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Re: DS3 System Services Procurement Design: SEM-14-059 (the "Consultation Paper)

Dear Andrew, Robert,

1. General Comments and Summary

As a general principle, Bord Gáis Energy (BGE) welcomes the proposal to introduce a market-based approach to the incentivisation and procurement of balancing services on the all-island system. A dynamic and competitive approach should better ensure that the trade-off between value and cost are appropriately balanced to deliver the flexibility necessary to achieve a system non-synchronous penetration level (SNSP) of close to 75% and a renewable target of 40% in electricity.

Recognising that certain details are yet to be determined at this stage of the high level design of the system services procurement design, it is nonetheless difficult to understand the practical interaction of the proposed preferred DS3 Option 5 ("Option 5"), and the I-SEM (as proposed in SEM-14-045). In particular BGE is concerned that the interaction between the preferred Option 5 and the balancing market under I-SEM may not result in the provision of energy and balancing services being commercially optimised simultaneously by generators. As a result, the TSO may then be obliged to take multiple actions in the balancing market in order to avail of the balancing services it has contracted for through the auction. The cost of this inefficiency will ultimately be borne by the customer, which in our view will undermine the value of increasing the SNSP as previously identified by the TSOs.

To that end, BGE suggests that certain changes are needed to the competitive auctioning of system services contracts to ensure that it better compliments the competitive energy market that will be implemented under the I-SEM.

2. Merits of the Analysis

BGE recognises the need for the analysis undertaken by the TSOs on behalf of the Regulatory Authorities (RAs) and accepts that there is significant value to be garnered from an enhanced system that can incentivise greater flexibility and operate more efficiently.

However, given the number of assumptions that were taken to conduct the analysis and that it is relatively static for a single year (being 2020), the analysis cannot in our view be used as a basis for establishing the categorical value of system services in a given year or across a number of years. As discussed further in section 4 below, a more iterative valuation of system

services needs whether required on a 10 year, 5 year, annual, quarterly or monthly basis is necessary.

The assumptions made in the analysis, such as interconnector flows, gas prices, coal prices, connections, retirements etc., will all change and so too therefore will the overall value of the system services. The analysis undertaken at this point in time cannot therefore be used to cap the market. Instead, the market should be designed to achieve the flexibility required in the most cost effective manner such that the investments made (both in flexibility and in renewable generation) are efficient. This implies the need for system service valuations that use assumptions reflective of both system service needs and contract lengths, rather than once-off analysis. Combining a fair and efficient market based approach to deliver investment with incentives on the TSO to optimise operations (both the purchasing of contracts and the dispatch of services) will deliver value for money and ensure that only needed and efficient investments are made.

3. Assessment Criteria

The assessment criteria provided for in the Consultation Paper are in BGE's view appropriate. We agree that the design of the system services market must seek to optimise investment such that curtailment is reduced in a cost effective manner, the consumer interest is protected and the renewable target is facilitated. The criteria allow for a high level assessment of the impact and value of the system services procurement work-stream.

However, while we agree and appreciate the provision of the assessment criteria, we do not believe that the RAs provided a robust framework under which the criteria could each be assessed and qualified. The application of the criteria and the resulting assessment as provided for in Table 7 of the Consultation Paper is therefore subjective in our view. For example when comparing the impact of options 3, 4 and 5 on investment the suggestion is that option 3 is optimal followed by option 5 and then option 4. There is no objective measure provided in the document for this comparison and therefore the reader has no rationale for the ranking of these options. Similarly, Table 7 suggests that Option 5 is optimal in terms of the consumer interest criteria, however there is no evidence to support this and as discussed in more detail below, BGE is concerned that without certain changes, Option 5 could be the most expensive option for the customer.

Without a defined framework by which each of the criteria can be objectively measured, assessed and therefore compared, the assessment conducted by the RAs could be considered subjective. BGE suggests that further detail should be provided as part of the final decision to better support the assessment of the various options.

4. Proposed Preferred Option – 'Option 5: Multiple Bid Auctions'

4.1 Interaction with the I-SEM

The system services work-stream has been an on-going work-stream for a number of years, however at this stage, BGE is of the view that the work-stream has to integrate with that of the I-SEM to ensure that as a whole **the market** delivers an efficient outcome. The I-SEM, as currently proposed by the RAs in SEM-14-045, is proposing to develop and implement a dynamic market down to the real-time balancing timeframe. This balancing market will be designed to incorporate both **balancing energy** and **balancing services** and should, if designed appropriately, deliver incentives for the provision of both simultaneously. It is not clear to us from the Consultation Paper that the SEM Committee's preferred procurement option adequately compliments and integrates with the direction of the I-SEM high level

design. We are concerned that as proposed the preferred approach will result in; generators **not** appropriately optimising the provision of physical energy and balancing services; the TSO being forced to take double actions in the balancing market to avail of the balancing services it has contracted for and requires, and ultimately the customer bearing the cost of the full risk (which includes capital costs and cost of risk associated with price volatility) of facilitating higher levels of wind on the system.

Specifically, BGE is concerned that as proposed in the Consultation Paper the contract for the provision of system services will not oblige service providers to dynamically optimise their position in the energy market and their position in the balancing services market. That is, the providers of energy services and balancing services will optimise the provision of one over the other at a given point in time depending on the arbitrage between the price for energy and the contracted price for balancing services. As a result, the TSO will not be certain that it will be able to avail of the balancing services it has contracted for and/or it will be required to take actions in the balancing market to constrain units up or down to avail of these services. This gives the TSO a direct role in influencing the market and market outcomes and will increase the overall costs of delivering the system services. BGE is concerned that this cost will ultimately be borne by the energy customer through increased balancing costs.

Certain changes to Option 5 could perhaps be considered to achieve a better trade-off between providing a dynamic competitive market to drive efficient investments in flexibility while ensuring that the market for system services does not undermine the underlying energy balancing market.

4.2 Assessment of Option 5: Competitive Multiple Bid Auction

BGE is concerned that as proposed it will be difficult to assess and compare the value of the various bids submitted by participants under Option 5 particularly as they will be for varying contract lengths. Contracts of varying length are not comparable without conducting detailed Net Present Value (NPV) assessments.

To allow for better and more robust auctions (and therefore qualified auction results), it may be best to break the bids into different timeframes, i.e. auctions for 5 year contracts, auctions for 10 year contracts and assess them based on the needs of the system in those specific timeframes.

Transparency as to how the bids are assessed and chosen will also be critical in the design of the auction. Parties entering the auction will need to have confidence that the auctions are truly fair and transparent and therefore they will need to be able to understand and replicate the outcome of the auctions. The algorithm used in processing the auctions will therefore need to be shared with the market.

4.3 Payment for Services

While BGE agrees with the RAs' concern that they do not want to double pay parties for the provision of system services, BGE is concerned that as suggested, the payment of services on a dispatch and/or an availability basis will undermine the ultimate objective of the provision of the system services contracts.

The system services market is being designed to support the provision of and investments in services that are not currently incentivised or supported in the normal energy market. In committing to provide a contract for a designated period of time but only making ad-hoc payments under those contracts, these contracts will not provide the certainty of the existence

and usability of the services that the TSO ultimately needs and that DS3 is intended to provide. BGE is of the view, that where a contract is awarded for the provision of system services, payment under this contract should be made on a capability basis. As discussed in section 4.1 above, BGE is of the view that double payment can be avoided by better co-ordination of the system services market with the energy market, and specifically the balancing market which will evolve under I-SEM[1]. Section 4.4 below outlines a high level proposal which may be useful to consider as a means of finding a balance between providing a competitive market which gives the certainty needed for investment and confidence to the TSO in the existence and usability of system services, while minimising the cost on the customer.

4.4 Alternative Option

Building on the principles of Option 5, BGE has considered an alternative approach which may better deliver a balance between the objectives of the DS3 system services work-stream and the balancing market which will be provided for under the I-SEM:

- **Energy Market for Existing Capabilities:** parties who have existing capabilities to provide system services or who do not require a medium to long-term contract for the provision of system services should bid in the price for those services into the balancing market[2]. This will allow the parties to optimise their position across the energy market timeframes and provide a real-time price signal for the value of energy **and** balancing services. Unlike the current market, the I-SEM's proposed balancing market can provide a commercial incentive to make these services available.
- **Competitive Auctions for Investments:** where the TSO cannot procure sufficient services from the balancing market it would run auctions to procure the required services:
    - Auctions should be limited by the volume of system services required. The volume should be made publically available ahead of the auction;
    - Successful bidders in auctions would be entitled to a fixed auction fee for the provision of the balancing reserve. In receipt of this fee, the successful party will be obliged to make this service available to the TSO in the balancing market (the fixed fee would compensate them for the restriction on their ability to arbitrage the energy market timeframes);
    - The TSO can run 10 year, 5 year, annual, quarterly and monthly auctions to meet its requirement on a gradual basis (as the need for services change or as the status of those parties who provide services change, e.g. due to outages, closures etc.); and
    - Incentives would be placed on the TSO to optimise the purchasing of the system services so that it does not over contract in the long-term auctions and place an undue cost burden on the customer.

Recognising that the above proposal would need more detailed assessment, BGE believes that an approach which firstly places an obligation on a party in receipt of a system services contract to actually provide that service and secondly to commercially co-optimise the provision of energy and system services should be considered. We would very much welcome an opportunity to discuss the proposal in more detail with the RAs.

[1] This is not to suggest that BGE is in favour of the high level design of the balancing market as proposed in SEM-14-045, however, whatever the high level design and detailed design of the balancing market, it is clear that a balancing energy market will evolve under I-SEM which will have the capacity to reward flexibility.

[2] The TSO will likely need to engage in a discovery process to understand what services each unit can provide and therefore understand what volume of services will need to be procured outside of the normal energy market.

Lastly, given the uncertainty in the market with the pending changes to the SEM under I-SEM, it is questionable as to whether a market based approach to system services is appropriate at this time. Investors, and their financiers, need revenue certainty and at this time there is considerable uncertainty as to what the future market revenue streams may be. Therefore, it is unlikely that a market based approach will deliver the much needed investments in system services until after the I-SEM is implemented and parties gain confidence in the market prices that emerge.

In the interest of incentivising system services investment in the short term, a bridging solution between the regulated price and market based auctions could perhaps be considered. That is, in the interest of delivering immediate system service investments the RAs could look to set a regulated price for each of the products. As competition emerges for each of the products (which, if the regulated price and the market prices are efficient, should occur) and there is an over-subscription for the regulated contracts at the regulated price, the RAs could introduce a merit-order of bids from applicants for each of the products eventually moving towards an auction. Again, as competition emerges, the regulated prices move from being 'the price' to being a 'reference price' and eventually to being redundant as the market moves gradually towards a market based auction.

Perhaps somewhat in reverse to the suggested governance of Option 5, this approach would start with the regulated price and only move towards a market based auction approach once the success of the regulated price in delivering necessary system services has been demonstrated (perhaps akin to the development of competition in the retail energy markets). The factors involved in the decision to move from such a regulated price approach to a market based approach would of course need to be transparent and notice of such a change would need to be timely for investor certainty reasons.

I hope you find the above comments and suggestions useful. Please do not hesitate to contact me if you have any queries on the comments raised.

Yours sincerely,

Jill Murray
Manager, Regulatory Affairs – Commercial
Bord Gáis Energy

{By email}