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Dear Karen and Thomas,

**SEM-16-051 - Capacity Requirement and De-rating Factor Consultation**

We welcome the opportunity to respond to the consultation SEM-16-051 - Capacity Requirement and De-Rating Factor.

We understand the TSO methodology that seeks to group similar technologies together for de-rating purposes and we agree that this approach does generally structure similar technologies in this manner. However we would suggest that where technology grouping does not naturally deliver a satisfactory/best fit solution that consideration be given to grouping in other forms, such as similar TOD for example, or not at all. In this respect we disagree with the inclusion of AGUs in the same technology group as DSUs. We see no true technology connection between capacity based on load shedding and capacity based on active power generation and these capacity types should therefore not be in the same technology group. It is also the case of course that some DSUs will include the use of active power generation – we also believe that in certain circumstances such capacity should not be placed in the same category as load shedding.

One of the key distinctions between an AGU and a DSU is that a DSU is very much load dependent capacity whereas an AGU is totally load independent because it has a full export capacity. This point is well made in the DRAI consultation response.

We feel that AGU technology based on reciprocating engine generating systems which are fully synchronised with an export capacity should be classified as a technology group in their own right and



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given a de-rating factor based on the 5 year analysis period of historical SEM data. We also believe that a DSU which fully sits within this category should be considered in the same technology group. We feel this is a much more fair and equitable approach whereby highly reliable DSU capacity is correctly elevated from a lower to a higher de-rating factor than for a highly reliable AGU to be, in effect, penalised with a lower de-rating factor. It is unfair, inequitable and discriminatory for the highest reliability performers in the SEM to be very significantly de-rated below their true rating and level of reliability.

If for some reason this is not a viable approach that fits well within the overall TSO model for de-rating then we feel that a peaker technology group should be considered based on OCGT, AGU and any other similar capacity that carries the same levels of proven reliability. In this way the grouping will take account of technology of similar TOD. The operational characteristics and TOD of the AGU mean that it clearly sits in the same market space as the OCGT. It is fast starting, fast ramping, load independent, separately metered and can run for extended periods if required. This is the approach used by National Grid in GB where a peaker category has been created comprising OCGT and non-CHP/autogeneration reciprocating engines and allocated a 94.5% de-rating factor. (Reference [https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/Auction%20Guidelines%20June%2029%202015\\_TA.pdf](https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/Auction%20Guidelines%20June%2029%202015_TA.pdf))

De-rating focusses on reliability – the TSO has all the necessary historical data to confirm the very high levels of availability and reliability for the iPower AGU. It is also important to point out that not all AGU dispatches have been instructed at winter peak times when demand is highest – some have been mid-summer and weekends. Also there is no issue with periods of extended running, to meet the 8 hour ramping margin for example - this is simply a matter of fuel storage.