**Lottery No: 25**

**PQ No: 27559/24**

**Supplementary Material**

**QUESTION:** To ask the Minister for the Environment; Climate and Communications the work he and his Department are undertaking to increase electricity grid capacity in line with our 2030 target; if hybrid connections will form of this plan; if he is aware of mounting concerns over delays to renewable energy developments in securing grid connection posing a threat to our 2030 targets; and if he will make a statement on the matter. – Darren O’Rourke

**KEY MESSAGES**

1. The Government is committed to supporting the development of electricity infrastructure and policy that will help facilitate our ambitious decarbonisation targets including 9GW of onshore wind and 8GW of onshore solar by 2030.
2. The Commission for the Regulation of Utilities (CRU) was assigned responsibility for the regulation of the Irish electricity sector following the enactment of the Electricity Regulation Act, 1999 and subsequent legislation. CRU is responsible for, inter alia, the economic regulation of the system operators.
3. The Irish electricity grid is segregated into two parts, the Transmission Network, operated by EirGrid as the Transmission System Operator, and the Distribution Network, operated by ESB Networks as the Distribution System Operator. The two system operators are tasked with building, safely operating and maintaining a fit for purpose electricity system which includes building grid capacity.
4. The Government does not have any role in the delivery of electricity infrastructure on the ground. This is consistent with the 2012 Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure which states: ‘The Government does not seek to direct EirGrid and ESB Networks or other energy infrastructure developers to particular sites or routes or technologies’.
5. The CRU are currently completing work on a new ‘Electricity Generation and System Services Connection’ Policy to connect onshore generators, storage and other systems services technology projects (CRU/2023/163) to the grid to support decarbonisation ambitions. This policy will be published in early Q3. In addition, under CAP 23, the CRU are tasked with ensuring that hybrid technology grid connections are facilitated; work on this action is progressing following engagement with the system operators, EirGrid and ESB.
6. An Accelerating Renewable Electricity Task Force has been established within the Dept of the Environment, Climate & Communications to coordinate and track delivery of a work programme to achieve the 2030 targets for onshore renewables set out in the Climate Action Plan. This includes the introduction of working groups dedicated to tracking and supporting the development of renewable projects and infrastructure, including grid connections, hybrid connections, renewable hubs and future grid.

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**Supplementary Q&A**

**QUESTION 1: What measures are the system operators taking to develop grid infrastructure and to increase grid capacity?**

In July 2023, EirGrid published an update to Shaping our Electricity Future, their roadmap for the development of the transmission grid out to 2030 to deliver on the renewable energy targets. This roadmap includes plans for reinforcements, upgrades, and new infrastructure across the country. The grid needs to be stronger and more flexible to accommodate wind and solar generation which is technically very different to burning fossil fuels to produce power. The roadmap also sets out EirGrid’s plans to evolve operation of the power system in the period to 2030 as well as electricity market recommendations.

Shaping is a plan led approach to deliver an electricity system in 2030 which meets Ireland’s climate targets, to include 80% of electricity demand being met from renewable energy, complies with Carbon Budgets and allows for electricity demand growth.

EirGrid as part of the update to Shaping have identified 16 further grid reinforcement projects and 4 Renewable Hubs which are required in addition to the previously identified transmission grid upgrade works. In total EirGrid have identified in excess of 350 projects which are required by 2030 to deliver the required transmission network.

In January 2023, the Irish electricity distribution system operator ESB Networks launched its Networks for Net Zero Strategy which outlines its commitment to futureproofing Ireland’s electricity network and making the country’s goal of net zero by 2050 a reality. In order to meet the changing needs of society and to achieve climate action targets, ESB Networks has set out an estimated €10 billion euro investment to 2030 to develop a smarter and more flexible electricity network. The Networks for Net Zero Strategy outlines ESB Networks’ drive to develop a Net Zero Ready Distribution Network by 2040 which will enable Ireland’s achievement of net zero no later than 2050.

Following approval by the CRU, ESBN is also working on the development of a renewable hubs pilot to take place at five locations on the distribution network. The aim of renewable hubs is to optimise existing and new grid infrastructure and create additional anticipatory capacity to facilitate future connections.

**QUESTION 2: How much capital is being invested to ensure that the electricity grid is being developed in a way that will support a grid comprised of 80% renewables by 2030?**

The cost of building, safely operating and maintaining the electricity system is recovered by system operators through Network Tariffs on customers, all of which is overseen and agreed with the CRU. Network Tariffs are set annually by the CRU for the period October to September.

System operator spending is agreed with the CRU in five year cycles, referred to as Price Reviews. The current Price Review, PR5, spans the period 2021 to 2025 and will see a capital investment spend of €4 billion in the electricity network. Of the €4bn, €2.8bn (representing an 84% uplift on the previous period) was allocated to the distribution system and €1.2bn (representing a 35% uplift) to the transmission system.

Work has commenced on Price Review 6 which will see the CRU sanction the investment in the grid to 2030. While a decision is not expected until Q3 2025, the CRU have recently published their strategy paper to inform and seek comments on their approach to deciding the funding for the period. These investments will start to deliver the building blocks upon which we will expand our onshore grid out to 2050.

The electricity system operators, EirGrid (Transmission) and ESB Networks (Distribution), must use the funds to ensure the electricity grid is fit for purpose to underpin economic development and achieve energy and climate policy objectives including decarbonisation. Of particular importance is the need to accommodate the high level of renewables being added to the system to meet the Government’s 80% target as well as the increased demands from the electrification of our heat and transport sectors.

**QUESTION 3: What measures are being taken to support increasing the number of hybrid connections on the electricity grid?**

Hybrids consist of the connection of different forms of generation to the grid through a single connection point. The Climate Action Plan recognises the important role of hybrid connections. Hybrid connections present an opportunity to maximise the utilisation of existing grid infrastructure, to accelerate the connection of new renewable generation and associated storage. Currently it is possible to obtain a hybrid connection, for various forms of generation, on the Irish system for a single legal entity at a connection. The ongoing work on Hybrids includes facilitating the connection of multiple legal entities behind a single connection point, this is currently not allowed under the rules related to one customer per connection.

The CRU have spilt the hybrids workstream into three parts and are working towards facilitating each part with System Operators who have submitted proposals to the CRU.

**Over install capacity**: Currently generators can install up to 120% of their Maximum Export Capacity. Removing this limit may see additional renewable generation on the system by allowing additional generation behind a connection point. In January the CRU published a decision to remove the installed capacity cap for single technology types and requested a review of the cap for hybrid located sites by the system operators. Earlier this month the SO published its review decision and implementation timelines for hybrid located sites, thus closing out this workstream.

**Sharing Maximum Export Capacity (MEC):** Currently market registered capacity of units must be the same as the MEC. This means that for a 50MW wind unit and a 50MW battery unit, the MEC must be 100MW. Under proposals the units could connect through the single connection point and retain the 50MW MEC, both units would operate separately in the market but be required to not breach the MEC. This will allow for greater use of existing connections. Both units would be required to be owned by the same legal entity. The CRU are to publish a consultation on this issue shortly, with a final decision expected later this year.

**Multiple Legal Entities:** Allowing multiple legal entities to own separate generation assets behind a single connection point is a complicated part of the workstream. The CRU are progressing this aspect and are seeking legal advice in respect of barriers that have been identified. Legal advice is expected by year end, following which next steps will be identified.

In addition, the Electricity Storage Policy Framework for Ireland, which I expect to bring to Government for Cabinet approval next week, addresses the role of electricity storage on the grid network until 2040. It contains 11 Actions that support both the key stakeholders and industry to incorporate the optimum amount of electricity storage to meet our 2030 and 2040 needs and ensures continued engagement with all electricity storage stakeholders to meet Ireland Net-Zero future.

One of the Eleven action coming from the policy relates to electricity storage and hybrid connections as part of the new connection policy process. More broadly, the Electricity Policy Framework addresses the colocation of storage with renewable electricity generation assets in the context of hybrid connections and the Renewable Energy Support Scheme (RESS).

**QUESTION 4: What measures are being taken to expedite the connection of renewable projects to the electricity grid?**

In Ireland, the Commission for Regulation of Utilities (CRU) is responsible for grid connection policy. Grid connections are a scarce and valuable resource and grid connection policy can influence which generators and storage projects can access markets and when they can secure that access. Consequently, connection policy can have a wide-ranging impact on the electricity system, from determining the level of competition in wholesale markets, facilitating the delivery of renewable energy targets, and helping ensure that new technologies can connect to provide required system services. These impacts directly affect consumers in terms of the prices they pay, the quality of service they receive, and the environment they live in.

The CRU published the Enduring Connection Policy (ECP-1) in March 2018 which was the first step in a fundamental redesign of Irish grid connection policy. In 2020, the CRU published its decision on ECP-2, which built on the objectives to ECP-1 to provide a pathway for generators, storage and other system services technology projects to connect to the electricity system. ECP-2, which supports increased prioritisation of large renewable energy projects to facilitate a low-carbon future, set policy for three annual batches of connection offers with a target of 115 connection offers in total for each ECP-2 batch year.

In accordance with the Climate Action Plan, the CRU are tasked with reviewing and publishing a successor policy to ECP 2. The CRU held a consultation, which closed in February 2024, on the ‘Electricity Generation and System Services Connection’ Policy, the responses to which will inform the introduction of a new policy framework that will continue to connect onshore generators, storage and other systems services technology projects to the grid. Responses were sought on several topics, including, inter alia, locational prioritisation, charging methodology, application fee structure and repowering. The policy also sought responses on the CRU’s ‘minded to’ approach to introduce a bi-annual application process without caps for renewable generators.

This new connection policy will require significant changes to previous iterations of ECP-2, including a review of timelines to support the implementation of Article 16 of the RED II Directive. There are significant challenges to be addressed such as the interaction with the timelines for environmental and planning permits, as well as the processing times for grid connection offers. To date, the permitting timelines have been considerably longer than those outlined in Article 16, and delays have been experienced relative to expected timelines. The Electricity Generation and System Services Connection Policy was due to be published in Q2, 2024 but given the complexity of the issues involved this has now been delayed until early Q3, 2024.

**QUESTION 5: How is Government monitoring the delivery of actions needed to support grid capacity and grid connection development?**

In accordance with the Climate Action Plan, my Department has established an Accelerating Renewable Electricity Taskforce, with the core aim of accelerating the delivery of renewable generation and electricity infrastructure required to underpin national decarbonisation objectives. The Taskforce Implementation Plan sets out nearly 70 actions, many underway already, across grid, planning and markets vital to ensure early delivery of the Climate Action Plan target of 80% renewable electricity by 2030.

The Plan also addresses barriers to early delivery, in particular in the area of planning and permitting, as well as the planning and delivery of the electricity network. As such, the taskforce includes one working group dedicated to accelerating grid connections for large-scale renewable projects including renewable hubs and hybrid connections, and another dedicated to expediting the delivery of grid infrastructure.