



NETWORKS

# LAOIS – KILKENNY REINFORCEMENT PROJECT: COOLNABACKY SUBSTATION

YOUR QUESTIONS ANSWERED

NOVEMBER 2020



Dear reader,

We are pleased to bring you this update on the Laois-Kilkenny Reinforcement Project, and in particular in relation to the construction of a substation at Coolnabacky near Ratheniska, Co. Laois.

ESB Networks recognises that there are some local concerns about this project.

As a result, in October 2019, we engaged an independent organisation, Irish Rural Link, to assess current community understanding of the substation at Coolnabacky. We have published its report (available on [www.esbnetworks.ie/tns/publications](http://www.esbnetworks.ie/tns/publications)). The report makes five recommendations and EirGrid and ESB Networks is committed to implementing each of the five recommendations:

1. An independent hydrogeologist be engaged by ESB Networks.
2. An information leaflet, in plain English, containing an accurate visual of the work. This is the information leaflet.
3. Clarification by EirGrid on the possible future large-scale wind energy developments.
4. Establishment by EirGrid of a voluntary community forum.
5. Remain open to further dialogue on the project from all sectors of the community.

Finally, we have compiled a detailed Questions and Answers section overleaf.

These five recommendations provide a basis for addressing those concerns and progressing this important project for the region. The substation site has been acquired and detailed design, landowner engagement and works have already started on the overall project.

Laois, Kilkenny and surrounding counties have growing populations and need strong electricity infrastructure that is secure and of the highest-quality. This is the main reason why we need to complete this reinforcement project and progress with the works on site.

Kind Regards,

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**The ESB Networks**  
**Laois-Kilkenny Reinforcement Project team**

*Paul Dempsey*

# YOUR QUESTIONS ANSWERED

## 1. Why is the project needed?

The Laois-Kilkenny Reinforcement Project is required to address electricity reliability issues across Laois, Carlow, Kildare, Wicklow and Kilkenny. These issues are caused by continued growth in demand for electricity and weaknesses in the transmission network across the Midlands and South East.

EirGrid has identified that if this project is not progressed it will result in a reduction in the quality and reliability of supply across these five counties.



## 2. Does the project have full planning permission?

The planning application and a detailed Environmental Impact Statement were submitted to An Bord Pleanála and remains available on: <http://eirgridlaoiskilkenny.ie/>. Planning permission was granted in April 2014 following an oral hearing in Portlaoise. There was a High Court judicial review challenging the granting of planning permission in November 2014, which was dismissed in January 2015.

## 3. Is the new substation being constructed to facilitate wind energy projects?

The purpose of the Laois-Kilkenny Reinforcement Project is to address electricity reliability issues across Laois, Carlow, Kildare, Wicklow and Kilkenny. *No wind farms have applied to connect to the station in Coolnaback at this time and the only application to connect is for a solar farm. Any future wind developments or solar projects connecting to the substation would in the first instance have to secure a planning consent through the Local Authority and/or An Bord Pleanála. EirGrid is aware of two proposed windfarm developments in the region which have received planning permission for wind turbines. Currently the majority of wind farm connections to the transmission grid are by underground cable. Further details are available at <http://www.eirgridgroup.com/the-grid/projects/laois-kilkenny/whats-happening-now/>*

## 4. How long will construction take?

The Laois-Kilkenny Project represents an investment of €110 million into the region and construction is expected to take three years to complete.

## 5. What is the risk of this project to local drinking water? What steps are being taken to ensure the project doesn't contaminate the local aquifer?

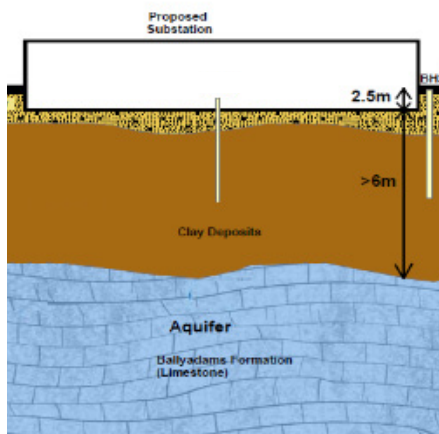
The aquifer is located in deep bedrock at the location of the Coolnaback substation and we are fully aware of its importance. Because of this, a thorough analysis was conducted as part of our planning application documentation, including on site ground investigations to determine underlying conditions. The station compounds, and concrete on which the switchgear will sit, will be

sufficient to hold and trap any spills should they occur. They will also be rigorously tested to ensure they are water tight. This is all part of the overall planning permission for the project. In addition, there is an approximate six-metre-thick layer of stiff clay subsoil above the aquifer at the location of the substation. The presence of this clay subsoil would impede any downward flow of water to the underlying aquifer. This is a further safeguard that prevents any possible contamination of the aquifer.

An Bord Pleanála, the planning authority for the project, comprehensively evaluated the risk to groundwater. It reviewed our planning documentation and the concerns raised by some local residents, prior to granting planning permission for the project.

*Notwithstanding these findings, ESB Networks is committed to engaging an independent hydrogeologist to carry out a thorough investigation of the site to ensure that there is no threat to the water supply of the area before construction commences.*

The hydrogeologist selected will not have worked previously for either ESB Networks, ESB Group subsidiaries or EirGrid and have extensive experience and expertise in undertaking similar aquifer assessments. He/she will also be accredited to the International Association of Hydrogeologists. This report will be published on the ESB Networks website and made available to the local community.



## 6. Are oil filled cables proposed as part of the Laois-Kilkenny Project?

There are no oil filled cables being installed as part of the development of this project.

## 7. What about SF6 gas? Does this pose a risk?

Sulphur Hexafluoride (SF6) is present within switchgear found on electricity networks globally. Manufacturers design switchgear with this gas because of its very high electrical insulating properties allowing the switchgear to work efficiently and safely.

ESB Networks recognises that SF6 gas is a potent greenhouse gas which requires careful management. The supply and maintenance of the equipment will comply with all relevant international standards and best practice. We can assure the local community that the new switchgear at the Laois-Kilkenny Reinforcement Project will be of the highest standards to contain the SF6 in the switchgear.

**8. I'm confused on where responsibility for this project sits? Is it with EirGrid or ESB Networks?**

EirGrid was responsible for obtaining planning permission for the project. In common with all transmission system developments, there was then a handover to ESB Networks post-planning for the detailed design and construction stage. EirGrid carries out the long-term planning of the transmission system and operates the transmission system 24/7, 365 days a year.

ESB funds and builds the infrastructure and maintains it to the specification and standard set out by EirGrid.

**9. What is the EirGrid community fund and when will this be made available?**

EirGrid's community fund recognises the importance of the local communities in the development of the electricity grid. The fund is in proportion to the scale of a project.

The overall fund for the Laois-Kilkenny Reinforcement Project is approximately €500,000. When allocating the fund consideration will be given to the amount of new infrastructure in each county.

*The Irish Rural Link report recommends a voluntary community forum comprising local residents, community activists and political representatives to consider proposals for the community gain funding and to develop local area plans. EirGrid will implement this recommendation.*

**10. How many new lines will be built out of the substation in Laois? What will the visual impact be?**

A key feature of this project is ensuring that any new infrastructure built is kept to a minimum by using existing lines to the greatest extent possible. The Coolnabacky substation is located 1.4km from the intersection of the 400 kV and 110 kV networks in order to minimise the amount of infrastructure.

There is one new 110 kV overhead line and one new double circuit 400 kV line connecting to the station. The existing 110 kV line which crosses the station site will also be diverted into the station. Planning permission for the substation does not permit any other overhead lines out of the substation. Further details and visual representations of the project are available at:

<http://www.eirgridgroup.com/the-grid/projects/laois-kilkenny/whats-happening-now/>

Photomontage of new transmission lines and 400 kV substation from R426 Ratheniska - Timahoe Road, looking east.



**11. Did ESB Networks breach planning conditions for this project?**

In summer 2017, ESB Networks carried out some works at Coolnabacky on a temporary structure without planning permission from Laois County Council. Both ESB Networks and EirGrid regret this occurrence and we apologised to the council and local communities. We met with council officials and reinstated the lands back to their original condition. We also reviewed our respective processes to ensure that this does not occur in the future.

**12. Have ESB Networks and EirGrid been disengaged from the community on this project?**

There has been a protest at the entrance to the site of the Coolnabacky substation causing the development at the Laois end of the project to be delayed. ESB Networks and EirGrid have engaged with all sections of the local community to help alleviate any concerns they may have around the project. This was not successful and thus Irish Rural Link was appointed to assess current community understanding of the project.

*ESB Networks and EirGrid recognises that there are concerns in the Ratheniska area about this project. ESB Networks and EirGrid take on board the Irish Rural Link recommendation that all sides remain open to further dialogue.*

Photomontage of new transmission lines from R427 Stradbally-Ballyroan Road, looking south.



**Contact us:** [lkproject@esbnetworks.ie](mailto:lkproject@esbnetworks.ie) or call 057-8665718  
(lines open Monday to Friday, 9am to 5pm)