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23rd September 2020

Dear Sir/ Madam,

RE: 2019 Annual Electricity Transmission Performance Report (APR) and 2019 Investment Planning and Delivery Report (IPD).

BGE has reviewed the draft 2019 Annual Electricity Transmission Performance Report ('**APR**') and 2019 Investment Planning and Delivery Report ('**IPD**') published by EirGrid and ESB Networks and welcomes the opportunity to provide feedback.

In general, BGE welcomes the increased transparency in the areas covered in these annual reports[1] which goes some way towards informing customers, particularly the TUoS customer, as to the actions and performance of EirGrid as the Transmission System Operator ('**TSO**') and ESB Networks as the Transmission Asset Owner ('**TAO**') in areas of importance to customers.

The reports provide complementary support to the information they each contain, and so read well together. In this context, we outline our views below in the first instance on certain format and content issues within the reports outlining commendable aspects but also some opportunities for possible improvement in future reports. We then go on to discuss the level of reporting on, and performance relating to, the various incentives for the TSO and TAO under PR4.

1. Format and Content

The reports overall are well drafted, clear and are not over-crowded with technical data easing readability for stakeholders. They have a degree of balance in the approach taken as a number of areas where the expected delivery was not achieved (e.g. TSO Strategic Incentives, Transmission Outage Programme, etc.) have been identified alongside the delivery successes. The reports contain good graphics to support the delivery of the point being made without overpowering the message, and there is good reference to where further detail may be obtained by the readers (e.g. the All Island Transmission System Report).

There is reference in the reports to bringing benefits to customers and value to all users of the power system. We believe that the reports could be improved however by more clearly identifying these benefits and value-adds and by attributing a monetary value where possible to them, such as where actions by the TSO and/ or TAO have resulted in a saving to customers and/ or end-users. We ask the TSO and TAO to consider this for the next version of the reports.

Data Centres are recognised as one of the large energy use drivers for the work of the TSO and TAO in 2019. We welcome this recognition of the increased connection of data centres on the Irish system, and the transparency in the reports on the actions needed to meet their needs. Given that the Dublin region has a heavily constrained network, we encourage the TSO to work with the CRU in achieving their stated aim below to examine locational signals not just for data centres, but also for their use for new connections:

> "*EirGrid will continue to review and enhance policy measures to appropriately support data centre development for the rest of PR4 and in PR5 through engagement with the CRU, the data centre industry and other stakeholders. EirGrid is keen to examine further locational signals for new*

[1] Noting for example that details on the All Island Transmission System Performance in 2019 are contained in a separate report; that TLAFs and their calculation is dealt with in a separate process/ paper, and; that the Operational Constraints are published in a separate update.

connections through charging, tariffing or other policy measures and looks forward to working with the CRU on these areas early in the PR5 period."[2]

We welcome this focus that EirGrid is giving to **locational signals**, and we believe there is a clear need for this activity. One of the main locational signals currently in SEM is Transmission Loss Adjustment Factors (**TLAFs**). We acknowledge the inclusion of the reference to TLAFs in the report but believe that the report, and stakeholders, would benefit from EirGrid's view on the effectiveness of TLAFs in signalling efficient investment and why. BGE's view is that 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. To help mitigate this, as outlined in our response to the Consultation Paper on Imperfections Charge October 2020 – September 2021[3], we believe that the Imperfections Model needs to be more accurate both to determine the Imperfections Charges which are recovered from customers, and also because the model is used to calculate other tariffs such as TLAFs. Examples of improved accuracy in this regard include reviewing the modelling assumptions around day-ahead and balancing market bidding as well as assumptions around the net export/ import nature of the Moyle interconnector during times of high wind. We believe an update of the imperfections model could have a more cost-reflective effect on the level of dispatch balancing costs paid by consumers and on TLAFs and would contribute positively to EirGrid's aforementioned objective to examine locational signals.

System constraints remain a recurring item in the reports through the system reinforcement and refurbishment activities that are identified for 2019. We welcome this activity but note that system constraints remain an issue and may get worse due to the increased connection levels of renewable generation (onshore and offshore) and interconnectors that are expected over the coming years. We request clarity on the plans to alleviate constraints on the system relating to the Southern Corridor, the movement of power from the west and south of Ireland to Dublin, and the management of the constraint impacts from new interconnectors. We believe that the TSO's considerations of locational policy will add to the mitigation of system constraints, and we ask that the TSO gives due consideration to minimising consumer costs with the use of flexibility and non-wire solutions where they would be a lower cost solution. Further notwithstanding increasing SNSP targets there are increasing levels of wind energy curtailment- we welcome any clarity the TSO can provide as to how the trend will be addressed.

The issue of interconnectors and constraints impacts, is something we have addressed before in responses including in response to the **Celtic Interconnector** consultation in 2019. We have ongoing concerns on the potential Celtic has to impact constraints in the Cork area which is, as we understand it, the area it is expected to be connected in. Without any clear feedback from EirGrid on our submission, we are unclear if the points we made then were considered, and if the final decision on connection point has been made. We have asked that clear analysis including load flow studies in the proposed connection area occur before any decision on connection point is made as we believe constraints in the area, and possibly beyond, will be negatively impacted when Celtic is connected. We ask for clarity on whether the load flow analysis for Celtic has been completed and when/ if it will be available to stakeholders, or if not then when will it be completed?

On a related point, we have been unable to identify across the various transmission documentation that exists, what the planned grid works are onshore to accommodate the connections of Celtic or indeed the Greenlink interconnector. Given the likely constraints impacts of both connections, we request early sight of these plans and/ or an indication as to when the final grid works required will be decided upon and made public.

Regarding the reference to the interconnector offer made during the period which this report covers, we would welcome an update as to the status (e.g. acceptance and timelines) of that connection offer.

Demand Side Units (DSUs) are expected to play an enduring and growing role in the future energy system in Ireland, and it is good to see the particular reference to them in the reports. The growth in DSU connections in 2019 is welcome but we feel that these numbers would be higher if the TSO registration and

[2] EirGrid PR5 Submission, pg B-14
[3] SEM-20-046, dated 14th August 2020

testing processes were more efficient in terms of time. The current timelines (up to six months) are in our view unduly long and unacceptable. It is a barrier to market entry in a timely manner and restricts competition and opportunities for the TSO to benefit from improved system services. The requirement for a DSU operator to have signed contracts with each constituent demand site before beginning registration is also removed from commercial reality and acts as a serious disincentive for DSU operators and demand site owners to participate in the market. Given the expected growth in demand side response, it is imperative that the long timeline associated with registering and connecting DSUs is addressed and reduced in the very near term. BGE has suggested that the issue be addressed as part of the TSO's strategic incentives (under performance incentives) in PR5.

We ask that the above requests and suggestions to the TSO and TAO are considered and that updates are included in the next version of the reports.

2. Performance and financial incentives

The draft 2019 APR provides a good historical summary of the performance incentives applicable to the TAO and TAO in 2019, and their associated performance assessment against them. Looking at the information in the draft 2019 APR, we take each incentive separately as reported in the "Key Performance Summary Matrix[4]" of the APR, focusing first on the TSO incentives and then those of the TAO:

2.1. TSO Incentives

2.1.1. **TSO Strategic Incentives** – the performance reported for this incentive shows a declining rate of success from 2017 (82%) to 2019 (60%), and the incentive payments associated to these scores mirror this outcome. The further breakdown of the targets behind this incentive in the section "How EirGrid performed against Strategic Incentives[5]" is appreciated and helps identify the areas that need focus to improve delivery under this incentive. The importance of delivering this incentive is captured in the opening remark of this section "*We are in a time of unprecedented change on the electricity system as we move to a low carbon future*." Increasing levels of renewable generation (both onshore and offshore) on the system in the coming years will increase the need for higher SNSP as shown in SNSP targets in Price Review 5. Once the agreed upon SNSP levels for PR5 are set we ask the TSO to focus on meeting the annual targets for SNSP and utilise Innovation and system service flexibility opportunities where possible. We note the reference to how the innovative solutions for tower voltage uprate for project CP1017 was only partially achieved due to a lack of timely agreement with ESBN. In this regard we would welcome the TSO/ TAO views on how such delays will be mitigated in future for other projects and initiatives.

2.1.2. **TSO Transmission System Performance (System Frequency – SF- and System Minutes Lost - SML)** – while the continuing success of the TSO in achieving SF and SML targets is positive the margin by which these targets are being achieved indicates in our view that the targets are not set at a level that will improve the performance of the TSO to the benefit of end users and market participants. This incentive is aimed at maintaining a stable system, and the reported performance identifies that the TSO is capable of comfortably meeting this challenge. In line with our PR5 response on performance incentives we suggest the targets should be tightened to improve incentivisation of enhanced performance and value for the consumer of the incentive payment.

2.1.3. **TSO Management of Curtailment** – The increasing levels of wind energy available to the system is evident from the data reported and reflects the increased connection rate for renewable generation which rate is commended. Yet these increased volumes of wind energy are reported alongside increases in dispatched down energy volumes including curtailed volumes. We appreciate the variety of factors identified in the draft 2019 APR that relate to dispatch down and curtailment, but we ask that clarity is given to any root causes to this trend for increased dispatch down and curtailment to occur when increased renewables connect, in light of the fact that increased SNSP is expected. The trend will have an inevitable impact on end consumer costs, and we would welcome the TSO's view on what might better

[4] 2019 Annual Electricity Transmission Performance Report (APR), pgs 5-6
[5] 2019 Annual Electricity Transmission Performance Report (APR), pgs 12-13

help mitigate the trend in a cost-effective manner, e.g. particular investments, policy decisions, use of non-wires and flexibility solutions where more cost effective than grid works.

2.1.4. **TSOs Imperfections savings for participants** – It is noted in the report that no incentive for imperfections was applied in the period due to the determination of the RAs[6]. The purpose of this incentive has however not changed in that all efforts should be made to achieve Imperfections Charge savings that can be passed onto consumers. The change in the market structure pursuant to the I-SEM project does not in our view undermine the need for, or high-level design of, the original SEM imperfections incentive. Measurable savings on Imperfections Charges should be an enduring target for the TSO. Please see our response to PR5 for the proposed continuation of the 'old' SEM incentive. Regarding the report, BGE believes that transparency in the levels of constraints in particular areas as well as the related costs could be covered in the report to identify where cost savings could be best achieved. We have included such a suggestion in our PR5 response suggesting that the level of constraint actions that occur in a particular time period (e.g. quarterly, seasonal or annual) could be measured against a starting point such as the start of the year or the quarter/ season immediately before it and the related dispatch balancing costs related to that constraint area could be drawn out. We also suggest including in annual reports the historic figures over the preceding few years to demonstrate improvements through lower costs. We would welcome additional detail around how the Imperfection Charge savings were calculated and what exactly they represent as well as to what extent it can be considered that lower cost flexibility procurement and innovative solutions have been used to lower these costs. We welcome the sections on page 19 of the draft 2019 Report on constraints and TSO initiatives as a start to this process, and we urge the TSO to build this out to give stakeholder clarity on constraint costs and the use of cost-conscious approaches (such as flexibility and non-wire solutions) to reduce these costs.

2.1.5. **TSO management of new connections (wind**) and **TSO Stakeholder Engagement** – We will address these incentives together as we welcome the improved scores by the TSO on both. We add that there remain opportunities for improvement on Stakeholder Engagement for the TSO as was identified by the NSSE Panel earlier in the year. One improvement that we want to reiterate to the TSO is the need for clarity in its website to ensure that all open consultations no matter what they relate to are captured in one place and are grouped with their related decision documents and data provided on particular topics. A useful search function on such an all-encompassing "consultations and decisions" page would also be extremely helpful.

2.2. TAO Incentives

2.2.1. **TAO Management of planned outages** – We welcome the efforts made by the TAO in the period to meet the targets set relating to these outages and minimise the disruption to the grid availability. The transition into PR5 may bring increased disruption to the grid as it transforms and develops, and we would welcome inclusion of the actions to be taken by the TAO to continue to minimise the grid disruption with a view to meeting targets.

2.2.2. **TAO Completion of Transmission Maintenance Work Programme** – We acknowledge improvements in TAO performance in this incentive but note that the target has again been missed for this period. We ask the TAO to outline the actions they will take to improve their performance against this target given the increased demands being put on the grid in the coming decades.

2.2.3. **TAO/TSO Transmission Capital Outage Programme Delivery** – The ability of the TAO/TSO to manage resilience in the network is commendable between the use of protection equipment on the network and swiftly addressing adverse events as they occur. The incentive identifies a falling performance level against the target set and we ask for clarity on the efforts being made by the TAO and TSO to improve this performance and move towards meeting the target set.

2.2.4. **TAO Project Delivery Incentive** – The impacts of the COVID-19 pandemic have been felt right across Irish society, and it is unsurprising to see impacts being reported in the draft 2019 Report. We look forward to seeing the final assessment of performance under this incentive

[6] 2019 Annual Electricity Transmission Performance Report (APR), pg 18

when it is available. Our understanding is that the payment associated with this incentive will be delayed until the submission and assessment have been finalised and reported publicly.

3. Conclusion

In general, BGE welcomes the increased transparency and readability of the reports. There are notable improvements and focus given by EirGrid and ESB Networks to the reports including the provision of balanced views around performance against incentives. We have identified above areas within the 2019 report where improvements could be made.

BGE welcomes the focus that the reports give to some areas, and we have identified aspects that we believe are important on each topic. These include:

- **Locational signals**– we encourage the TSO to partner with the CRU to achieve their desired review on locational signals for new demand and generation connections. In the meantime, an update to the modelling assumptions in the imperfections model (which would also bode well for confidence in the **accuracy of dispatch balancing costs**) and an increased flattening of the TLAF methodology compression factor would help alleviate the concerns BGE has in the short term;
- **System constraints** – we would welcome clarity on the plans to alleviate system constraints especially for connections of renewables and interconnectors at lowest cost consideration including the use of flexibility procurement and non-wire solutions where they positively impact costs.
- **Celtic Interconnector** – we ask for the status of the connection decision and the availability of the load flow analysis as previously requested to understand the potential impacts on constraints in the area of connection. Insights on the inevitable onshore reinforcements that will be required to alleviate constraint impacts of Celtic, not least in the Cork area are requested as early as possible.
- **Demand Side Units (DSUs)** – we believe that the time it takes for the TSO's registration and testing processes to complete (up to 6 months) should be reduced as soon as possible to mitigate this current barrier to timely market entry by DSUs. We believe that every effort must be made to increase connection rates for DSUs given for example the Clean Energy Package's ambitions for demand side response and the system services benefits on offer by DSUs.

Finally, our review of the TSO/ TAO Performance incentive results has identified commendable successes as well as a number of areas where certain insights are requested from the TSO and TAO. For example, we welcome the continued focus on Imperfections Charges savings for the customer despite the lack of an incentive and we request further details on the Charges breakdown and make suggestions around reporting on annual constraint levels in constraints areas and related consumer costs. The continuation of the 'old' SEM dispatch balancing costs/ imperfections incentive is also promoted. There are certain improvements to the TSO website on consultations we would like to see too, and we would also welcome more detail around the planned actions by the TAO to improve performance against their maintenance programme.

I hope you find the above comments and suggestions helpful. If you have any queries thereon please do not hesitate to contact me.

Yours faithfully,

Ian Mullins
Regulatory Affairs – Commercial
Bord Gáis Energy

{By email}