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Dear Jean-Pierre

Response to the Consultation Paper SEM-14-008 ISEM HLD

iPower welcome the opportunity to respond to this very important consultation paper. We are the largest Demand Side Capacity (DSC) participant in the SEM and have built a capacity aggregation business which began at the commencement of the SEM in November 2007. We have been to the fore in providing the necessary aggregation vehicle for a wide range of electricity customers to utilise their capacity in the SEM and have grown from approximately 20 MW to 75 MW over the last three years. Our response has therefore been prepared from a DSC perspective.

Executive Summary

1. The SEM brought about an excellent opportunity for DSC participation for the very first time in a true wholesale market. It provided for the transition from a highly inefficient and environmentally unfriendly vehicle of tariff based peak lopping (including WPDRS) to true wholesale market participation alongside traditional power stations and other capacity types. iPower are on record in complimenting the RA's and others for their vision and foresight which ultimately lead to the new SEM/market structures that facilitated demand side participation.
2. Our concern at this time is that, now demand side participation has gained significant traction and is beginning to flourish both in NI and RoI, that the new market changes could be the undoing of something that is fundamentally very good. DSC participation in itself now stands as an ideal platform on which the DSV 2020 programme, introduced by the RA's, can be built.
3. It's important to say that a DSC business, by virtue of its disparate capacity structure, carries costs and overheads that would not be carried by conventional generators. The structure of the SEM has helped to some extent to ease this overhead/burden not least by facilitating DSC participation in the market without requiring the high level of trading resources that would be at the disposal of the much larger participants.

4. The iPower DSC business model is based on a single generating unit which sits as a capacity tool in the same general space as a conventional peaking plant. It is very heavily dependent on the CPM/CRM for income with zero real opportunity for infra-marginal rent. The key areas of concern within the options presented in the consultation paper are:
 - a. Loss of stability and certainty that is currently provided by the long term price based CPM;
 - b. An energy only market which would also impact the current stability and certainty;
 - c. Abuse of market power and the impact on iPower and smaller participants;
 - d. Quantity based mechanisms whereby market power can be abused;
 - e. Portfolio based mechanisms which are discriminatory against small, single product type participants;
 - f. Auction type mechanisms which reflect an 'all or nothing in or out' scenario for small participants such as DSC.
 - g. We believe that all of the above areas pose a substantial threat to the future of DSC in Ireland in varying degrees dependant on the final design details that might be proposed for each.
5. We are very much in favour of the existing long term price based mechanism as in the CPM but would be concerned about a short term price based mechanism with the underlying volatility associated with LOLE/VOLL. We recognise that the long term price based approach of the existing CPM has provided the necessary stability and certainty required to permit medium to long term capacity contracts to be put in place with DSC Providers. If the structure of such capacity contracts cannot be kept very simple, as provided for by the current SEM structure, the future participation of demand side will very much be threatened.
6. We would suggest that the level of detailed information provided in the options, and in particular the energy market options, within this consultation paper is insufficient to allow consultees to conduct the level of comprehensive analysis that is absolutely necessary to permit a draft decision to be made on the options. It is clear that a further options consultation with much more detailed information is essential before moving into a decision making space on such an important matter. Given the limitations of the information within the options for analysis consultees must be afforded the right to reserve judgement until the appropriate level of information is provided. This can only be achieved through a further consultation phase.
7. Insofar as it is possible to provide a detailed response to the three fundamental questions posed in the consultation paper these are now given below.

Energy Market Options

8. DSC Operators are essentially capacity providers to the market and as such there is unlikely to be any opportunity for forward contracts for the provision of energy. Bidding into the market for all of the output is therefore the most likely outcome.
9. Given that DSC is likely to be high priced in respect of their running costs, they are unlikely to be dispatched very often and when they do, they are likely to set the price. It is therefore unlikely that there will be any infra marginal rent earned by DSC. In the absence of sufficient detail within

the paper we are not in a position to determine any preferences in respect of the options. We will however need assurance that the market mechanism chosen will allow us to at least cover our costs when running (marginal, no load and start/stop/shutdown costs).

10. As a small business with limited resources, the complexity of the bidding process will be very important. We have the capability to manage the requirements of the current market. The four options described in the paper do not include any of the necessary detail to enable us to take a view as to the resource requirements to enable us to prepare our daily bid. We therefore reserve the right to comment on the detailed process as and when it becomes available.

Requirement for a CRM in the HLD

11. We are very firmly of the view that separate energy and capacity markets for a small island system such as we have in Ireland is the preferred option. We see no good argument to combine the two markets, indeed we see significant disadvantages, particularly for small units such as DSC.
12. Keeping the two markets separate has significant advantages in that the two components are clearly visible. If they are combined in a single market, then the daily bid from participants will have a price in each trading period that reflects both the cost of the provision of the energy and the value that the participant associates with the provision of the capacity. The cost of provision of the energy is likely to be based on the SRMC, as at present. The capacity however, would need to be based on the participant's perception of the demand supply balance and the consequent probability of loss of load. This will vary enormously not just by participant, but by trading period, days in the week and season and experience in GB and elsewhere has shown that this will lead to a significant level of volatility in the price, much more so than we currently have in the SEM. It would also lead to much greater uncertainty of income year on year which would move us outside the contractual parameters of our customer capacity agreements.
13. This approach also means that participants would have to be given the freedom to bid in prices as they see appropriate, rather than be controlled as at present by the market regulations. With the small number of large players in the Irish market, this could lead to abuse of market power, which could disadvantage the smaller players, particularly if this then would lead to regulatory control on either the level of bid prices or the bidding process itself.
14. For DSC the volatility would mean an uncertainty on a month by month basis on overall income, but more importantly year on year there could be a significant variability in income. As capacity providers with little or no other income from the market, this would increase the uncertainty for us. There is a very real risk that there would be very little or even no income, as DSC is rarely called on to run. If they were called, the price charged by the units would have to be very high, causing extreme volatility in the market. It would be a significant discouragement to new DSC as insufficient level of certainty could be offered by Aggregators to their member Capacity Providers.
15. Moving from a market in Ireland that separates energy and capacity to one where the two are combined would also mean a significant change in the effort required by the participants. iPower currently prepare a single daily bid that contains availability by trading period and a single price for the day based on SRMC. For participants to take part fully in the market that does not place them at a disadvantage, would require them to have available a significant resource to set up the necessary systems, maintain them and to carry out the appropriate forecasts and bid calculations.

While this would be feasible and manageable for the larger players, it would impose a very significant burden for the smaller participants such as DSC and smaller wind farms. It could make it uneconomic for some to continue in business and would be a significant barrier to entry for new entrants.

16. Changing to a single market for energy and capacity from the current two markets would therefore discriminate against the smaller players to such an extent that the capacity available to meet demand may shrink. We therefore fully support the SEM Committee opinion that a CRM separate to the energy market should remain in place as part of the design changes to the SEM.

Capacity Market

17. The paper discusses a range of options for a new CRM. These are split into two distinct option types, price and quantity based. We favour the price based options, essentially because the quantity based options are more open to abuse of market power and lead to much greater uncertainty for smaller single unit participants such as DSC.
18. The **quantity based** approach by definition requires a defined level of capacity in the market. This is likely to be set by some form of auction where the market ranks the capacity in ascending order of bid price and then accepts the capacity up to the defined level. If there is a surplus then there will be some units that will not be selected to receive payment from the CRM. This represents an “all or nothing in or out” mechanism which would be unsustainable for DSC.
19. While such an approach may be manageable for participants with a significant portfolio of capacity, smaller players such as DSC, who depend almost entirely on the CRM for their income and who have in effect a single unit, could lose out. This would result in loss of capacity to the system. This approach therefore makes the capacity income for all players more uncertain, which cannot be mitigated by the smaller single unit participants. This approach in effect therefore discriminates against the smaller players, particularly DSC and would pose a significant threat to the future of DSC participation in Ireland
20. The **price based** approach sets a price for the value of capacity and all participants receive a payment for making their capacity available. This makes the expected income more dependable to those participants who in fact totally depend on the CRM. This is therefore the preferred approach for us
21. Two price based options are put forward in the paper, long and short term and these are differentiated by the way in which the capacity price is determined in each trading period. The long term option sets the level of capacity required and the value of capacity to get, what is termed, the capacity pot for the year, which is then distributed throughout the trading periods by predetermined rules. There has long since been a broad consensus amongst SEM participants that the current capacity payment mechanism, which is long term price based, works very well and we would strongly concur with that view and also strongly favour the retention of this type of CRM. This provides a reasonably stable income for participants year on year.
22. The short term approach is essentially a LOLE times VOLL approach (as in the original GB system). If this approach were implemented, it would result in a highly variable capacity income for participants year on year and a volatile price by trading period. This would make the future capacity income for participants very uncertain and deter new entrants, especially DSC, again which depend almost exclusively on the CRM for their income. We very firmly believe that the

short term approach would present a significant threat to the future of the iPower business and on that basis would equally threaten the future of demand side participation in Ireland.

23. Our preference for CRM type is therefore clearly for a **price based long term option**. This is similar to the CRM that is currently used in Ireland and has been very successful in attracting new entrant capacity, as well as providing the necessary support to existing participants. We are therefore of the opinion that we should continue with a CRM that is as close as possible to the existing one. We realise that the current CPM is not compliant with the EU Target Model. However, we are of the view that it could be modified relatively easily to accommodate the EU requirements making the necessary adjustments to the ex-post component.