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8th November 2022

RE: SEM-22-068 - Firm Access Methodology in Ireland "EirGrid - proposed methodology" (the "Consultation")

Dear Electricity Connection Policy Team and Brian,

Bord Gáis Energy (**BGE**) welcomes this opportunity to respond to the Consultation on Firm Access Methodology in Ireland "EirGrid – proposed methodology".

BGE agrees with a Firm Access Methodology that gives a higher level of predictability of financial reimbursement for developers to encourage generation investment while minimising cost to the consumer. The annex to this response reflects our main points expressed below within the framework of the questions posed in the consultation paper. These points are:

- The proposed Firm Access Methodology should be implemented for all unit types including batteries and system service providers. There is no equitable rationale for not applying the same firm access quantity (FAQ) approach for all unit types.
- We welcome the opportunity this consultation proffers to better signal optimum locations in which to invest. Today's TLAF¹ approach is not effective and needs to be replaced. Investors require better locational signals through the provision of "heat maps" which should be informed by the data from an updated Transmission Development Plan (**TDP**) that provides a holistic and strategic consideration of all the changes expected on the transmission system in the next 10 years. The heat maps should demonstrate on an annual rolling basis for each of the next 5 years the grid regions offering i) spare capacity, ii) the level of firm access available (Firm Access Quantities FAQs), and iii) the connection costs associated (which should be cheaper for generation/demand depending on which of generation/demand is most needed in the region²).
- Investors should be able to rely to a reasonable extent on the level of these indicators (grid capacity/ firmness timelines/ connection costs) <u>before</u> going into market auctions. The availability of these locational indicators well in advance of the relevant RESS/capacity market (CRM)/ system services (SS) auctions would then feed into auction bids and lead to the most competitive cost outcomes for consumers and ensure more realistic timelines for build/ delivery of the relevant capacity, being achieved.
- Units should have a committed indication from the annual firmness review as to when they will be able
  to secure FAQ. The annual firmness review should provide an indication of when a unit will receive
  firmness for both existing non-firm capacity and prospective developments. For prospective
  developments, it would help inform their participation in capacity auctions, RESS auctions and system
  services auctions. Alignment between the annual firmness review and the Enduring Connection Process

<sup>1</sup> **Transmission Loss Adjustment Factors (TLAFs)** - In the case of TLAFs for example, Irish investors have experienced negative commercial impacts because pre-investment TLAF indicators have drastically, unpredictably and in a volatile manner, deteriorated such that the initial "locational indicator" provided by the TLAF is no longer valid. Those that have invested and continue to receive the locational signals cannot alter their behaviour to change the outcome – other than to shut down production. It is not efficient and therefore not in the interests of consumers for plant that have already been built to receive the locational signal as they are not driving the change and cannot control it. The current arrangements are not a sustainable long-term approach to ensuring efficiency of investment location.

<sup>&</sup>lt;sup>2</sup> the grid needs to provide strong, locational signals to investors at the pre-connection stage to support generation locating to meet demand requirements and vice versa (via for e.g., cheaper connection cost for generators/ demand in areas short of generation/ demand) whilst helping alleviate (or at least not worsen) constraint conditions on the grid.



(ECP) should occur so that FAQ and connection timelines/ costs can be considered holistically ahead of market auctions.

- An investor's allocation of FAQ should be confirmed at the date that payment for connection agreement(s) are submitted such that certainty on FAQ and connection dates again are aligned. The confirmation of the connection agreement and payment of connection fees shortly after the auction should confirm/ commit the level of FAQ to be allocated. This date should also act as the date order for FAQ allocation regardless of the type of unit involved, whereby existing non-firm units will always have priority to FAQ allocation ahead of non-connected units.
- If a unit obtains a connection and FAQ date (having paid the connection fee) but (subject to the regulators' reasonable discretion applied in a transparent manner):
  - a) does not clear in the relevant market auction, they should be permitted a reasonable window (e.g., one year, or a timeline that covers at least one more long-term auction in the relevant market from when the connection agreement was paid for) to obtain a market position. If they do not obtain a market position within that timeline the FAQ should be returned to the annual review cycle for reallocation.
  - b) does clear in the relevant market auction but does not complete by the relevant market's long stop date, then the FAQ should be returned to the annual review cycle for reallocation.
- The "deadband" in the current PR5 incentive (Renewable Dispatch Down) should be tightened to incentive the TSO to address the system constraints. Any FAQ incentives are added to the existing PR5 incentives (via constraint mitigation/ imperfections costs) and include a clawback on the benefit to the TSO for missed FAQ deadlines. We propose another mechanism to protect the consumer from increased DBCs where system reinforcement has been delayed due to TSO actions.

We ask the regulators to consider our positions and suggestions outlined above and expanded on below before coming to a decision on the proposals in this consultation. Please do not hesitate to contact me should you need to follow-up on any related issues to the above.

Yours sincerely,

Ian Mullins Regulatory Affairs – Commercial Bord Gáis Energy

{By email}



#### **ANNEX - Consultation Questions and BGE Answers**

- Comments are invited from interested parties on EirGrid's proposed approach of having a time bound Firm Access date. Comments are also invited on alternative options (i.e., ATRs etc). Should scheduled FAQ date be linked with ATRs, with more targeted delivery incentives? Please provide reasons and rationale for any views provided.
- 2. Comments are invited from respondents regarding EirGrid's historical performance on delivering ATRs. How can EirGrid's performance be improved? Please provide reasons and rationale for any views provided.

The continuing levels of constraints on the grid are unacceptable and must be addressed with some urgency. The constraint levels have several negative impacts for the market in terms of how they are currently segmenting the various energy/ capacity and system services markets with consequential cost impacts for consumers e.g., via imperfections.

For the purposes of this consultation however we focus on how constraints negatively contribute to the need for continuing firm/ non-firm access treatment to connecting units so increasing the cost to consumers via higher levels of Dispatch Balancing Costs (DBCs). The TSOs need to demonstrate their plans to address the grid constraints/ bottlenecks through optimising the existing grid and applying cost benefit analysis (CBA) determined solutions (e.g., solutions could be one or a combination of grid build/ reinforcement/ system services/ technology devices) to improve the grid and mitigate DBCs for consumers. Developers willing to invest in new units to connect to the grid must be provided with better locational signals through "heat maps" demonstrating on an annual rolling basis for each of the next 5 years the grid regions offering i) spare capacity, ii) the level of firm access available (Firm Access Quantities – FAQs), and iii) the connection costs associated. These "heat maps" can incorporate the Associated Transmission Reinforcement (ATR) activities of the TSOs and/or the solutions determined by the relevant CBA. while disassociating the ATR delivery from the FAQ availability where appropriate.

We agree with a Firm Access Methodology that gives a higher level of certainty of financial reimbursement for developers under the rules of the Trading & Settlement Code (T&SC) to encourage generation investment while minimising cost to the consumer. FAQ availability levels should be known up to 5 years in advance so that developers can consider the status of firmness in their RESS/CRM/SS/energy bids to help better competitive outcomes for consumers through bids that take account of connection costs and FAQ timelines.

The current approach of linking Firm Access to the delivery of the associated ATRs is not effective as planned grid reinforcement activities are regularly rescheduled by the TSO, outside of any input or control by the generation developer. Therefore, developers have no certainty on the implementation of their firm access allocation which can impact future development projects as well as existing projects. These ATR delivery delays also increase the security of supply risk for the consumer through delayed future investments. We do however believe that the TDP and related heat maps we refer to above will likely have to be informed to an extent by the ATR (and / or other CBA determined solutions for constraints) in order to determine a FAQ that subsequently should not be delayed if the ATR delivery itself is delayed.

We ask for more targeted incentives for the TSO in not just the delivery of Firm Access Quantities to participants but also a strict application of the existing PR5 incentives for the TSO to address network constraints as constraint mitigation activities on the grid do not seem to be achieving the benefit for the grid users or the consumer that PR5 anticipated via the Renewable Dispatch Down, Local Security of Supply, and Imperfections & Constraints incentives.

- We believe that the existing "deadband" within the Renewable Dispatch Down incentive should be tightened to lower the dispatch down percentage at which the maximum penalty will be applied.
- Should new incentives be introduced for the timely delivery of FAQ against plan by the TSO we ask
  that a clawback mechanism is introduced where missed deliveries of FAQ will put at risk any upside
  earned by the TSO on FAQ delivery on an escalating scale to reflect the duration of the delay beyond
  the FAQ delivery deadlines.



• Further we suggest that a mechanism<sup>3</sup> is introduced where delivery delays to grid development plans from lack of progress by TSO would see the TSO bear more of the increase to constraint costs so as to protect the consumer from these costs. Otherwise, this proposed Firm Access policy can see the increased costs of delivery delay be passed straight from the developers to the consumers without any risk to the TSO who is solely accountable for the delivery.

We would welcome clarity from the CRU on the interaction between the existing PR5 incentives and any further incentives given to the TSO on Firm Access, or if one set of incentives will supersede the other.

Finally, we ask for clarity on the application of Firm Access Quantities under this proposed methodology to units that are connected on the Distribution system. We believe there should not be a difference in implementation between the transmission and distribution grids but we welcome clarification in the decision on this. Constraints, renewable dispatch down, and security of supply are "whole of system" challenges which require a "whole of system" approach of joint collaboration by the SOs to apply joint/ aligned planned mitigation activities.

3. Comments are invited on whether stakeholders agree with the proposed approach of allocating partial Firm Access Quantities. Please provide reasons and rationale for any views provided.

BGE supports the move to grant partial FAQ in blocks of 20MWs. We also support the application of the unit achieving its longstop date under relevant market contract(s) (see comments on Q4 & Q5 below) to confirm the implementation of its awarded or scheduled FAQ (otherwise the unit should risk losing its FAQ allocation). We believe this will mitigate the hoarding of FAQ by units whose final delivery may not be achieved by the developer.

- 4. Comments are invited from respondents on the proposed approach of allocating Firm Access to generators once they reach committed project phase (progress beyond Consents Issue Date). Please provide reasons and rationale for any views provided.
- 5. Comments are invited from respondents on the inclusion of a longstop date with awarded FAQs. Please provide reasons and rationale for any views provided.

BGE supports the eligibility suggestions within the proposal that the new Firm Access methodology is applied to existing connected non-firm generators<sup>4</sup> and "committed" non-firm units (these being units which have reached financially committed project phase(s) in the payment of connection agreement fees).

BGE supports the need for a unit to reach their longstop dates to "validate" or "trigger" activation of their awarded FAQ or scheduled FAQ date to prevent FAQ being hoarded or "locked away" by units whose final delivery date becomes uncertain. Units who fail to meet their longstop date and so have their awarded new capacity/ system service/ RESS contracts terminated must also lose their awarded/ scheduled FAQ, which is then returned to the next annual review cycle for reallocation. Similarly, if a unit obtains a connection and FAQ date (having paid the connection fee) but (subject to the regulators' reasonable discretion applied in a transparent manner) does not clear in the relevant market auction, they should be permitted a reasonable window (e.g., one year, or a timeline that covers at least one more long-term auction in the relevant market from when the connection agreement was paid for) to obtain a market position. If they do not obtain a market position within that timeline the FAQ should be returned to the annual review cycle for reallocation.

6. Comments are invited from respondents on the proposed approach of treating batteries and other service providers as outside the scope of the Firm Access methodology. Please provide reasons and rationale for any views provided.

<sup>&</sup>lt;sup>3</sup> The mechanism can allow CRU oversight on delivery delays such that the costs of delays considered outside the TSO's control would be "allowed" to be passed straight through to the consumers.

<sup>&</sup>lt;sup>4</sup> As stated by EirGrid in their Firm Access Methodology Proposal (SEM22-068a) – "The ambitions of the new methodology are as follows: - Allocate available firm capacity to connected generators......" (pg3)



BGE believes that the proposed Firm Access Methodology should apply to all unit types when implemented and should not be the reserve of renewable energy source units only. The change being proposed in this consultation will apply for several years post-implementation, and this new approach needs to works for all unit types including storage and service providers from the start. Market investment signals need to be available to all unit types and investors.

With regard to batteries, BGE disagrees with the proposed position to exclude batteries from the proposed Firm Access methodology as we believe that batteries will:

- impact the accuracy of the FAQ calculations for other units batteries by their nature can be an "enabler" of FAQ in terms of being able to help release more FAQ for other unit types given their ability to reduce consumption behind a constraint point,
- begin to align the longer-term view of the methodology ("look forward") with the timescale and expected growth of battery storage in EirGrid's other annual reports <sup>5</sup> including "Shaping Our Electricity Future" Roadmap, and
- allow for the active inclusion of battery storage units once they have passed a "duration threshold" that positively impacts on the SEM's security of supply. For example, more value can be obtained from a circa 4-hour battery being firm as compared to a 2-hour battery being firm which may need consideration in terms of offering FAQ at least on an interim basis.

Batteries will be the basis of a congestion product where behind-the-constraint operation of batteries will allow excess flexible generation to be absorbed locally for discharge later (i.e., batteries can operate as a local energy sink to enable a higher level of FAQ for non-storage generators). The application of this "congestion product" on the grid will need to be better developed and understood for it to be incorporated into the "look forward" review of this proposed methodology. Once the expected congestion product is being considered by the TSOs<sup>6</sup> the application of the proposed Firm Access methodology to longer duration batteries whose supply exceed a "duration threshold" will be required to provide them with FAQ awards or scheduled dates.

We ask therefore that batteries are included with the proposed Firm Access methodology both as a "congestion product" to enable higher levels of regional FAQ and also as units in their own right (based on reasonable assumptions) once they have exceeded an agreed "duration threshold". Batteries will feature keenly in the decarbonisation transition of the power system in the coming years and they should be afforded the same investment signals as other unit types.

7. Comments are invited from respondents on the proposed approach of having a MEC "floor" of 1 MW. Please provide reasons and rationale for any views provided.

BGE supports the application of a 1MW MEC "floor" under the proposed methodology given the TSOs view that Firm Access is not considered relevant below this level.

8. Comments are invited from respondents on the Annual Review process. Please provide reasons and rationale for any views provided.

BGE supports the application of an annual allocation process for FAQ but the allocation process must not be allowed to operate independently of other grid processes such as the ECP to mitigate against divergence of award dates for generators between connection agreements and FAQs. Ideally, generators would receive both connection and FAQ commitment timelines at the time of their financial commitment under the connection agreement. We ask that the FAQ annual review dates are scheduled well ahead of the bidding submission deadlines for RESS/CRM/SS auctions that are due to occur in that year so that investors have clarity on the likely connection and FAQ dates to be incorporated into their unit bids. Overall, this should lead to better located investments which are most likely to deliver within the timelines allowed/ expected so bringing down costs for consumers.

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<sup>&</sup>lt;sup>5</sup> such as the Transmission Development Plan (TDP), and the Generation Capacity Statement (GCS).

<sup>&</sup>lt;sup>6</sup> From Q2 2024 – Shaping Our Electricity Future Roadmap (pg 110)



### 9. Comments are invited from respondents on the Firm Threshold. Please provide reasons and rationale for any views provided.

Investment in generation units will seek a commitment on the FAQ levels and spare grid capacity that are available year on year, especially for up to a rolling 5 years forward basis to inform business development plans. This information can be shown as forward looking "heat maps" which will provide better locational signals for developers. The Firm Threshold levels will be a key information source on these maps to demonstrate the percentage level of constraints expected at various points on the grid.

### 10. Comments are invited from interested parties on the approach of First to commit – first to be Firm. Please provide reasons and rationale for any views provided.

All markets (RESS/CRM/SS) should be aligned in the "commitment" requirements to qualify under this approach. i.e., units should have a committed indication from the annual firmness review as to when they will be able to secure FAQ to inform their participation in capacity auctions, RESS auctions and system services auctions. Alignment with ECP should occur so holistic investment signals can materialise (in tandem with our proposed heat maps which incorporate costs for connecting in different areas depending on whether you are generation or demand, as outlined in our cover letter). The confirmation of the connection agreement and payment of connection fees likely shortly after the auction should confirm the allocated FAQ and date. If a unit obtains a connection and FAQ date (having paid the connection fee) but (subject to the regulators' reasonable discretion applied in a transparent manner):

- a) does not clear in the relevant market auction, they should be permitted a reasonable window (e.g., one year, or a timeline that covers at least one more long-term auction in the relevant market from when the connection agreement was paid for) to obtain a market position. If they do not obtain a market position within that timeline the FAQ should be returned to the annual review cycle for reallocation.
- b) does clear in the relevant market auction but does not complete by the relevant market's long stop date, then the FAQ should be returned to the annual review cycle for reallocation..

The RAs can consider any exceptions on a case-by-case basis. There must be rigour in the transparency of the information on confirmed FAQ allocations via a central publication that lists all units in the market, their FAQ dates and relevant longstop dates. Market participants can then see the level of committed FAQ by region and the FAQ levels that may re-appear in the next annual review cycle.

# 11. Comments are invited from respondents on the use of the Transmission Development Plan as part of the Firm Access methodology. Please provide reasons and rationale for any views provided.

BGE believes that the proper use of the Transmission Development Plan (TDP) will be key to effectively implementing the proposed Firm Access methodology. But as we set out in our response<sup>7</sup> to the CRU consultation on the EirGrid Draft Transmission Development Plan 2021–2030 (CRU202222) we believe the TDP as a document needs to develop to provide a holistic and strategic consideration of all the changes expected on the transmission system in the next 10 years. The TDP should expand to include a "latest best view" of the range of changes expected to the transmission environment which blends recent expected changes to the power system and the grid with the existing projects that currently make up the TDP. Grid development plans (determined on foot of a Cost Benefit Analysis - CBA<sup>8</sup>) from other EirGrid documents such as Shaping Our Electricity Future (SOEF) Roadmap and Tomorrow's Energy Scenarios (TES) should also be included in the all-encompassing TDP to overcome the diverse publications of current grid development plans, and the different freeze dates applied. The TDP data should feed into our proposal for "heat maps" as better locational signals demonstrating on a rolling annual basis for each of the next 5 years the grid regions offering i) spare capacity, ii) the level of firm access available (Firm Access Quantities – FAQs), and iii) the connection costs associated. The availability of these indicators well in advance of the

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<sup>&</sup>lt;sup>7</sup> Dated 19th April 2022

<sup>&</sup>lt;sup>8</sup> to determine which solution(s) (e.g., a market/ grid technology/ grid development solution) to the challenge in question is optimal from the consumer perspective in terms of costs, services improvements etc.



relevant RESS/CRM/SS auctions would then feed into auctions bids and lead to most competitive cost outcomes for consumers and ensure more realistic timelines for build being achieved.

# 12. Comments are invited from respondents on the proposed look-back and look-forward approach, and the interaction between these steps. Please provide reasons and rationale for any views provided.

BGE agrees with the look-back/ look-forward approach as proposed in the Firm Access Methodology to give both a regular opportunity for units to gain FAQ and to give more meaningful locational signals to generation projects for connection. We have explained in our response to Q11 the importance of a more holistic and well-developed TDP to these processes to effectively implement the proposed Firm Access methodology.

### 13. Comments are invited from interested parties on the interaction of delivery incentives with the proposed Firm Access methodology. Please provide rationale to support these views.

We ask for more targeted incentives for the TSO in not just the delivery of Firm Access Quantities to participants but also a strict application of the existing PR5 incentives for the TSO to address network constraints as constraint mitigation activities on the grid do not seem to be achieving the benefit for the grid users or the consumer that PR5 anticipated in via the Renewable Dispatch Down, Local Security of Supply, and Imperfections & Constraints incentives.

- We believe that the existing "deadband" within the Renewable Dispatch Down incentive should be tightened to lower the dispatch down percentage at which the maximum penalty will be applied.
- Should new incentives be introduced for the timely delivery of FAQ against plan by the TSO we ask
  that a clawback mechanism is introduced where missed deliveries of FAQ will put at risk any upside
  earned by the TSO on FAQ delivery on an escalating scale to reflect the duration of the delay beyond
  the FAQ delivery deadlines. The timely delivery of FAQs could be considered as another
  achievement measure under the Constraints, Imperfection, & Dispatch Down section of the
  incentives.
- Further we suggest that a mechanism is introduced where delivery delays to grid development plans
  from lack of progress by TSO would see the TSO bear more of the increase to constraint costs so
  as to protect the consumer from these costs. Otherwise, this proposed Firm Access policy can see
  the increased costs of delivery delay be passed straight from the developers to the consumers
  without any risk to the TSO who is solely accountable for the delivery.

## 14. Comments are invited from respondents on the need for independent assurance around the Firm Access process. Please provide rationale to support these views.

BGE agrees with the need to have an independent assurance review around the Firm Access process. Parts of the methodology are still open for detail such as the allocation frequency, the order of FAQ allocation, and clarity on the Firm Threshold calculation and application and these will need independent assurance of completion. The assurance process must operate on an annual cadence to an agreed Terms Of Reference on which market participants can comment.

BGE asks for regular reporting by the TSOs to the market on the expected delivery of FAQ levels against the indicated timelines to avoid late-delivery shocks to the market. The report should further quantify the impact to DBC costs of missed delivery deadlines.

### 15. Views are invited from interested parties on how the TSO should be incentivised to alleviate constraints. Please provide supporting rationale for these views.

PR5 introduced robust incentives for the SOs on Constraints, Imperfection, & Dispatch Down (such as Local Security of Supply, and Imperfections & Constraints) but the levels of constraints on the grid remain unacceptable and must be addressed with urgency. Constraints are segmenting all of the energy, system services and capacity markets raising costs for consumers as a result across all three markets respectively. The constraint levels also contribute to the need for continuing firm/ non-firm access treatment to connecting units so increasing the cost to consumers in energy markets via higher levels of Dispatch Balancing Costs



(DBCs). The TSOs need to demonstrate their plans to address the grid constraints/ bottlenecks through optimising existing grid and applying CBA determined solutions (grid build/ reinforcement/ system services/ technology devices) to improve the grid and mitigate DBCs for consumers.

We believe that efforts should be made to focus getting the TSOs to deliver against existing incentives by expanding the current PR5 incentives to incorporate new FAQ related incentives rather than seek to build a new suite of incentives.

- 16. General comments are invited from interested parties on whether they agree with EirGrid's proposed Firm Access methodology. Should a party disagree with EirGrid's approach, please provide reasons and rationale for this.
- 17. Suggestions and/or alternative approaches are invited from interested parties on EirGrid's proposal. Please provide rationale to support this.

The proposed Firm Access Methodology should be implemented for all unit types including batteries and all system service providers – no technology discrimination should apply. It should also apply to existing non-firm units who should get priority over yet to be connected units.

Investors require better locational signals through the provision of "heat maps" demonstrating annually for each of the next 5 years the grid regions offering i) spare capacity, ii) the level of firm access available (Firm Access Quantities – FAQs), and iii) the connection costs associated. These "heat maps" will be informed by the data from an updated TDP that provides a holistic and strategic consideration of all the changes expected on the transmission system in the next 10 years. The availability of these locational indicators well in advance of the relevant RESS/CRM/SS auctions would then feed into auctions bids and lead to most competitive cost outcomes for consumers and ensure more realistic timelines for build being achieved. Units should have a committed indication from the annual firmness review as to when they will be able to secure FAQ to inform their participation in capacity auctions, RESS auctions and system services auctions. The confirmation of the connection agreement and payment of connection fees likely shortly after the auction confirms the allocated FAQ and date for the allocation to the unit. Unconfirmed FAQ allocations (perhaps from failed auction bids or unused due to non-completion by the long stop date) will be returned to the annual review cycle for reallocation. The RAs can consider any exceptions on a case-by-case basis.

18. Comments are invited from interested parties on the benefit of providing firm access to connected legacy generation in Ireland which currently have non-firm access. Should legacy non-firm generators be considered in any new firm access methodology. Please provide rationale to support this.

BGE agrees that firm access should be provided to connected legacy generation in Ireland which currently have non-firm access. Connected non-firm units should have priority access to FAQ. In our view, the provision of firm access should be available to all unit types as the importance of connecting RES units is clear in relation to achieving government targets. However, there is an enduring requirement to have the appropriate levels of non-RES generation also connected to provide adequate generation for security of supply and to support the power system operations. All unit types (both RES and non-RES) require equal access to firmness to aid their business cases for continuing operations.

19. Comments are invited from respondents on the proposed methodology in relation to the equivalent approach taken in Northern Ireland. Do respondents have any views on the interactions and differences between these different approaches.

No views expressed.