EirGrid.ie

Kildare Dublin Grid Reinforcement

Project Update

PUBLIC INFORMATION

EirGrid is planning to upgrade the electricity grid in the area of East Kildare and South West Dublin to help meet growing electricity demand.

Who is EirGrid and What Do We Do?

EirGrid is a state-owned company that develops, manages, and operates Ireland's electricity grid. We are responsible for the safe, secure, and reliable supply of Ireland's electricity, bringing power from where it is generated to the distribution network that supplies the electricity we use every day in homes, businesses, schools and hospitals.

EirGrid is responsible for leading the secure transition of the electricity grid to a sustainable, low-carbon future.

What is the Kildare Dublin Grid Reinforcement?

The Kildare Dublin Grid Reinforcement is a proposed programme of works to accommodate the continued growth in electricity demand in the region, which is being driven by several sectors. This includes:

- residential housing;
- commercial and industrial development;
- electrification of heat (heat pumps) and transportation (electric vehicles and public transport);
- and the integration of offshore renewable energy connections

The existing electricity infrastructure in the East Kildare and South Dublin area is at risk of reaching its capacity limit. To address this need, new infrastructure is required to ensure a reliable, sustainable electricity supply to communities, residents, schools and businesses.

What has happened so far?

In May 2025, EirGrid consulted with local communities and stakeholders on the preferred zones to select sites for the construction of two new substations; one near Hynestown and one near Steelstown.

The primary function of these substations is to facilitate power flows between the transmission and distribution systems to enable power to be distributed to where it is needed.

Following the consultation it was determined that the best technology option is to build two Gas Insulated Switchgear (GIS) substations. EirGrid is currently undergoing assessments to determine the most suitable sites for both of these substations and will publish the selected sites once they are confirmed.

Information related to this consultation, including a consultation report and project documents and brochures can be found on the project website EirGrid.ie/KildareDublin or scan the QR below.

What is happening now?

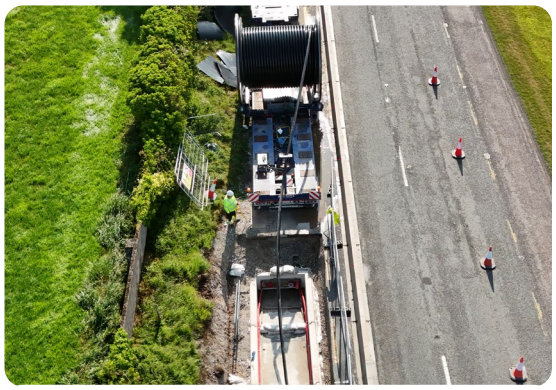
Once built, the two required substations will need to be connected to the grid by high voltage electric circuits. EirGrid undertook a multi-criteria assessment (MCA) on the best technology for the following circuits:

- New Hynestown substation to new Steelstown substation
- New Hynestown substation to the existing substation in Maynooth

EirGrid employs a structured MCA process to evaluate and compare different options for electricity transmission projects. This assessment helps in identifying the most suitable solutions while considering various factors that impact the environment, economy, and society. The MCA considered the viability of both Overhead Lines or Underground Cables for both of these circuits. **Following these assessments, EirGrid will proceed with Underground Cables for both circuits.**

You can read about these options in detail on the dedicated Kildare Dublin Grid Reinforcement project webpage EirGrid.ie/KildareDublin.

Examples of typical underground cable installation



About underground cables

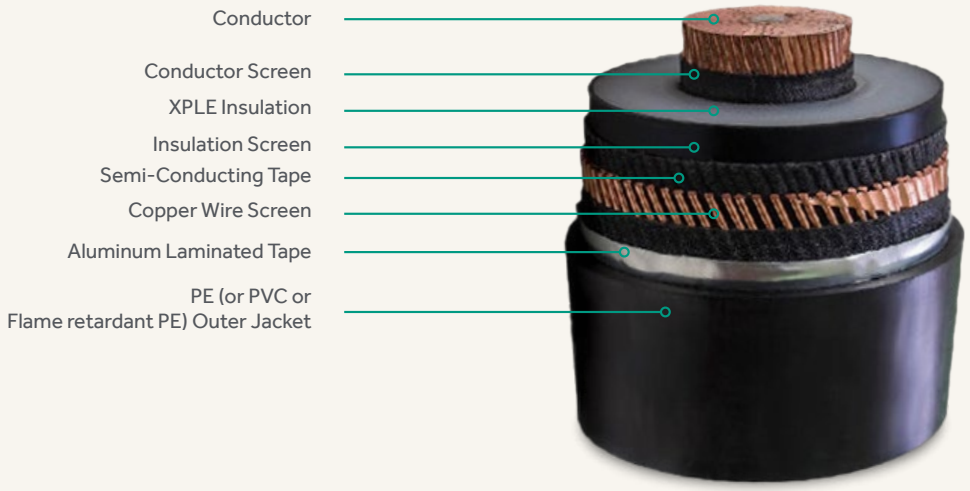


Figure 1: Underground Cable

The cable that will be used is high-voltage XLPE cable with copper or aluminium core, installed within underground plastic ducts. This technology for electricity transmission is proven across Ireland and internationally.

What does underground cable construction involve?

Typically construction is broken down into three steps. In advance of construction commencing, traffic management plans will be developed and agreed with the local authority along cable routes.

Step 1:

Trenches are dug for plastic ducts and larger openings for joint bays. Joint bays are installed below ground to allow for joining different sections of the cables at up to 750 metre intervals. This interval depends on constraints and space.

Step 2:

The cables are delivered to a section of the site on cable drums. Two working areas are set up at each end of the trenched section, at the joint bays. At one end, the cable drum is placed, and at the other, the equipment to pull the cable through.

Step 3:

Cables are pulled through in sections and connected as one circuit in a process called jointing. This process is carried out in an environmentally controlled enclosure which fits directly over the underground joint bay which is exposed for access. Once installed, the road surface is reinstated, and the joint bays are completely hidden from view.

As this project progresses, we will consult and work closely with local communities and businesses to minimise disruption that may be caused by construction.

What happens next?

EirGrid will now begin assessments and surveys to identify potential routes for these two cable projects. Once we have established a number of options, we will hold a public consultation to seek local input and identify the best performing options.

Community Forum

EirGrid is creating a Community Forum focussing on these two cable routes to ensure local input is taken into account when determining the best routes for the cables to take. The forum will facilitate discussions on how we communicate and engage with the public; what we need to consider in developing the project; and how we can deliver meaningful community benefit to the area. Interested individuals can find out more and express interest in joining the forum on our website www.EirGrid.ie/KildareDublin

If you have any questions or concerns, you can contact our dedicated Community Liaison Officers:

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