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The Draft Kildare County Development Plan, C/O The Administrative Officer, Forward Planning, Áras Chill Dara, Devoy Park, Naas, Co. Kildare.

23rd May 2022

Re: Submission to the Draft Kildare County Development Plan 2023-2029

Dear Sir/Madam,

EirGrid Group welcomes the opportunity to make a submission to the Draft *County Development Plan* and requests that this submission is taken into consideration in the finalisation of the plan.

EirGrid is a prescribed authority for the purposes of Section 11 (2) of the Planning and Development Act 2000, as amended and has been involved in the making of Project Ireland 2040 (National Planning Framework) and the Eastern and Midlands Regional Spatial and Economic Strategy in which the strategic issue of the future development of Ireland's electricity transmission grid was highlighted and extensively addressed. EirGrid also made a submission to the Issues Paper for the Kildare County Development Plan.

EirGrid's Function

EirGrid is responsible for the safe, secure and reliable transmission of electricity – now and in the future. EirGrid develops, manages and operates the electricity transmission grid. This brings power from where it is generated to where it is needed throughout Ireland. The grid also supplies power to industry and businesses that use large amounts of electricity and powers the distribution network. The distribution network in turn supplies electricity to homes, businesses, schools, hospitals, and farms.

EirGrid's function as the national electricity Transmission System Operator (TSO) is set out in the European Communities (Internal Market in Energy) Regulations, 2000 – SI 445/2000. Article 8(1) (a) gives EirGrid as TSO, the exclusive statutory function:

"To operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical, and efficient electricity transmission system, and to explore and develop opportunities for interconnection of its system with other systems, in all cases

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with a view to ensuring that all reasonable demands for electricity are met having due regard for the environment."

The transmission system on the island of Ireland refers to the higher capacity electricity network and primarily comprises substations and circuits at 400 kV (i.e. 400,000 Volts), 220 kV, and 110 kV (in Northern Ireland, transmission infrastructure also occurs at 275 kV).

Our transmission system investment programme to 2030 will connect renewable energy projects, ensure security of supply and support economic growth. This will ensure that we have a robust network that can facilitate the increased level of renewables without the need to constrain them down at peak periods of generation and demand. The investment plan provides for over several hundred projects which connect solar, onshore and offshore wind in addition to system reinforcement projects required to strengthen the electricity system in Ireland.

The investment also supports regional and local development and the connection of large demand customers which supports economic growth by facilitating the connections to IDA & Enterprise Ireland supported companies. It is also central to delivering on the commitments in the Programme for Government, delivering a secure transition to our 2030 targets, preparing for net zero emissions in 2050 and making Ireland a leader in responding to climate change. The decarbonising of the energy network in the context of a transition to a climate-neutral and climate-resilient society is a strategic investment priority in the recently published National Development Plan 2021-2030.

Since the Issues Papers for this plan were consulted on, EirGrid has published 'Shaping our Electricity Future - A Roadmap to achieve our Renewable Ambition'.¹ The Roadmap provides an outline of the key developments from a networks, engagement, operations and market perspective needed to support a secure transition to at least 70% renewables on the electricity grid by 2030 – an important step on the journey to 80% and to net zero by 2050.

The roadmap has identified significant additional capacity needs in the Kildare region to accommodate forecasted growth of electricity demand and generation. This projected demand growth is driven by a number of factors including large energy users, electrification of heat and transport and growth in commercial connections and connection of a significant amount of new renewable generation.

This results in a requirement for significant expansion, reinforcement and upgrading of the existing electricity transmission network both in, and in proximity to, County Kildare over the lifetime of the forthcoming development plan; this will include both electricity substations and connecting cable circuits. In particular, this essential grid development will concern the existing bulk supply point substations at Dunstown (near Two Mile House) and Maynooth Station as well as other key stations in neighbouring counties such as Woodland (near Batterstown, Co. Meath) and the cable connections between them.

EirGrid has identified major strategic infrastructure grid projects that will require to be undertaken in the County Kildare area over the lifetime of the forthcoming Plan, and which are currently at different stages of project development these include the CP0966 Kildare-Meath Grid Upgrade and the Maynooth 220 kV Station Upgrade.

¹ https://www.eirgridgroup.com/site-files/library/EirGrid/Shaping_Our_Electricity_Future_Roadmap.pdf



The council may consider it of benefit for the various specific projects to be identified in the forthcoming Development Plan, and if it so wishes, this can easily be provided by EirGrid, both in list form and in GIS mapping.

Upgrading the existing electricity transmission system in Kildare is an integral requirement of delivering a secure and sustainable transition to a low carbon electricity system. It is EirGrid's submission that the draft Development Plan should emphasise the requirement to be open, flexible and supportive of strategic grid infrastructure development to ensure Ireland can tackle the cause and adapt to the effects of climate change in a sustainable and programmatic way.

The planning authority, its executive and elected members, are critical gate keepers in realising emerging energy scenarios through decisions made in the development plan. The development plan should consider climate action as an opportunity and realise the role spatial planning can play in delivering and unlocking climate innovations in a practical sense, and in particular the proper planning and sustainable development of enhanced electricity transmission infrastructure.

General Comments on the Draft Development Plan

EirGrid is a prescribed authority for the purposes of Section 11 (2) of the *Planning and Development Act* 2000, as amended and has been involved in the making of several development plans in Ireland as well as *Project Ireland 2040 (National Planning Framework)* and the *Regional Spatial and Economic Strategies (RSES)* in which the strategic issue of the future development of Ireland's electricity transmission grid is being highlighted and addressed – most notably Section 10.3 of the RSES It is requested the future development plan is in consistent with such national plans, policies or strategies as the Minister determines relate to proper planning and sustainable development. It is critical that the final plan re-emphasises this issue also.

In this context, the key objective of the RSES (Section 10.3, pg. 225) in the context of electricity transmission states:

"Support for the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid's (2017) Grid Development Strategy will serve the existing and future needs of the Region and strengthen all island energy infrastructure and interconnection capacity."

In particular EirGrid generally welcomes Section 7.14 of the draft plan in relation to *Energy Supply and Infrastructure*, and provisions to support key infrastructure providers, such as EirGrid and the Electricity Supply Board (ESB), in efforts to reinforce and strengthen existing utility infrastructure and transmission networks. The reinforcement of this infrastructure is critical to meeting climate change targets.

It is EirGrid's view that the importance of the electricity transmission grid in supporting our environment, society and economy should be explicitly and unambiguously stated in the *plan*. EirGrid is therefore advocating for greater reference and focus placed on the role of electricity transmission grid infrastructure in meeting the challenges of climate change and energy.

EirGrid considers that the *plan* needs to support a safe, secure and reliable supply of electricity, and this needs to be explicit in subsequent iterations of the development plan; by so doing, this will assist EirGrid



in the successfully implementation of its *Grid Development Strategy* - Your *Grid, Your Tomorrow (2017), Shaping our Electricity Future* - *A Roadmap to achieve our Renewable Ambition* (2021) and future grid development plans. This is imperative to meeting national targets for electricity generation, climate change targets, and security of energy supplies.

Addition text, policy support and specific reference to the execution of *Shaping our Electricity Future* - *A Roadmap to achieve our Renewable Ambition (2021)* and the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks, would be welcomed in the plan.

Several recommendations are made in this regard below.

Comments and Recommendations on Relevant Policies and Objectives

Section 7.14 Energy Supply and Infrastructure Preamble

EirGrid welcomes this which will support EirGrid in executing our Grid Development Strategy -Your Grid, Your Tomorrow (2017), Shaping our Electricity Future - A Roadmap to achieve our Renewable Ambition (2021), Implementation Plan 2017 – 2022 and Transmission Development Plan (TDP) (2021) and any subsequent plans prepared during the lifetime of this Plan, in order to provide for the safe, secure and reliable supply of electricity.

EirGrid recommends updating the following (red) reference documents to more recent publications (green) which have been prepared over the past year and are the culmination of the Tomorrow's Energy Scenarios project.

EirGrid's Tomorrow's Energy Scenarios 2017 - Planning our Energy Future EirGrid's Tomorrow's Energy Scenarios 2019 System Needs Assessment

Shaping our Electricity Future - A Roadmap to achieve our Renewable Ambition (2021)

In the last paragraph of the preamble, several stations are noted as being of regional significance. EirGrid would also suggest that Maynooth 220 kV Station be added to this list given its role a major node on the network for the wider region.

Policy ECP19

EirGrid welcomes Policy *ECP19* and looks forward to working in partnership with Kildare County Council and other infrastructure providers to enhance the transmission network in order to provide for the safe, secure and reliable supply of electricity

Objective EC 069

Objective EC 072

EirGrid understands the principle underlying Objective EC O69 and EC O72 and will always examine the feasibility for undergrounding in collaboration with State authorities and other interested parties. However, it is not always possible for high voltage transmission infrastructure



to be located underground, nor relocated, even in urban areas, for a variety of reasons including the safety security and reliability of supply and space constraints with other utilities.

A flexible approach in developing the transmission network, in line with EirGrid's Six Step Framework for Grid Development and approach to consultation and engagement, with the provision and/or retention of essential transmission grid infrastructure is required to support wider environmental, social and economic development of Kildare and the Eastern and Midland Region.

In particular, the strategic development and regeneration of certain areas should not presume that transmission assets could be undergrounded within the lifetime of this plan.

EirGrid carefully plans for the operation and development of for new transmission grid infrastructure and decisions in relation to it are a carefully considered balance of technical, economic, planning, environmental considerations with extensive consultation and engagement carried out with residents, communities and stakeholders such as the local authority. Where it is not possible to use underground technology, EirGrid will always explain and qualify reasons for this.

Policy EC P2 (Renewable Energy)

EirGrid welcomes these policies y, however it is respectfully recommended that it make explicit reference to the provision for associated electricity transmission and distribution grid infrastructure. In this regard. EirGrid seeks additional text in the policy (identified in green) as follows:

Promote renewable energy use, and generation and associated electricity grid infrastructure at appropriate locations within the built environment and open countryside to meet national objectives towards achieving a net zero carbon economy by 2050.

Policy EC P9 (Strategic Energy Zones (SEZs))

EirGrid welcomes Policy *EC P9* and looks forward to working in with the Eastern and Midland Regional Assembly, Kildare County Council and other infrastructure providers to facilitate SEZs and enhance the transmission network in order to provide for the safe, secure and reliable supply of electricity

Kildare-Meath Grid Upgrade

The Kildare-Meath Grid Upgrade (also known as Capital Project 966) will add or upgrade a high-capacity electricity connection between Dunstown substation in Kildare and Woodland substation in Meath. The upgrade will help to more effectively transfer power to the east of the country and distribute it within the electricity network in Meath, Kildare and surrounding counties.

The project is essential to meet the Government of Ireland's Climate Action Plan target of 70% renewable energy generation by 2030, this includes transporting electricity from offshore renewable



sources. It will also help meet the growing demand for electricity in the East. This growth is due to increased economic activity and the planned connection of new large-scale IT industry infrastructure in the region.

As part of ongoing public engagement, EirGrid has identified the emerging best performing route option for Kildare-Meath Grid Upgrade. Following feedback gathered during an extensive public consultation process and a range of assessments evaluating the four possible route options for the Kildare-Meath Grid Upgrade, Option A (the Red Option) has been identified as the emerging best performing route option. Aa full evaluation report on this outcome has been published.

The route, which is the most westerly of the four options, is approximately 51km in length, with an estimated off-road section of six kilometres. It travels south from Woodland substation, near Batterstown in Meath to Dunstown substation near Two Mile House in Kildare. Over the coming months the project team will carry out further technical and environmental evaluations while continuing to meet and engage with landowners, community, business and statutory stakeholders. This will inform the final route which we anticipate announcing in June, 2022.

Full detail of the best performing route option available here:



https://www.eirgridgroup.com/the-grid/projects/capital-project-966/the-project/

Figure 1: Emerging Best Performing Route Option for the Kildare-Meath Grid Upgrade

EirGrid would welcome specific and explicit policy support for this project in the development plan.



Conclusion

The development of the electricity transmission grid is of critical importance to support the environment, economy and society, as well as to realise the transformation of Ireland's energy system, while delivering the Commitments in the Programme for Government, achieving a secure transition to our 2030 targets, preparing for net zero emissions in 2050 and making Ireland a leader in responding to Climate Change.. Electricity infrastructure is critical for regional and local economic and spatial development.

To ensure Ireland's sustainable development and growth, the draft plan should ensure additional Emphasis on the Transmission, Renewable and Low Carbon Infrastructure;

The matter of the required significant expansion of the existing electricity transmission grid, while continuing to ensure a secure and reliable electricity supply to Kildare is both of profound importance and very significant complexity. It is highly challenging to convey this in this written submission to the Draft Development Plan. EirGrid is available and willing to collaborate with the planning authority in providing expert and focused input into the finalisation of the development plan, particularly from a strategic energy policy perspective.

In addition, as noted above EirGrid would welcome further engagement on 'Shaping our Electricity Future Roadmap' – to provide clarification on the drivers for change, as well as the nature and extent of the planned development projects in the Kildare area. EirGrid submits that such engagement will be of critical importance to the making of the development plan and ensuring the planning authority sets clear objectives for climate adaption and mitigation.

Should you have any comments in regard of this submission please contact the undersigned. EirGrid once more welcomes the opportunity to participate in the making of the *draft plan* and looks forward to further engagement and collaboration on the delivery of an enhanced secure and reliable electricity supply in the Kildare area.

Yours sincerely,

Tomás Bradley, Senior Lead Planner tomas.bradley@eirgrid.com