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5th August 2020

RE: SEM-20-042 - Consultation on Aggregation (the "Consultation")

Dear Heather and Ian,

Bord Gáis Energy (**BGE**) welcomes the opportunity to respond to this consultation on Aggregation.

1. General context

BGE is a long-standing advocate of an open, transparent and competitive market that allows approved parties to participate in the market in a manner compliant with their licencing conditions and their obligations under the market codes.

Aggregation is an important mechanism to facilitate participants in finding a route to market particularly for technology that is developing across the electricity industry. Aggregation of electricity whether by generation or demand side response features prominently in the expectations of the recast EU Electricity Regulation[1] ('**Regulation**') and Electricity Directive[2] ('**Directive**'), both being key pieces of legislation within the EU Clean Energy Package ('**CEP**'). This review of aggregation in the SEM is timely and appropriate to assess the mechanisms within the SEM to facilitate aggregation and consider updates to support aggregation mechanisms to align with the expectations of the CEP.

Any changes to arrangements resulting from this consultation must in BGE's view, ensure that the key attributes of a well-performing market remain unaltered and enhanced where possible. In particular:

i. The market needs to maintain transparency which would include continuing unit-based bidding practices in SEM and also ensuring that consideration of aggregation and Intermediary arrangements in the SEM does not reduce transparency in the market. Furthermore, the flow of volumes (and related revenues) for individual units[3] as between the ex-ante markets and balancing market must remain clear and easily traceable/ linkable;
ii. Enhancement of market liquidity is to be encouraged. In the context of aggregation, access for new entrants and new technologies should be facilitated in a manner that increases the levels of market competition and liquidity. By corollary; changes for aggregation should not: reduce liquidity, contribute to market concentration or potentially facilitate non-competitive behaviours in the markets, and;
iii. The regulatory framework for aggregators, the oversight and controls on them, and the administration of aggregators needs to be clear.

Against the above context, particularly in light of the overarching aims of the CEP in the area of demand side response and enhanced small and larger scale consumer participation BGE's main ask in this Consultation is that revision of the definition of the Demand Side Unit ('**DSU**') occur such that CEP ambitions can be realised to the benefit of consumers large and small. In Section 2 we outline how we do not believe that Intermediary Arrangements, and so Intermediaries, can or should be seen as Aggregators in the SEM. We go on in Section 3 to discuss how Aggregated Generator Units ('**AGUs**') can be considered as Aggregators, and that an

[1] REGULATION (EU) 2019/943 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 on the internal market for electricity
[2] DIRECTIVE (EU) 2019/944 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU
[3] DSUs and AGUs being considered aggregator units

alteration to the definition of DSUs can better enable achievement of the CEP's consumer centric vision for enhanced demand side and battery storage participation in energy markets. Finally, Section 4 sets out our consideration on the need for clear regulatory oversight and monitoring of aggregation in the SEM via a regulatory framework that includes an Aggregator's Licence and other contractual agreements. It also considers the regulatory principles that should feature as aggregation develops in the various consumer segments in the retail sector, including to the final customer. The consultation questions, and our answers, are grouped into each of these relevant sections.

2. Intermediary Arrangements

Intermediary Arrangements are a historical construct that have existed and operated in the Irish electricity markets for over 12 years. The original intent of Intermediary Arrangements was "*….to facilitate the transfer over of a number of legacy power-purchase arrangements (PPAs) that existed prior to the introduction of the SEM, and its gross mandatory pool design*.[4]". Intermediary Arrangements were designed for Suppliers to facilitate a route to market for the (then developing) wind generation sector without introducing increased credit risk to the contracts. The arrangements enabled the transmission of the value for the electricity generated by the wind assets to be passed to the generators via the Suppliers. The purpose and design of Intermediary Arrangements has facilitated the efficient operation of the SEM over the last decade.

Consultation Question 1: *- Do the existing Intermediary arrangements in the SEM meet the criteria for Aggregators outlined in the CEP?*

BGE firmly believes that Intermediary Arrangements do not meet the criteria for Aggregators, based on the definition of 'aggregation' from the Directive. To maintain market transparency and liquidity, Intermediaries should not be considered as an aggregator unit that may "combine" generation or demand units under their Intermediary Arrangements. Intermediary Arrangements are a market construct for appointed market participants to represent a single unit in the market as contractually agreed between that unit and the Intermediary. In representing the unit in the market and complying with all relevant obligations that apply to Intermediaries (including unit-based bidding in line with bidding rules where applicable) there is, and should continue to be, no scope for the Intermediary to effectively combine the unit's generation or load with that of another unit the Intermediary is also representing.

In our response to the consultation on Intermediary Arrangements in the SEM (SEM-20-033), BGE sought confirmation that there will be no scope for an Intermediary to be considered as a stand-alone unit itself (under which multiple units can be bid and settled on a pooled basis). We reiterate that request here. We believe Intermediaries should be seen only as the "representative" of an eligible unit and that its participation in the market(s) in which it engages on behalf of the eligible unit is in the interests of that unit alone. Our stringent desire for continued transparency and liquidity in the market includes at a minimum maintaining unit-based bidding practices in SEM. It is not possible in our opinion to reconcile our view on this with the Directive where aggregation is defined as "*…a function performed by a natural or legal person who combines multiple customer loads or generated electricity for sale, purchase or auction in any electricity market*"[5].

Intermediary Arrangements, and Intermediaries, continue to have a valid and important role in the SEM but should not be considered aggregators under the CEP. As explained above, were Intermediaries considered to be aggregators per the definition in the CEP then we foresee considerable negative consequences for SEM not least in terms of reduced market transparency and reduced liquidity with knock-on negative impacts for competition and ultimately consumers.

Consultation Question 4: Do Intermediaries have non-discriminatory access to participate in the SEM?

BGE has provided its views on the access of Intermediaries to the SEM in our response to the SEM-20-033 Consultation on Intermediary Arrangements in the SEM, dated 7th July 2020. We supported the proposal for the application of Intermediary arrangements to the ex-ante markets on the proviso that it does not impact market transparency or liquidity. The proposal is a natural build-on for Intermediary Arrangements in SEM to allow units and participants full access to markets and comply with Article 7 of Regulation (EU) 2019/943 (CEP). Our views are based on our enduring principles of an open, transparent and competitive market for all licensed

[4] SEM-20-033 (p2)
[5] Article 2 (18) of DIRECTIVE (EU) 2019/944, via Article 2 (44) of REGULATION (EU) 2019/943

or approved participants to encourage continued market transparency and liquidity. In short, we believe Intermediaries have non-discriminatory access and are well used in the SEM. We are not aware of any units in the SEM having issues gaining access via Intermediaries. Given that we do not consider Intermediaries to be aggregators, then the question as to whether non-discriminatory access for Intermediaries to the SEM as an aggregator does not arise.

Consultation Question 8: *Do you feel that the current framework for Intermediaries could be applied in future aggregation frameworks and is compliant with Article 17 of the Electricity Directive?*

Intermediary Arrangements are, in our view, not aggregators. They should not be afforded any further consideration as such within any aggregation frameworks or compliance with aggregation provision reviews under the Directive.

3. Aggregated Generation Units (AGUs) and Demand Side Units (DSUs)

This Consultation appears to assume that the market participant models of Demand Side Response/ Units (DSUs) and Aggregated Generator Units (AGUs) share enough characteristics to be grouped within the concept of demand response for the purposes of the Consultation[6]. We believe the acknowledgement that the models are different in practice, is a very pertinent point, however. DSUs and AGUs fulfil different functions in terms of the types of load or generation they are seeking to pool/ combine/ aggregate. The difference between them is necessary to acknowledge and maintain at least in the short-term to ensure the CEP aims are best facilitated. In this regard, we have separated out the concepts in our response to provide clarity around our views on the treatment of AGUs and DSUs under the concept of aggregation.

3.1 Aggregated Generator Units (AGUs)

By definition, in the SEM Trading and Settlement Code (**TSC**), an Aggregated Generator is "…*a collection of Generators located at different Generation Sites each with a capacity of no greater than 10MW and which together comprise an Aggregated Generating Unit within the meaning of the applicable Grid Code*.[7]" This cleanly aligns with the definition of aggregation from the Directive in that AGUs "…*combine….generated electricity for sale, purchase or auction*…." and their position as a form of aggregation in the SEM is clear. The rules and framework of the TSC provide clarity for the access and obligations of AGUs to the energy and capacity markets in the SEM. AGUs provide a clear route to market for smaller generators in the SEM and in our view are currently working effectively within the market. We note for example from the DSO's list of connected non-wind generators that those small generators requiring a route to market via an aggregator are often well under the de minimus with most being in the 1-2MW size[8].

AGUs are therefore currently a viable form of aggregation in SEM in our view and should be retained as is. Any change to the AGU construct should be well-evidenced and justified. Care should be taken that any amendments for AGUs further to this consultation do not introduce market power concerns via the AGU construct.

3.2 Demand Side Units (DSUs)

3.2.1 DSUs and the SEM definition

Demand Side Units are also clear in their definition, purpose and responsibilities in the SEM under the TSC. DSUs are defined in the TSC as "…*one or more Demand Sites which comply individually or collectively as appropriate with the criteria set out in paragraph B.9.5.3 and is so registered by a Participant*.[9]" The consideration of Demand Sites within DSUs is clarified by TSC B.9.5.2 – "*Subject to the terms of the Grid Code, a single Demand Side Unit may be associated with a number of Demand Sites provided that those Demand Sites are within the same Currency Zone and that each Demand Site contributes no greater than 10MW to the Demand Side Unit MW Capacity. The combined Demand Side Unit shall for all purposes under the Code be*

[6] Footnote 5, p6 SEM-20-042
[7] Aggregated Generator TSC-Part B-Glossary
[8] DSO Connected-Energised Non-Wind Generators Q2, 2020 - Of the 273MW connected generators to distribution system, all are <=5MW (most are close to 1-2MW), except 7 small generators whose MEC is <10MW and then 2 other larger generators.
[9] Demand Side Unit TSC-Part B-Glossary

treated as a single Demand Side Unit." TSC B.9.5.3 then goes on to clarify the criteria for any Demand Site associated with a Demand Side Unit as:

(a) *the Demand Site shall house a final customer or consumer;*
(b) *the Demand Site shall have the technical and operational capability to deliver Demand Reduction in response to Dispatch Instructions from the relevant System Operator in accordance with the relevant Grid Code or Distribution Code;*
(c) *the Demand Site shall have appropriate equipment to permit real-time monitoring of delivery by the relevant System Operator; and*
(d) *the Demand Site shall have a Maximum Import Capacity and shall not have a Maximum Export Capacity greater than the De Minimis Threshold.*

There is alignment between the TSC provisions for DSUs and the definition of "demand response" under the Directive[10]. The alignment of DSUs with the CEP's "demand response" definition as well as with the definition of "aggregation" from the Directive makes DSUs an existing aggregator construct in SEM in our view.

3.2.2 DSUs and the vision under the CEP

However, there are a number of aspects to the DSU that we believe require review and amendment if the SEM is to be deemed wholly compliant with the CEP and facilitative of the CEP's aims. In our view, the CEP aims to introduce a number of developments to the European electricity sector by:

- Facilitating the access to markets of all types of consumers big and small
- Seeking consumers to be more proactive and involved
- Implying that easy routes to market should be available and access should be non-discriminatory.

Simultaneously however in the electricity sector, there are balancing responsibilities and related requirements. For the CEP vision to materialise we need to develop unit constructs (aggregators) that are attractive to big and small players in that their risks can be clearly managed and mitigated. There must be sufficient scope for them to become as active as possible in the various markets including ancillary services.[11]

For the reasons explained in Section 3.1 above the AGU concept as an aggregator is currently sufficient in its current set-up to meet SEM needs and comply with CEP aims. However, given the consumer-centric focus of the CEP and emphasis on both big and small demand-response and battery storage the current construct of the DSU falls short of CEP aims and needs more refinement.

3.2.3 Overseas experience in the DSU and battery space

With this context in mind we have considered how some other markets are rapidly developing to cater for the CEP's ambitions and maximise the role that consumers can play in the market. The development of electricity storage (batteries) in the energy sector is progressing in a number of European markets such as the UK, the Netherlands and Germany[12]. In Ireland, reference is made to 4 separate battery projects that are Contracted Transmission Generation in the TSO's Ten Year Transmission Forecast Statement 2019[13]. Wider afield, battery technology is becoming more pronounced in Australia[14]. Alongside the growth of electricity storage in these markets are developing structures for the use of battery storage in the power sector. One pertinent example is the developing structure that combines distributed loads and energy storage to offer demand-side response operations. This model can be seen in operation in the Terhills leisure park in Belgium[15] which incorporates

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[10] 'demand response' means the change of electricity load by final customers from their normal or current consumption patterns in response to market signals, including in response to time-variable electricity prices or incentive payments, or in response to the acceptance of the final customer's bid to sell demand reduction or increase at a price in an organised market as defined in point (4) of Article 2 of Commission Implementing Regulation (EU) No 1348/2014 (17), whether alone or through aggregation; - Article 2 (20) of DIRECTIVE (EU) 2019/944

[11] Article 15 of DIRECTIVE (EU) 2019/944

[12] Thurcroft battery storage site, South Yorkshire (UK), Haringvliet Hybrid Energy Park (The Netherlands), "Germany's power grid industry is set to expand big battery capacity to 517 megawatts (MW) in 2020, 14% more than last year's 453 MW….", Reuters March 2020 (Germany)

[13] Table 4.2 (pgs 57-58) - TSO's Ten Year Transmission Forecast Statement 2019

[14] South Australia's big battery and Maoneng's portfolio

[15] Centrica Business Solutions' 32MW scalable facility at Belgium's Terhills leisure park incorporates 18MW of Tesla batteries, combined with a wider flexibility portfolio of other distributed energy resources such as industrial load and generation assets.

an 18MW battery unit to optimise its load flexibility within its energy requirements whilst also "…*delivering balancing services to European transmission system operators*…".

3.2.4 Optimising a DSU to the benefit of the SO and its system services needs

The growing availability of commercial battery technology in the electricity sector provides system service options to aggregators for demand side response to the benefit of the System Operators (**SOs**). A battery in combination with other sources of demand reduction can offer more efficient and effective services for system stability than demand sites on their own. Individual demand sites may be most effective at providing frequency response within a specific timeframe, but inclusion of a battery allows for the optimal activation of constituent sites and provides a greater range of services. Batteries also help facilitate the provision of symmetric frequency regulation which while not a required system service in the SEM at present may become more important as the variable proportion of our generation increases. The inclusion of a battery within a DSU can also further enhance the controllability of the DSU by the SO. Responsibility for the real-time controllability can rest with the DSU owner/ operator who can have responsibility to action the respective demand sites that make up the DSU. This can deliver benefits to the consumer in terms of for example lower imbalance charges given the inherent balancing protection provided by the battery and greater access to system service revenues due to the combination of battery and demand site capability on offer.

3.2.5 Batteries within DSUs and compliance with CEP aims

Batteries when aggregated in a DSU in BGE's view allow for optimum achievement of the CEP Directive's ambitions. A combined battery-demand side response unit, compared to a DSU with no battery option, best enables: the fostering of participation of demand response through aggregation[16] and; non-discriminatory treatment of market participants engaged in the aggregation of demand response[17]. DSUs also offer battery technology/ storage units a route to market and could attract new participants and investment in the technology to the SEM market. By corollary, excluding batteries from DSUs is in our view establishing a barrier to entry for the technology and new market participants.

3.2.6 DSUs in the SEM and need for change to better align with CEP and wider EU developments

The use of aggregation in the form of DSUs as a route to market for battery units should be permitted. Indeed, looking at the definition of a Demand Site in a DSU, batteries meet most of the established criteria: they could be considered akin to a 'final customer' when they recharge; they have the technical and operational capability to deliver Demand Reduction on instruction; and they have a large MIC as opposed to "house loads". Batteries have a unique set of operational characteristics that set them apart from conventional generators, and these are key when considering batteries in terms of aggregation within a DSU. Batteries are well suited to sit within a DSU whether on a standalone basis or as part of a "behind-the-meter" environment. A DSU incorporating battery technology can offer an optimum route to market for batteries of all sizes and as the demand-side technology develops a DSU incorporating battery technology in our view offers optimum opportunity for aggregation of residential customers' load also. Provision for a DSU of this type would better enable SEM DSU participants to compete on a level-playing field with EU counterparts. The problem however with the SEM definition of DSUs is that a battery shall not have a Maximum Export Capacity (**MEC**) greater than the current 10MW (de-minimus) threshold. This MEC limitation on demand sites within DSUs reflects a barrier to entry for battery technology and for optimum aggregation of household as well as business customers' demand side response capabilities.

3.2.7 DSU definition – proposed revision and way forward

The Demand Site size limit was established before the existence or offering of battery technology in the SEM and has a purpose against the background of conventional units. However, we believe that this 10 MW limit is unsuitable for batteries and serves little purpose other than represent a barrier to entry for developing technologies and household as well as larger consumer engagement in energy markets. For a DSU utilising a battery to improve its efficiency the optimal size of battery depends on the size of the other demand sites. For

[16] "Member States shall allow and foster participation of demand response through aggregation. Member States shall allow final customers, including those offering demand response through aggregation, to participate alongside producers in a non-discriminatory manner in all electricity markets." - Article 17 (1) of DIRECTIVE (EU) 2019/944

[17] "Member States shall ensure that transmission system operators and distribution system operators, when procuring ancillary services, treat market participants engaged in the aggregation of demand response in a non-discriminatory manner alongside producers on the basis of their technical capabilities." - Article 17 (2) of DIRECTIVE (EU) 2019/944

current DSU activities in the SEM this would be a battery larger than 10 MW. Also, importantly the majority of commercial battery units scheduled in Ireland[18] are greater than 10 MW and this would exclude them from participation in a DSU. A removal of this limitation would allow batteries to participate in DSUs and provide significant benefits to consumers, the SO and provide a route to market for battery storage thereby maximising compliance with, and achieving the ambitions under, the CEP.

We therefore request the removal of the existing unit limit for demand sites in DSUs as we believe the limit removal is necessary to enable the enhanced development and market participation of batteries in the Irish energy market to the benefit of consumers and the TSOs. By corollary, it should also lead to enhanced development of the demand side response market on a commercial and household level in the medium to long term. Maintaining the existing 10 MW limit on DSUs limits the options for new technology in the market and does not facilitate the aims of the CEP under the Directive. We would welcome further discussions on this proposal with the Regulatory Authorities **('RAs**') as we appreciate that the changes requested would require modification of some elements of the TSC.

Consultation Question 2: *- Do the existing DSU arrangements in the SEM meet the criteria for Aggregators outlined in the CEP?*

At a high level DSUs and AGUs do in our view meet the criteria for Aggregators as outlined in the CEP. We believe however that DSUs and AGUs are, and should continue to be regarded as, separate registration entities / unit constructs. We further believe that the spirit and aims of the CEP point to the need for revision of the definition of a DSU within SEM to best enable, and facilitate, achievement of the CEP's vision for aggregation not only on a commercial level but on a household level too. AGUs on the other hand are to our mind sufficiently defined within SEM at present to achieve the objectives of the AGU unit set-up and meet CEP objectives.

Consultation Question 3: *- Should a formal definition of an Aggregator be developed which may or may not encapsulate these existing market participants for the purpose of developing an entity to fulfil aggregation functions which meets the criteria of an Independent Aggregator as defined in the CEP?*

We do not believe that a new definition of an Aggregator is required for the purposes of the SEM as in our view at a high level DSUs and AGUs do meet the criteria for Aggregators (and Independent Aggregators) as outlined in the CEP. Looking at the definition of these two constructs, the definition of AGUs is currently well aligned with the CEP. To strengthen the compliance with the CEP of DSUs, as discussed above we request the amendment of the definition of a DSU under the TSC, i.e. removal of the 10MW limit on demand sites' MECs.

Consultation Question 5: *Do DSUs have non-discriminatory access to participate in the SEM?*

AGUs and DSUs are well-understood and tested constructs for aggregators within the Irish markets. We are not aware of any barriers to access for AGUs at present. We believe however that the current deminimus limit (10MW) on MECs for demand sites in a DSU is a blocker to incorporating viable technology such as batteries at a site level, and we reiterate the need for this limit to be removed from the criteria / definition for a DSU. We believe that the inclusion of batteries as a developing technology within the definition of a DSU when the limit is removed, will maximise achieving the vision of aggregation in the CEP for big and small customers. The persistence of this 10MW limit within DSUs is discriminatory when considered against the activities of demand response in Europe as discussed above.

Consultation Question 6: *Are there updates which could be made to the existing market structure which would facilitate participation by Aggregators in a non-discriminatory manner?*

The existing 10MW limit on MEC on demand site participation in a DSU in SEM excludes the use of technologies like batteries whose optimum viability as a unit in our view sits above this limit. The achievement in SEM of the CEP expectations on aggregation in markets is hampered by the continuation of this limit and we see its removal as necessary for non-discriminatory participation by Aggregators in SEM.

Consultation Question 9: *Are there changes that could be made to the existing DSU framework that facilitates future frameworks for aggregation for demand-side response?*

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[18] "The auction procured three new battery projects equating to a total of 110MW flexible capacity" two 30MW units and one 50MW unit – "What happened in Ireland's first DS3 fixed contract auction?" – Aurora News Brief – Oct 2019; Also from EirGrid Group All-Island Generation Capacity Statement 2019-2028 - CY2022/23 T-4 results list four battery storage units (de-rated) one 39MW unit, two 17MW units, and one 7MW unit

The removal of the 10MW MEC limit on demand site participation in DSUs is a key change required to the DSU framework to better incorporate aggregation in demand-side response.

4. Regulatory Oversight

Aggregation participant responsibilities and obligations in the SEM should be clearly established. This requires not only provisions in the relevant market codes, but also clear regulatory oversight and monitoring. This can offer a degree of protection to smaller market participants such as small-scale generation or demand side response for their market activities with larger aggregators. Regulatory oversight can also protect against increased system costs related to poor aggregator activities that could increase imperfections charges, and so impact consumer costs. We note that concurrent to this Consultation was the SEM Committee consultation on a Capacity Market Code modification (CMC-08-20) proposal by the SOs to address substandard issues with some existing smaller capacity units highlighting the need to have oversight and monitoring of these smaller units that can make up an aggregator (DSU/ AGU) unit. An Aggregator Licence is necessary to address this situation in the future together with a regulatory framework that can include contractual arrangements, Forms of Authority, etc. Finally, operations under an established regulatory oversight framework for aggregators in the wholesale market will provide insight into the protections it can offer to smaller participants in the market. This experience can then be used in any future model for the protections to be afforded to residential prosumers and citizen energy communities as aggregation develops in the residential market.

Consultation Question 7: *What form of regulatory oversight of Aggregators is most likely to ensure the protection of small-scale market participants involved in aggregation (e.g. Contractual Arrangements, Aggregator Licenses, updated Forms of Authority, etc.)*

We set out above the licensing and regulatory oversight we propose is needed for aggregators in the SEM to afford the appropriate protection to small-scale generation/ demand participants, and consumers. BGE proposes that the formal oversight obligation is established through an Aggregator Licence, issued by the RAs with monitoring and reporting of aggregation operations in the SEM by both the RAs and the SOs. Engagement with SEM participants can establish the level of published information on aggregation operations in the SEM that would support an open and transparent market. We trust that you will take on board these comments and we look forward to engaging in upcoming consultation(s) alluded to in the Consultation..

Consultation Question 10: *What other considerations should the RAs focus on prior to the implementation of Article 17 of the Directive?*

Our consideration of aggregation in the SEM has identified that Intermediary Arrangements cannot be considered aggregators, AGUs currently align well as an aggregation construct, and DSUs also offer aggregation in the SEM but are hampered by the existing 10MW MEC limit on demand sites. We see the removal of this limit from DSUs as the main consideration for change when reviewing demand response through aggregation as set out under the CEP.

We agree with the position that smaller participants in the SEM need to be afforded the protection of a framework to regulate the activities of Aggregators in the SEM and to support demand side participation through aggregation. This in our view could occur via the implementation of an Aggregators Licence and the appropriate regulatory oversight and monitoring to protect participants and consumers when contracting with Aggregators.

Considerations on aggregation in the SEM needs to ensure that market transparency is maintained including the continuation of unit-based bidding practices in SEM and ensuring that consideration of Intermediary Arrangements in the SEM does not reduce transparency in the market. Furthermore, the flow of volumes (and related revenues) for individual units as between the ex-ante markets and balancing market must remain clear and easily traceable/ linkable. The growth of market liquidity is to be encouraged by using aggregation to provide market access for new entrants and new technologies. But it is a minimum expectation that changes to facilitate the improved implementation of aggregation should not reduce liquidity, contribute to market concentration or potentially facilitate non-competitive behaviours in the markets.

There are a lot of emerging topics in the expected development of aggregation in the various consumer segments in the retail sector, including the final customer. We would consider that a set of basic principles for the regulation of aggregation for final customers and smaller consumers should be clearly established and these principles should include, but not be limited to:

- The form of regulation should be proportionate to the risks posed to consumers and the effective operation of the competitive market, ultimately protecting the consumer interest,
- The regulation should be evidential in nature, and follow an evidence-based process in application,
- A level playing field should be facilitated for all of the different actors in the different markets who are engaging in aggregation.

The development of the regulation will benefit from input by participants, and we look forward to engaging with the RAs as this work advances.

5. Conclusion

The consideration of Aggregation in the SEM under the expectations of the CEP is an opportunity for the SEM to continue seeking ways to become more open and accessible to new participants and developing technologies. While the review of aggregation could suggest many changes and alterations to the existing aggregation arrangements in the SEM, we believe that in the short term at least only a few key changes (e.g. removal of the 10MW MEC cap on demand sites within DSUs and the introduction of an Aggregator Licence) while maintaining some key existing constructs (Intermediary Arrangements, and AGUs) are needed to support aggregation as a robust proposition in the SEM that will benefit consumers large and small.

BGE requests that urgent consideration be given to the removal of the 10MW MEC limit on demand sites seeking to contribute to a DSU. This change will facilitate developing battery storage technology being able to aggregate with DSUs at a viable level and offer batteries an optimum route to market in the SEM. The benefits in terms of for example increased flexibility in system services offered by units with demand loads incorporating batteries as seen in EU markets and in terms of the benefits to consumers through lower balancing risk cannot be overlooked. Please see sections 3.2.3 and 3.2.4 above. Overall, this alteration to the DSU definition will in our view better enable achievement of the CEP's consumer centric vision for enhanced demand side and battery storage participation in energy markets. A further change identified to better facilitate aggregation and protect consumers (large and small) is the implementation of an Aggregators Licence and the appropriate regulatory oversight and monitoring to protect participants and consumers when contracting with Aggregators.

The existing operation of Intermediary Arrangements ('**IAs'**) in SEM must continue in their current form, that being an Intermediary representing a unit's outputs, requirements and responsibilities in the market as set out in the Form of Authority in the TSC. BGE cannot reconcile the role of the IAs in SEM with the definition of aggregation under the CEP. An IA should not be permitted to or be seen to "combine" any client loads or generation as if it is an aggregator unit. Intermediary Arrangements cannot be considered as Aggregators against the CEP in order to maintain unit-based bidding, liquidity and transparency. Equally, there does not appear to be a need to change the AGU construct in the SEM at present. AGUs meet the requirements of the CEP and are understood and well used in the market for their purpose and operation.

We believe making key changes in removing the 10MW MEC limit on demand site participation in DSUs and the introduction of an Aggregators Licence and framework whilst maintaining the current Intermediary Arrangements and AGU construct will allow the SEM to comply with the expectations of the CEP on aggregation. As with any change in SEM, any change pursuant to this consultation should not result in any impact that would reduce liquidity, contribute to market concentration or potentially facilitate non-competitive behaviours in the markets.

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

Yours sincerely,

Ian Mullins
Regulatory Affairs – Commercial
Bord Gáis Energy
{By email}