# Capital Project 966

Autumn 2018





### Who are EirGrid and what do we do?

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 966?

Capital Project 966 is a proposed electricity development that will help to transfer power 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 is where many wind farms and some modern, conventional electricity generators are located. This power needs to be transported to where it is needed.

Power is mainly transported cross-country on two highvoltage power lines from Moneypoint in Clare to the Dunstown substation in Kildare and Woodland substation in Meath. Transporting increased amounts of electricity on these two 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.

## Technologies

The project is at a very early stage of development and we are currently evaluating possible technology options for the project. This is what we call Step Two of our six-step process for developing projects. See page five for further information on this.

The technologies under evaluation are:

- Underground cables and overhead lines
- 220 kV and 400 kV voltage levels
  - The voltage level 110 kV would not deliver the capacity required to solve the identified problem.
- Supporting technologies that will help to maintain the right level of voltage on the system.

# List of Options

By evaluating a number of strong connection points on the electricity grid with our technology options, we were able to create a long-list of 15 possible project solutions.

Details of this long-list are available on www.eirgrid.com

We then compared all of the options in the long list using two criteria – technical performance and economic performance.

The list was then refined to the five best-performing options:

- 1. Dunstown Woodland Uprate of existing 220 kV overhead lines to 400 kV
- 2. Dunstown Woodland New 400 kV overhead line
- 3. Dunstown Woodland New 220 kV overhead line
- 4. Dunstown Woodland New 220 kV underground cable
- 5. Dunstown Woodland New 400 kV underground cable

We propose to bring forward these five options for further study. The options will be evaluated using a set of five criteria to further distinguish between the options performances. The five criteria are:

- Technical performance
- Economic performance
- Environmental aspects
- Deliverability aspects
- Socio-Economic aspects

By using these criteria we will further refine the best performing options to a shorter list. At the end of Step Two of our project development process, we will have a short list of best performing options that will be considered for further more detailed evaluation and analysis in Step Three.



### How we develop projects

Capital Project 966 is currently at Step Two of our six-step process for developing projects.

Many people might not take an active interest in a project until we identify a precise route. However, it is important that we gather your views before this point.

We want you to know how and why we plan our projects, so you can give us your feedback as early as possible.

Designing an electricity transmission project can be a complex and lengthy process.

Because of this, we use a consistent project planning process to explore options and make decisions This means we follow the same steps for every project.

The decision-making tools we use, and the amount of engagement we carry out at each step, depends on the scale and complexity of each project.

#### 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

This document discusses our investigations into a reinforcement of the transmission grid in the area between Kildare and Meath.

Its purpose is to provide information to interested parties on our investigations to date.

We welcome your feedback. If you have any comments on the technology options outlined above, or any other aspects of the development, please send them to: Customer Relations Capital Project 966 The Oval 160 Shelbourne Road Ballsbridge Dublin D04 FW28 Telephone: 01 677 1700.

Alternatively, you can leave your comments at www.eirgrid.com or send them to leinstergridprojects@eirgrid.com

We will provide detailed project information and updates at www.eirgridgroup.com/contact/



