An Bord Pleanála

STRATEGIC INFRASTRUCTURE DEVELOPMENT

PLANNING AND DEVELOPMENT ACTS 2000 TO 2013

An Bord Pleanála Reference Number: 11.VA0015

(Planning Authorities: Laois County Council and Kilkenny County Council)

APPLICATION for approval under section 182A(1) of the Planning and Development Act, 2000, as amended, in accordance with plans and particulars lodged with An Bord Pleanála on the 25th day of January, 2013 and on the 16th day of August, 2013, by EirGrid plc of The Oval, 160 Shelbourne Road, Ballsbridge, Dublin.


The proposed Laois-Kilkenny Reinforcement Project, as described in the public notices submitted with the application, consists of eight interrelated elements as follows:
(i) A new 400/110-kilovolt gas insulated switchgear (GIS) substation comprising the construction of a new 400/110-kilovolt GIS substation at Coolnabacky and Esker townlands, north of Timahoe, Co. Laois. This substation, in a site area of approximately 7.6 hectares, will consist of: two GIS substation buildings, one operated at 400 kilovolts (building dimensions 64 metres x 15.5 metres x 13 metres), and the other operated at 110 kilovolts (building dimensions approximately 50 metres x 11.5 metres x 12.5 metres) within a 98-metre x 117-metre compound secured by a 2.6-metre high palisade fence; a 400-kilovolt gantry and associated line equipment required to divert the 400-kilovolt overhead lines into the 400-kilovolt GIS station; two 400/110-kilovolt, 500-megavolt ampere transformers and two shunt reactors which will be positioned in transformer bunds between the two substation buildings; associated development including eight separate sedimentation/attenuation ponds (average area 110 square metres); vehicular access to the substation is via a modification to the existing private road including the existing access point; foul holding tank; and all other ancillary site works;

(ii) A new connection to the proposed Coolnabacky substation from the existing Moneypoint-Dunstown 400-kilovolt line by way of a 400-kilovolt overhead line in two new single circuit spans (approximately 280 metres and 295 metres respectively) connecting to approximately 1.2 kilometres of 400-kilovolt double circuit line which brings the 400-kilovolt circuits to the proposed gantry in Coolnabacky 400/110-kilovolt substation. The proposed development includes: two new 400-kilovolt single circuit angle masts of heights up to approximately 37.3 metres and 32.3 metres; two new 400-kilovolt double circuit angle masts both up to approximately 55.5 metres in height; and three new 400-kilovolt intermediate masts all up to approximately 57.8 metres in height. An existing 400-kilovolt intermediate mast on the existing 400-kilovolt line and approximately 150 metres of existing 400-kilovolt overhead line between the two connection points to the Moneypoint-Dunstown 400-kilovolt line will be removed;

(iii) A new connection to the proposed Coolnabacky substation from the existing Athy-Portlaoise 110-kilovolt line by replacing two existing intermediate polesets with two lattice steel line/cable interface masts both approximately 21 metres in height (both these structures are contained within the proposed Coolnabacky substation site adjacent to the proposed site compound). Short lengths of underground cable (approximately 100 metres and 190 metres in length) will connect the new line/cable interface masts into the 110-kilovolt building within the proposed Coolnabacky compound. Approximately 150 metres of existing overhead line will be removed between the two line/cable interface masts;
(iv) A new 110-kilovolt/38-kilovolt/medium voltage substation in Moatpark, Ballyragget, Co. Kilkenny in a site area of approximately 1.5 hectares, constructed adjacent to the existing 38-kilovolt/medium voltage Ballyragget substation. The proposed 110-kilovolt GIS substation (approximate dimensions 50 metres x 11.5 metres by 12 metres high) will be in a compound of 61 metres x 70 metres plan area secured by a 2.6-metre high palisade fence. The compound will also include: a 38-kilovolt/medium voltage GIS substation building (approximate dimensions 24.5 metres x 8 metres by 7 metres high); one 31.5-megavolt ampere 110/38-kilovolt transformer and one 5-megavolt ampere 38/20-kilovolt transformer positioned in transformer bunds between the substation buildings; a new access road (60 metres long) from an existing entrance to the substation; two lightning masts each approximately 14 metres in height; associated development of a septic tank and percolation area, soakaway pits and all other ancillary site works;

(v) A new 110-kilovolt overhead line between the proposed Ballyragget substation and the proposed Coolnabacky substation consisting of approximately 26 kilometres of overhead line and two short lengths of cable at the approach to the proposed Ballyragget and Coolnabacky substations. The overhead line will consist of 143 double wood polesets up to a maximum height of approximately 22 metres and 17 lattice steel angle masts up to a maximum height of approximately 25 metres supporting three electrical conductors and two earth wires. Approximately 160 metres of underground cable connects the proposed Ballyragget 110-kilovolt building to a proposed line/cable interface mast within the Ballyragget substation site and approximately 190 metres of underground cable connects the proposed Coolnabacky 110-kilovolt building to the line/cable interface mast adjacent to the proposed Coolnabacky substation;

(vi) An uprate to the existing Ballyragget-Kilkenny 110-kilovolt overhead line consisting of the replacement of all the structures along the existing line with similar structures along the same alignment except for the first 670 metres out of Ballyragget substation and the first 275 metres out of Kilkenny substation which are required to be realigned as well as uprated. The development comprises approximately 21.9 kilometres of overhead line and two short lengths of cable at Ballyragget and Kilkenny substations. The overhead line will consist of 90 double wood polesets up to a maximum height of approximately 22 metres and 14 lattice steel angle masts up to a maximum height of approximately 25 metres supporting three electrical conductors. Approximately 215 metres of underground cable connects the proposed Ballyragget 110-kilovolt building to a proposed line/cable interface mast and approximately 50 metres of underground cable connects the line/cable interface mast to the electrical equipment in Kilkenny substation;
(vii) A new bay in the existing Kilkenny 110-kilovolt substation of dimensions measuring approximately 20 metres x 6 metres x 5 metres high consisting of the installation of outdoor air insulated equipment including circuit breaker, disconnects and instrument transformers mounted on concrete plinths; the removal of the existing end mast; and all other ancillary site works;

(viii) Modifications to existing Athy-Portlaoise 110-kilovolt line comprising the replacement of existing structures along a portion of the existing Athy-Portlaoise 110-kilovolt line from the proposed Coolnabacky substation south-eastwards towards Athy for approximately 2.3 kilometres and from the proposed Coolnabacky substation north-westwards towards Portlaoise for approximately 1.3 kilometres. The replacement structures, which will be of a generally similar form and character to those existing, will be fitted with earth wire. One existing poleset structure will be replaced with a lattice steel angle mast. The proposed replacement overhead line will thereby consist of 17 double wood polesets up to a maximum height of approximately 22 metres and two lattice steel angle masts up to a maximum height of approximately 25 metres.

The application for approval includes all associated and ancillary site works.

Significant further information, in the form of an environmental impact statement, was submitted to the Board on the 16th day of August, 2013. Copies of the public notices to this effect were received by the Board on the 13th day of September, 2013.

DECISION

APPROVE the proposed development under section 182B of the Planning and Development Act, 2000, as amended, in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

DETERMINE under section 182B, as amended, the sum to be paid by the undertaker in respect of costs associated with the application as set out in the Schedule of Costs below.
MATTERS CONSIDERED

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included the submissions and observations received by it in accordance with statutory provisions.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

(a) the provisions of the National Spatial Strategy for Ireland 2002-2020, which seek to strengthen energy networks in the regions,


(c) the provisions of the ‘Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure’ issued by the Department of Communications, Energy and Natural Resources (2012),

(d) the provisions of GRID25, EirGrid's transmission network development strategy,

(e) the provisions of the Regional Planning Guidelines 2010-2022 for the Midland Region, and of the provisions of the Regional Planning Guidelines for the South-East Region 2010-2022,

(f) the provisions of the Laois County Development Plan 2011-2017 and of the provisions of the Kilkenny County Development Plan 2008-2014,

(g) European Union and national guidance on electro-magnetic field strength,

(h) the regional importance of and demonstrated need for the proposed development in strengthening the electricity network in the region, including that of Counties Laois, Kildare and, in particular, Kilkenny, and which would provide enhanced security of electricity supply, would avoid a prospective deficit in the quality and capacity of electricity supply in the region, and would support future economic growth,

(i) the design of the proposed development, which would provide access to bulk electricity supply from the 400-kilovolt network and would maximise the additional supply to the region, and which would optimise the use of existing assets and reduce the length of the new overhead line required,
(j) the planning history and pattern of development in the area, including the existing Ballyragget to Kilkenny electricity line, permitted under planning register reference number P702/88,

(k) the documentation submitted with the application, as amended by the significant further information submitted on 16th day of August 2013 in response to a request by An Bord Pleanála, including the environmental impact statement, appropriate assessment screening statement and the Natura impact statement, as further amended by the documentation submitted at the oral hearing,

(l) the range of mitigation measures set out in the documentation, and

(m) the submissions on file, and the report of the Inspector who held the oral hearing.

The Board is satisfied that the information available on file is adequate to allow an environmental impact assessment and appropriate assessment to be completed.

Having regard to the nature, scale and location of the proposed development, the appropriate assessment screening statement and associated documentation, the submissions on file, including those from relevant prescribed bodies, and the Inspector’s assessment, which is noted, the Board completed a screening exercise for appropriate assessment of the impacts of the proposed development on the River Nore Special Protection Area (site code 004233), Lisbigney Bog candidate Special Area of Conservation (site code 000869) and Ballyprior Grassland candidate Special Area of Conservation (site code 002256). The Board concluded that the proposed development, in itself or in combination with other plans or projects, would not be likely to have a significant effect on these European sites.

Having regard to the nature, scale and location of the proposed development, the Natura impact statement and associated documentation, the submissions on file, including those from relevant prescribed bodies, and the Inspector’s assessment, which is noted, the Board completed an appropriate assessment of the potential impacts of the proposed development on the River Barrow and River Nore Special Area of Conservation (Site Code 002162). The Board concluded that, subject to the implementation of the identified mitigation measures, the proposed development, in itself or in combination with other plans or projects, would not adversely affect the integrity of the River Barrow and River Nore Special Area of Conservation, in view of the conservation objectives for this site.
Having regard to the nature, scale and location of the proposed development, the environmental impact statement and supporting documentation submitted by the applicant, the submissions and documents on file generally, the public consultation undertaken, the alternatives proposed, the characteristics of the potential impacts arising, including the potential for cumulative impact, the detailed mitigation measures proposed, and the Inspector’s assessment of environmental impacts, the Board completed an environmental impact assessment. The Board noted and generally adopted the Inspector’s assessment of environmental impacts, with the exception of his assessment in relation to the potential for impact on public health, and concluded that the proposed development would not be likely to have significant adverse effects on the environment.

Taking all of the above into account, and having regard to the nature, scale and location of the proposed development, and to the demonstrated need for the proposed development, it is considered that, subject to compliance with the conditions set out below, the proposed development:

• would be in accordance with national policies and guidance, and with regional and local development policies,

• would represent a benefit for this region by virtue of the enhancement of electricity supply,

• would not seriously injure the amenities of the area or of property in the vicinity,

• would not seriously injure the visual or recreational amenities of the area,

• would not seriously injure the ecology of the area, including bird life, protected species and habitats, and areas designated for environmental protection,

• would not give rise to water pollution, and would not affect drinking water supplies,

• would not adversely affect the hydrology or hydrogeology of the area,

• would not give rise to risk of or exacerbation of flooding,

• would not be prejudicial to public health,

• would not detract from the character or setting of features of architectural or archaeological heritage, and would not seriously detract from the cultural heritage of the area,

• would be acceptable in terms of traffic safety and convenience, and

• would, therefore, be in accordance with the proper planning and sustainable development of the area.
In deciding not to accept the Inspector’s recommendation to seek further information from the applicant in relation to the electricity line between Ballyragget and Kilkenny, the Board examined the planning history of the existing electricity line, which was permitted as a 110-kilovolt line and constructed accordingly. Although in operation at 38 kilovolts, the Board considered that the proposal to uprate this line in accordance with its permitted voltage was reasonable.

In this regard, the Board also noted the Inspector’s specific concerns in relation to the magnetic field arising from the proposed development; however, the Board had regard to the exposure guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and which, in 1998, identified a magnetic field reference level for the general public of 100 $\mu$T (microtesla). This reference level applies to all exposure situations, including long-term exposure. It is noted that the ICNIRP carried out a review of these guidelines in 2010, and increased the reference level for the general public to 200 $\mu$T.

The Board is satisfied that the predicted magnetic fields arising from the proposed development at certain houses would be significantly lower, by orders of magnitude, than established ICNIRP reference levels, which are considered to provide an acceptable level of protection for the general public. In forming this view, the Board also had regard to the following publically available documents:

(i) the Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF) approved in 2013 by the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR),

(ii) the European Council Recommendation on the Limitation of Exposure of the General Public to Electromagnetic Fields (1999/519/EC), which generally adopted the 1998 ICNIRP Guideline levels for magnetic fields,

(iii) the “Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure” issued by the Department of Communications, Energy and Natural Resources (2012), which requires compliance with EMF exposure limits set in ICNIRP Guidelines and associated EU Recommendations,

(iv) the conclusions of the Report of the Expert Group on the Health Effects of Electromagnetic Fields, issued by the Department of Communications, Marine and Natural Resources (2007), and

(v) the report of the Office of the Chief Scientific Adviser, “Review of Recent Investigations into the Possible Health Effects of Exposure to Electromagnetic Fields (EMF) from Power Lines”, prepared in 2010 by the Dublin Institute for Advanced Studies.
Therefore, and notwithstanding the proposed increase in voltage of this line, the Board is satisfied that the resulting magnetic field exposure at houses would be far below that of established guidelines, and did not accept the Inspector’s recommendation in relation to public health.

Taking all of the above into account, including the planning history of the existing line and the ICNIRP guidance in particular, the Board did not consider that any re-alignment of the existing power line would be necessary or appropriate.

Finally, the Board noted the Inspector’s second concern in relation to the accuracy of the description of the proposed “uprate to the existing Ballyragget–Kilkenny 110 kV overhead line”. The Board considered that the description as set out in the public notices is satisfactory. The Board noted that this section of existing line is already permitted at 110 kilovolts and was constructed accordingly, and notwithstanding the current operational voltage, the Board is satisfied that the public would not have been misinformed in any material way as to the principal nature and extent of the proposed development, and that the rights of the public to participate in the planning, environmental impact assessment and appropriate assessment processes have not been infringed.

CONDITIONS

1. (a) The development shall be carried out and completed in accordance with the plans and particulars lodged with the application and submitted on the 16th day of August 2013, and by the documentation submitted at the oral hearing except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the undertaker shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars

(b) The proposed Ballyragget to Coolnabacky 110-kilovolt overhead line is to be supported by 133 double wood polesets.

Reason: In the interest of clarity.
2. (a) The mitigation measures identified in the environmental impact statement, Natura impact statement, and associated documentation on file, shall be implemented in full, except as may be required to comply with the following conditions.

(b) The construction of the proposed development shall be supervised by suitably qualified and experienced environmental personnel, to ensure that all environmental mitigation and monitoring measures are implemented in full.

Reason: In the interests of clarity and of environmental protection.

3. Prior to commencement of development, and following consultation with the National Parks and Wildlife Service, the following shall be submitted to and agreed in writing with the relevant planning authority:

(i) installation details for bird flight diverters,

(ii) details of pre-construction surveys for badgers, otters and bats,

(iii) in the event of these surveys identifying these species, measures for their protection shall be identified and incorporated into the construction management plan, and

(iv) reporting procedures for the above.

Reason: In the interest of safeguarding protected species and bird life.

4. Works in the vicinity of rivers and streams shall comply with the “Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites” issued by the Eastern Regional Fisheries Board.

Reason: In the interest of protecting aquatic ecology.

5. Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works.

Reason: To ensure adequate servicing of the development, and to prevent pollution.
6. The proposed waste water treatment and disposal systems to serve the two substations shall be designed, constructed and maintained in accordance with the requirements of the ‘Code of Practice - Wastewater Treatment and Disposal Systems Serving Single Houses’, issued by the Environmental Protection Agency (2010), and in accordance with the details set out in the documentation submitted by the undertaker on file and at the oral hearing. Construction stage details of the measures for the collection and final disposal of waste water shall be submitted to and agreed in writing with the relevant planning authority, prior to the commencement of development at each substation site.

**Reason:** In the interests of public health and the prevention of pollution.

7. The two substation sites shall be landscaped using only indigenous deciduous tree and hedging species. The proposed landscaping at the Ballyragget substation shall be supplemented by the dense planting of indigenous tree and hedging species along the entire northern boundary of the site.

**Reason:** In order to screen the development and assimilate it into the surrounding rural landscape and in the interest of the visual amenity of the neighbouring cemetery.

8. All road surfaces, culverts, watercourses, verges and public lands shall be protected during construction, and in the event of any damage occurring, shall be reinstated to the satisfaction of the relevant planning authority.

**Reason:** To ensure a satisfactory standard of development.

9. Prior to commencement of development, and following consultation with the Department of Arts, Heritage and the Gaeltacht, a methodology shall be submitted to and agreed in writing with the relevant planning authority for the replacement of existing polesets that are situated in close proximity to existing archaeological features.

**Reason:** In the interest of the protection of archaeological features.
10. The undertaker shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the undertaker shall:-

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

(b) employ a suitably-qualified archaeologist prior to commencement of development. The archaeologist shall assess the site and monitor all site development works. The assessment shall address the following issues:-

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material, and

(c) particular care shall be taken in replacing polesets close to archaeological features.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the undertaking shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

**Reason:** In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

11. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:

(a) location of any site and materials compound(s) including area(s) identified for the storage of construction refuse;

(b) location of areas for any construction site offices and staff facilities;

(c) details of site security fencing and hoardings;
(d) details of on-site car parking facilities for site workers during the course of construction;

(e) details of the timing and routing of construction traffic and any required directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;

(f) measures to obviate queuing of construction traffic on the adjoining road network;

(g) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;

(h) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during the course of site development works;

(i) provision of parking for existing properties during the construction period;

(j) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;

(k) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater;

(l) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;

(m) means to ensure that surface water run-off is controlled such that no silt or other pollutants enter watercourses;

(n) hours of site development and construction; and

(o) provision for the prevention of the invasive spread of plant species.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of amenities, public health and safety.
SCHEDULE OF COSTS

In accordance with section 182B of the Planning and Development Act 2000, as amended, the Board requires the following costs to be paid by the applicant:

To Laois County Council, being reasonable costs incurred in consideration of the application €3,255

To Kilkenny County Council, being reasonable costs incurred in consideration of the application €821

To:
- David Malone of Environmental Action Alliance Ireland
- James Deegan MCC, and
- Ratheniska, Timahoe & Spink Substation Action Group,
as a contribution towards reasonable costs incurred in consideration of the application Nil

In accordance with the provisions of section 182B of the Planning and Development Act 2000, as amended, the reimbursement of fees by An Bord Pleanála to the undertaker amounts to €9,602.

Note: An explanation of the above is set out in the attached Appendix 1.

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day of 2014.