



Powerhouse Generation Limited

response to

Capacity Remuneration Mechanism (CRM)

DSU Compliance with State Aid Consultation Paper

SEM-19-013.

Powerhouse Generation (PHG) welcomes the opportunity to respond to the consultation in relation to Demand Side Units participating in the I-SEM CRM. Powerhouse Generation operate a DSU in both jurisdictions

The comments made below shall refer to specific clauses within the consultation document where possible.

Overview

In the Paper's introduction, paragraph 1.1.10 clarifies that

- a) at I-SEM go-live it was not possible to treat DSUs the same as other units.
- b) DSUs did not have access to energy revenue
- c) DSUs could not offset difference payments
- d) DSUs would be placed at a disadvantage compared to other capacity providers

In recognising the above, paragraph 1.1.11 identifies the SEMC determination

- e) DSUs would be exempt from RO payments
- f) Difference payments would be applied to DSUs only when the demand reduction is not delivered

It looks as if the current market application may not be in line with this high-level commentary. Our position is that demand reduction has to be asked for before it can be considered that 'the demand reduction has not been delivered'.

Response to Proposed Solution

PHG acknowledges the identified differences between the 'energy revenue' comments in 1.1.8 and 1.1.10. This is key in understanding the concern of DSUs operating in the I-SEM Energy and Capacity markets.

Whilst we appreciate this paper attempting to address the issue of equal treatment of DSU and other Capacity Participants, we do not fully agree that the proposals therein achieve it.

It is significant that this consultation paper proposes to deliver commitments by the RAs from October 2020. This obviously includes the capacity year of 2022/23, as identified in clause 1.2.4. It is unfortunate that the auction for that year continued to be progressed despite this outstanding consultation paper. This added further discrimination on DSUs that had to participate in the T-4 auction, as they did not know the implications of any outcome from this paper. Since this paper only addresses DSU and State Aid then this also confirms lack of equal treatment between DSU and other Capacity Participants.

2.2.3 suggests that on-site generation should be captured at each IDS. This could of course involve more than one generator. Such expenditure could be significant and make the exercise uneconomical. Should an IDS have metering on their generator(s) it may not be of Grid Code Metering quality (fiscal metering quality) and this would have similar financial implications, leading to uneconomical exercise. It is our understanding that Demand Side Reduction is the delta between consumption before despatch and that after despatch. This is currently measured by the existing fiscal metering provided and measured by ESB/NIE under the control of the appropriate Meter Data Provider (MDP). PHG do not believe that there are any sites that do not have fiscal metering as mentioned. There is no need to change this metering as it meets the Metering Code requirements and that of the Meter Data Provider.

It is unclear as to the provision of a “profile solution”. Current settlement is over a half hour basis, in line with the testing procedure implemented by Eirgrid and SONI.

2.2.4 There should be no requirement for any additional fiscal quality metering as the site has this already fitted to measure its consumption from the grid. Any generation or reduction due to on-site activities are the matter of the site. All reduction from the grid is already measured by fiscal metering. PHG would reject any suggestions that there are sites that do not have this level of metering already installed, and if this is the case then that is a matter for ESB/NIE and the Ras to ensure the implementation of the Metering Code and Grid Code under the appropriate Licences.

2.2.5 There is no requirement for additional data feeds from the site. It may be that the meter data provider could allocate the MPRN data feed, which it already has, to a DSU or a Supplier.

2.2.6 The requirements here seem to suggest there is no relationship between DSU and IDS. This may currently be the case within the T&SC, with the metering of a DSU being aggregated by the MDP. The suggested changes to data handling could be expensive to implement and to maintain.

2.2.7 this is where the proposed technological approach becomes interesting in its implementation, and also fraught with concern.

- It should be remembered that metering settlement is based on a half hour. Should a DSU be given a dispatch during the half hour then there needs to be adjustment and scaling to accommodate for ‘DSU metering’. The consumption of any IDS and DSU is not constant prior to any dispatch that may be issued. It is therefore imperative that the dispatch time is the trigger for capturing the IDS consumption value, and any consumption thereafter is a reflection of the demand reduction.
- PHG would disagree that the Supplier metering for any specific IDS should be adjusted. The metered demand response is the provision, by the site, in supporting the electricity market and grid. It is not suitable to then increase their metering to a level that would suggest that the site had taken zero actions. It is also technically questionable if such an adjustment could take place at the site metering level. If this did not take place at the site level then the only other level that all information is known is at the T&SC level, as the MDP may not have the demand response metering, as it wouldn’t have the dispatch timing.
- The TSSU should be removed as it currently negates the energy settlement for the DSU under the current T&SC rules.
- The requirements of changes to credit cover should be made clearer and identify if it is likely to be an increase or decrease for DSU / Supplier.

Powerhouse Generation is concerned that the SEMC and RAs believe that this proposal shall introduce equal treatment of units. They are suggesting to take the KWh from the DSU and add it back onto the Suppliers metering for the IDS.

This is the same as asking a conventional power station that is off load and importing from the grid to start up and begin exporting energy KWh. Then the MO would take that energy provision and add it back onto the suppliers metering and the power station would be paying the supplier as if it didn't do anything. The power station would receive energy payments from the market, but end up paying significantly more to the Supplier, after the Supplier applies all its additional tariff uplifts.

- 2.2.8 It should be made clear that there are time constraints associated with the potential changes to Grid Code / Metering Code etc. There is a requirement to go out to consultation on these documents.

There is a suggestion that the DSU would need different contractual relationships between DSU and IDS. This would therefore mean that the existing contracts are not valid. If the current contracts are not valid then the DSU has no ability to "secure" the service provision of the IDS for the Capacity Auction Qualification and as such it would have no Existing Capacity (Initial Capacity) and no proof for New capacity. NOTE – This is a concern that exists in the enduring solution and alternative consideration and is a serious concern for the section of the industry.

- 2.2.9 It is disappointing that there is no reference to the changes that may be required by Participants and the costs associated with that. Given the small size of the DSU businesses any such changes are likely to have significant impacts to the economic operations of the DSUs. This shall place pressure on this section of the industry which other sections are not having to experience.

- 2.2.10 PHG welcomes the proposal to identify the actual metered volume at each IDS and to combine the demand response. PHG restates that the IDS demand reduction is based on the effective time of the EDIL dispatch from the TSO, and any metered consumption thereafter is a reflection of the provided demand reduction. PHG does not believe that the demand response should be netted from the meter data of the relevant Supplier (added back on to the actual metered consumption). NOTE – if the IDS, as part of its demand reduction, disconnects from the Grid then its consumption from the grid will go to zero. The proposal within this paper is to add back the calculated demand response and the site will get billed by the Supplier as if nothing had happened. Worse still is that the IDS will get billed for a single value, captured at the effective time of dispatch, for the time that the dispatch lasts.

The Supplier would not just bill the site for the calculated KWh at the Balancing Market price. The Supplier would apply its usual additional costs, which would not reflect the true cost of the demand reduction provided, such as-

- TUoS
- MO Charges
- Supplier Capacity
- DUoS
- Supplier Margin
- Climate Change Levy

- 2.2.12 Please confirm that the scheduled Feb 2020 software release is by SEMO and **not** the TSOs. This is to identify that the changes are for the T&SC systems and not any TSO settlement systems.

- 2.2.13 PHG agree that the timescales for implementing changes, regardless of size, would not achieve October 2020 due to the requirement of investment and installation and testing.

- 2.2.14 We are disappointed to see that the SEMC and RAs believe that the operational metering is “below settlement quality”. This is an issue that the Ras should take up with the MDP, NIE, ESB under their implementation of the Grid Code and Metering Code. PHG believes that all metering of our IDS has been fitted by ESB/NIE and are of fiscal metering quality.
- PHG are concerned that the SEMC and Ras believe that the “current operational metering” can provide actual KWh values. For any IDS there is basically a calculation to be performed, based on a value that is captured at the time of dispatch.
- 2.2.15 The SEMC is correct to assume that there shall be significant cost implications for the whole market, and hopefully this includes the IDS and the DSUs. The question to be answered is whether the social benefit outweighs the cost to the whole market. PHG propose that the socialisation of costs across the Suppliers is a better approach, rather than billing the IDS.
- 2.2.16 There should be no requirement for any further installation of settlement quality metering for any DSU or IDS. This proposal is unacceptable. The economics of Demand Side Reduction are under pressure, following the reduction in Capacity Market De-Rating Factors. Additional costs shall not be carried by IDS or DSU participants as it shall push this section of the industry to being uneconomical.

Response to Interim Solution

- 2.2.20 PHG welcomes the proposed interim solution. We would suggest that this becomes the enduring solution.
- 2.2.21 We agree that the data available at present is the Despatch Quantity and other data is not currently available. PHG agree to the proposal that the Energy payments to DSU participants is socialised across all Suppliers. Given that the demand response by DSU assists in the provision of system security and the ability of further integration of renewables/non-synchronous generation, then the benefit of such cheaper energy is seen by the suppliers. It is therefore appropriate that the relatively small amounts of energy payments to DSU participants is socialised across the suppliers.
- 2.2.22 The current T&SC utilises the despatched quantity (QD) values to settle against the metered quantity (QM), as stated in the consultation paper.
- 2.2.23 PHG does not disagree that the TSOs should continue to implement the Grid Code to all participants. We are aware of the requirements of OC11 of the SONI grid code, which we notice was not referenced in the consultation paper. Referencing only one of the Grid Codes is not appropriate for a consultation paper that is purported to address the whole market.
- The suggestion that a DSU could have a de-rating factor applied to it is more than confusing. Whilst we understand the concern that any unit is not capable of performing to its declared availability, it should be understood that a DSU capability does vary through the day. Such variations are declared through EDIL to the TSOs. PHG are concerned that the proposal to introduce DSU specific De-rating factors will mean a change to the Capacity volume, since that is where de-rating factors exist. If the suggestion is to ‘adjust’ (not de-rate) the energy capable declaration then a new term should be utilised, to avoid confusion.
- 2.2.24 There is some confusion over the suggestion within this clause that Suppliers obtain energy revenue. This may be the position currently under the T&SC due to the TSSU being attributed energy payments, and it being associated with a supplier. However, if the DSU QM is equal to the QD and the T&SC is changed to remove the TSSU, then there shall be

payments to the DSU and not to the Supplier. There needs to be clarification as to how the existing TSSUs are related to Suppliers, within the T&SC settlement system, if any.

It may be suggested that a Supplier who has produced a demand forecast and purchased in the Day Ahead market, could benefit from settling in the Balancing Market with a lower demand volume. This would suggest that the Supplier is selling back power that it didn't need, due to the Demand Reduction despatch of the DSU. This is not double counting, as suggested in the paper. Any Supplier is likely to see some imbalance between their Day Ahead trades and the actual metering in the settlement period.

- 2.2.25 PHG agree with the proposal to socialise the energy revenue paid to the DSUs across all the Suppliers through the Socialisation Fund.
- 2.2.26 We agree that the FSOCDIFFP should be adjusted to ensure with Socialisation Fund is capable of sustaining its obligations to the T&SC.
- 2.2.27 The lack of changes to Participant or MO systems is to be welcomed.
- 2.2.28 The proposal in this clause is not acceptable. When a DSU is despatched by the TSO then it should be given energy payments. This is an equal treatment to other participants, and part of the main thrust of this consultation paper. To do otherwise would perpetuate the discrimination of DSUs and avoid the introduction of consistent treatment of units. DSUs are exposed to difference payment in the same way as other participants, and there is no reason to treat them differently, under such a proposal.
- 2.2.29 The proposal in clause 2.2.28 should not be introduced as it would introduce unequal treatment of units, as covered in the response above.

Response to Alternative Considerations

- 2.2.30 The idea of the Supplier passing the relevant energy revenue to the DSU via the IDS would mean the Supplier being able to identify the specific amount of KWh attributable to a DSU despatch. It would also mean that the DSU would have to inform the Supplier if a specific IDS was part of a DSU despatch, and if the IDS actually responded.
- 2.2.31 Whilst there may be no changes to TSO or MO systems, although we are not sure if that is true, there would be changes needed to DSU and Supplier systems. It should be noted that the MDP and TSO are the entities that know the QD and QM. This information is passed to the MO. For true settlement it would be for those parties to provide data to the other parties, and this may necessitate change to their systems.

There is a suggestion that the DSU would need different contractual relationships between DSU and IDS. This would therefore mean that the existing contracts are not valid. If the current contracts are not valid then the DSU has no ability to "secure" the service provision of the IDS for the Capacity Auction Qualification and as such it would have no Existing Capacity (Initial Capacity) and no proof for New capacity. NOTE – This is a concern that exists in the enduring solution as well and is a serious concern for the section of the industry.

- 2.2.32 Our response to 2.2.30 covers our concerns regarding this clause.
- 2.2.33 This was identified in our response to 2.2.31 above and this would likely push the DSU/IDS arrangements into being uneconomical.
- 2.2.34 PHG agrees that this proposed Alternative Consideration is not a viable option.

Conclusion

Powerhouse Generation agrees with the Interim Solution as it is closely aligned with the current setup in the T&SC. There shall be a requirement to remove the TSSU from the T&SC settlement systems and to socialise the payments over all Suppliers via the Socialisation Fund.

Powerhouse Generation does not believe that the proposed Enduring Solution is workable or able to be applied to the whole DSU environment. There appears to be a lack of understanding of the intricacies of how IDS and DSUs interact and operate. This is probably due to the fact that there are a variety of ways Demand Reduction can be provided, and the proposed solution has not attempted to encompass these different methodologies. It does appear, to some extent, that the proposal is based on the existing AGU approach. PHG would express our concern around this as we believe that the AGU approach is not a good reflection of the service provided to the electricity system outside the IDS.

There is an underlying suggestion that DSU should be the supplier for its IDS and therefore the benefit would be captured by the vertically integrated approach. This would not work due to the requirements of the DSU to perform additional registration and operational forecast and trading. The IDS can also change DSU from time to time.

We would recommend that the SEMC and RAs hold a working discussion group or workshop so that the industry can better understand the thoughts behind the approaches put forwards within this paper. It would be beneficial to have worked examples for the different types of DSUs. For information this includes IDS that can –

- Provide pure reduction, or disconnection from the Grid
- Provide reduction via internal generation to cover their own consumption and then disconnection from the Grid
- Provide reduction via internal generation to cover their own consumption
- Provide reduction via internal generation to cover part of their own consumption