

# Proposed Culmullin 220 kV substation

## FAQs

September 2022

### Why is this substation necessary?

Once operational, the proposed Culmullin 220 kV substation will facilitate the export of renewable energy from three local Energia solar farms, which are still in development, onto the national grid. The substation will help Ireland to reach its Climate Action targets and reduce our dependence on fossil fuels, while increasing security of energy supply.

### How big is the site?

The overall application site boundary encompasses just under 6 hectares, with the substation component covering just over 2 hectares and the grid route making up the remaining 3.5 hectares.

### What about visual impact?

The retention of existing hedgerows will support the screening of potential residential views of the proposed substation. The site will also benefit from additional landscape planting post construction, which will increase existing hedgerow boundaries with appropriate native species.

### Will new overhead lines be created?

No additional overhead lines will be installed. Two Line Cable Interface Masts will be installed beside the substation to facilitate a connection to the existing Gorman – Maynooth 220 kV overhead line. All cables from this existing overhead line into the proposed Culmullin 220 kV Station will be underground.

### How close to properties will the substation and new infrastructure be?

The nearest property is 950m to the east and 1km south-west of the main substation site.

### Does a substation pose health risks to humans or animals?

Some people have concerns about the electric and magnetic fields (EMFs) found near electricity lines and cables. When electric current flows, EMFs are produced but register in the extremely low frequency end of the electro-magnetic spectrum. They occur in the home, in the workplace, or anywhere we use electricity. Natural sources of EMFs include the earth's geomagnetic field and electric fields from storm clouds. The consensus from health and regulatory authorities is that extremely low frequency EMFs do not present a health risk.

### Is there audible sound from a substation?

The main noise heard from a substation is a low frequency 'hum' produced by the transformer. A typical new substation transformer will have a similar noise level of an outdoor air conditioning unit at approximately 1 metre distance. The sound level diminishes at a greater distance. For example, the sound will be barely perceptible at the substation perimeter fence. Noise surveys and reports are completed as part of the planning application and are available for review.

### **Will the substation be lit up at night?**

Construction is planned to take place during daylight hours so that wildlife is not disturbed. If artificial lighting is required at any point during construction, it will be both temporary and directional and will only illuminate the section of the site where work is continuing.

Once energised and operational, the substation will not be lit up at night. However, emergency lighting will be installed to facilitate non-daylight hour access for emergency or non-routine repairs.

### **Will there be a fence around the substation?**

A 2.6m palisade fence will be installed around the substation compound with an additional 1.4m post and rail fence positioned 3m along the outer perimeter boundary in line with EirGrid policy.

### **What safety measures will be in place?**

The substation will be built to EirGrid and ESB Networks standards and will be subject to a rigorous design review process prior to the commencement of construction. The purpose of these design specifications and reviews are to ensure the safety of both the public and operational staff working in the substation. Safety is at the core of the development and construction of all our projects.

### **How often will maintenance be carried out?**

Scheduled maintenance is generally completed on a monthly basis, with more intensive maintenance scheduled annually.

### **What about construction traffic?**

A traffic management plan will be put in place, setting out how we will manage construction traffic during the construction of the project. Our construction and community engagement team will liaise with local residents and businesses to minimise disruption.

### **What are the next steps?**

We are engaging with the local community to provide residents living near the proposed Culmullin substation site with project information and an opportunity to ask questions and have their say. Our Community Liaison team will be visiting homes and delivering information in the immediate area. We will also be holding a public information evening so that members of the public can drop in to meet the project team and find out more. Residents can also contact our Community Liaison Officer by email or by telephone.

Once submitted, planning application documents will be available to view at the following locations:

- Meath County Council offices
- The Offices of An Board Pleanála
- An Board Pleanála's Online Planning Portal
- Project website: [www.culmullinsubstation.ie](http://www.culmullinsubstation.ie)