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NPF Submissions,

Forward Planning Section,

Department of Housing, Planning, Community and Local Government,

Custom House,

Dublin 1, D01 W6X0)

npf@housing.gov.ie

31st March 2017

Re: National Planning Framework – Strategic Issues Submission

Dear Sir/Madam,

EirGrid is grateful for the opportunity to make a submission in respect of the National Planning Framework (NPF).

As noted from the NPF website, *"The National Planning Framework (NPF) is a national plan to guide and shape the spatial development of Ireland. It seeks to do this by providing a spatial expression of Government Policy and providing a decision-making framework from which other plans will follow – such as Regional Plans and City and County Development Plans…"*.

Essentially, therefore, the NPF will provide the context for future development and investment in Ireland. It will provide a long-term and place-based aspect to public policy and investment, and will aim to integrate sectoral areas such as housing, jobs, transport, education, health, environment, energy and communications.

The NPF is identified as *"the successor"* to the National Spatial Strategy 2002 (NSS). However, it does have an expanded focus as a framework to channel and to integrate multi-sectoral Government policy into a clear vision for strategic future development, including national development and investment priorities.

Moreover, and crucially, it is founded on the bedrock of a legislative context which places it at the top of a planning policy hierarchy, as per the pyramid below, from the NPF website. It is of critical importance, that the policy context, and indeed specific policies, set out in the NPF are clearly translated into the "lower-order" regional and local policy context.

It is in this context that EirGrid wishes to highlight strategic issues that are relevant to the future sustainable development of Ireland's national Transmission Grid for consideration in the upcoming National Planning Framework.

EirGrid's Role and Functions

EirGrid plc (EirGrid) is the national electricity Transmission System Operator (TSO). The European Communities (Internal Market in Energy) Regulations, 2000 - SI 445/2000 sets out the role and responsibilities of the TSO; in particular, 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 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 as shown in Figure 1 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).

In summary, EirGrid is responsible for a safe, secure and reliable supply of electricity – now and in the future. EirGrid develops, manages and operates the electricity transmission grid – bringing power from where it is generated to where it is needed throughout Ireland (Figure 2). The grid is used to supply power directly to industry and businesses which use large amounts of electricity. It also powers the lower-voltage electricity distribution network, which supplies the electricity used in homes, businesses, schools, hospitals, farms, etc.

Figure 1: Transmission System Map

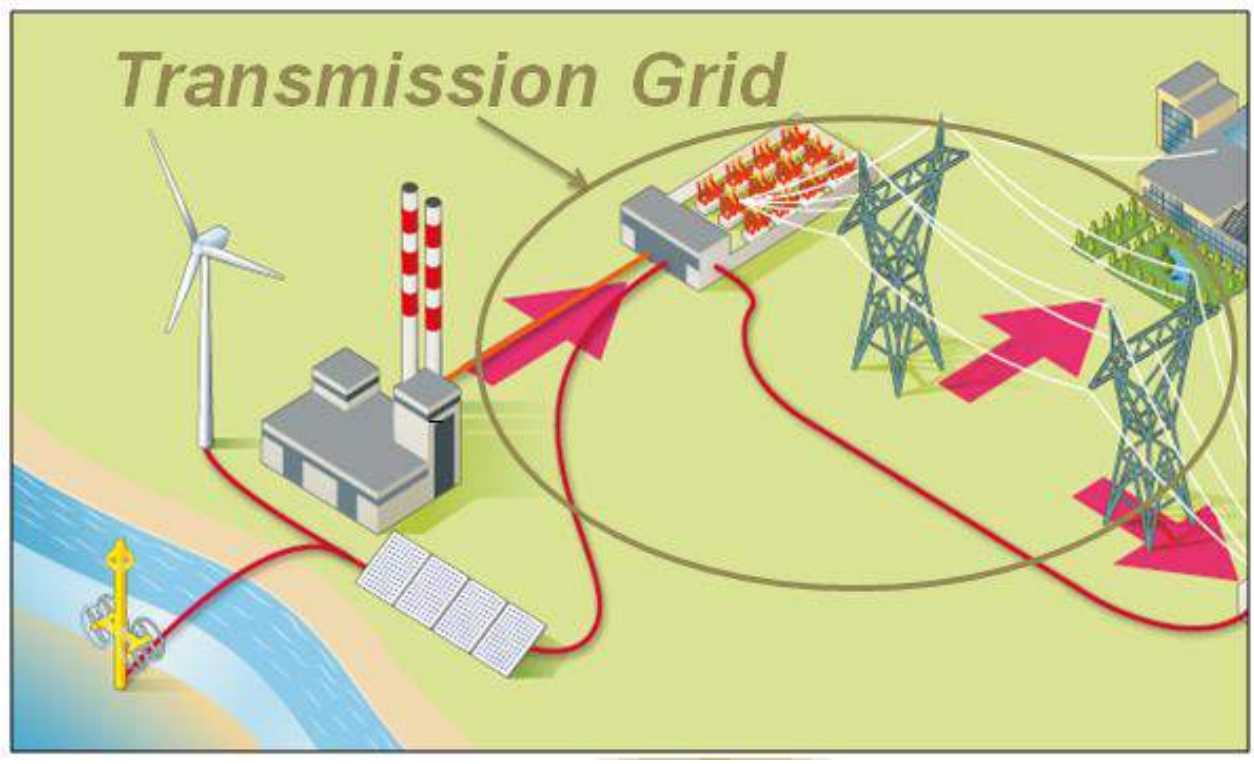


Figure 2: A Graphic of the Transmission Grid

Strategic Policy and Planning Context

We again note the intent that the NPF will provide *"a spatial expression of Government Policy"*. In this regard, the Government Energy White Paper reaffirms the Government's existing approach to change to a low-carbon energy future while supporting the core policy goals of sustainability, security of supply and competitiveness. It restates Ireland's commitment to established 2020 targets and outlines a vision and framework to guide Irish energy policy up to 2030 and sets goals of low and zero carbon energy systems by 2050 and 2100 respectively.

The White Paper acknowledges that developing, maintaining, and upgrading the grid is essential to meeting its short, medium and longer-term objectives. It also has considerable regard to wider emerging EU policies which promote smart low-carbon economies centred on energy efficiency. These policies in turn acknowledge the role of sustainable development of individual country's transmission grids to assist in their delivery.

The White Paper is a key context for EirGrid's recently published **Grid Development Strategy** 2017 – available at www.eirgridgroup.com. The Strategy is also set into the context of other Government policy, in particular including the Action Plan for Jobs and the IDA's 2015-2019 regional strategy.

The new Strategy is an informed view of our needs for electricity in the coming years. It notes that "*A strong electricity transmission infrastructure has two long-term benefits for the overall economy:*

- *It provides power capacity to support new investment and jobs; and*
- *It ensures competitiveness by having cost-effective power capacity.*

Our revised strategy provides enough capacity to meet demand forecasts in all regions" (p.6).

The Grid Development Strategy, and its accompanying **Technical Report** – also available at www.eirgridgroup.com, set out the anticipated regional distribution of planned capital investment in grid infrastructure. This is summarised in Figure 3 below (the planning regions referred to in Figure 3 are identified at Appendix A of this submission).

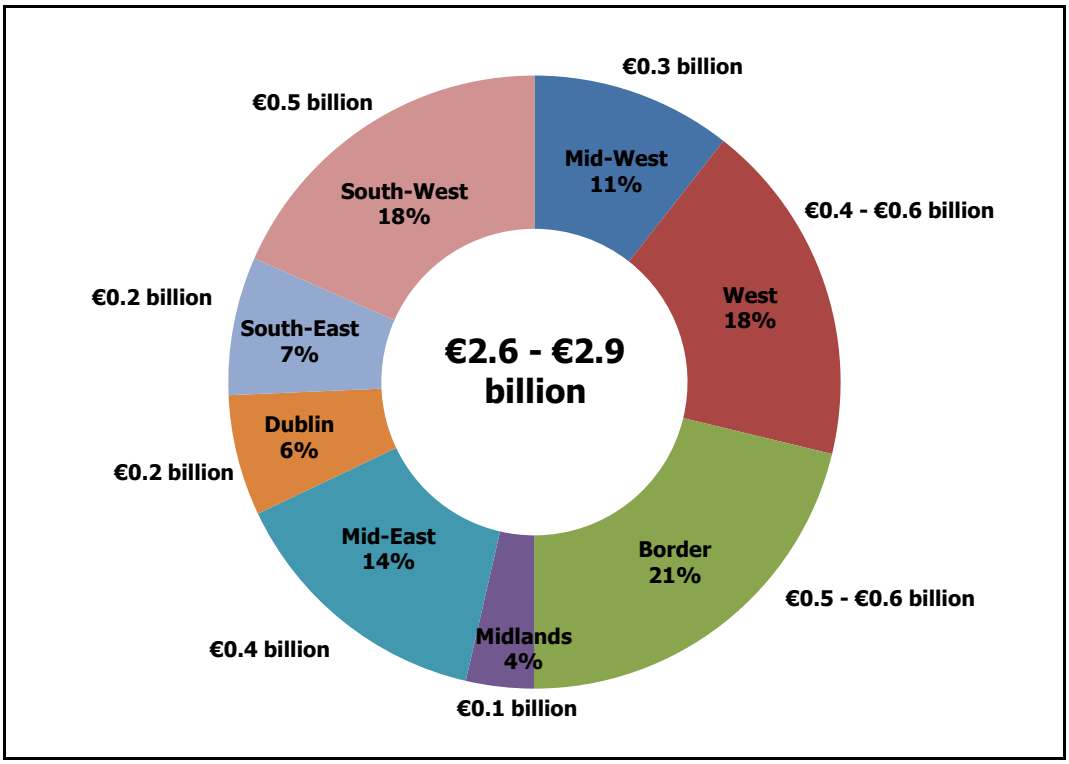


Figure 3: Regional Breakdown of Planned investment in Grid Infrastructure

Chapter 4 of the Strategy is entitled *Planning for the Future*, and addresses new and emerging technologies for grid development. It notes that technology and innovation are at the core of the Strategy, and that EirGrid continually reviews technological developments to assess their potential. The Strategy identifies the key advantages of new transmission technologies, but notes that such potential advantages must always be balanced against the need to ensure a reliable and secure electricity supply.

The Strategy discusses three categories of new technologies:-

- Technologies at the Research and Development stage;
- Those at trial use stage; and
- Those that are ready to use now.

These are all summarised in Chapter 4 of the Strategy, and addressed in greater detail in the Technical Appendix of the Strategy.

The Strategy also discusses EirGrid's approach to ***Tomorrow's Energy Scenarios*** (p.20) – the analysis to assist understanding of what the long-term future usage of the grid might look like. Understanding and/or thinking about changes in the way people and businesses will use electricity in the future is essential, as it is not certain or predictable. The Strategy states in this regard that:-

> *"To cater for this, we are changing how we plan the grid. Our new approach involves developing a range of energy scenarios (possible situations or events that impact on energy). We will test whether the grid of today can support these scenarios or if further development of the grid is required….We will use these scenarios throughout our planning analysis to assess the future needs of the electricity system. We will also use them to test the practicality and merits of network reinforcement options, and propose solutions for any problems we uncover"* (p.20).

Development of these scenarios is informed by stakeholder opinions of what the future looks like and how they see things changing over time. In this regard, EirGrid is currently undertaking a National public consultation on *Tomorrow's Energy Scenarios* – again set out on our website, www.eirgridgroup.com. The scenarios will be reviewed every two years, in order to factor in any new information available regarding trends and changes in the electricity industry and other relevant factors. This will ensure an overall sustainable, secure, robust and reliable transmission network can be developed now for a long-term future.

Clearly, this focus on an uncertain longer-term context for electricity use and associated grid development is of particular relevance in the preparation of the NPF.

In addition to the technical issues concerning grid development, but also of crucial importance, the Strategy acknowledges the need to achieve a balance between social, environmental and economic factors. On the basis of this need the Strategy is underpinned by three Strategy Statements as follows:-

- *Inclusive consultation with local communities and stakeholders will be central to our approach.*
- *We will consider all practical technology options.*
- *We will optimise the existing grid to minimise the need for new infrastructure.*

The *Issues and Choices* paper of the NPF asks certain key questions in respect of *Infrastructure* as follows:-

- *What are the nationally important infrastructure projects for Ireland that require delivery over the next twenty years?*
- *What do we need to do to make best use of existing infrastructure?*
- *How can we ensure that ensure that the provision of infrastructure can be planned to match future demand and how can the NPF reflect this (pg.17)*

In addition, in respect of *Climate Change*, the paper states that:-

> *"Energy infrastructure, including electricity grid infrastructure, power generation and gas networks, is critical to support Ireland's future growth. If we are to reduce our national reliance on fossil fuels, increase our long-term energy security and decouple economic growth from emissions, our future energy needs will need to be delivered in a more sustainable way, whilst also providing retrofit solutions to existing development".*

It also asks key questions:-

- *How do we plan for growth in such a way that supports a transition to a low carbon and climate resilient economy and what planning policy measures are needed to achieve this?*
- *What strategic energy infrastructure is needed to support the economy and society and realise the transformation of Ireland's energy system to meet climate change and energy obligations and in what areas should it be located? (pg.15)*

The articulation of such policy context should, of course, have significant reference to the provisions of EirGrid's Grid Development Strategy.

The NPF as "A Successor" to the National Spatial Strategy

The NSS recognised that reliable and effective energy systems, including the electricity system, are key prerequisites for effective regional development. It identified prime considerations in terms of spatial policies namely: developing energy infrastructure on an all island basis, strengthening energy networks in specific geographic areas of the country and enhancing the robustness and choice of energy supplies across the region through improvements to the national electricity grid. It suggested that there may be potential for streamlining infrastructure co-ordination, planning and delivery, for example by combining the provision of different types of infrastructure in one physical corridor, where appropriate and feasible (Section 3.7.2).

Perhaps most importantly, the NSS recognised that it is vital that electricity investment programmes by the statutory undertakers (EirGrid and ESBN) should be integrated with planning policy at regional and local levels, particularly by ensuring that the written statements in the county and city development plans support the timely commissioning of transmission infrastructure. It stated that important points to consider should include:

- *the need to address electricity infrastructure in county development and local plans to facilitate national, regional and local economic progress*
- *the need to liaise with the operators of the transmission and distribution grids, particularly in the environs of towns, to ensure the continued availability of corridors for overhead cables and continuity of supply for existing and new users of electricity*" (Section 3.7.2)

It is the case that these considerations remain valid 15 years later. However, it might be considered that their effectiveness, from a policy perspective, has been somewhat tempered by the absence of a clear legislative "cascade" of a planning policy hierarchy. This has now been resolved in respect of the NPF, and its governing legislative context.

As such, it is of critical importance that a strong policy context for grid development remains for the NPF as was originally set out in the NSS.

Conclusion

The development of the National transmission grid as summarised above and outlined in detail in EirGrid's Grid development Strategy and associated Technical Report, is of critical importance to support the economy and society, as well as to realise the transformation of Ireland's energy system to meet climate change and energy obligations. Electricity infrastructure, and other strategically important infrastructure development is the backbone for national and regional economic and spatial development.

Ensuring Ireland's sustainable development and growth includes planning for national grid infrastructure and prioritising it appropriately in order to deliver national benefit. In this regard, EirGrid requests that the importance of the grid is acknowledged as a strategic issue and that EirGrid's Strategy is specifically referenced in this context in the text in the new Framework, particularly by way of provision of robust and clear policies supporting grid development.

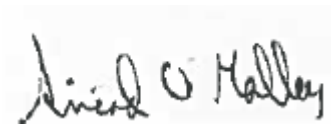
EirGrid recognises that close collaboration is required with the Department to provide expert and focused input into the preparation of the NPF, particularly from a strategic policy perspective. In this regard, EirGrid acknowledges the essential importance of integrating energy requirements with other sectoral requirements for *"channeling and managing growth in a way that will support quality of life, sustainable economic development, an environment of quality and capitalise on the potential of places"*.

In this last respect, EirGrid understand that it is essential to achieve the appropriate balance between infrastructure and social and environmental considerations now and in the future.

EirGrid strongly welcomes the new NPF, and would be eager to actively assist on any Departmental Working Group in preparing the new Framework.

Should you have any comments or queries in this regard, please contact the undersigned.

Yours faithfully,



Sinead O'Malley,

Principal Planner, EirGrid plc

Appendix A: Planning Regions of Ireland