical Accounting Judgements and Estimates

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the statement of financial position date and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements.

**Impairment of Property, Plant and Equipment:** Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset’s carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset’s fair value less cost to sell and value in use. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Non-financial assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

**Depreciation and Residual Values:** The Members of the Commission have reviewed the asset lives and associated residual values of all fixed asset classes, and in particular, the useful economic life and residual values of fixtures and fittings, and have concluded that asset lives and residual values are appropriate.

**Provisions:** The Commission makes provisions for legal and constructive obligations, which it knows to be outstanding at the period end date. These provisions are generally made based on historical or other pertinent information, adjusted for recent trends where relevant. However, they are estimates of the financial costs of events that may not occur for some years. As a result of this and the level of uncertainty attaching to the final outcomes, the actual out-turn may differ significantly from that estimated.
2. Income

Levy Income: For the purpose of meeting its expenses under the Electricity Regulation Act, 1999 as amended, the Commission may impose a levy on the relevant energy, safety, petroleum extraction and exploration undertakings and Irish Water. The Commission imposed a levy on the relevant energy undertakings for each activity of transmission, distribution, generation, supply or shipping that is carried out in Ireland as outlined overleaf.

Other Income: The Petroleum Safety Framework is funded in two ways, an annual industry levy and safety case assessment fees. The safety case fees cover the costs associated with assessment of a safety case. The petroleum undertaking that submits the safety case for assessment is liable for the associated safety case fee.

3. Remuneration and Other Employee Costs

(a) Renumeration and other employee costs during the year:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>€'000</td>
<td>€'000</td>
<td>€'000</td>
<td>€'000</td>
<td>€'000</td>
<td>€'000</td>
<td>€'000</td>
</tr>
<tr>
<td>Staff Salaries</td>
<td>2,816</td>
<td>1,374</td>
<td>36</td>
<td>622</td>
<td>986</td>
<td>5,834</td>
</tr>
<tr>
<td>Employer PRSI</td>
<td>270</td>
<td>132</td>
<td>4</td>
<td>62</td>
<td>100</td>
<td>568</td>
</tr>
<tr>
<td>SEM Committee Fees</td>
<td>57</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>57</td>
</tr>
<tr>
<td>Recruitment and Training</td>
<td>111</td>
<td>48</td>
<td>0</td>
<td>39</td>
<td>57</td>
<td>255</td>
</tr>
<tr>
<td>Staff Travel and Subsistence</td>
<td>112</td>
<td>48</td>
<td>0</td>
<td>30</td>
<td>21</td>
<td>211</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,366</td>
<td>1,602</td>
<td>40</td>
<td>753</td>
<td>1,164</td>
<td>6,925</td>
</tr>
</tbody>
</table>

The average number of employees during the year, analysed by sector was as follows:

<table>
<thead>
<tr>
<th>Electricity</th>
<th>Gas</th>
<th>LPG</th>
<th>Petroleum</th>
<th>Water</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>22</td>
<td>1</td>
<td>9</td>
<td>16</td>
<td>96</td>
</tr>
</tbody>
</table>
The Commission operate a performance related remuneration scheme which was approved by the Department of Public Expenditure and Reform and the Department of Communications, Climate Action and Environment. Of the total salary costs during 2017 €202,638 (2016 €238,885) represents the payments to staff associated with the provisions of the performance related remuneration scheme and the terms of their contracts of employment. Staff salaries include the cost of accrued holiday pay earned by employees but not availed of at the reporting date. Costs are shown net of secondment salaries recovered. No termination benefits paid in the period.

It is the policy of the Commission to reimburse staff when expenses are necessarily incurred in the performance of the Commission’s business. Staff travel and subsistence reimbursement claims must be clearly presented, fully vouched and properly authorised. The staff Travel and Subsistence totals for 2017 comprise of €111,141 (2016 €122,589) for foreign travel and €99,468 (2016 €85,067) for domestic travel.

(b) Employee Benefits Breakdown

Employees’ gross pay in excess of €60,000 are categorised into the following bands:

<table>
<thead>
<tr>
<th>Range of total employee benefits</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>From €60,000 To €69,000</td>
<td>14</td>
</tr>
<tr>
<td>From €70,000 To €79,000</td>
<td>7</td>
</tr>
<tr>
<td>From €80,000 To €89,000</td>
<td>6</td>
</tr>
<tr>
<td>From €90,000 To €99,000</td>
<td>4</td>
</tr>
<tr>
<td>From €100,000 To €109,000</td>
<td>1</td>
</tr>
<tr>
<td>From €110,000 To €119,000</td>
<td>0</td>
</tr>
<tr>
<td>From €120,000 To €129,000</td>
<td>1</td>
</tr>
<tr>
<td>From €130,000 To €139,000</td>
<td>2</td>
</tr>
<tr>
<td>From €140,000 To €149,000</td>
<td>2</td>
</tr>
<tr>
<td>From €150,000 To €159,000</td>
<td>1</td>
</tr>
<tr>
<td>From €160,000 To €169,000</td>
<td>0</td>
</tr>
<tr>
<td>From €170,000 To €179,000</td>
<td>1</td>
</tr>
</tbody>
</table>

(c) Commissioners Remuneration

The Commissioners’ remuneration package for 2017 was made up as follows:

<table>
<thead>
<tr>
<th>Salary Costs</th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul McGowan – Chairperson*</td>
<td>171</td>
<td>151</td>
</tr>
<tr>
<td>Garrett Blaney – Commissioner**</td>
<td>152</td>
<td>167</td>
</tr>
<tr>
<td>Aoife MacEvilly – Commissioner</td>
<td>146</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>469</td>
<td>461</td>
</tr>
</tbody>
</table>

* Chairperson from 15 February 2017; ** Chairperson until 14 February 2017

This does not include the value of retirement benefits earned in the period. The Commissioners pension entitlements do not extend beyond the standard entitlements in the model public sector defined benefit superannuation scheme.
(d) Key management personnel

Key management personnel in CRU consists of the Commissioners, who are assisted in their duties by 4 Directors. The total value of employee benefits for the Commissioners and Directors is set out below:

<table>
<thead>
<tr>
<th></th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Salary &amp; Short Term Benefits</td>
<td>995</td>
<td>941</td>
</tr>
<tr>
<td>Allowances</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>1,005</td>
<td>961</td>
</tr>
</tbody>
</table>

This does not include the value of retirement benefits earned in the period. The key management personnel are members of the CER Pension Scheme and their entitlements in that regard do not extend beyond the terms of the model public service pension scheme. The Chairperson, Members of the Commission and the Directors do not receive any performance related payments.

(e) Pension Related Deduction as provided under the Financial Emergency Measures in the Public Interest Act, 2009

During 2017 €303,652 (2016 €298,660) pension related deductions were made from the staff of the CRU and paid over to the Department of Communications, Climate Action and Environment (€254,655) and the Department of Housing, Planning, Community and Local Government (€48,997).

4. Hospitality Expenditure

Hospitality expenditure in 2017 amounted to €1,905; analysed as follows-

<table>
<thead>
<tr>
<th></th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Hospitality</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Client Hospitality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

The hospitality expenditure disclosed above is classified in accordance with the Code of Practice for Governance of State Bodies (2016). The CRU does not engage in Client Hospitality. The above amounts do not include expenditure on refreshments / hospitality associated with business operations such as conferences hosting, events and meetings.
5. Professional Fees

The Commission procures professional and legal services in respect of economic, technical, and legal disciplines including litigation fees, usually on a fixed fee basis, for a defined period of time to perform specific self-contained tasks or projects that contribute to decision-making and policy-making in the CRU. A multiple-member framework agreement has been established for consultancy support in the Single Electricity Market (SEM) and Integrated SEM (I-SEM), relating to Economic & Technical Advice and Policy Development & Implementation.

During 2017, the Commission incurred costs for each activity of electricity, gas, safety regulation (includes petroleum safety) and water regulation per key professional services category as follows;

<table>
<thead>
<tr>
<th>(a) Professional Fee Category</th>
<th>Electricity €’000</th>
<th>Gas €’000</th>
<th>LPG Safety €’000</th>
<th>Petroleum €’000</th>
<th>Water €’000</th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Technical Consultancy</td>
<td>384</td>
<td>93</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>490</td>
<td>1,019</td>
</tr>
<tr>
<td>* Technical Safety Consultancy</td>
<td>0</td>
<td>84</td>
<td>11</td>
<td>610</td>
<td>0</td>
<td>705</td>
<td>459</td>
</tr>
<tr>
<td>* Economic/Financial Consultancy</td>
<td>263</td>
<td>447</td>
<td>0</td>
<td>0</td>
<td>64</td>
<td>774</td>
<td>752</td>
</tr>
<tr>
<td>Multiple Member Framework Agreement for I-SEM</td>
<td>1,969</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,696</td>
<td>1,777</td>
</tr>
<tr>
<td>National Smart Metering Programme Consultancy</td>
<td>235</td>
<td>66</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>301</td>
<td>1,872</td>
</tr>
<tr>
<td>* Professional inc. Market Research &amp; OECD Review</td>
<td>325</td>
<td>119</td>
<td>0</td>
<td>35</td>
<td>71</td>
<td>550</td>
<td>222</td>
</tr>
<tr>
<td>* General Legal Advices</td>
<td>381</td>
<td>62</td>
<td>24</td>
<td>21</td>
<td></td>
<td>488</td>
<td>459</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,284</strong></td>
<td><strong>871</strong></td>
<td><strong>11</strong></td>
<td><strong>669</strong></td>
<td><strong>169</strong></td>
<td><strong>5,004</strong></td>
<td><strong>14,262</strong></td>
</tr>
</tbody>
</table>

*As per guidance in the Code of Practice for the Governance of State Bodies (2016), these headings can be classified as “business as usual”.

<table>
<thead>
<tr>
<th>(b) Judicial Review Litigation &amp; Provision</th>
<th>Electricity €’000</th>
<th>Gas €’000</th>
<th>LPG Safety €’000</th>
<th>Petroleum €’000</th>
<th>Water €’000</th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Fees - legal proceedings</td>
<td>1,021</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,021</td>
<td>56</td>
</tr>
<tr>
<td>Conciliation, Mediation &amp; Arbitration</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Settlements</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,021</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>1,021</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(c) Audit Fees</th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Fees for the Office of the Comptroller and Auditor General</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Internal Audit Fees</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>
6. Public Water Forum

The Water Services Act 2014 provides that the Commission establish a customer consultative forum, to be known as the Public Water Forum. The primary purpose of the Forum is to represent the interests of domestic water consumers and a variety of sectoral organisations. The Minister has determined that the CRU should cover the costs of the activities of the Public Water Forum to 17 November 2017; expenditure in 2017 amounted to €8,430 (2016: €46,041).

7. Property, Plant and Equipment

<table>
<thead>
<tr>
<th></th>
<th>Leasehold Improvement €'000</th>
<th>Fixtures &amp; Fittings €'000</th>
<th>Office Equipment €'000</th>
<th>Computer Hardware €'000</th>
<th>Computer Software €'000</th>
<th>Total €'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At 31 December 2016</td>
<td>2,961</td>
<td>648</td>
<td>274</td>
<td>672</td>
<td>365</td>
<td>4,920</td>
</tr>
<tr>
<td>Additions</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>28</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Disposals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>(37)</td>
<td>0</td>
<td>(37)</td>
</tr>
<tr>
<td><strong>At 31 December 2017</strong></td>
<td><strong>2,961</strong></td>
<td><strong>648</strong></td>
<td><strong>286</strong></td>
<td><strong>663</strong></td>
<td><strong>368</strong></td>
<td><strong>4,926</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Leasehold Improvement €'000</th>
<th>Fixtures &amp; Fittings €'000</th>
<th>Office Equipment €'000</th>
<th>Computer Hardware €'000</th>
<th>Computer Software €'000</th>
<th>Total €'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accumulated Depreciation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At 31 December 2017</td>
<td>1,213</td>
<td>643</td>
<td>229</td>
<td>594</td>
<td>356</td>
<td>3,035</td>
</tr>
<tr>
<td>Charge for the Year</td>
<td>118</td>
<td>1</td>
<td>9</td>
<td>54</td>
<td>9</td>
<td>191</td>
</tr>
<tr>
<td>Disposals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>(37)</td>
<td>0</td>
<td>(37)</td>
</tr>
<tr>
<td><strong>At 31 December 2017</strong></td>
<td><strong>1,331</strong></td>
<td><strong>644</strong></td>
<td><strong>238</strong></td>
<td><strong>611</strong></td>
<td><strong>365</strong></td>
<td><strong>3,189</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Leasehold Improvement €'000</th>
<th>Fixtures &amp; Fittings €'000</th>
<th>Office Equipment €'000</th>
<th>Computer Hardware €'000</th>
<th>Computer Software €'000</th>
<th>Total €'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Book Value:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At 31 December 2017</td>
<td>1,630</td>
<td>4</td>
<td>48</td>
<td>52</td>
<td>3</td>
<td>1,737</td>
</tr>
<tr>
<td><strong>At 31 December 2017</strong></td>
<td><strong>1,748</strong></td>
<td><strong>5</strong></td>
<td><strong>45</strong></td>
<td><strong>78</strong></td>
<td><strong>9</strong></td>
<td><strong>1,885</strong></td>
</tr>
</tbody>
</table>

8. Receivables

<table>
<thead>
<tr>
<th></th>
<th>2017 €'000</th>
<th>2016 €'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levy/Levies - Electricity</td>
<td>77</td>
<td>107</td>
</tr>
<tr>
<td>Levy/Levies - Petroleum Safety</td>
<td>69</td>
<td>130</td>
</tr>
<tr>
<td>Payroll</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>92</td>
<td>48</td>
</tr>
<tr>
<td>Prepayments</td>
<td>134</td>
<td>205</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>401</td>
<td>502</td>
</tr>
</tbody>
</table>

A provision of €750,000 for 2017 represents a prudent estimate of liabilities that may arise to third parties, in respect of legal actions notified prior to year-end. Due to the nature of its operations the Commission is involved in legal actions, principally judicial review proceedings on its decisions.

This provision is based on an assessment of the probable costs of defending known actions to the extent that such costs can be reliably estimated. The assumptions made in assessing the appropriate level of provision include the likely outcome of the actions, future trend of legal costs (both our own and third party) and the estimated date the action will be heard. The Commission is satisfied that it has made the best estimate of the appropriate provision in the financial statements for the likely outcome, the provision may be subject to revision from time to time as more information becomes available.

11. Contingent Liability

Legal Actions: As stated in Note 10 the Commission is, from time to time, party to various legal actions. The Commission makes a provision for expected legal costs associated with cases notified to it (Note 10). It is probable that a number of additional cases may be notified in the future in relation to decisions made prior to 31 December 2017. It is not possible to estimate the potential effect of such claims.

12. Capital Account

<table>
<thead>
<tr>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>commodity</td>
<td>€'000</td>
</tr>
<tr>
<td>Opening Balance</td>
<td>1,572</td>
</tr>
<tr>
<td>Funds allocated to acquire fixed assets</td>
<td>28</td>
</tr>
<tr>
<td>Amount amortised in line with asset depreciation</td>
<td>(103)</td>
</tr>
<tr>
<td>Net amount of transfer</td>
<td>(75)</td>
</tr>
<tr>
<td>Total</td>
<td>1,497</td>
</tr>
</tbody>
</table>
13. Retirement Benefit Costs

<table>
<thead>
<tr>
<th></th>
<th>2017 €’000</th>
<th>2016 €’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Analysis of total retirement benefit costs charged to the Statement of Income and Expenditure and Retained Revenue Reserves.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CER defined benefit scheme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current service cost</td>
<td>1,995</td>
<td>1,551</td>
</tr>
<tr>
<td>Interest Cost</td>
<td>625</td>
<td>627</td>
</tr>
<tr>
<td>Expected return on Scheme Assets</td>
<td>(436)</td>
<td>(535)</td>
</tr>
<tr>
<td>Less: Employees Contributions</td>
<td>(286)</td>
<td>(260)</td>
</tr>
<tr>
<td>Total</td>
<td>1,858</td>
<td>1,383</td>
</tr>
<tr>
<td>Single Public Sector Scheme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current service cost</td>
<td>326</td>
<td></td>
</tr>
<tr>
<td>Deferred retirement benefit funding</td>
<td>(346)</td>
<td></td>
</tr>
<tr>
<td>Employer Contribution</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>*2016 figures not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee contributions by SPSPS members amounted to €76,832 in 2017 and were remitted to the Department of Public Expenditure and Reform. The total retirement benefit costs for the two schemes in 2017 amounted to €2,148,000.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Net Retirement Benefit Liability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present value of funded obligations</td>
<td>33,310</td>
<td>31,822</td>
</tr>
<tr>
<td>Fair value of scheme assets</td>
<td>(24,371)</td>
<td>(21,381)</td>
</tr>
<tr>
<td>Net Liability</td>
<td>8,939</td>
<td>10,441</td>
</tr>
<tr>
<td>bii) Present Value of Scheme Obligations at beginning of year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Service Cost</td>
<td>31,822</td>
<td>22,934</td>
</tr>
<tr>
<td>Interest Cost</td>
<td>2,245</td>
<td>1,551</td>
</tr>
<tr>
<td>Actuarial Loss / (Gain)</td>
<td>(1,119)</td>
<td>6,975</td>
</tr>
<tr>
<td>Benefits Paid</td>
<td>(263)</td>
<td>(265)</td>
</tr>
<tr>
<td>Present Value of Scheme Obligations at end of year</td>
<td>33,310</td>
<td>31,822</td>
</tr>
<tr>
<td>CER Pension Scheme Members</td>
<td>32,534</td>
<td></td>
</tr>
<tr>
<td>Deferred funding asset (to meet SPSPS obligations)</td>
<td>776</td>
<td></td>
</tr>
<tr>
<td>Fair Value of Scheme Assets at end of year</td>
<td>33,310</td>
<td></td>
</tr>
<tr>
<td>*2016 figures not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>biii) Change in Scheme assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair Value of Scheme Assets at beginning of year</td>
<td>21,381</td>
<td>18,842</td>
</tr>
<tr>
<td>Expected return on Scheme Assets</td>
<td>436</td>
<td>535</td>
</tr>
<tr>
<td>Actuarial Gain / (Loss)</td>
<td>1,124</td>
<td>685</td>
</tr>
<tr>
<td>Employer Contributions</td>
<td>1,407</td>
<td>1,324</td>
</tr>
<tr>
<td>Members’ Contributions</td>
<td>286</td>
<td>260</td>
</tr>
<tr>
<td>Benefits paid from Scheme</td>
<td>(263)</td>
<td>(265)</td>
</tr>
<tr>
<td>Fair Value of Scheme Assets at end of year</td>
<td>24,371</td>
<td>21,381</td>
</tr>
<tr>
<td>Invested assets (to meet CER Pension Scheme Liabilities)</td>
<td>23,595</td>
<td></td>
</tr>
<tr>
<td>Deferred funding asset (to meet SPSPS obligations)</td>
<td>776</td>
<td></td>
</tr>
<tr>
<td>Fair Value of Scheme Assets at end of year</td>
<td>24,371</td>
<td></td>
</tr>
<tr>
<td>*2016 figures not available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The current practice of increasing pensions in line with public sector salary inflation is taken into account in measuring the defined benefit obligation.
c) Description of Scheme and Actuarial Assumptions

The retirement benefit scheme is a defined benefit final salary pension arrangement with benefits defined by reference to current “model” public sector scheme regulations (in respect of members appointed prior to 1 January 2013) and by reference to the Single Public Sector Pension Scheme (in respect of members appointed from 1 January 2013). Employer and employee contribution rates are set having regard to actuarial advice and periodic review on the funding rate required for the scheme.

The valuation used for FRS102 disclosures has been based on an actuarial valuation performed on 31st January 2017 by a qualified independent actuary, taking account of the requirements of the FRS in order to assess the scheme liabilities at 31st December 2017.

The principal actuarial assumptions were as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Rate</td>
<td>2.05%</td>
<td>1.97%</td>
</tr>
<tr>
<td>Price Inflation</td>
<td>1.95%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Rate of salary increase</td>
<td>3.20%</td>
<td>3.15%</td>
</tr>
<tr>
<td>Pension increases for in-payment benefits</td>
<td>2.70%</td>
<td>2.65%</td>
</tr>
<tr>
<td>Pension increase for deferred benefits</td>
<td>2.70%</td>
<td>2.65%</td>
</tr>
<tr>
<td>Plan participant census date</td>
<td>31-Dec-17</td>
<td>31-Dec-16</td>
</tr>
</tbody>
</table>

The scheme assets at the year-end comprised:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Securities</td>
<td>35.8%</td>
<td>50.2%</td>
</tr>
<tr>
<td>Debt Securities</td>
<td>38.6%</td>
<td>31.9%</td>
</tr>
<tr>
<td>Real Estate / Property</td>
<td>9.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Alternatives</td>
<td>14.6%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Cash</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actual return less expected return on scheme assets</th>
<th>€’000</th>
<th>€’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Return</td>
<td>1,560</td>
<td>1,220</td>
</tr>
<tr>
<td>Less: Expected return</td>
<td>(436)</td>
<td>(535)</td>
</tr>
<tr>
<td></td>
<td>1,124</td>
<td>685</td>
</tr>
</tbody>
</table>

In developing the expected long-term rate of return on assets assumption, the Commission considered the current level of expected returns on risk free investments, the historical level of the risk premium associated with the other asset classes in which the portfolio is invested and the expectations for future returns of each asset class. The expected return for each asset class is then weighted based on the actual asset allocation to develop the expected long-term rate of return on assets assumption for the portfolio.
d) Funding of Retirement Benefits
The Commission expects to contribute €1,640,000 to its retirement benefit schemes in 2018.

e) Prior pensionable service
The assets and liabilities of the retirement benefit schemes relate to retirement benefits arising from service with the Commission. Two Commission members and six staff members have superannuation entitlements arising from service with other public sector bodies prior to their joining the Commission. The Commission is entitled to recover the cost of funding the prior service from other public bodies under the terms of its membership of the Public Service Transfer Network.

f) Single Public Sector Pension Scheme
The assets as at 31 December 2017 include a notional asset in respect of deferred funding towards the unfunded liabilities under the Single Scheme. The value of this asset amounts to €776,000 as at 31 December 2017.

The Minister for Public Expenditure and Reform, based on actuarial considerations and pursuant to Section 16 (4) of the Public Service Pension (Single Scheme and Other Provisions) Act 2012 has decided that: an employer contribution is to be paid in respect of certain members of the Single Public Sector Pension Scheme and the rate of that Employer contribution is equal to three times the employee contribution paid by the single scheme member.

As a self-financing body, the sum of €310,476 (Employer contribution €233,644; Employee contribution €76,832) represents the amount paid to Department of Public Expenditure and Reform in 2017.

14 (a). Reconciliation of movements in Reserves

<table>
<thead>
<tr>
<th>Income &amp; Expenditure Account</th>
<th>Capital Account</th>
<th>Pension Reserve</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>Gas</td>
<td>LPG</td>
<td>Petroleum</td>
</tr>
<tr>
<td>€’000</td>
<td>€’000</td>
<td>€’000</td>
<td>€’000</td>
</tr>
<tr>
<td>Opening balance at 1 January</td>
<td>2,826</td>
<td>1,126</td>
<td>21</td>
</tr>
<tr>
<td>Surplus/(Deficit) for the Financial Year</td>
<td>(17)</td>
<td>(590)</td>
<td>12</td>
</tr>
<tr>
<td>Net Movement in Capital</td>
<td>(148)</td>
<td>(148)</td>
<td></td>
</tr>
<tr>
<td>Actuarial Gain/(Loss)</td>
<td>2,243</td>
<td>2,243</td>
<td></td>
</tr>
<tr>
<td>Movement in Reserve</td>
<td>360</td>
<td>172</td>
<td>0</td>
</tr>
<tr>
<td>Closing balance at 31 December</td>
<td>3,169</td>
<td>708</td>
<td>33</td>
</tr>
</tbody>
</table>

The retirement benefit reserve represents the cumulative cost of retirement benefits less amounts contributed by the employer. The transfer in the year represents the difference between the full cost of retirement benefits recognised in the Income and Expenditure and Retained Revenue Reserves Account in the year of €2,148,000 and the employer contributions of €1,401,000.
14 (a). Reconciliation of movements in Reserves

In accordance with Paragraph 20 of the Schedule to the Electricity Regulation Act, 1999 as amended the Commission is required to apply any excess of revenue over expenditure in any year to meet its expenses. Accordingly the accumulated surplus attributed to the electricity sector of €3.1M; the gas sector of €0.7M and the water and waste water sector of €1.5M was taken into account in determining the levy orders for 2018. The petroleum levy surplus of €0.8M for 2017 was taken into account in determining the levy order for 2018.

15. Related Party Disclosures

Key management personnel in the CRU consist of the three Commission Members – the Chairperson and Commissioners supported by four Directors. For a breakdown of the remuneration and benefits paid to key management personnel, please refer to Note 3.

The Commission adopted procedures in accordance with the Code of Practice for the Governance of State Bodies issued by the Department of Public Expenditure and Reform in relation to the disclosure of interests by the Members of the Commission and these procedures have been adhered to in the year. There were no transactions in the year in relation to the Commission’s activities in which the Members of the Commission had any beneficial interest.

16. Commitments – Capital and Others

16.1 Capital Commitments:

The Commission had neither contracted for nor authorised any capital expenditure at the statement of financial position date.

16.2 Operating Leases

As at 31 December 2017 the Commission had the following future minimum lease payments under non-cancellable operating leases for each of the following periods:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payable within one year</td>
<td>411,933</td>
<td>411,933</td>
</tr>
<tr>
<td>Payable within two to five years</td>
<td>1,647,732</td>
<td>1,647,732</td>
</tr>
<tr>
<td>Payable after five years</td>
<td>68,656</td>
<td>480,589</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,128,321</td>
<td>2,540,254</td>
</tr>
</tbody>
</table>

Operating lease payments recognised as an expense were €411,933 (2016: €411,933)

17. Approval of Financial Statements

The Commission approved these financial statements on 12 July 2018.