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26 July 2024

RE: SEM-23-048 Consultation Paper on Imperfections Charge October 2024 – September 2025 (the "Consultation")

Dear Lisa, Mary,

Bord Gáis Energy ("BGE") welcomes the opportunity to respond to SEM-24-048 consultation on the Imperfections Charge for the Tariff Tear 2024/25 ("TY2024/25") ("the consultation"). We welcome the decrease in the modelled costs of constraints, though we note that this is largely due to lower wholesale fuel prices since 2023 rather than the TSO's efforts to address system constraints. Similarly, we welcome the decrease in the K-factor compared to 2023/24, but we remain concerned about the persistent volatility of Imperfections K-factors, which has also been influenced by changes in wholesale fuel prices in recent years. The volatility of the Imperfections charge continues to erode the benefit to consumers of the decreased wholesale fuel prices we've seen since TY2022/23. This highlights the need for EirGrid to reassess its modelling processes for forecast tariffs and charges to minimise the gap between forecast Imperfections costs and actual outturn Imperfections costs, thereby reducing the impact of Imperfections costs on consumers.

BGE has consistently raised concerns across several consultations regarding the continuing contribution of constraints to Dispatch Balancing Costs ("DBCs"). We note that in their Decision SEM-23-049, the RAs acknowledged that EirGrid's lack of progress in resolving constraints in 2021 was weaker than expected, however the RAs also noted that some improvements were made over 2022. The RAs also expressed significant concerns about the adequacy of EirGrid's reporting processes and methodology, including EirGrid's failure to provide (i) a comprehensive report on all constraints, (ii) a detailed methodology on addressing these constraints, and (iii) a plan to resolve Transmission Constraint Groups. Despite stakeholders repeated calls for transparency in response to previous Imperfections Charge consultation processes, the Imperfections Charge consultation for 2024/25 continues lack detail on:

- i. The progress of EirGrid's constraint abatement plan and its impact on future Imperfections Costs
- ii. Efforts made by the TSO to remove constraints, particularly regional constraints in Cork that prevent the export of additional MWs from the region and the impact this will have on the potential value to the consumer of the Celtic interconnector
- iii. Engagement between the RAs and EirGrid on the removal of constraints where this would provide value to the consumer.

BGE has also consistently raised concerns about how recent Imperfections Charge volatility has been worsened by EirGrid's inaccurate modelling assumptions<sup>1</sup>. It is BGE's view that our primary concerns regarding EirGrid's modelling assumptions, highlighted in our response to the 2023/24 Imperfections consultation, have not been adequately addressed by the TSOs. These concerns include:

<sup>&</sup>lt;sup>1</sup> BGE has also raised these concerns with the TSO via the GTUoS and TLAF consultations



- Insufficient efforts by the TSO to remove system constraints which are significantly impacting consumer bills through unpredictable DBCs, despite decreased wholesale fuel prices.
- Lack of transparency on how Imperfections revenues are utilised, and which constraints are being addressed.
- Lack of transparency in EirGrid's processes for forecasting tariffs and charges, particularly relating to Imperfections forecasting which has knock-on effects for GTUoS, TLAFs, and
- The need to improve the accuracy of interconnector modelling, especially with the imminent arrival of the Greenlink interconnector in 2024 and the Celtic interconnector in 2027, and the subsequent impacts on the GTUoS and TLAF modelling processes.

For the purpose of effective consultation in response to SEM-23-049 Proposed Imperfections Charges for 2023/24 ("Decision SEM-23-049"), BGE included a set of recommendations that could be implemented by the TSO in the short-term to address our above concerns. These recommendations have not been progressed by the TSO, and in light of persistent system constraints and the recent volatility of the Imperfections Charge, we again reiterate these asks in the box below:

## BGE recommendations for addressing grid constraints and improving Imperfections forecasting

- i. Provide a single joined-up, strategic plan across TSO projects to resolve existing and forecast grid issues, including constraints, and provide transparency on the baseline position that exists before a project is implemented to alleviate constraints. Please refer to Section 3.3 of this response for further detail on this ask.
- ii. Provide more information on the drivers of the forecast K-factor, efforts made by the TSO to alleviate constraints and the expected volatility in Imperfections costs over the coming year. Please refer to Section 3.4 of this response for further detail on this ask.
- iii. Take immediate action to mitigate constraints, ensuring alignment with the PR5 requirements, and update stakeholders on how the requirements under the Constraints and Imperfections incentive are going to be executed within the PR5 period. Please refer to Section 3.3 of this response for further detail on this ask.
- iv. Prioritise improving the accuracy and reducing the cost of the Imperfections model (which must also be optimum for TLAFs and GTUOS) by enhancing the process for modelling interconnector and zero-carbon reserves modelling. Please refer to Section 4.1 of this response for further detail.
- v. Introduce a 3-year recovery of the K-factor and a 3-year recovery of any forecast Imperfections cost increases to work together with a 3-year forecast of Imperfection Charges to give a forward view on the level of costs and tariffs expected. Please refer to Section 3.4 of this response for further detail on this ask.

BGE requests an update be provided to industry on the any agreed improvements from engagement that has taken place between the TSO and the RAs over TY2023/24 relating to the Imperfections reporting process. We also asks that detail is provided on any improvements that have been made to EirGrid's Imperfections reporting process over TY2023/24, particularly with regards to transparency and modelling methodologies. This ask follows the SEMC Decision SEM-23-067<sup>2</sup> that the RAs continue to engage with the TSOs regarding improvements to Imperfections reporting in the main forecast report, the K-factor and Backcast reports, and ancillary data spreadsheets <sup>3</sup>. It remains unclear whether any meaningful improvements have been made to EirGrid's modelling and reporting processes over TY2023/24, particularly around Interconnector modelling which is critical from a consumer cost perspective and for budgeting TLAFs and GTUoS costs.

<sup>&</sup>lt;sup>2</sup> <u>SEM-23-067 Constraints Costs (Imperfections Charges) October 2023 – September 2024 and Reforecast Report October 2021 – September 2022 Decision Paper | The Single Electricity Market Committee (semcommittee.com)</u>

<sup>&</sup>lt;sup>3</sup> SEM-23-067 Decision Paper - Constraints Costs (Imperfections Charges) 2023-24 (final).pdf (semcommittee.com), page 15.



We believe that the continued piecemeal approach to stakeholder engagement across tariffs and charges is driving ineffectiveness for impactful change to DBCs, and so Imperfection Charge levels, and we ask that improvements are made immediately. We urge the TSOs to adopt a holistic approach to stakeholder engagement, addressing all forecast modelling processes concerns relating to network tariffs and charges across in a single consultation. This would (i) ensure alignment of modelling assumptions across the EirGrid business, (ii) improve transparency and consistency across EirGrid's modelling processes, and (iii) reduce the need for repeated and ineffective expressions of the same modelling concerns across different consultations.

For the immediate purpose of informing the RAs Decision on Imperfection Charges for 2024/25, Sections 1 and 2 below address BGE's new concerns relating to the 2024/25 forecast model. Sections 3, 4 and 5 reiterate our previous concerns and asks in relation to constraints and Imperfections modelling with respect to the Imperfections consultation for 2024/25.

# 1 BGE concerns relating to Forecast Imperfections Costs for TY2024/25

#### 1.1 Impact of FASS on DBCs

The Climate Action Plan 2023 ("CAP 2023") requires EirGrid and CRU to accelerate the development of Future Arrangements System Services ("FASS") for zero carbon system services. This will ensure that (i) reserve requirements are fully provided by zero-carbon technology by the end of 2027 and (ii) procurement of reserve services from carbon sources phased out by end-2027<sup>4</sup>. BGE acknowledges the ongoing developments in FASS design<sup>5</sup> and asks the TSO to provide detailed insights on expected impacts of FASS on DBCs once the Day-Ahead System Services Auction ("DASSA") goes live in December 2026<sup>6</sup>. While theoretically having 100% zero-carbon reserves could reduce the volatility of DBCs by decoupling reserve prices and wholesale fuel prices, BGE is concerned that these cost savings will be offset by the requirement under FASS to resolve reserve requirements on an individual basis.

## 1.2 Inconsistent application of PLEXOS modelling methodologies across TSO projects

BGE remains significantly concerned about the effectiveness of interconnector modeling for Imperfections. In addition to our previously raised concerns (please see Section 4.1 below), BGE emphasises the now urgent need for (i) improvements in the TSO's modelling approaches, and (ii) consistency in modelling approaches across TSO projects given the end-2024 commissioning date for the Greenlink interconnector<sup>7</sup>. With specific reference to the Imperfections forecast for TY2024/25, we believe that the proposal to include Greenlink flows is unreasonable. The forecast contribution of Greenlink to Imperfections costs for TY2024/25 should be excluded from the model given that (i) there will be no historic flow data available for Greenlink, and (ii) there are significant changes occurring in both SEM and BETTA making it inappropriate to assume that price dynamics will be the same from year to year i.e., the correlation of prices between SEM and BETTA are not reflective of the installed levels of renewables in these markets, and we expect this to be exacerbated by the introduction of Greenlink.

The inclusion of Greenlink in the 2024/25 Imperfections model also raises concerns for BGE about the consistency of PLEXOS modelling across the EirGrid business. For example, to determine the contribution of Interconnector flows:

 the methodology applied to the Imperfections costs model for TY2024/25 (i) is based on fixed interconnector flows derived from a historic profile while EWIC and Moyle were operating at full

<sup>&</sup>lt;sup>4</sup> Climate Action Plan 2023, page 139

<sup>&</sup>lt;sup>5</sup> These include i) the development of the DASSA Design Recommendations Paper (ii) the Consultation paper on the TSOs' DASSA Product Review and Locational Methodology, which BGE responded to on 18th July 2024 (iii) the virtual FASS information session held on 19th June by the TSOs (iv) the development of the System Services Charge consultation paper

<sup>&</sup>lt;sup>6</sup> Per the <u>FASS Phased Implementation Roadmap</u>, the current DASSA go-live date is set for December 2026, subject to funding approval by the RAs.

<sup>&</sup>lt;sup>7</sup> Summary | Greenlink



- capacity, and (ii) accounts for increased Greenlink flows from expected go-live in October 2024; whereas.
- the methodology applied to Tomorrows Energy Scenarios 2023 (TES 2023) 8 is based on EU methodology (ii) does not account for increased Greenlink flows from expected go-live in October 2024.

Including the Greenlink interconnector in the Imperfections model for TY2024/25 will create further inconsistencies across EirGrid modelling approaches, and therefore we expect this cost to removed from the final Imperfections forecast calculation.

# 2 Queries relating to modelling inputs for 2024/25

We ask the TSO to address the below queries relating to the inputs for the Forecast and Backcast Imperfections model for 2024/25 and to share these clarifications with the RAs for inclusion in the SEMC's decision paper on this consultation.

## 2.1 Queries relating to Forecast model inputs

<u>Grid upgrades</u>: please provide insight on if stakeholders can expect consumers to benefit from decreased constraint costs once the refurbishment of the 220kV and 400kV network is complete?

<u>Demand figure:</u> please clarity the factors contributing to Forecast Demand decreasing from 38,950 in TY2023/24 imperfections model to 38,800 in the proposed TY2024/25 imperfections model.

<u>Pumped Storage costs</u>: supplementary modelled costs must be tested and verified by CRU or else discounted appropriately from the supplementary model. As with previous years' decisions on Imperfections Costs, we would expect pumped storage costs to be tested for veracity and suitability. Where there is doubt as to the basis for these costs or where the costs cannot be justified, either partially or fully, then these costs should be challenged by the RAs and discounted from the model as appropriate. We also ask the RAs or confirm that these costs have not been provided for elsewhere.

# 2.2 Queries relating to Backcast model inputs

Operational Constraints: in finalising the Imperfections Charge for 2024/25, the TSO must acknowledge that the system is not solely redispatched based on operational constraints, and for the TSO to assume so is contributing to the gap between forecast and actual outturn Imperfections costs. While BGE welcome the introduction of new Control Centre tools<sup>9</sup>, their contribution to DBCs must be accurately reflected in the Imperfections forecast and backcast models. We also ask that the TSO provides more detailed analysis to show why operational constraint costs have increased despite the reduction of the All-Island Minimum Set Requirement from 8 units to 7 units.

## 3 Fuel price decreases are undermined by the continued contribution of constraints to DBCs

### 3.1 The TSO must focus on constraints to manage future Imperfection cost levels and volatility

Imperfections costs are driven mainly by DBCs which are mostly made up of constraints costs which are heavily influenced by fuel prices. We welcome that decreased fuel prices have decreased modelled forecasted Imperfections costs for 2024/25. However, the significant reduction in fuel prices over 2023/24 have been undermined by the continued and worsening contribution of constraints to DBCs which represent the majority of the Imperfections Charge. We also welcome the fact that this year's K-factor adjustment reduces the forecast Imperfections Charge for the coming tariff year, however, more detail is needed on the cause for the €66.41m expenditure over-recovery to allow stakeholders to distinguish between the impact of fuel prices and the impact

<sup>&</sup>lt;sup>8</sup> Tomorrow's Energy Scenarios (TES) (eirgrid.ie)

<sup>&</sup>lt;sup>9</sup> Namely the Ramping tool, the LSAT tool and the VTT tool.



of constraints on Imperfections costs. BGE asks that the TSO outline how much of this recovery is a result of decreased fuel costs and how much of the recovery is a result of actions taken by the TSO to relieve constraints.

It is imperative that the TSO makes grid investment decisions and undertakes actions that relieve constraints to see enduring predictable lower Imperfections costs over the coming years. This must be done if we are to achieve 2030 and net-zero targets at an optimum cost to consumers. Given the deteriorating nature of the grid, the longer EirGrid delay in addressing constraints issues (i) the more investment will be required to fix constraints (ii) the more the cost of constraints will continue to impact DBCs and increase Imperfections costs to the detriment of the consumer, and (iii) the higher carbon emissions carbon emission will be increases the risk of us missing our emissions targets.

We outlined in our response to the Consultation on Constraint and Imperfections<sup>10</sup> a full set of consequences of the TSO's lack of effective progression to solve constraints on the system, which includes:

- i. directly increasing consumer bills through the growth in DBC-related Imperfections Charge,
- i. preventing the export of additional MWs from the Cork and Wexford regions, and
- ii. acting as a barrier to competitiveness.

Fixing constraints will lead to more efficient markets, lower consumer costs, improved security of supply and more competition. Regional constraints in Cork are of particular concern to BGE as they prevent the export of additional MWs from the Cork region. Taking the BGE Whitegate CCGT unit at Glanagow in Cork as an example, between 2019 and 2022 we have seen a 13% increase in the number of balancing market actions affecting our output<sup>11</sup>. The potential value to the Irish consumer of the additional MWs being brought by the connection of the Celtic Interconnector in the Cork region will be significantly undermined if the network constraints in the Cork region are not mitigated ahead of Celtic's connection in 2026/27<sup>12</sup>.

As recently as September 2022 for example, the CRU outlined how the grid is not developing fast enough to manage the required transition over the next 5-8 years which is at least partially due to the TSO's failure to deliver investments<sup>13</sup>. Unless constraints are addressed urgently to facilitate increasing levels of renewable generation and interconnection, we will miss delivering our 2030 targets. Missing the 2030 targets will undermine renewable investment decisions and the decarbonisation agenda, and ultimately will have cost implications for consumers<sup>14</sup>.

# 3.2 The TSO needs to provide more transparency on constraints

Given the increase in the Imperfections price from €5.22/MWh in 2018/19 to a forecasted €15.26/MWh for 2024/25, and despite recent volatility in the commodities market, we would by now have expected that planned projects on the grid would deliver improvements that would ease ongoing constraints that are impacting units, including BGE's Whitegate unit in Cork. However, there has been a continued lack of detail on the constraints addressed. Coupled with the increasing level of DBCs, this demonstrates that the TSO failing to construct necessary infrastructure to relieve network constraints as required in line with regulatory arrangements and the

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<sup>10</sup> Submitted on 27 March 2023

<sup>&</sup>lt;sup>11</sup> This is due to the S\_MWR\_ROI constraint binding (*Imperfections & Constraints Incentive*) which reflects the deteriorating nature of the grid at a time when intuitively substantial investment in this grid should be occurring

<sup>&</sup>lt;sup>12</sup> We see similar concerns for the connection of the Greenlink Interconnector in the Wexford area, and impacts to its delivery of value for the consumer due to network constraints.

<sup>&</sup>lt;sup>13</sup> CRU noted that "EirGrid reported that a significant portion (28%) of its PR5 plan [for Investment Planning & Delivery] is behind schedule" in Year 1 of the PR5 period". CRU2022090 Electricity Transmission Network Allowed Revenues for 2023 And Demand Transmission Use of System (D-TUoS) Tariffs 2022/23 (Section 8. Investment Planning and Delivery – pg 24) CRU noted that "EirGrid reported that a significant portion (28%) of its PR5 plan [for Investment Planning & Delivery] is behind schedule" in Year 1 of the PR5 period". CRU2022090 Electricity Transmission Network Allowed Revenues for 2023 And Demand Transmission Use of System (D-TUoS) Tariffs 2022/23 (Section 8. Investment Planning and Delivery – pg 24) <sup>14</sup> Consumers have already been facing growing dispatch balancing costs year on year from 2017/18 to 2021/22 whereby more than a 190% increase has been seen.



Climate Action Plan 2023 ("CAP 2023")<sup>15</sup>. We ask the TSO to advise if this level of tariff recovery volatility is expected to continue in the coming years and how such volatility can be predicted in future. In general, we request the RAs' and TSOs' views on the expected Imperfections costs and K-factor trends for the next 3 years and whether, or what, actions may be taken to reduce the scale and volatility of the annual K-factor swing/value.

Higher transparency around the drivers and mitigation actions for these Imperfection costs is required. We ask the TSO to clearly demonstrate to participants the work they are doing to remove existing constraints from the grid, and the effectiveness this work is having in reducing future Imperfections Charge tariffs for consumers <sup>16</sup>. EirGrid's constraint abatement plan should also have a forward-looking aspect to include any expected increase in constraints to the grid from large project connections <sup>17</sup> and the forecast growth in wind generation (both offshore and onshore) to meet the 2030 targets, as well as the grid works needed to accommodate these projects. These forward views on expected constraints must feed into the forward-looking forecasting of Imperfections Charges as BGE has suggested above.

Looking to the future, BGE feels strongly about the level of transparency provided to market participants regarding the impact of large projects (such as the Celtic interconnector and increased renewables) on the transmission system, the related planned system reinforcements to accommodate these large projects, and their effects on TLAFs values. We again request that data (including the impact of planned reinforcements on constraints and TLAF levels on a regional basis) be made available to participants for up to 3 years ahead.

# 3.3 BGE's suggested approach to relieving constraints if 2030 and net zero targets are to be achieved

BGE asks that the TSO take on board our suggestions in our response to its consultation on TSO Imperfections & Constraints Multi-year Plan 2023-2027<sup>18</sup> to produce an actual year-on-year reduction in the amount of the constraint costs/ dispatch balancing costs within the Imperfections Charge. In summary, our ask is that the TSO clearly outline:

- iii. the causes and costs of constraints in place for longer than 12 months,
- iv. options considered to remove the constraint (market based/infrastructure based/ operational based)
   measures, and
- v. the TSO's plan to remove/ not remove the constraint.

We understand that the TSOs have undertaken discussions with the CRU on the matter, but we request an update on this and how the requirements under the Constraints and Imperfections incentive are going to be executed within the PR5 period. We also propose that a 3-year forecast of Imperfections Charge levels is introduced to give stakeholders a forward view of expected tariffs and the impact the expected K-factor recovery in each year may have. For constraint planning and mitigation in the immediate term, we need:

i. a single joined-up, strategic plan across the TSO projects to resolve existing and forecast grid issues including constraints<sup>19</sup>. This should prioritise projects and be extremely clear on the problem(s) it will solve and the benefits of resolving the problem(s) from a consumer/ competition/ other perspective e.g., an expanded and forward-looking Transmission Development Plan (TDP) that is inclusive of all planned and projected network developmental changes up to 2030, and

<sup>&</sup>lt;sup>15</sup> Climate Action Plan, page 139

<sup>&</sup>lt;sup>16</sup> SEM-22-049 (pg2) – "For 2023/24, and similar to recent Tariff Years, Imperfections Costs are mostly due to Constraints." This is aside from the recent volatility seen in fuel prices since the invasion of Ukraine, with has recently driven Imperfections charges.

<sup>&</sup>lt;sup>17</sup> such as the Greenlink and Celtic interconnectors

<sup>&</sup>lt;sup>18</sup> Submitted on 27<sup>th</sup> March 2023

<sup>&</sup>lt;sup>19</sup> As set out in the Electricity Networks Stakeholder Engagement Evaluation (NSEE) Panel Close-out Report 2021 (CRU/202315) – Section 3.6. BGE also called this point out in our submission on the TSO PR5 Strategic Objectives Multi-Year Plan 2022-2026 (dated 10th December 2021).



ii. more transparency on the baseline position that exists before a project is implemented such that impacts from projects and /or actions taken to alleviate impacts on grid and market operation/ development are very clear to all stakeholders.

These tasks in our view must necessarily be undertaken imminently in 2024 if consumer and competition harm is to be mitigated. These tasks are also necessary to maintain a degree of hope that we can meet the 2030 targets to set us on the right trajectory for the longer-term net-zero targets by 2050. Finally, given the cost impacts that system constraints have on the proposed and actual Imperfections Charge, we urge the RAs and the TSOs to expedite the delivery of the projects that are expected to remove and alleviate constraints and so minimise the extent of these costs insofar as possible.

# 3.4 BGE's suggested approach for reducing the impact of Imperfections Charge, and K-factor volatility on consumer bills

Per our response to the Imperfections consultation for TY2023/24, we ask that the over-recovery in the Imperfections Charge for 2024/25 (compared to 2023/24) is distributed across a 3-year period to manage the significant swings in the Imperfections Charge due to commodity price volatility. This, in our view, will smooth out the significant impact of Imperfections charge and K-factor volatility on consumers bills in any one year, and allow a more manageable impact in future years where the impact to the tariff rate should be mitigated to an extent by increasing demand levels.

It is evident that commodity price volatility is also distorting the level of within year K-factor correction required by the TSO given the substantial (-27%) swing in the proposed level from -€91.17m 2023/24 to -€66.41m in 2024/25. We recognise these deferred recovery requests may introduce a cost-recovery delay in any given tariff year for the TSO, but we believe that any cash-flow risk introduced to the TSO operations by the changes proposed must be borne by the TSO in the short-term (e.g., 12-18 months) without impacting Market Participants. This is on the understanding that the TSO will be returned to a cash neutral position in the longer period (e.g., 3 years). We ask that all efforts are made to reduce consumers being exposed to significant swings in K-factors caused by unpredictable commodity prices. In our view, the 3-year recovery of the K-factor and 3-year recovery of cost increases should work together with our proposed 3-year forecast on Imperfection Charges to give a forward view on the level of costs and tariffs expected.

## 4 Modelling Assumptions and Data sets

BGE acknowledges the complexity of forecasting the annual Imperfections Charge and the importance of forecast accuracy in a system with increasing levels of interconnection and renewable energy. Forecast charges need to be as close to the actual outturn costs as possible. These improvements will not only improve the accuracy of system cost forecasts, but also benefit consumers with Imperfections Charges that are more reflective of the expected system costs and that are less volatile. We believe that the points we raise below, particularly regarding interconnector modelling, offer opportunities for improvements to the TSO forecast model for the Imperfections Charge. These improvements will not only improve the accuracy of system cost forecasts, but also benefit consumers with Imperfections charges that are more reflective of the expected system costs and that are less volatile.

## 4.1 Demand, Interconnector Flows & Wind Availability

BGE has significant reservations about the effectiveness of interconnector modelling for Imperfections and has consistently raised these issues in previous responses. We do not believe that this modelling approach is reasonable however, we assume that the imminent arrival of the Greenlink Interconnector will force the necessary changes to improve the TSO's approach to interconnector modelling. We maintain our position as



outlined in our response to SEM-23-049<sup>20</sup> that it is not acceptable to add the new Greenlink into the current approach as:

- i. there will be no historic flow data available for Greenlink
- ii. there are significant changes occurring in both SEM and BETTA making it inappropriate to assume that price dynamics will be the same from year to year i.e., the correlation of prices between SEM and BETTA are not reflective of the installed levels of renewables in these markets, and we expect this to be exacerbated by the introduction of Greenlink.

The TSO must prioritise improving the accuracy of the Imperfections model by treating interconnected markets equally to the SEM in its modelling processes. It is concerning that this (between demand, ICs, and RES) has not considered geographic coupling of NI and Scotland as it is reasonable to assume that high wind conditions in one location will coincide with the same or similar conditions in the other. Furthermore, as more onshore and offshore wind generation is developed, the accuracy of modelling conditions in interconnected markets will be crucial to (i) improve the extent to which the Imperfections model reflects reality, and (ii) reduce the number of energy-actions taken by the TSO and therefore reduce Imperfections costs.

While the current approach to interconnector modelling may suffice in the short term, BGE urges EirGrid to implement a more dynamic approach to modelling the interaction of the SEM with other markets through interconnectors. This must be implemented before Greenlink is commissioned to represent market interactions more accurately. The possible changes resulting from the Greenlink and Celtic interconnector coming online demonstrate the need to develop more proportionate modelling of the flows expected. We believe now is the time to change the approach to modelling interconnected markets, given the additional interconnection expected to become operational / linked with SEM over the coming decade.

## 5 Imperfections modelling has knock-on effects for the determination of GTUoS and TLAFs

BGE is concerned that the accuracy of the TSO's forecasting model, which underlies the determination of the TLAFs and GTUoS for the following year, is worsening the already ineffective TLAFs and GTUoS processes. We share EirGrid's view as outlined in both Shaping Our Electricity Future 1.0 and Shaping Our Electricity Future 1.1<sup>21</sup> that "The transition to lower emissions, and the expected engineering challenges of increased congestion and constraints on the power system and demand increases, suggests that the methodology and required outcomes from the application of GTUoS and TLAFs may need to be reassessed". The TLAFs and GTUoS processes have also been subject to a lack of transparency and increased volatility in recent years, which in our view, has been worsened by the shortcomings of the Imperfection model which we understand is the same model used to determine TLAFs and GTUoS. We therefore ask that the TSO considers this response in tandem SEMC consultations on GTUoS and TLAFs. In particular, we urge the TSO to consider our asks within this response which will improve the accuracy of the Imperfections model which determines TLAFs and GTUoS, particularly with regards to interconnector modelling.

## 6 Conclusion

BGE appreciates the challenge of providing an accurate forecast for Imperfections Charges given the projected risks over the coming year, particularly the volatility in the commodities market and the uncertainty in the system services market. While we recognise that the TSO has attributed the significant positive K-factor to decreased fuel costs which have decreased DBCs, it remains evident that the TSO must do more to alleviate constraints. Given the fast-approaching climate targets and the deterioration of the grid which will drive costs to fix constraints, it is now crucial that the TSO takes immediate measures to alleviate constraints if we are to have any hope of meeting our 2030 and net-zero targets at an optimum cost to consumers. It is also imperative that the TSO takes immediate measures to reduce, insofar as possible, the volatility of Imperfections charges

<sup>&</sup>lt;sup>20</sup> <u>SEM-23-049 - Constraints Costs (Imperfections Charges)</u> <u>2023/24 Consultation Paper | The Single Electricity Market Committee (semcommittee.com)</u>

<sup>&</sup>lt;sup>21</sup> Shaping our Electricity Future (eirgridgroup.com)



from year to year to minimise the impact of Imperfections costs on consumer bills. To reduce the impact of volatile imperfections on consumer bills, BGE requests that the TSO takes the following actions:

# Actions that can be taken by the TSO in the short-term to mitigate volatile Imperfections Charges and the resulting impact on consumer bills

- i. Introduce a 3-year recovery of the K-factor and a 3-year recovery of Imperfections cost increases to work together with a 3-year forecast of Imperfection Charges to give a forward view on the level of costs and tariffs expected.
- ii. Provide more information on the drivers of the forecast K-factor, what the TSO is doing to alleviate constraints and the volatility the TSO expects to see in Imperfections costs over the coming years.
- iii. Update stakeholder on how the requirements under the Constraints and Imperfections incentive are going to be executed within the PR5 period,
- iv. Provide a single joined-up, strategic plan across the TSO projects to resolve existing and forecast grid issues including constraints and more transparency on the baseline position that exists before a project is implemented to alleviate constraints.
- v. Prioritise improving the accuracy of the Imperfections model Imperfections model which must not only be optimum for Imperfections calculations, but also for TLAFs and GTUOS. In particular, the TSO must treat interconnected markets equally to the SEM in its modelling processes.

These actions should be taken as soon as possible to minimise the volatility of Imperfections costs which will become increasingly significant with greater interconnectivity and levels of renewable generation expected to come onto the system. The longer the TSO delays in implementing an accurate Imperfection model, the more volatility will be seen in consumer bills.

I hope you find the above comments and suggestions helpful. BGE recognise that the above response is similar to those we have submitted in previous years. This demonstrates the need for us as an industry to consider alternative approaches to managing Imperfections costs, especially given the increasing level of interconnection, renewables and constraints we expect to see on the system. We recognise that the TSO and RAs have limited control over several factors that feed into Imperfections costs, notably fuel prices. However, it is suppliers and consumers who are bearing the burden of the risk resulting from these highly volatile factors. We therefore believe there is significant merit for us to consider a more realistic approach to dampen the impact of these risks and the level of volatility that they impose on consumer bills. BGE would welcome a call to discuss our views on alternative approaches that could be taken to manage Imperfections costs in the best interest of the consumer.

Yours sincerely,

Niamh Trant Regulatory Affairs – Commercial Bord Gáis Energy {By email}