



Capital Project 1029

May 2019



The current. The future.



Who is EirGrid?

EirGrid is responsible for a safe, secure and reliable supply of electricity – now and in the future. We develop, manage and operate the electricity transmission grid. This brings power from where it is generated to where it is needed throughout Ireland. We use the grid to supply power to industry and businesses that use large amounts of electricity.

The grid also powers the distribution network. This supplies the electricity you use every day in your homes, businesses, schools, hospitals and farms.

What is Capital Project 1029?

EirGrid is responsible for delivering electrical power to major customers in Ireland, including Intel. Capital Project 1029 will ensure there is a secure and reliable supply of power to the Intel manufacturing facility in Leixlip, Kildare.

The development includes a new 220 kV substation, adjacent to the Intel site, and two new electricity circuits connecting into the Maynooth-Woodland 220 kV power line which runs to the north of the facility.

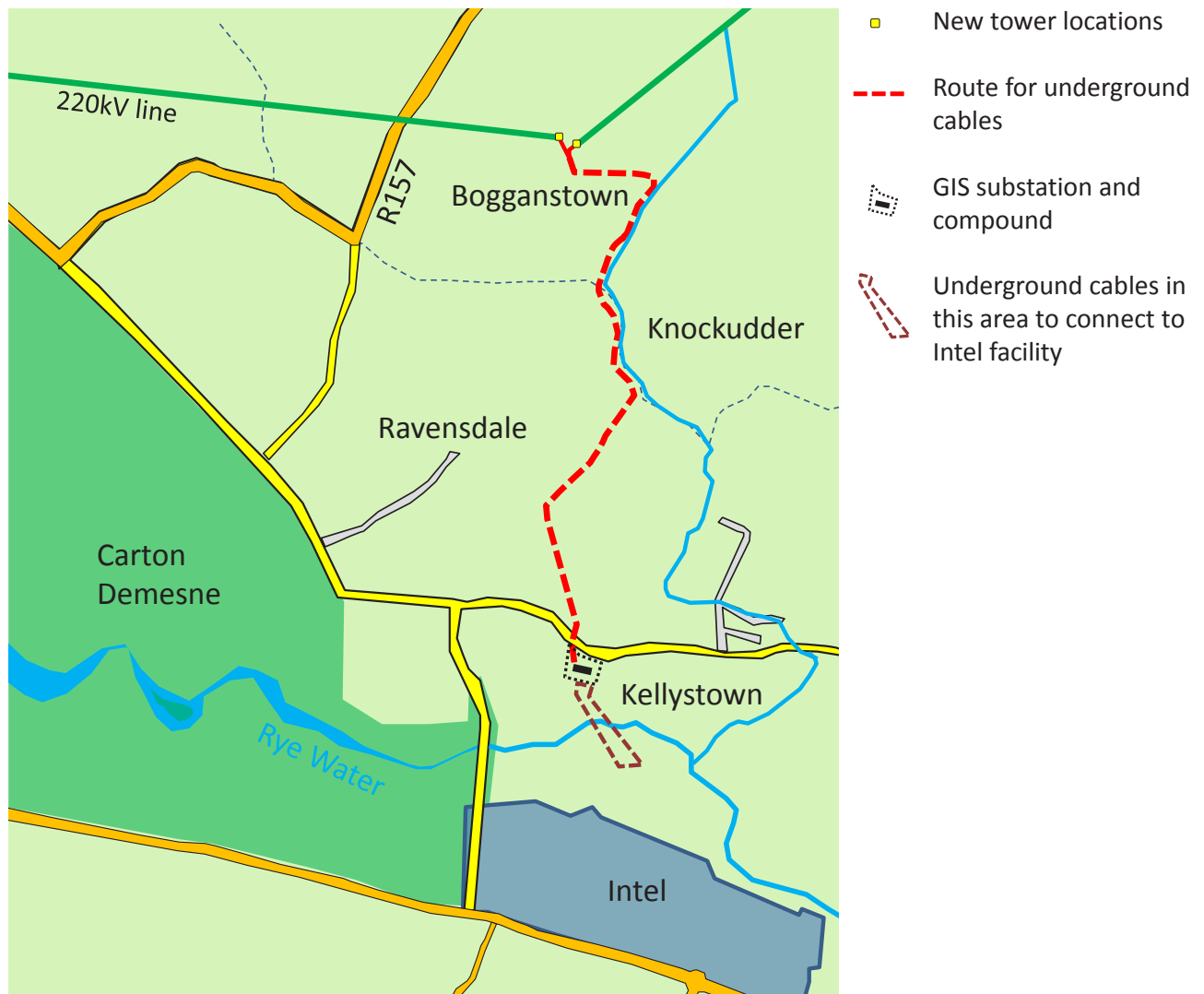
In addition, a total of six new circuits will be required to connect the new 220 kV substation to new transformers which will be located within the Intel facility. Three of these will be required immediately, and three will be required at a future point in time. The transformers will reduce the high-voltage electricity from the Maynooth-Woodland line to a lower-voltage that can be used in the Intel facility.

Electricity is currently, and will continue to be, provided to Intel by 110 kV circuits. Further connections between the new substation and Intel's facility, and an upgrade of the Maynooth-Woodland 220 kV line, will also be required at a later point.

What's Happening Now?

Over the past number of months we have evaluated and consulted with local people on possible project solutions. We have now identified the best performing option. This comprises a new substation with Gas Insulated Switchgear (GIS) technology immediately north of the Intel facility and the Rye Water in the townland of Kellystown. An underground cable that crosses lands on the east and north-east of Ravensdale Demesne will connect the substation to the Maynooth-Woodland line. New cables will connect the substation to the Intel facility. These will be installed below the Rye Water as shown.

The Best Performing Option



GIS Substation

The GIS substation at Intel will be similar to the one pictured below. It is a high-voltage substation in which the major structures are contained in a building.

Because the majority of electrical equipment and apparatus is contained within a building, the total space required for a GIS substation is significantly less than that needed for a traditional Air Insulated Switchgear (AIS) substation.

GIS substations offer other advantages in addition to the reduced space requirements. Because the substation is enclosed in a building, it is less sensitive to pollution, as well as salt, sand or large amounts of snow. Although the initial cost of building a GIS is higher than building an air insulated substation, the operation and maintenance costs of a GIS are lower.



Typical GIS substation building

What Happens Next?

EirGrid uses a six-step process to develop projects. Capital Project 1029 has just completed Step 4 of the process. This step we call “Where exactly should we build”.

This means we have identified the specific site for the substation and route for the planned development.

Following this, we will move to Step 5 of our process, where a planning application will be submitted to the appropriate planning authority.

How We Develop Projects

Step 1

How do we identify the future needs of the electricity grid?

Step 2

What technologies can meet these needs?

Step 3

What's the best option and what area may be affected?

Step 4

Where exactly should we build?

Step 5

The planning process

Step 6

Construction, energisation and benefit sharing

Feedback

If you have comments on any aspect of development, please contact:

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Or

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Or alternatively in writing to:

Capital Project 1029

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We will also provide detailed project information and updates at: www.eirgrid.com



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