

Submission to the Commission for Regulation of Utilities regarding  
**Electricity Networks Price Review 2021 - 2025 (PR5)**  
**CRU/19/152**

On behalf of:



An Roinn Gnó,  
Fiontar agus Nuálaíochta  
Department of Business,  
Enterprise and Innovation



### **Introduction**

The Department of Business, Enterprise and Innovation (DBEI), Enterprise Ireland and IDA Ireland welcome the opportunity to provide comments on the CRU's discussion paper and proposed approach, in advance of reviewing submissions on the Electricity Networks Price Review Five 2021 – 2025 (PR5). As is made apparent in the discussion document, the coming decade will see a radical transformation of how the electricity grid operates, the functions it serves and the way electricity consumers interact with suppliers and the network. The Electricity Networks Price Review (PR5) will need to carefully balance the demanding requirement to transition our electricity grid and generation market to a low-carbon future, while ensuring efficient and cost-effective outcomes for electricity customers. This will require world-leading service delivery from the transmission and distribution system operators – both in their operational roles and in their functions as 'Asset Owners' of the State's electricity infrastructure.

### **Objectives**

DBEI, Enterprise Ireland and IDA Ireland are primarily concerned with ensuring that there is a cost-competitive, business-friendly policy environment which can support the success and growth of enterprises operating in Ireland. This requires:

- A price-competitive electricity market;
- In terms of capacity, capability and location, a fit-for purpose national transmission and distribution grid, to support enterprise development, job creation, regionalisation and renewable energy strategies of Enterprise Ireland and IDA Ireland;
- A user-friendly, predictable grid connection process for generators and enterprises undertaking on-site generation;
- Engagement with industry in planning and development on the role industry will play in the future transformation of the grid; and

- Opportunities for enterprises to decarbonise their energy use in order to underpin sustainable economic development in Ireland.

DBEI, Enterprise Ireland and IDA Ireland provide the following comments in order to highlight the particular context in which enterprises will rely on sophisticated and innovative delivery of grid electricity services over the period of PR5, framing some of the key decisions facing the System Operators in their respective roles.

### **Future of the Grid**

It is apparent that the transmission and distribution networks will need fundamental transformation over the coming decade to support a changing energy system and national policy objectives such as a dramatic increase in the proportion of renewable generation in our energy mix. The grid will be required to facilitate a significant decentralisation of electricity generation as large power stations are gradually replaced by regionally distributed renewable electricity generation – including onshore wind, offshore wind, solar PV and energy storage, battery and demand-response connections. The next phase of grid infrastructure investment and grid operations will need to prioritise the delivery of this transformation. The DS3 programme has demonstrated significant success in integrating intermittent renewables supply while balancing the requirements on the grid. The PR5 period will see a substantial further step-up in this regard, which will require appropriate resourcing.

The transformation of the grid will support, and coincide with, a significant change in how consumers understand and manage their electricity consumption. The transposition of the EU Renewable Energy Directive (RED) and implantation of the Clean Energy Package will set out a requirement for electricity customers to have greater flexibility, information and control over how they use electricity. The grid will need to facilitate likely increased demand for energy in specific activities, such as the significant projected increase in electric vehicle (EV) use and electrification of heating systems in residential and commercial buildings. The grid will further need to facilitate the delivery of smart grid services, supporting increased levels of on-site generation.

### **Microgeneration / On-site Generation**

The CRU and the System Operators will be aware of ongoing work to develop a new enabling framework for Microgeneration as required under Action 30 of the Government's 'Climate Action Plan'. Any support scheme designed as part of this framework will further incentivise enterprises to deploy on-site generation technologies. This will involve empowering enterprises to remove carbon from industrial processes by facilitating on-site generation with the option to export surplus electricity. Where export capacity is above 11KW this capability will be need to be delivered through a streamlined 'non- batch' grid connection process. In this regard we would refer the CRU to the joint submission made by DBEI, Enterprise Ireland and IDA Ireland to the proposed decision on EPC-2 (CRU/19/143). The System Operators will have a key role in enabling informed electricity customers, and 'prosumers' – part of this will

be communicating and engaging directly with electricity consumers to better understand their requirements.

### **Innovation**

We welcome the CRU's commitment in the discussion document to examining ways to enable greater flexibility for the network companies within the PR5 framework to facilitate innovation. Research<sup>1</sup> suggests that incentive mechanisms that do not take into account the risk profile of innovation activities divert the attention of the network utilities away from actual innovation toward normal efficiency gains. This indicates the importance of differentiating between cost efficiency and innovation in designing appropriate targets and incentives for the System Operators. While Ireland and the System Operators are already internationally recognised for industry leading innovation, including expertise in grid management and integrating intermittent renewables, the opportunity exists to further develop the energy sector, and expertise available in a growing 'Smart Energy' cluster in Ireland. Stimulating a domestic and export-oriented product development capability with enterprises in this cluster can further develop expertise and innovative products in the 'green economy' to support electricity generators, the System Operators and electricity customers.

The 'Innovation Fund' mechanism, approved previously by the CRU, can benefit from closer engagement of the System Operators in their supply chain development. Enterprise Ireland would welcome and facilitate linkages between the System Operators and Ireland's supply base via its Public Procurement supports such as the Small Business Innovation Research (SBIR) and 'Meet the Buyer' programmes.

### **Balancing Investment and Efficiency**

The significant transformation of the grid, to decentralised power generation and delivering smart services to customers, will require substantial investment. The System Operators will require sufficient funding to enable this transformation. This will require a careful management of resources and efforts to achieve significant operational efficiencies. In particular, the System Operators will need to prioritise resources for connecting a considerable volume of renewable generation through an efficient EPC-2 process, facilitating decarbonisation across the economy. The System Operators should be required to balance the new requirements of the grid, discussed above, with facilitating a dynamic and competitive generation market, and delivering cost-efficient services in the interests of all electricity customers. International benchmarking of KPIs and targets in this regard will be useful, with performance against these communicated clearly to stakeholders – the PR5 decision should articulate the CRU's oversight role in this regard.

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<sup>1</sup> Electricity Networks: Technology, Future Role and Economic Incentives for Innovation; <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2017/12/Electricity-Networks-Technology-Future-Role-and-Economic-Incentives-for-Innovation-EL-27.pdf?v=d2cb7bbc0d23>

## **Enterprise Development**

To support sustainable economic development and the objectives of Project Ireland 2040, it will be important that the structure (capacity and capability) and location of the national grid, comprising the transmission and distribution network, are fit for purpose in order to support the enterprise development strategies of IDA Ireland and Enterprise Ireland. Regional development is a key national policy priority and is dependent on adequate grid capacity and a user-friendly demand-connection process. The grid network will be required to facilitate the renewable energy requirements of the enterprise sector, driven by strongly increasing demand from sub-sectors such as life sciences, food and drink, and data centres. The PR5 decision should articulate a clear requirement for engagement with industry to facilitate development and decarbonisation, with defined standards for customer engagement.

## **Tackling Capacity Challenges**

The proposal in the CRU's discussion document that the System Operators be incentivised to tackle local security of supply issues in the Dublin region appears an appropriate approach. Delivering connection offers in the Dublin region in a timely manner through an efficient and transparent process would support a better understanding of any capacity constraints and customer outcomes. Where capacity constraints are acute, the process should carefully balance the requirements of new developments with the interests of all electricity customers. The System Operators should be tasked with addressing these issues in a way that overcomes security of supply concerns, while informing customers early as to the likely outcomes. They should facilitate project development in a timely manner, where appropriate, and provide greater predictability to potential project developers.

## **Cost Recovery**

While customer charging for grid services is the focus of a separate decision process, it is important to note in framing the development of PR5 that the transformation in how electricity customers use the grid will require a commensurate re-assessment of how customers contribute towards the cost of upgrading and operating it. As smart grid-services, demand-response capabilities and on-site generation or storage capabilities become common across the grid, energy consumption patterns and cost-drivers for the grid are likely to change. To the greatest extent possible, charges for the grid, as part of customers' electricity bills, should be reflective of the extent to which customers are driving requirements for new investments in the grid. This is particularly the case for large energy users. It is essential for public acceptance of energy intensive developments that the System Operators can demonstrate that energy customers are paying an equitable, cost-reflective and appropriate portion of the cost of grid investment. Costs imposed on the grid exclusively by single developments should be charged primarily to that development, and not cross-subsidised by other enterprise or domestic electricity customers. Any change in charges should be well-considered, equitable and apply only from a future decision point forward.

## **Conclusion**

Our national enterprise environment, and climate action commitments, require that electricity prices be kept as low as feasible, in order to drive the electrification of commercial heating and manufacturing processes, as businesses endeavour to remove carbon from their operations. The System Operators play a critical role in this regard, both in delivering cost-efficient grid services and in facilitating a competitive electricity generation market. The CRU will need to consider the appropriate incentives for the System Operators, to ensure that they deliver a flexible and efficient grid, which meets the objectives of the Clean Energy Package. The CRU should ensure that the economic competitiveness of Ireland's electricity for end-customers remains the central focus of its PR5 decision.