

BY EMAIL ONLY

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Wholesale Electricity and Gas Policy Division

DECC

29 - 31 Adelaide Road

DUBLIN

28th October 2022



Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems – Consultation

Dear Sir /Madam,

Thank you for providing RWE Renewables Ireland the opportunity to respond to the above consultation. RWE Renewables, a subsidiary of RWE has been active in Ireland since 2016 and now has two offices: one in Kilkenny City and one in Dun Laoghaire, County Dublin. RWE Renewables has already earmarked up to €1.5 billion [gross] for Ireland up to 2030 through current projects already being developed. The investment will be across its portfolio of renewable energy businesses in onshore wind, offshore wind, solar, and battery storage. RWE Renewables is part of RWE - a leading **global** energy player, with a 38GW global generating capacity and 18,200 employees worldwide and is one of the world's leading renewable energy companies. RWE has recently confirmed it will acquire Con Edison Clean Energy Businesses in the United States.

Key Messages

- The security of supply review should include the post 2030 period given the timescales required to deliver new infrastructure
- Clarity on the timing of the outcome of this consultation and the next steps (including funding and the legislative changes required to implement any of the proposed mitigation options.
- Government and Regulators must ensure consistency with other policy decisions (including the outcome of the summer consultations into Interconnectors, Green Hydrogen and proposals for the Future Arrangements of System Services) as well as the current live consultation; (issued by SEMC) regarding proposals for Firm Access.
- Urgent clarity is required on the assessments of the risks provided (in terms of probability) and impact as these are currently missing from the CEPA analysis and consultation.

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- Ensuring the adequate resourcing now for An Bord Pleanála, EirGrid and MARA is urgently required to ensure the plans to deliver current plans for offshore wind are vital to ensure Ireland's security of supply in the future.
- Government should be careful in accepting the base assumptions made regarding the delivery of all energy efficiency measures and renewable generation targets by 2030 and take concrete steps; whether through the annual Climate Action Plan review or the proposed Security of Supply reviews to ensure those objectives are being delivered.

If you have any questions regarding these, please do not hesitate to contact me or our Senior Regulatory Affairs Manager,

Yours faithfully

RWE Country Chair RWE Renewables Ireland



RWE Renewables Ireland – Response to Security of Energy Supply Consultation Questions

Risks

1) Are there any other security of supply risks that you can identify in addition to those set out in Section 6?

No - the risks shown in Section 6.1.1[Demand Side Risks] appear to cover the main risks from the demand side – althoughwe note that the electrification of heat and transport isn't a risk in and of itself, rather it is agreed Government policy and will happen (only the speed of its delivery is unclear). However, re Section 6.1.2 [Supply Side Risks] given the recent physical disruption to the Nordstream 1&2 pipelines, we would suggest the potential risk to the Corrib pipeline and actual energy infrastructure (including electricity and gas interconnectors) should be considered alongside the risk of insufficient energy [gas molecules and or electrons] being unavailable to import and export. This risk to the physical energy infrastructure would also include deliberate cyber attack.

Furthermore, we consider there is a significant risk of the planned renewable electricity targets not being delivered by 2025 and 2030 which will increase the current risk of capacity deficits within Ireland. Ongoing delays facing the Phase 1 offshore projects and the lack of clarity regarding the allocation of seabed leases (MACs and grid capacity for Phase 2 projects and the enduring regime, undermine confidence and risk delivery of the 7GW offshore wind target, expected to deliver substantial capacity as the existing and aged thermal plant are retired.

If there are other risks you have identified, could you outline some mitigation options to address the risk (s)?

Mitigating the risk to the security of the associated supply infrastructure at Corrib and the existing and planned interconnectors (through enhanced security) should be evaluated and; if required, increased. As well as the risk of physical damage to the energy infrastructure, increased and enhanced actions to mitigate the risk of cyber-attack should be implemented for all critical energy infrastructure / assets.

The mitigation of the risks to the renewables energy targets will need to ensure the urgent publication of ORESS1 Terms and Conditions and finalised auction timescales. Furthermore, ensuring the adequate resourcing of An Bord Pleanála, EirGrid, the new MARA team will be fundamental to the timely delivery of offshore wind.

Ensuring policy alignment with the development of Future Arrangements for System Services in line with Security of Supply is critical, given the current proposals to further reduce the DS3 System Services tariffs, which will undermine current proposals for investment in new batteries. If as the short-listed mitigation option of increaesd storage and DSR is to be feasible, it is critical that the development pipeline for new storage isn't undermined now

2) Are the 5 shock scenarios that were considered, and the additional scenarios related to the Russian invasion of Ukraine, sufficiently broad?



Yes -we agree these are sufficiently broad, however the lack of assessment of the materiality of the risks (both the probability and impact) makes it hard to assess whether further combinations of the risks set out in Section 6.2 should also be considered.

Mitigation Options

3) Do you have any additional mitigation options that you think should be considered?

We welcome the use of the 3 criteria set out in Table 6 (Consistency with Climate Action Pan, Security of Supply Impact and Feasibility of Implementation), noting that the criteria: Consistency with Climate Action Plan should perhaps also be strengthened with ensuring alignment with the recent sectoral carbon budgets.

We note the consultation and technical analysis undertaken by CEPA based the mitigation assessment on the assumption that electrification of demand, delivery of offshore wind capacity, geothermal energy, district heating and energy efficiency are broadly achieved by 2030. We would reiterate the importance of ensuring these outcomes are delivered as a matter of extreme policy urgency.

We note that the proposal for the Gas Mitigation Package (Gas storage, renewable gas, green hydrogen and gas demand side response). Whilst we do not disagree with the assessment that each element on its own would not be likely to mitigate against a significant supply shock, we are concerned that treating these in aggregate will lead to inconsistent and / or incomplete policy outcomes. We do not agree with the assumption that only potential curtailed electricity would be used to produce green hydrogen.

For example, if Ireland intends to develop its hydrogen production potential (for both domestic and export markets), the gas storage to be developed would need to be hydrogen compatible and dedicated hydrogen pipelines linking the production, storage and end use (including export) would be required. Therefore, there would clearly need to be a confirmed strategy, with confirmed legislative and regulatory steps set out, costed and implemented (which would be a different outcome to "simply" considering and procuring additional gas storage.

Therefore, we would strongly recommend the earliest possible publication of the hydrogen strategy, and implementation of the necessary legislative and regulatory requirements in order to deliver a green hydrogen economy within the next decade. This would be a mitigation - in the sense that this is currently missing, and with the increased global supply chain issues anticipated in the medium to long term, any failure to mobilise now will remove the opportunity for green hydrogen to provide a longer-term mitigation option to address Ireland's Security of Supply risks (as well as reducing the economic growth opportunities associated with the development of a Green Hydrogen economy).

Typically using only curtailed wind is suboptimal in that the electrolyser cannot be used efficiently and there will be additional hydrogen storage requirements. This will increase the capital cost required to build a project which a developer will need to recover via Government support. Use of curtailed renewable electricity should be encouraged via policy, but electrolyser development should not be restricted only to projects using curtailed power or operating intermittently.



4) Which gas supply mitigation options, if any, should be considered for implementation?

As noted above, the holistic development and implementation of a green hydrogen strategy for Ireland needs to be started, with the anticipated longer-term outcomes included as part of Ireland's Future Security of Supply.

With regards to the wider gas supply mitigation options, we would note that without any associated Cost Benefit Analysis we would not wish to rule in or out the other short-listed mitigation options, although we note since the start of the gas crisis following the Russian invasion of Ukraine, RWE managed on behalf of the German Government); the procurement of two FSRU's and the first shipments of LNG are due to be delivered before the end of 2022¹. Furthermore, RWE is part of the consortium building the new LNG terminal at Brunsbuttel has already stated its intention to develop a green ammonia terminal at Brunsbuttel, to ensure the eventual conversion of the site to low carbon fuels.²

As noted in our introduction, we strongly advocate that the Security Of Supply Review henceforth, considers the options for the post 2030 period and we recommend that mitigation options, including the development of a 100% hydrogen capable interconnector between Ireland and the UK (as part of the wider EU Hydrogen backbone) are considered). This could include a repurposing of one of the Moffat gas interconnectors or a new a 100% hydrogen interconnector connecting to Milford Haven.

5) Which electricity supply mitigation options, if any, should be considered for implementation?

In principle, we are supportive of the following mitigation options (notwithstanding our earlier comments regarding the lack of a cost benefit analysis),

Additional interconnection – although the priority must remain ensuring the timely delivery of the 3 interconnectors (North-South, Greenlink and Celtic) that have already been consented and are already scheduled for delivery.

Conversion of a gas fired power plant to hydrogen (this links in with the green hydrogen mitigation noted in our response to question 4) – but this will require urgent decisions on the funding for and ongoing support to deliver both the hydrogen production and other end-use opportunities, as the power produced by the plant should predominantly be used as back up for when there is insufficient wind/ solar available.

Electricity Mitigation Package (Additional DSR and batteries) - We fully agree and support the increased take up of DSR and additional battery storage solutions, whilst we agree with the concerns flagged in the consultation:

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¹ <u>https://www.offshore-energy.biz/rew-seals-multi-year-lng-supply-deal-with-adnoc-first-cargo-to-reach-floating-lng-terminal-at-brunsbuttel-by-year-end/</u>

 $^{^2\,\}underline{\text{https://www.rwe.com/-/media/RWE/documents/07-presse/rwe-ag/2022/2022-03-18-import-of-green-enery-rwe-builds-ammonia-terminal-in-brunsbuettel.pdf}$



"Market structures would need to be put in place to support the delivery of batteries and DSR"

Given that the changes to market structures is already a known issue and an active project overseen by SEMC (CRU), and EirGrid we would hope that the difficulty in delivering this mitigation would be **substantially** less that the practical issues that will be associated with gaining consent for a new interconnector or agreeing the financial / market frameworks that will be required to convert an existing gas fired plant to green hydrogen.

We believe that only the proposed Electricity Mitigation Package has a realistic chance of delivering additional Security of Supply by 2025 (this is the year EirGrid have assumed the new Market Arrangements for system services will be in place). As such, it is critical that this Review does not delay further the design, decision-making and implementation of the Future Arrangements for System Services.

6) What measures should be considered on the demand side to support security of supply of electricity and gas?

We believe the main measures that need to be considered on the demand side to support the security of supply of electricity and gas remain the effective roll out and delivery of energy efficiency measures across both domestic and non-domestic premises, as well as the requirements placed on the development of new data centres in Ireland to be capable of providing system flexibility, having back up generation / storage onsite and supporting the development of future renewable generation / green hydrogen as part of their connection requirements.

7) Do you have any views on how the mitigation options should be implemented?

Following the consultation and the overarching decisions to be made on Security of Supply, the most effective mitigation options need to be implemented in a timely manner, with aligned regulatory and legislative frameworks, with a clear governance and reporting framework available and regularly maintained.

Policy Measures

8) Do you support the policy measures proposed in Section 8 of the consultation paper?

We support the proposals as listed but note that these do not go far enough. Whilst this consultation is considering the medium to longer term deliverability of security of supply (separate to the current Review underway by Mr McCarthy) we would urge the Irish Government to ensure the proposed Joint Planning (as set out in Section 8.1) includes not only the operators of the Irish gas and electricity transmission and distribution systems, but also includes representation from Northern Ireland- given the integrated approach to the Single Electricity Market and the reliance of gas in Northern Ireland on the UK – Ireland gas interconnection.

We would also ask that the energy regulators have clear oversight and responsibility for the development of the renewable gas market (including green hydrogen).

With regards to the proposals for Regular Energy Security Reviews (Section 8.2), we do not support the suggested approach (technical analysis on energy security of supply being undertaken every two years and setting out an energy security review every four years.



We would expect the metrics proposed for the technical analysis for energy security would be produced and maintained on a rolling basis – in particular the assessment of Ireland's security of supply KPIs and reporting of the implementation of policies and measures designed to address / support security of supply issues.

Furthermore, we would suggest that the energy security review should (at least in the short to medium term) should be on a far more frequent basis, particulary given the fast pace of change required domestically and the potential for significant and unexpected impacts from international developments.

To ensure consistency – Government must clarify how any proposed measures will feed into and support the annual review of the Climate Action Plan. Furthermore, there must be clarity on how and when the required resources (including financial, legislative / regulatory changes) will be confirmed.

9) What further tools and measures do you think would contribute the most to Ireland's energy security of supply?

As per our response to question 3 ensuring the development of a holistic and coordinated approach to the development of a domestic green hydrogen industry is critical. It is also vital that the consideration of security of supply does not focus only on delivering the 2030 targets, but the wider 2050 net zero targets.

To that end, whilst we welcomed the delivery of the Shaping Our Electricity Future (SOEF) v 1, it is critical that the revised version (SOEF 1.1) is updated to not only consider the impacts of the current short-term security of supply mitigation issues, but also considers now the requirements for a more accelerated build out of the energy infrastructure required to deliver the net zero ambitions. This should include consideration of the potential for Ireland to connect into the proposed UK Hydrogen backbone and beyond.