

Consultation Team
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RE: TSO PR5 Strategic Objectives Multi-Year Plan 2023-2027

Dear consultation team,

Bord Gáis Energy (**BGE**) welcomes the opportunity to respond to this consultation on the **TSO PR5 Strategic Objectives Multi-Year Plan 2023-2027 ('Plan')**.

Overall, we do not believe that the Plan as proposed is meeting the requirements set out in the PR5 Regulatory Framework, Incentives and Reporting Decision Paper.¹ The Plan needs to have more holistic overall milestones and annual targets to reflect deliverables from existing forward-looking Roadmaps². In line with PR5's intention for this incentive the planned Strategic Objectives' milestones and measures should demonstrate the appropriate path to ensure delivery of the 2030+ targets in a manner that:

- delivers optimum value for consumers from cost and service perspectives and
- provides existing and new investors with confidence around market access and opportunities.

We ask that EirGrid provides greater clarity through the year-on-year delivery milestones and measures of the Strategic Objectives for the **Networks section** on the projected progress of a centralised critical "priority projects" plan ('grid plan') for which it should be accountable. The grid plan should have a 10-20 year project horizon to support the immediate grid changes necessary up to the connection of the Celtic interconnector in 2026, the grid projects for the initial decarbonisation and renewable growth agenda for 2030, as well as the longer-term vision out to 2045, and the alleviation of grid constraints. The longer vision grid plan should provide the comfort that the interim (2030) and long-term (2045) targets for moving to net-zero will be met through the delivery of the "priority projects" for the grid it contains. Grid constraints impact both the renewable generation investment plans and value delivery for the consumer by the grid, and their alleviation must be a constant, key strategic activity for the TSO.

We do not believe that the Networks section of the Strategic Objectives is showing the plan we see as necessary for the grid development projects to provide comfort that delivering the 2030 targets is in hand. We need to see a path of delivery of grid development plans through 2026 to 2030, as well as the grid development plans beyond 2030 out to 2045, in a central grid plan with the priority projects earmarked in each year. These priority projects absolutely cannot change given their key strategic relevance for other strategic infrastructure projects, for example the grid development projects to support the connection of the Celtic interconnector from 2026. It is recognised some grid projects will span years in delivery but their strategic value to the consumer is critical, examples being the grid projects needed for:

- the connection of the Celtic Interconnector in the Cork region, and improving the flow of the excess power out of the Cork region,
- enabling the continued use of power from the SE region to support regional and national security of supply requirements after the connection of the Celtic and Greenlink interconnectors, and
- increasing the flow of renewable energy to demand centres on the East coast.

The Plan should outline the annual measures to deliver the expectations for PR5 up to 2025 as well as the measures preparing for beyond 2025 (such as increasing SNSP limits and growth in interconnection).

¹ (CRU/20/154)

² Including an expanded version of the Transmission Development Plan, Shaping Our Electricity Future (SOEF), and the Operational Policy Roadmap 2030

The outcomes described in the annual milestones of the Plan should be both demonstrably challenging, and strategically important for the system or market³ with the target measures being consistent with strong performance relevant to either the timing, cost, or quality of the energy transition⁴. We believe the current plan falls short of this expectation and is not reflecting the detail of the actions needed from the TSO to:

- **Markets section -**
 - include both the design for the Future Arrangements for System Services (FASS) and Long Duration Storage batteries (4 hour+) within the System Operator (SO) activity set as both will be critical for the projected growth for renewable generation to 2030.
 - Mitigate the slow delivery of battery and renewables integration into the grid operations and bring forward the delivery of the SDP delivery to Q3/Q4 2023,
 - Determine the extent to which the current grid projects planned will facilitate 2030 targets e.g. 95% SNSP to be achieved and what measures can mitigate the constraint issues without grid build/ devices. For example, incentives for long duration batteries (4hour+) should be adopted given short duration battery volumes are at saturation point. A regulated revenue stream akin to that decided for LCIS products should be considered keeping in mind the current capacity market does not adequately signal the urgency at which these types of long duration storage are needed to enable RES meet 95% of demand by 2030,
 - Re-integrate the SEM with the GB and EU markets once the regulators' final decision on the matter issues this year, and
 - Addressing the strategic tension of de-risking onshore and offshore renewable generation projects by the application of Unrealised Available Energy Compensation (UAEC) arrangements in the contract terms and conditions which undermines the incentive to grow energy storage while increasing the cost to the consumer.
- **Operations section -**
 - Demonstrate the cooperation with the DSO to develop demand side response at a transmission level and determine how a) the two transmission and distribution system volumes around demand side response will interact and b) distribution level participants will participant in joint transmission/ distribution demand side management.

We ask that the Strategic Objectives encompass these areas identified within their milestones and measures. The current Plan is lacking the detail for 2024-25, with little identifiable transitional actions for PR6. We ask these aspects are addressed in the final Strategic Objectives Multi-Year Plan.

Overall, we see the current draft of the Plan as having insufficient detail on: the milestones to be delivered across the PR5 period; the specific measures against which annual delivery can be measured; and how the PR5 milestones will evolve into PR6 forming the basis for the longer-term achievement of the 2030 aims⁵. Care is needed that targets in the Plan are not double counting or over-lapping with milestones under other TSO incentives. Business as usual activities also should not be part of the Strategic Objectives. It is with these points in mind that we offer our below feedback and proposals.

1. Networks

BGE believes the Plan should demonstrate the 2023-25 milestones and measures for:

- Addressing the lack of vision for the grid plans on a 10-20 year developmental horizon which is needed as soon as possible for the SOEF. Delivering the priority network changes needed in the immediate term to the connection of Celtic interconnector in 2026, to deliver major capital projects for the 2030 interim decarbonisation and renewables targets, and the longer-term vision out to 2045 while also addressing the system constraints on the system, and
- The implementation of a centralised strategic plan of “critical projects” for grid development over the next 10 years to meet the priorities for the 2030 targets, including the seamless transition of activities through in to PR6. These priority projects absolutely cannot change due to their strategic impacts for example

³ Section 7.10 (Strategic Incentives) PR5 Decision Paper (pg65)

⁴ Annex 11 (TSO Strategic Incentives) PR5 Decision Paper (pg125)

⁵ Section 7.10 (Strategic Incentives) PR5 Decision Paper (pg65)

the grid changes / devices that will ultimately deliver Celtic and Greenlink benefits for RES and consumers. Otherwise, this strategic value to RES and the consumer will be undermined.

We expand below on these focus areas for 2023 and provide further comments on the Networks area of the Plan.

“Priority Projects” for grid development to 2045 - BGE asks that the TSO’s Strategic Objectives Multi-Year Plan show how it is supporting the delivery of “priority projects” (in support of the infrastructure requirements in the “Shaping Our Electricity Future” roadmap - SOEF) necessary to achieve the priority change in the grid in a timely manner for the 2030 targets. BGE believes that the grid transition required to support the delivery 2030 targets is falling behind and will not be ready to support the 2030 requirements. There is already concern for the timely delivery of initial targets and milestones⁶, much less achieving the stated aim by EirGrid for the Network activities⁷ section of the Plan. The network changes needed should, in our opinion, focus on two key priorities for the System Operators to deliver, which are a) ensure delivery of the major capital projects needed to deliver our 2030 decarbonisation and renewables targets and b) identification and remediation of system constraints (existing and potential future constraints). Grid bottlenecks on the system undermine the investment case for renewable generation investment and impacts the value that consumers get from RES developments. Failure to deliver these key priorities will undermine the ability to mitigate against segmentation of markets⁸ on an enduring basis, achieve the targets of the Climate Action Plan (CAP), and lead to lower costs for consumers. In our view, the projects required must be determined by the TSO through the application of a clear robust approach for determining what type of projects are needed to improve the grid by application of a Cost Benefit Analysis (CBA) at the very initial stages of TSO grid planning. The CBA should assess, considering consumer benefits including achievement of decarbonisation targets, whether the grid issue can be optimally fixed using a grid fix/ market-based solutions for example. DSR, storage/ technology device non-wire solution. The output of the CBA will also inform a priority order of determination for the solutions that are grid-build or grid device related with achievement of the 2030 targets in mind.

From the experience in SEM, most issues in getting efficient market signals and efficient market outcomes relate to the lack of grid capacity and the existence of constraints. Some of this stems from a lack of planning and thinking beyond 5-year regulatory cycles of funding and some relates to the ability to get grid investments through the public planning process. We need to start thinking about the grid not for the next 5 years but for the next 20-30 years and start building the grid we will need, and not just the grid we need today. The system operators and regulators need to work cohesively to ensure that the investments the customer is underpinning are future proofed and in customers’ long-term interest.

In the meantime, to address grid bottlenecks, a targeted long duration battery policy (4 hour+) is needed. A regulated revenue stream would bring these forward quickly as they are needed before 2030 in Ireland given the capacity mechanism and system services markets are not currently providing them effective signals for investment. Incentivising new renewables to build long duration batteries in front of constraints to capture excess output is another possible solution that could be effective in the short and long term.

Development of centralised “critical projects” plan/ list - We believe that EirGrid must develop and work from a centralised strategic plan of “critical projects” that sets out the developments and schedule for the required grid transition in PR5 (and PR6) to deliver the key priorities as above and meet the 2030 targets. In our view the Transmission Development Plan (TDP) should be that overarching document to simplify and centralise the view of grid development plans for the next 10 years, including the implications for policy, technical and network developments drivers/ needs such as markets, security of supply, RES integration, etc. Once the long-term

⁶ “...a significant portion (28%) of its PR5 plan is behind schedule” in Year 1 of PR5 - Section 3.4.2 TSO 2021 incentives outturn (Part 8. Investment Planning and Delivery) – Pg 24 of CRU2022090- Electricity Transmission Network Allowed Revenues for 2023 And Demand Transmission Use of System (D-TUoS) Tariffs 2022/23

⁷ “The Networks activities seek to maximise the effectiveness and efficiency of the transmission system through the use of innovative and flexible solutions.” – Section 2 Multi-Year Programme (pg 5), TSO PR5 Strategic Objectives Multi-Year Plan 2023-2027

⁸ This means determining projects that will ultimately remove the need for the different mechanisms currently used in the different markets to address the impact of grid constraints - LCCAs in capacity market, locational scarcity scalars in DS3 market, and constraints costs in BM. These mechanisms have negative effects including in terms of consumer cost outcomes.

vision for next ~15+ years is determined, then those should be included in a central document, ideally the TDP. Then a list priority projects needed to deliver strategic items like major constraints alleviation and facilitation of Celtic and Greenlink should be non-moveable. By their nature, some of these priority projects will span into 2026 but a case in point is the lack of clarity on how we can have confidence that consumers and RES will get value from the connections of Celtic and Greenlink given the likely constraint implications which we cannot clearly see being addressed via grid build. We see the lack of detailed actions in the Plan for 2024 as evidence that this linkage to a centralised long-term grid development plan as not been made leaving participant unclear of the strategic actions to be taken from 12 months forward. This by definition is a weakness for the Strategic Objectives Multi-Year Plan.

2. Markets:

In our view, the Markets area of the Plan for 2023-2025 needs to show milestones and measurables delivering:

- Clarity for participants on the forward plan for the Future Arrangements for System Services
- The integration of longer duration (4 hour+) battery storage with the growth in RES generation before 2030, and
- the integration of the SEM into the GB market and forwards trading on the interconnectors.

Further detail on these are provided below.

Future Arrangements for System Services (FASS) - BGE asks the TSO to provide indicative milestones in the Plan as to the earliest availability of annual and long-term forecasts of system services needs for the Future Arrangements for System Services (FASS). We believe that the Plan should include the multi-year milestones for delivery of the FASS to the market based on the last known requirements set out for the market. Despite the current flux in the system services market with no certainty on tariff levels for 2023, or the enduring FASS market design from 2026 with the awaited decisions by the Regulatory Authorities (RAs), the lack of detail on FASS delivery milestones is a concern to participants. Investors need confidence:

- on 2023 tariff levels,
- as to when the transition from the current DS3 arrangements to the FASS market can be expected to occur, and
- when they can expect to see the product and volume insights allowing them to formulate their related investment plans.

Effective system services to the grid are key to the decarbonisation agenda in terms of facilitating the growth in renewable generation to meet the 2030 targets, and the TSO must deliver its role to provide the long-term signals for investors. Plans can change year to year but we ask the TSO for increased stakeholder engagement on market design attributes needed to deliver on strategic aims and bottom out on necessary design changes in 2023.

We also ask for more detail, measures, and targets for the interim steps before 2025 for integration of SEM into the European system later in the decade including scoping the changes related to integrating the intraday and balancing markets. We ask that consideration is given to inclusion of a 2023 milestone that the FASS design ensures alignment with EU balancing market requirements to avoid future upheaval around market design.

Long Duration Storage batteries (LDS) - BGE asks the TSO to include within the Plan investment signals to the market for the development and deployment of Long Duration Storage (4 hours+) batteries (LDS). Recent evidence from the TSO shows that grid developments are not occurring as quickly as they need to, to facilitate RES and mitigate constraints on time for 2030. Storage can play a major role in mitigating the extent of grid work needed and we believe that the time has come to recognise that batteries can help manage the constraints. We are already saturated with short duration batteries however as evidenced in DECC's recent consultation on energy storage policy. What we need is LDS that is both flexible and also fill in the intermittency gaps of RES that can sometimes last weeks. The TSO should put this high on their strategic agenda as a way to manage constraints and to help meet RES targets (e.g. excess wind can be stored and if located in front of a constraint can be dispatched when called on in case RES behind a constraint cannot be used). Consideration of how to incentivise LDS is needed this year, e.g. a regulated revenue stream akin to the LCIS approach maybe optimum

given the urgency at which we need LDS batteries 4hour+ to be delivered. This would work particularly well if new RES projects were incentivised to deliver storage solutions in tandem

Re-integration of SEM to GB/ EU markets - The current post-Brexit cessation of forwards trading arrangements on the interconnectors with the GB market is impacting the hedging options for Suppliers which ultimately negatively impacts end consumers. The earliest solution for re-coupling of SEM to the GB market on a Day-Ahead (DA) is a priority for Suppliers and will ultimately benefit the end consumer. We ask that delivery of the solution that the RAs decide on this year following the assessment the interconnector owners have been asked to do in Q1 2023, is noted as a deliverable.

Alignment of onshore and offshore RESS Terms and Conditions to achieve CAP targets - We are concerned with the intention of this deliverable. It needs to be clarified. There is a very concerning development in Irish renewable energy contracts – the latest offshore update is that units will be paid for output even when that output is curtailed. A similar proposal was suggested for the latest onshore (RESS3) terms and conditions which is pending a decision from government. This curtailment compensation mechanism or UAEC (“Unrealised Available Energy Compensation”) will cost the consumer significantly and undermine the value of the RES contracts. We ask the TSO to consider how it can better incentivise long duration batteries but also to ensure that the risks of more costs to consumers of certain measures like UAEC are flagged to DECC and how the risk could be mitigated e.g. by incentivising RES developers to also build storage to capture excess generation and deliver MWs whenever called to dispatch by the TSO.

Capacity market alignment with a high -RES world and system requirements - we strongly support this aim but believe it should be a deliverable in 2023. Capacity mechanisms need to signal the need for net-zero-carbon flexible capacity, while also signalling continued investments in existing efficient low carbon units instrumental for the decarbonisation transition given their criticality to ensuring security of supply.

3. Operations:

We consider that the Plan milestones and measures for Operations in 2023 must plan for:

- Delivery of existing forward-looking Roadmaps including the Operational Policy Roadmap 2030, and an expanded version of the Transmission Development Plan (TDP) as set out above (to include “priority projects” the delivery of which are strategic such that they are necessary to achieve decarbonisation targets).
- The importance that more clarity is given on the expected interactions between the TSO and DSO systems in terms of demand side management (DSM). DSM is relevant for both distribution and transmission level and is of strategic importance especially given potential savings to consumers. However, the management of operations between the between the 2 systems must be clear including dealing will overlaps. We address in the Markets section below that how demand is an all-system issue and needs to be managed at transmission level by the TSO directly with the end provider, avoiding any DSO interface between TSO and customer.

We expand below on this proposed addition to the draft Plan.

Existing Future Roadmaps - The Operations Policy Roadmap (OPR) 2023-2030⁹ is a helpful addition for participants to understand EirGrid’s plan to 2030 to accommodate continued growth in variable, non-synchronous renewable generation. We ask however that EirGrid align the Plan with the aims of yet another separate publication. EirGrid should make every effort to reflect all plan developments within their Strategic Objectives Multi-Year Plan and not add another planning silo to their forward-looking activities set. The Plan should reflect the best estimate for 2023-25 of the milestones and measures contained within the OPR and TDP, and it is not acceptable that it is only 2023 that contains any detail with the other years awaiting update of other documents. The Plan should reflect the “best-known” information across all the years up to 2025, as otherwise it will be 2024 before the next version of the Strategic Objectives Plan is seen which is too late to share the critical detail of the

⁹ [Operations Policy Roadmap 2023-2030](#)

Strategic Objectives delivery with participants. The Plan needs more detail of the activities in each of the years and is insufficient in its current format.

Interactions of the transmission and distribution systems for demand side response - given the strategic role of demand side management in facilitating renewables and enabling consumers manage consumption and costs, we ask for a clear KPI in 2023 on the TSO to clarify what the plan / roadmap is for them and the DSO in terms of the interaction of the transmission and distribution systems for demand side response. Demand is a “whole of systems” not a local issue and needs to be managed at a whole of system (transmission led) level. We have no insight on how DSR will be managed between now and 2030 for example, in terms of the impacts of volumes from distribution connected participants on requirements at a transmission level and vice versa. Please see below for the perspective on the clarity needed on this subject from a markets’ perspective.

We ask that more clarity is given to the scope of the “Operational Policy Roadmap to 2030” in this Plan to demonstrate that it is not overlapping with activities captured under other incentives to avoid being double counted.

I hope you find the above comments and suggestions helpful. Please let me know if you have any queries or wish to discuss any aspect further.

Yours faithfully,

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{via Consultation Portal}