



CRU Information Note

Electricity Security of Supply Programme of Work Update

On 29 September 2021, the Commission for Regulation of Utilities (CRU) published a [programme](#) of work to increase generation capacity to provide additional stability and resilience to the Irish energy system over the following four or five years. A first update on this was published in July 2022. This update note outlines progress up to February 2023.

The programme of work was in response to EirGrid's identification of a potential capacity shortfall, if no action was taken, from 2021 to 2026.

Programme Key Actions

Under the published Programme of Work, the CRU, in conjunction with EirGrid and the Department of the Environment, Climate and Communications (DECC), developed several key actions to be delivered by this group.

These included:

- The delivery, through the all-island capacity auctions, of over 2,000 MW of enduring flexible gas fired generation capacity by 2030, to provide for growing demand, replace retiring generators and support additional penetration of renewables in order to meet our 2030 policy goals, and the development of a policy statement to underpin this capacity.
- Procurement of temporary emergency generation capacity to remain available until the necessary enduring capacity has been secured. This capacity is a non-market based measure and will only be called upon in the event of a shortfall in market-based capacity and where alerts on the system are likely.
- Extending the operation of older generation units, on a temporary basis, to be called upon only when necessary, until the arrival of new enduring capacity.
- Actions to enhance the responsiveness of existing Demand Side Units in the SEM and develop additional demand side capacity, including accelerated deployment and optimised usage of batteries, and greater demand side response more generally.
- Advance work on the regulatory frameworks to support delivery of new electricity interconnectors.

As the programme has evolved, the required workstreams to deliver these actions were further developed across the three key organisations charged with delivery of the programme.

The actions were reorganised into pillars to create a more efficient process and to accelerate the delivery of each of the work items.

The CRU is now providing the latest update on the progress on each of these pillars.

1. System Operations & Emergency Planning

EirGrid and ESB Networks have continued to develop and update emergency response protocols to respond to potential supply issues. This includes an update to the DSO Load shedding Plan in Q4 of 2022¹, which introduced a new provision to reduce demand from classes of large energy users in the event of a System Emergency, along with enhancements to emergency planning and communications processes.

Demand Response can play an important role in managing the system when margins are tight. Following extensive engagement with industry participants, in November 2022, the SEM Committee published a decision related to the operation of the energy market, which will enhance market signals for Demand Side Units and incentivise greater volumes of Demand Response in the SEM.

As part of improved communications with key stakeholders including Demand Side Units, System Outlook information is now provided twice weekly to indicate the likely supply margins for the coming week. Engagements with demand-side customers on their ability to provide a voluntary response during System Alerts is also ongoing.

Work has also progressed to optimally dispatch the growing portfolio of grid-scale batteries at times when the system is constrained, while ensuring that batteries continue to play a key role in securing the system in response to incidents.

The Pillar has worked with ESBN on other consumer demand reduction initiatives, including voltage reduction and the highly innovative Beat-the-peak campaign.

2. Temporary Emergency Generation

EirGrid's public procurement exercise for the first tranche of temporary emergency generation has resulted in contracts being signed for 200MW at Northwall (ESB) and 50MW in Huntstown (Huntstown Power Company Limited).

Procurement for a second tranche of up to 450MW of temporary emergency generation has also resulted in the initial equipment contracts being signed for 258MW of capacity in Shannonbridge (ESB) and 150MW in Tarbert (SSE Generation Ireland Limited).

Work is now underway with multiple stakeholders including site owners / developers, EPC contractors, EirGrid and others, to deliver this temporary generation capacity as quickly as possible, with the majority aimed for delivery in Q4 this year. An update note on market operation of these units was published by the CRU in December 2022². In April 2023, the CRU

¹ <https://www.esbnetworks.ie/docs/default-source/publications/approved-dso-load-shedding-plan-01.10.2022.pdf>

² <https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/CRU2022985CRU-update-on-Temporary-Emergency-Generation-for-Electricity-Security-of-Sup.pdf>

expects to issue a further note to industry clarifying how the temporary emergency generators will be operated.

3. Retain Existing Units

The third pillar of the programme concerns the possibility of extending the operational life of a number of older units, on a temporary basis, for a period until new capacity has been delivered to replace them through the Capacity Remuneration Mechanism (CRM). EirGrid continues to engage with a number of operators concerning the feasibility of retaining in service a number of units in this context.

4. Long Term Capacity Provision

The CRU commissioned EY to carry out a review of the performance of the Capacity Remuneration Mechanism (CRM) in the SEM to date, and to propose recommendations for any improvements that could be made to ensure sufficient procurement of capacity. The SEM Committee published a Call for Comment from industry on the EY Review (SEM-22-054) in August 2022³ and held bilateral meetings with participants in the months that followed.

A number of changes to the design of the CRM, including recommendations from the EY Review, have been implemented already or are in the course of being implemented. These include in particular, the implementation by the TSOs of an updated methodology for calculating the derating factors applied to different technologies in the CRM; the increased lead time following an auction to a full 4 years (for T-4 auctions); the introduction of energy payments for Demand Side Units at all times (referred to in Section 1); enhanced performance security requirements and monitoring of projects that have been awarded capacity contracts alongside offering greater flexibility to projects, where appropriate, regarding delays to build. Other changes include the review of the Best New Entrant which was consulted on in October 2022 (SEM-22-076⁴) and the publication of an update on the Auction Price Cap to apply to the T-4 2026/27 Auction (SEM-23-009⁵).

Further potential changes to the CRM are under consideration by the SEM Committee and a response document following on from the Call for Comment on the EY review will be published in the coming months.

5. Capacity Market Auctions for 2022/23 to 2025/26

Capacity auctions were held in January and March of 2022. The T-3 auction in January 2022 for the period 2024/25 secured a total of 1,447 MW of derated generation capacity that includes proposed new gas-fired generation and battery storage facilities on an All-Island basis. A further 24 MW of existing generation was also successful in the auction, bringing the total to 1,471 MW of capacity that is targeted to come online in October 2024 across the island of Ireland.

The T-4 25/26 auction in March 2022, in the immediate aftermath of Russia's invasion of Ukraine, awarded 381 MW of new capacity in Ireland including 248MW of proposed new gas capacity and 104MW of existing capacity which is being converted to gas. The volumes

³ <https://www.semcommittee.com/publications/sem-22-054-call-comments-ey-review-performance-sem-capacity-remuneration-mechanism>

⁴ <https://www.semcommittee.com/publications/sem-22-076-best-new-entrant-consultation>

⁵ <https://www.semcommittee.com/publications/sem-23-009-update-202627-t-4-auction-participants-auction-price-cap-value>

procured in the Ireland and Dublin regions did not meet the volume requirements set for the auction.

The next capacity auction will be the T-4 26/27 auction, which will take place in March 2023 for delivery in October 2026. In July 2023, a T-1 top up auction will be held for the 2023/24 year, which will seek to deliver additional capacity in advance of Winter 23/24, and potentially incentivise the early delivery of existing projects in development. In September 2023, a T-4 27/28 auction will be held with delivery due in October 2027, thus implementing the EY recommendation of increasing the lead time to a full 4 years.

This pillar has also established a reporting process for developers of projects that have won capacity contracts, which includes a closer monitoring of successful projects than previously conducted, and the early identification and mitigation of barriers to their delivery where this is in the power of the state and its various agencies and network and system operators.

In January, the SEM Committee approved a change to the code that governs the operation of the Capacity Market, which will allow projects to apply for extensions to the milestones they must meet, in circumstances where they have been delayed due to a planning appeal or judicial review by a third party. In October 2022, the SEM Committee also published a Call for Evidence regarding the impact of recent high levels of inflation on the projects that were awarded capacity contracts in the T-3 24/25 and the T-4 25/26. In February 2023, a Consultation on a proposed indexation mechanism was published, alongside a Call for further Evidence.

6. Policy Development & Implementation

This pillar is focused on maintaining a policy environment that supports the overall programme, and delivered the policy statement on energy security and future capacity in Q4 of 2021. The team provides ongoing support to the programme through advising on national and regulatory policy and legislation, ongoing monitoring of contingency, and managing and progressing interactions with other agencies.

Programme Monitoring

The CRU will continue to monitor, in conjunction with EirGrid and DECC, the evolving electricity security of supply challenge as the above actions are implemented. The potential capacity shortfall will continue to be assessed and the programme of actions progressed and updated as necessary to maintain electricity security of supply.

In addition to the Programme pillars outlined above, there is ongoing progress in other areas of the Programme, particularly the delivery of new interconnection capacity:

- *The Cap and Floor regulatory framework for the **Greenlink electricity interconnector** (500MW between Ireland and Wales) has been finalized and relevant authorisations and licences issued. The project is currently under construction and due to commence commercial operations at the end of 2024.*
- *An Bord Pleanála has granted planning permission for the Irish onshore element of the **Celtic electricity interconnector** (700MW between Ireland and France). The CRU has published its decision paper on the costs recovery framework. The CRU has issued Celtic interconnector with its Authorisation to construct and other relevant consents.*

- *The **North South Interconnector**, a significant 400kV AC connection, has planning consent in both Ireland and NI, it is scheduled for completion in 2026/27. On completion it will mutually reinforce security of supply in both jurisdictions, reduce costs to consumers, and facilitate greater integration of renewables.*

The Electricity Security of Supply work programme forms part of the broader National Energy Security Framework published by the Government in April 2022.