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# The Strategy for Planning and Delivering the Grid

EirGrid in its role as Transmission System Operator (TSO) is responsible for operating and ensuring the maintenance and development of a safe, secure and reliable electricity transmission system - now and in the future. To achieve this EirGrid continues to develop, manage and operate the electricity transmission grid. ESB is the Transmission Asset Owner (TAO) and its business unit ESB Networks carries out the licensed TAO functions. ESB Networks is therefore responsible for building works and carrying out the physical maintenance as identified by EirGrid. We work closely together to ensure that all steps in the development and construction of grid infrastructure are carried out as efficiently and cost effectively as possible.

Our approach to the development of Ireland's electricity infrastructure is set out in the updated <u>Grid Development Strategy</u> which was published in 2017. This strategy helps us to meet projected demand levels, to meet Government policy objectives, and to ensure a long-term sustainable and competitive energy future for Ireland.

Central to the strategy is EirGrid's six-step approach for grid development. It sets out how the general public and stakeholders can influence the decisions that EirGrid make on grid development projects. The focus of the TSO has been to increase our value proposition to consumers and stakeholders while improving efficiencies in grid development.





The purpose of the six-step process is to facilitate greater involvement from the public in the decisions that are made in planning and developing the grid and to improve transparency in the decision-making process. More details can be found in EirGrid's "Have Your Say" document.

This short document has been compiled to:

- provide stakeholders with an overview of the transmission development programme as at the end of calendar year 2018; and
- highlight how each of the six steps works, by reference to 2018 projects.

We recommend that this report is read in conjunction with our Electricity Transmission Performance Report 2018.

#### **Reporting Requirements**

In addition to this public document, we also jointly provide a detailed "Annual CAPEX Monitoring Report" to the Commission for Regulation of Utilities (CRU). That report provides an annual update of EirGrid and ESB Networks' performance in delivering the grid against the total capital investment approved for network development under Price Review 4 (PR4).

The PR4 period runs from 2016 to 2020. The incentive arrangements that applied during PR3 continued to apply to the first two years of PR4, namely 2016 and 2017, while a new set of incentives was put in place for 2018 to 2020 covering the remainder of the PR4 period.

This Investment Planning and Delivery Report may be amended going forward to reflect changes in the transmission performance indicators as may be laid out by CRU.

The "Annual CAPEX Monitoring Report" for 2018 was submitted in April 2019 and feeds into the content of this report.

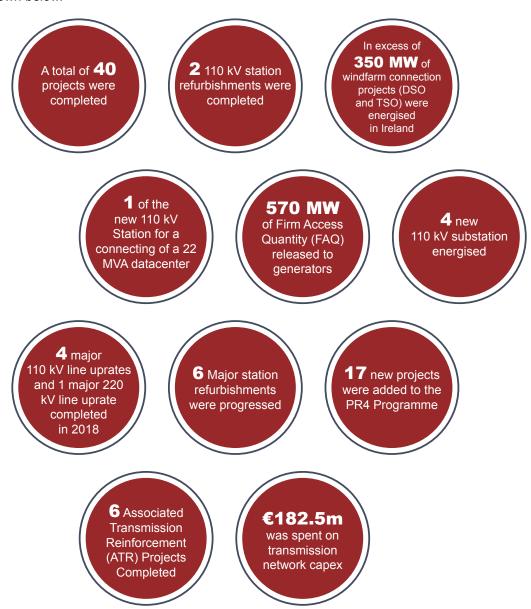
EirGrid also publishes the Transmission Development Plan (TDP) each year following public consultation and approval from the CRU. The primary objective of the TDP is to describe and raise awareness of the planned transmission network reinforcements for the next ten years. The TDP also identifies future needs that may drive future potential projects.

The TDP 2017-2027 can be found on EirGrid's website <u>here</u>, and the report on the public consultation can be found <u>here</u>.

# **Transmission Development Highlights 2018**

EirGrid manages a complex programme of transmission capital projects at various stages of development, ESB Networks undertakes the process of procuring, managing and delivering projects safely, in line with the needs identified by EirGrid and the jointly agreed work programmes. The successful rollout of an upgraded electricity network is a key requirement in achieving the ambitious targets for renewable generation and maintaining a secure system.

2018 was a very positive year for the transmission capital programme, with a total regulatory spend of €182.5m in line with programme. A number of new generation and a new demand customer were connected to the transmission grid. Reinforcement projects were also a key feature of the 2018 programme. In total, 40 projects were completed during 2018. While year on year project completion figures are not comparable as different projects can vary greatly in scale and complexity for information 31 projects where completed in 2017. A selection of highlights is shown below.



Further details on these transmission developments can be found throughout this document.

### **Transmission Developments 2018**

2018 saw a number of new generation and a demand customers connected to the transmission grid. Reinforcement projects were also a key feature of the 2018 programme.

### A total of 40 projects were completed during 2018

### 1. Renewable Connections and Increasing Capacity

The TSO provides connection agreements to renewable generators to connect to the transmission grid at 110 kV or above. During 2016-2018 c.1030 MW of renewable generation has been connected to the transmission system from a total of 23 renewable projects.

EirGrid, working with ESB Networks, has connected renewable projects developed by customers such as Bord na Mona, Brookfield, Coillte, Enercon, ESB Wind Development, Greencoat Renewables and Energia. The core benefit associated with the development of renewable generation on the transmission system is that it reduces our dependence upon fossil fuels and when available can be used instead of carbon fuels such as gas, coal or oil.

In excess of 350 MW of windfarm connection projects were energised in 2018. Some of the tranmission connections are listed below:

- The Kelwin project at Kilpaddoge 110 kV station was energised in July.
- The Slievecallan 110 kV connection was energised in August.
- The Knockacummer 110 kV permanent connection was energised in October.
- The Knockalough 110 kV station was energised in November.



Kelwin/Tullahennel Project

In excess
of **350 MW**of Renewable
Connections (TSO
and DSO)
in 2018.



#### 2. Demand and Datacentre Connections

In recent years there has been an increase in the level of enquiries for connection to the transmission system in the Dublin area. This is principally driven by the need for Information, Communications and Technology (ICT) industries and high-tech manufacturing companies which are supported by the Industrial Development Authority (IDA) to locate in city locations which can meet their requirements. This includes but is not limited to a requirement to connect to a high quality power supply.

Some of the world's best known companies have chosen Ireland as the location for their European datacentre operations and European headquarters. During PR4 the TSO working with TAO has connected datacentre projects developed by customers such as Facebook, Amazon and Microsoft.

From 2016 to 2018 251 MVA of Demand customers have been connected across 5 projects. This includes two new 220 kV substations, three new 110 kV substations and significant lengths of new underground cable in the Dublin region.

- The Snugborough 110 kV station was energised in August 2018, facilitating the connection of a 22 MVA datacentre.
- Construction works for a new 220 kV substation at Castlebagot (the West Dublin project) progressed in 2018, with an energisation programme scheduled during 2019.



Snugborough 110 kV GIS in foreground located adjacent to datacentre



#### 3. System Reinforcement & Refurbishment Projects

Reinforcement projects were also a key feature of the 2018 programme. Of these reinforcements the Ardnacrusha 110 kV substation replacement project was notable completion. The Ardnacrusha substation was commissioned in 1929 when the Ardnacrusha Hydro-Electric Power Station was built. This upgrade of the substation has made possible the continued supply of renewable energy from the power Ardnacrusha Power station and the further integration of new renewable energy sources into the network.

In addition to the Ardnacrusha substation a selection of key project completions is outlined below.

- The Kilpaddoge Knockanure 220 kV line uprate was completed in July.
- Four major 110 kV line uprates completed in 2018, namely Cauteen-Tipperary, Raffeen-Trabeg, Bellacorrick-Castlebar and Carrick-on-Shannon-Arigna-Corderry. This progress represented a positive development as land access on these projects had proved challenging in recent years.
- The Great Island 110 kV station refurbishment project was completed.
- Six Associated Transmission Reinforcement Projects (ATRs) were completed releasing 570 MW of Firm Access Quantities (FAQ) more information on this is below.
- A new 220 kV bay was energised in Finglas 220 kV station in September. This will facilitate the connection of Belcamp 220 kV station in 2019.

Further to the projects completed major station refurbishment works continued at a number of stations across the country, including Moneypoint 400 kV station, Kilpaddoge 400 kV station, Aghada 220/110 kV, Finglas 220/110 kV, Carrickmines 220/110 kV and Castlebar 110 kV.

#### Firm Access

The level of "firm" access to the transmission network relates to financial conditions around a generator's output. Firm access means that if the output of a generator is changed by the TSO (known as 'constraint'), then the generator may be eligible for financial compensation (as set out in the Trading & Settlement Code that governs the operation of the electricity market).

Firm access is linked to Associated Transmission Reinforcements (ATRs). This is where upgrades or new infrastructure are planned by the TSO, to accommodate additional power flows on the network. In advance of firm access being available, some generators may opt to connect to the system on a "non-firm" basis. In this instance, if the output of the generator is changed, the generator will not receive financial compensation as set out in the Trading & Settlement Code.

The level of firm access granted to a generator is known as the "Firm Access Quantity" (FAQ).

In 2018, six ATR projects were completed. As a result over 570 MW of firm access was released.



### **Network Development Expenditure**

Every five years the CRU determines the revenue price control for the TSO and the TAO. The CRU sets a revenue envelope to cover the development of the national transmission grid. This is referred to as network capex under which EirGrid and ESB Networks carry out their capital works programme over a five-year period. This envelope can be adjusted, if necessary, during the five years to allow for changing needs.

The total network capex allowance for the period was determined by CRU in the PR4 Determination, CER/15/296, as €985 million (2014 Prices), based on the forecast network project programme as available in Q2 2014.

As required by the CRU, an updated PR4 programme as at 01 January 2016, the start of the PR4 period, was subsequently submitted. This updated programme is the PR4 baseline network investment programme against which we are required to report on progress over the PR4 period. The PR4 baseline programme totalled €1,057 million (2014 Prices). Notwithstanding that the baseline total was €72 million higher than the PR4 allowance; we did not seek an adjustment at that time. It is recognised that the PR4 programme will continue to evolve resulting in continuous adjustments.

The PR4 programme has continued to evolve through 2018, as projects are completed, removed, added or project programme has changed and costs now be incurred at a later date. This has changed the forecast outturn cost. The table below provides an overview of the PR4 programme and the updated forecast programme costs. At the end of 2018 the forecast outturn programme cost was €186 million lower than the PR4 allowance.

#### **Number of Projects in PR4 Programme**

| Item | Description                             | # of Projects at 01/01/2018 | # of Projects at 01/01/2019 | Delta |
|------|---|-----------------------------|-----------------------------|-------|
| 1    | Ongoing Projects                        | 129                         | 101                         | -28   |
| 2    | Projects Closed or Complete             | 74                          | 114                         | 40    |
| 3    | Projects Removed from Programme         | 4                           | 6                           | 2     |
| 4    | Projects on hold                        | 10                          | 13                          | 3     |
|      | Total Number of Projects in PR4 Dataset | 217                         | 234                         | 17    |

|  | PR4 Baseline<br>2016 | PR4<br>Programme<br>2017 | PR4<br>Programme<br>2018 | PR4<br>Programme<br>2019 | Increase/<br>Decrease<br>2019 vs 2018 |
|--|----------------------|--------------------------|--------------------------|--------------------------|---------------------------------------|
| Total<br>Network<br>Capex<br>Forecast–<br>(Factored) | €1,057M              | €1,079M                  | €1,060M                  | €874M                    | -€186M                                |

No adjust to the allowance was sought as it is recognised that the PR4 programme will continue to evolve.



The PR4 programme continually evolves as projects are completed and new ones are added. These new projects are captured in the overall "ongoing projects" numbers shown in the table above. New projects affect the forecast outturn costs of the programme. They may also require previously planned projects to be rescheduled or modified in scope, thus changing forecast costs in the period across the project programme. The table below provides an overview of the drivers for new projects that have been added to the PR4 programme since January 2016.

|                                 | Number of New Projects added to the PR4 Programme |             |             |  |
|---------------------------------|---|-------------|-------------|--|
|                                 | During 2016                                       | During 2017 | During 2018 |  |
| Customer Connections            | 11  | 6           | 9           |  |
| Asset Refurbishment             | 8   | 6           | 4           |  |
| Asset Retirement                | 1   | -           | -           |  |
| Reinforcement project           | 16  | 3           | 2           |  |
| Line diversion                  | 2   | 1           | 2           |  |
| Distribution System Requirement | 1   | -           | -           |  |
| Total                           | 39  | 16          | 17          |  |

As can be seen from the above table, six of the new projects relate to necessary refurbishment or reinforcement of the network while two are line diversions. Of the nine customer connections, one relates to facilitating the connection of demand customers while the remaining eight relate to facilitating generation customers, or extensions to existing customer sites, that were not known requirements prior to the commencement of the PR4 period.





In Step 1 EirGrid confirm the need for a project by considering potential changes in the demand for electricity. These changes are influenced by factors such as how and where electricity is and will be generated, and changes in electricity use.

Key to this process is considering a range of possible ways that energy usage may change in the future. We call this scenario planning. We test whether the grid of today can support a range of possible future energy scenarios or if the grid needs further investment. In 2017 and 2018 we consulted on our scenario planning initiative which we call <a href="Tomorrow's Energy Scenarios (TES)">Tomorrow's Energy Scenarios (TES)</a>. In 2018, we published <a href="Tomorrow's Energy Scenarios 2017 System Needs Assessment (SNA)</a>. The purpose of the SNA is to highlight the long-term needs of the grid in Ireland out to 2040. The SNA report was the end of a process that started with the publication of, and consultation on, TES in 2017.

We must adhere to technical standards when planning the network. These technical standards are detailed in EirGrid's <u>Transmission System Security and Planning Standards (TSSPS)</u> as approved by the CRU. If it is established that the current grid cannot meet expected future needs under the TSSPS, the grid will need further investment.

When we have identified and confirmed a need, a formal process of project development is initiated. At this point, the only decision that has been made is to confirm that there is a need for a grid development project.

#### What happened in Step 1 during 2018?

In 2018 the need for investment in two areas in the North West was confirmed:

- CP0982 Flagford Sligo Capacity Needs. The integration of renewable generation in Donegal and Mayo and the ability for these renewable resources to be utilised is dependent on the transmission infrastructure being able to support the transfer of the electricity from where it is generated to where it is required by customers. This movement of electricity through the network is referred to as 'power flows'. As renewable generation increases it is essential that the infrastructure can support the increasing power flows. EirGrid has identified that the existing Flagford Sligo line cannot handle the required larger power flows and as a result additional capacity is required in the area. In development of the solution options EirGrid will also take into consideration refurbishment needs of this and other relevant assets.
- CP1023 Letterkenny Busbar Rating Needs. In assessing the integration of renewable generation in Donegal and in turn the increased power flows on the network now and into the future EirGrid has identified that there is a limitation in the existing network at Letterkenny 110 kV station. There is a requirement for the busbar, part of the station assets, to be able to handle larger power flows in the future.





The aim of Step 2 is to create a shortlist of technology options which meet the future needs as confirmed in Step 1. As part of this process, EirGrid will seek feedback from our stakeholders on the list of potential technical solutions.

We want to understand which options our stakeholders think are suitable, and which are not. We will study stakeholders' feedback and produce a shortlist of options to consider in more detail in Step 3. This process typically takes approximately six months.

When compiling the shortlist of options to consider in more detail, we try to balance stakeholder preferences with technical, cost and environmental suitability. This means we may include options that meet the TSSPS and have a strong public preference but are technically less suitable than alternatives. We will consider the issue of overall suitability in more detail when progressing to Step 3. If a major new line or linear development is shortlisted, an underground cable option will be put on the table.

We place new technologies into three broad categories. These are:



Technologies that are available now can be considered as potential solution options straight away. New technologies that are ready for trial use may be considered depending on their level of maturity.

#### What happened in Step 2 during 2018?

In 2018 the following two projects went through Step 2 of the process, they cater for a variety of system needs:

CP0917 Prospect Tarbert 220 kV Cable Replacement: The Prospect Tarbert cable is an
important asset on the transmission system and enables power flows between the west
and south west of the country and onto load centres. This project involves replacement of
existing assets due to their condition and age to ensure reliable system operation into the
future; and

• Capital Project 966: this project is a proposed development that will help transfer electricity to the east of the country and distribute it within the network in Meath, Kildare and Dublin. The project will help meet the growing demand for electricity in the east. This growth is due to increased economic activity and the planned connection of new data centres in the region. A significant number of Ireland's electricity generators are located in the south and south west. This power needs to be transported to where it is needed. The power is mainly transported cross-country on the two existing 400 kV lines. Transporting large amounts of electricity on these 400 kV lines could cause problems that would affect the security of electricity supply throughout Ireland, particularly if one of the lines is lost unexpectedly. To solve this emerging issue, we need to strengthen the electricity network between Dunstown and Woodland we are currently in this step exploring the options to do this.

These projects will help to maintain and enhance security of supply and also facilitate the integration of renewable energy onto the transmission system.





#### The aims of Step 3 are to decide:

- 1. the best performing option; and
- 2. the study area where this option could be placed.

During this step, EirGrid studies the benefits and impacts of the different options, and where these can be built.

When considering where a project can be built it is necessary to start by looking at a study area. This is a broad area within a region, rather than a specific, detailed route. Typically, this step is used to identify potential issues that may restrict options within the study area.

During Step 3, stakeholders' views are sought on a specific technology option and on the study area where the project is planned for. This consultation helps us to understand what is important to stakeholders and to learn more about the local area.

EirGrid has appointed Agricultural Liaison Officers (ALOs) and Community Liaison Officers (CLOs), who are available to discuss the siting of new lines and cables, land access and proximity payments. Contact details for our ALOs and CLOs can be found on the EirGrid website.

When making our decision a multi-criteria decision-making process is employed. This involves assessing the relative performance of options across agreed criteria. A decision is then based on a detailed analysis of stakeholder feedback and on economic, technical, social and environmental criteria.

#### What happened in Step 3 during 2018?

In 2018 24 projects went through Step 3 of the process.

This includes the following projects:

- Circuit related projects: 6
- Station related projects: 4
- New Connection related projects: 12
- Cable related projects: 2



These projects cater for a variety of system needs including:

- · Providing connections for demand and generation customers;
- Refurbishment and replacement of existing assets due to their condition and age; and
- Addressing a lack of power transfer capacity due to the connection of new customers, in particular new renewable energy generation.

These projects will help to maintain and enhance security of supply and also facilitate the integration of renewable energy onto the transmission system.





Following consultation and engagement in Steps 1, 2, and 3 EirGrid have made some key decisions and know which technology we will use on the project, and roughly where the project will be built. We continue to examine and consider both an overhead line option and an underground cable option if a new line is needed.

In Step 4, we assess where exactly the most appropriate place to build the project is. This could be either a route or a site, or both. Some projects will not go through Step 4, primarily uprates or similar works where the circuit or station is already built and therefore the location is determined.

Key inputs will be local, social and environmental "on-the-ground" information, combined with higher-level datasets used in Step 3, to determine and verify local constraints and opportunities. These will identify potential sites or route corridors within the study area for the best-performing technology solution.

Once again stakeholders' views are sought and depending on the size of the project, this could take many forms, such as public meetings or web pages with response forms. We promote consultations through the EirGrid website, and in local or national media depending on the scale of the project.

In 2018 one project went through Step 4 of the process. This project was for Thurles 110 kV Station Statcom and once completed will help to maintain system security in the Tipperary region.





The objective of Step 5 is to achieve the necessary statutory consent for a project; if no statutory consent is required, the decision underpinning is documented appropriately. This includes the preparation of plans and particulars in respect of the project proposal that will be used in the statutory consents process (or Declaration of Exempted Development where no statutory consent is required).

Where a project requires planning permission, EirGrid will submit a planning application to the planning authority – either An Bord Pleanála or the local planning body. In certain cases a Declaration of Exempted Development (or Section 5 Declaration) will be given by the relevant planning authority where no statutory consent is required. This also requires the preparation of plans and particulars for such projects.

The conclusion of this Step is the receipt of statutory consent from the relevant authority or a declaration of exempted development. When the planning application process ends, the planning authority will do one of the following:

- · Grant permission, or
- · Grant permission on the basis that EirGrid makes some changes to its application, or
- Refuse permission.

When a project reaches Step 5 and requires planning permission, EirGrid is legally obliged to publish details of its proposed plan in the national newspapers. These notices give details on how you can make a submission to the relevant planning authority. We also publish and update this information on the EirGrid website at <a href="https://www.eirgridgroup.com">www.eirgridgroup.com</a>.

In 2018 a number of projects entered or passed through step five of the framework. These are summarised below:

- CP0934 Ballynahulla 220 kV Station Statcoms Planning was granted for this project by Kerry County Council. The decision was appealed to An Bord Pleanála in December and as at the end of 2018 was pending a decision from the Board.
- CP0935 Ballyvouskill 220 kV Station Statcom An application for planning was lodged with Cork County Council and as at the end of 2018 was pending a decision.
- CP0945 Great Island Kilkenny 110 kV Uprate This exiting line passes through a number of counties. Planning applications were lodged with Wexford County Council and Kilkenny County Council for the respective elements and as at the end of 2018 were pending decisions.
- CP0903 Cloon Lanesboro 110 kV Line Refurbishment -This exiting line passes through a number of counties. Planning was granted by Galway County Council and Longford County Council for the elements within their areas. Planning was granted by Roscommon County Council for the Roscommon element. This decision was appealed to An Bord Pleanála in September 2018 as at the end of 2018 was pending a decision from the Board.



The following three applicants where at pre-application stage in 2018. This means that during 2018 EirGrid has been working to prepare the required documentation to enable submission to the relevant authorities in 2019.

- CP0949 New 110 kV GIS Station in the Kilbarry Area
- CP0984 Belcamp Shellybanks 220 kV Cable
- CP1017 400 kV Voltage Uprate Trial

In addition to new applications for planning consent or exemptions as outlined above, EirGrid as part of its ongoing management of the development of the transmission system may from time to time seek to extend the duration of existing planning consents. There were 3 such extension of duration of permissions cases in 2018:

- CP0794 Aghada 220 kV Station Reconfiguration An extension of duration of permission was granted by Cork County Council
- CP0622 Tarbert 220 kV Station Upgrade An extension of duration of permission was lodged with Kerry County Council and as at the end of 2018 was pending a decision
- CP0839 Moy 110 kV Busbar Uprate An extension of duration of permission was lodged with Mayo County Council and as at the end of 2018 was pending a decision





In Step 6 EirGrid and ESB Networks agree a construction programme. ESB Networks then undertake the construction work, which is jointly monitored and refined as the project progresses.

#### **Project Agreements Concluded**

The first priority of Step 6 is for EirGrid and ESB Networks to sign a Project Agreement. In 2018 there were 17 project agreements concluded by EirGrid and ESB Networks.

This includes the following projects:

- Circuit related projects: 7
- Station related projects: 5
- New Connection related projects: 5

Once a project agreement has been finalised the project progresses into the construction stage.

#### Scheduling and Prioritisation Approach

A key part of each project programme are the transmission network outages required to complete construction within substations or on linked circuits. Outages required for maintenance work must also be included.

There are a number of key steps in the outage process, including:

- Identification of outage requirements, including the sequence of work, expected timing, duration and the plant required for these outages;
- Assessment of readiness for outages in a given year; and the sequences of work, expected timing, duration and plant required for these outages; and
- Consultation with impacted stakeholders, the Distribution System Operator (DSO) where appropriate and Prioritisation of works



#### **Programme Prioritisation**

- 1. Safety 2. Security of Supply 3. Generator/Demand Connections 4. Associated Transmission Reinforcements (ATRs) 5. Backbone Transmission 6. Refurbishments 7. Control, Protection & Diversions
- Taking account of stakeholder requirements



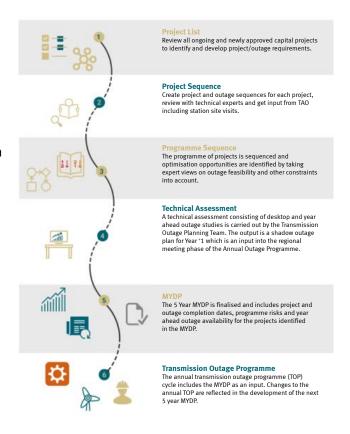
A key input into the scheduling process is the prioritisation of works. A prioritisation hierarchy is followed which categorises projects, or project activities, according to the importance of the project driver, with considerations of the safety of people and plant of the highest priority.

Where it is not possible to accommodate all proposed construction and maintenance works in the period requested, the required works and associated outages are prioritised in line with the hierarchy shown above, taking stakeholder considerations into account.

Based on this information, detailed system studies are carried out and a final plan is agreed. This annual plan is known as the Transmission Outage Programme (TOP). The plan is published in December for the coming calendar year. 83% of TOP18 was delivered representing a successful delivery of the 2018 outage programme.

The TOP is supported by a five-year delivery programme called the Multi-Year Delivery Programme (MYDP). The objective of the MYDP is to develop a realistic longer-term delivery programme which supports project prioritisation, customer requirements and outage scheduling. Complex projects must be planned a number of years in advance so that the outages used are efficient and the maximum work completed within the outage window.

### Multi-Year Delivery Programme



#### **Continued Engagement**

When the grid is developed in a region, the aim is to bring benefits to the whole community in the area. That can only happen when we work closely with local farmers and landowners.

Throughout 2018 ESB Networks maintained regular interaction with Landowners, Landowner Representative Organisations and EirGrid regarding land access issues and arrangements. In particular, in April 2018 ESB Networks organised a conference for ESB Networks and EirGrid staff focusing on the Planning and Environmental aspects of project delivery.

Care for safety, the environment and our heritage are foremost in our minds and actions in the work that we do. Throughout 2018 ESB Networks continued regular interaction with the public, landowners and relevant organisations on these important issues.

The EirGrid's Community and Agricultural Liaison Officers continue to engage closely with local farmers and landowners throughout the construction and energisation phase. Contact details for our ALOs and CLOs can be found on the EirGrid website.

In 2019 EirGrid published its Stakeholder Engagement Report 2018. This provided information on all areas of its stakeholder engagement including continued engagement with local communities in proximity to network developments. The report can be found on EirGrid's website here.

The TSO's performance in terms of Stakeholder Engagement is assessed on an annual basis by the Network Stakeholder Engagement Evaluation (NSEE) Panel. Further details on EirGrid's performance in its stakeholder engagement as determined by the NSEE Panel can be found in the Electricity Transmission Performance Report 2018.

#### **Benefits Sharing**

When EirGrid plans development or expansion of the transmission grid, this work will affect communities near new transmission lines. In some locations, and to some observers, electricity transmission lines have a visual impact on the landscape. Particularly in residential areas, they can seem intrusive when first built.

This is why, in January 2014, EirGrid developed a <u>Community Support Fund and a Proximity Payments scheme</u>. These were introduced after a consultation process where public feedback was taken onboard. We are building a more efficient, more effective and more economic electricity network. The Community Support Fund and Proximity Payments recognise that this can only happen when we work closely with local communities.

### **Community Support Fund**

Under this initiative, EirGrid creates a fund in proportion to the scale of the project and distributes grants from the fund when a project is complete and goes live. When a community fund is created, the aim is to support local projects that benefit the community near a new line.

#### **Proximity Payments**

Proximity payments are intended to share the benefits of a better network with the communities and home owners who help make the grid better. These payments are made to those who are closest to new transmission infrastructure. After the route is finalised and construction begins, proximity payments are then made to homeowners near a new line.



In 2018 EirGrid undertook a Community Fund and Proximity payments associated with the 220 kV Knockanure Substation in North Kerry. The Community Fund value was €70,500 and the fund was administered in partnership with Kerry County Council. The Community Fund supported 13 projects delivering long lasting benefits to the lost host communities.

#### **Transmission Development 2018**

2018 saw a number of new generation and a demand customers connected to the transmission grid. Reinforcement projects were also a key feature of the 2018 programme.

#### A total of 40 projects were completed during 2018

A selection of 2018 highlights include:

- The Snugborough 110 kV station was energised in August, facilitating the connection of a new demand customer connection.
- A new 220 kV bay was energised in Finglas 220 kV station in September. This will facilitate the connection of Belcamp 220 kV station in 2019.
- A number of stations facilitating the connection of renewable generation were completed.
- In excess of 350 MW of windfarm connection projects, across both the transmission and distribution system were energised in 2018
- 6 Associated Transmission Reinforcements (ATRs). As a result over 570 MW of firm
- access was released.
- Activation of the Kelwin Power Hybrid Wind Farm in Kerry connecting into Kilpaddoge 110 kV station was complete in July.
- 4 major 110 kV line uprates and 1 major 220 kV line uprate were completed in 2018
- The Ardnacrusha 110 kV substation replacement project was completed.
- The Great Island 110 kV station refurbishment project was completed.



## **Acronyms**

- (AC) Alternating Current
- (DC) Direct Current
- · (ALOs) Agricultural Liaison Officers
- (ATR) Associated Transmission Reinforcement
- · (CRU) Commission for Regulation of Utilities
- (CLOs) Community Liaison Officers
- (MYDP) Delivery Programme
- (FAQ) Firm Access Quantity
- (HTLS) High-temperature low-sag
- (PR4) Price Review
- (NSEE) Stakeholder Engagement Evaluation
- (TAO) Transmission Asset Owner
- (TDP) Transmission development Plan
- (TOP) Transmission Outage Programme
- (TSO) Transmission System Operator
- (TSSPS Multi-Year) Transmission System Security and Planning Standards





### **How to Contact Us**

We welcome all feedback in regard to the information set out in this booklet and any additional information you might wish to see included in future versions. Please contact the below:



The current. The future.

Please contact our Customer Relations Team at: info@eirgrid.com



Please contact us at: esbnetworks@esb.ie