



**Capacity Remuneration Mechanism (CRM) DSU
Compliance with State Aid**

Consultation Paper SEM-19-013

A Submission by EirGrid plc.

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1 EXECUTIVE SUMMARY

EirGrid welcomes the publication of the Capacity Remuneration Mechanism (CRM) DSU Compliance with State Aid Consultation Paper and the opportunity to respond to the consultation.

We recognise the importance of this market change both in terms of the need to comply with the State Aid requirements as well as the benefits that can be achieved by facilitating further participation of Demand Response in the wholesale market arrangements.

EirGrid is supportive of the approach undertaken by the SEM Regulatory Authorities which has seen the development of interim proposals which seek to implement a solution to comply with the State Aid decision, while paving the way for a more robust enduring solution. EirGrid broadly supports the process to amend the market rules using both an interim solution to comply with the immediate State Aid requirements along with considerations of an enduring solution for the long term. EirGrid wishes to highlight that there are risks of unintended consequences arising from some aspects of the proposed approaches that need to be considered. In particular the proposed approaches appear to suggest changes to what is recorded as a Supplier's Metered Quantity. Changes to the Meter Quantities could have knock on implications for the tariffing, settlement, and recovery of revenue streams outside of energy costs that employ SEM metered data (eg. Imperfections, Market Operator Tariffs and NI STUoS and SSS tariffs).

With this in mind, while EirGrid is broadly supportive of the changes proposed, we believe this process would benefit from a working group with industry, incorporating views from the Transmission System Operator (TSO), the Distribution System Operator (DSO), the Market Operator (MO) and Demand Side Unit (DSU) participants among others.

EirGrid agrees that the enduring solution is dependent on resolving metering questions; however, it is significantly dependent on data systems and transfers that do not exist within the current retail and wholesale market designs and will involve significant time and investment to deliver. The scale of the changes to support the enduring solution should not be under-estimated and may involve interim arrangements remaining in place for a number of years.

Assumptions that underpin the interim solution with respect to performance monitoring of Demand Side Units need to be considered in the context that these arrangements may be in place for a number of years. To maintain the robustness of these assumptions and to ultimately support the role out and enduring operation of the proposed arrangements enhancement to the existing Performance Monitoring process for DSUs will be needed.

EirGrid notes that the proposed arrangements would suggest that the MO may take on new roles as meter aggregators and that this is not currently an obligation that is reflected in the MO Licenses. We would welcome clarity as part of the decision as to how the RAs see these roles being implemented and reflected in the regulatory framework.

Under the interim approach, recovering the energy costs of DSUs by socialising the cost through a tariff introduces additional costs and risks which need to be accounted for, through changes in the levels to which the tariff is set, and flexibility around managing the cashflow impacts of differences between incurring the costs and recovering those costs.

EirGrid are committed to supporting the proposed changes to the wholesale market arrangements to ensure compliance with the State Aid decision and look forward to engaging further with the SEM RAs on the development and implementation of the interim and enduring solutions.

2 INTRODUCTION

2.1 EIRGRID PLC

EirGrid plc is a leading Irish energy business, dedicated to the provision of transmission and market services for the benefit of electricity consumers. We are committed to delivering high quality services to all customers across the high voltage electricity system and via the efficient operation of the wholesale power market. We put in place the grid infrastructure needed to support competition in energy, to promote economic growth, to facilitate more renewable energy and to provide essential services. Both EirGrid, and its subsidiary SONI, have been certified by the European Commission as independent TSOs.

EirGrid holds licences as independent electricity Transmission System Operator (TSO) and Market Operator (MO) in the wholesale trading system in Ireland, and is the owner of the System Operator Northern Ireland (SONI Ltd), the licensed TSO and market operator in Northern Ireland. The Single Electricity Market Operator (SEMO) is part of the EirGrid Group, and operates the Single Electricity Market (SEM) on the island of Ireland.

As part of its role EirGrid has developed and is operating a High Voltage Direct Current (HVDC) electricity interconnector with 500 MW transmission capacity linking the British and Irish Electricity markets. This is known as the East West Interconnector (EWIC). EirGrid Interconnector Limited is the licensed operator of EWIC and is a 100% wholly owned subsidiary company of EirGrid plc.

EirGrid welcomes the opportunity to comment on the Regulatory Authorities' Consultation Paper on the Capacity Remuneration Mechanism (CRM) DSU Compliance with State Aid. This response is submitted on behalf of all of the EirGrid licensees.

2.2 STRUCTURE OF OUR RESPONSE

This main part of this response is made up the following sections –

- **High Level Principles** – this sets out some of the thinking from EirGrid with respect to the proposed changes and how Demand Side Units are treated in the market;
- **Metered Demand Reduction and Governance** – this section comments on the requirements for calculation of Metered Demand Reduction and changes to roles and responsibilities that may arise from options in the consultation paper;
- **Interim Approach** – this provides specific comments on the proposed approach;
- **Funding the Residual Cost of the Interim Approach** – this provides comments on the options for funding the market imbalance that would arise under the interim approach; and
- **Proposed Rules Drafting Updates** – this provides some high level comments on the T&SC changes noted in the consultation document.

3 COMMENTS ON THE CONSULTATION

3.1 HIGH LEVEL PRINCIPLES

The consultation considers a number of key issues. Principally, the consultation considers the issue of applying Difference Charges to DSUs (as is done for other Generator Units). This in itself opens the question of access to energy revenue by Demand Side Units (DSUs) which leads to further questions such as:

- Calculating a Metered Quantity for DSUs as for other Generator Units;
- Accounting for that Metered Quantity as for other Generator Units.

We are broadly in agreement with the RAs' proposed changes to the Trading and Settlement Code (T&SC) to apply Difference Charges fully to DSUs. Regarding the calculation of a Metered Quantity for DSUs, we agree that until such time as the enduring Metered Quantity calculation can be implemented, the current approach of setting the Metered Quantity equal to the Dispatch Quantity is appropriate; however, EirGrid stress the need for more sophisticated performance monitoring of DSUs in order to facilitate this change. The current performance monitoring solution for DSUs has minimal commercial impacts, and was developed simply to assess performance against DSU Grid Code requirements. The current methods involve high levels of manual data analysis and manipulation, are resource intensive and not suitable for units which may be regularly dispatched. The performance monitoring standards and assessment methodology for DSUs need to evolve to facilitate the verification of unit performance for the purposes of both Grid Code compliance and energy settlement. Given that the interim solution may be in place for a number of years before the enduring solution can be put in place, EirGrid believe enhancements are needed to existing performance monitoring methods to ensure an enduring and sustainable solution is implemented.

To implement the enduring solution, we consider the key issue to be the development of the appropriate baseline calculation or profile for each Demand Site. This will enable the estimation of what the Demand Site would have consumed prior to the reduction in demand taking place and thus, with the final metered consumption, provides for the calculation of a Metered Quantity of demand reduction. We have outlined further thoughts on the requirements for this calculation in Section 3.2.

With regard to the accounting for the Metered Quantity of the DSU in settlement, we consider this to be an area that requires careful consideration. In the current design, the DSU by default "buys back" its Metered Quantity through the Trading Site Supplier Unit (TSSU) in imbalance settlement. This is important to ensure the demand reduction is not double-counted, as it also appears through the Metered Quantities of the Supplier Units relevant to the individual demand sites (IDSs). The RAs propose to remove this requirement for the DSU to buy its Metered Quantity back through the TSSU and to assign this volume to Supplier Units, on an interim basis through some form of socialisation of the residual error and on an enduring basis through the allocation of the demand reduction at each Demand Site to the Supplier Units of those Demand Sites.

An important consideration is where a DSU gets its energy from. A thermal Generator Unit will procure its energy through other wholesale fuel markets and convert it to electricity. A renewable generator will collect energy from its environment (e.g., wind, hydro, solar energy, etc.) and convert it to electricity. A storage Generator Unit will buy its energy from the electricity market, store it and then convert it back to electricity at a future time.

A DSU does not simply have a Metered Quantity without buying that energy somewhere. There are a number of ways in which this can occur:

SEM (Part A) approach: In this model, the DSU would have a Metered Generation value; however, this would be netted against an equal and opposite amount on the Netting Generator Unit (NGU) where the NGU effectively buys back the market sale of the DSU, resulting in a net amount of zero. When a DSU is dispatched, the IDss, through their relevant Supplier Units, only pay for what they actually consumed.

SEM (Part B) approach: In this model, the same approach that applied in SEM Part A applies except the TSSU is cashed out for their energy in imbalance settlement rather than a NGU. The Metered Quantity for the TSSU is equal and opposite to the Metered Quantity for the DSU. A further difference exists in the current SEM in that the DSU can opt to buy the Metered Quantity for the TSSU in the Ex Ante Markets. Where it does not buy the energy in the Ex Ante Markets, it will be cashed out for the volume in the Balancing Market. Similarly, it can sell the DSU's energy in the Ex Ante Market and submit a Physical Notification or wait until the Balancing Market where it may be dispatched by the relevant System Operator. As per the approach for SEM Part A, when a DSU is dispatched, the IDss (through their relevant Supplier Units) only pay for what they actually consumed. The Supplier Unit may have procured this energy in the Ex Ante Markets and would thus be in a long position and, if not traded out in the intraday markets, would be cashed out for this energy in imbalance settlement.

The Smart Energy Demand Coalition approach¹ (proposed by the Demand Response Aggregators of Ireland during the detailed design of SEM Part B): In this option, the DSU is seen to buy any dispatched energy from the Supplier Unit automatically at the Day Ahead Price through a separate process that they envisage being managed by the relevant NEMO(s). Under this proposal, the DSU waits to be dispatched by the relevant System Operator. Where the DSU is dispatched, it is paid the higher of the Imbalance Price and its offer price for its Metered Quantity as part of Balancing Market settlement. The DSU participant (either through its TSSU or other unit registered with the NEMO(s)) is charged for an equal and opposite amount at the Day-Ahead Price by the NEMO(s). As per the previous two approaches, when a DSU is dispatched, the IDss (through their relevant Supplier Units) only pay for what they actually consumed. The Supplier Unit may have procured this energy in the Ex Ante Markets and would thus be in a long position. The Demand Response Aggregators of Ireland (DRAI) proposal envisages that the NEMO would credit the affected Supplier

¹ Smart Energy Demand Coalition: Enabling Demand Side Participation – Roles & Responsibilities: Keeping the BRP whole after a Demand Response event
(<https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-15-026g%20DRAI%20reponse%20to%20SEM-15-026.pdf>)

Units with a payment back at the Day-Ahead Price (which has been collected from the DSU). In their proposal, the Smart Energy Demand Coalition (SEDC) emphasised that this approach would need to be centrally facilitated, in their view by the NEMO(s), and should not require the DSUs to contract directly with Supplier Units.

We consider that both the interim and enduring approaches proposed by the RAs do not require the DSU to procure their Metered Quantity and, as a result, introduce an imbalance, which is likely to be resolved by the DSU having to buy the energy from the IDSs through their contractual arrangements.

RA interim approach: The DSU gets paid for Metered Quantity but the TSSU does not have to pay back for energy from the wholesale market in imbalance settlement. This will manifest physically as an error volume (under the Part A arrangements, the amount not credited to the TSSU would turn up in the Residual Error Volume, while under the Part B arrangements, the amount not credited to the TSSU would result in a difference in imbalance settlement between suppliers and generators/DSUs). The RAs propose to adjust the Socialisation Charge to recover this; however, we would consider that a different tariff such as the Residual Error Volume Charge may be more appropriate, noting that the Residual Meter Volume Interval Proportion (RMVIP) would need to be reviewed to reflect the application of the charge across Supplier Units. In any case, Supplier Units are paying for the Metered Quantity that was reduced (i.e. energy that was not used). As the Supplier Unit derives its revenue from its customers, it follows that this cost will be spread one way or another across the Supplier Unit's customer base (including the IDS that reduced its output), potentially with less competitive segments of the market likely to bear more costs than the more competitive segments.

RA enduring approach: The DSU gets paid for Metered Quantity but the TSSU does not have to pay back for energy from the wholesale market in imbalance settlement. The RAs propose to adjust the Metered Quantities of a Supplier Unit by the proportion of the DSU Metered Quantity associated with the IDSs that form part of their Supplier Unit. As with the interim approach, Supplier Units are paying for the Metered Quantity that was reduced (i.e. energy that was not used). This cost will be passed onto the Supplier Unit's customers resulting in them paying for energy they did not use. In this case the cost is passed to those Supplier Units relevant to the IDSs, rather than socialised across all Supplier Units.

A result of both the interim and enduring approaches may be that IDSs may have to pay for energy that they did not use and DSUs may be paid for energy that they did not procure. Where there is competition between DSUs for IDSs, as is the case today, it is likely that DSUs could compete by offering to pay more of this energy revenue to the IDS, which has in turn paid for the energy from the Supplier Unit, which in turn has bought from the wholesale market. The result of this would be the DSU buying its Metered Quantity from the IDSs, which have paid for it through the retail market. This may in turn lead to more emphasis on contractual arrangements between the DSUs, IDSs and Supplier Units, an end-result that may not be that different from the outcome of the Alternative Considerations set out in the Consultation Paper.

As the proposed approaches appears to suggest that the Supplier Units' Metered Quantity should include energy which was not consumed, this would have knock-on implications for the settlement of other items which use this Metered Quantity, including tariffs (imperfections, variable market operator charge etc.), and factors such as the Capacity Quantity Scaling Factor (FSQC). Whether or not this is appropriate, this highlights that care needs to be taken to ensure wherever in the rules the changes are introduced to implement the intent of the RAs that it results in the appropriate outcome with the least amount of unintended consequences.

Consider a Supplier Unit with a Metered Quantity composed of the aggregate of the metered quantities of two IDSs. These IDSs are also associated with a DSU. Where the DSU is instructed to generate, it gives effect to this by coordinating a reduction in demand at the import point of the IDSs. Following the reduction, the Supplier Unit is charged for the Metered Quantity after the reduction and the DSU currently receives no energy payment (as it only coordinated the reduction, it did not produce any energy). Only the reduced demand is consumed and this is all that is paid for. In this way, the market is balanced.

To put this another way, at the start, neither the Supplier Unit nor the Demand Side Unit have any physical energy (unlike another Generator Unit that has fuel or stored energy). The Supplier Unit consumes the initial demand on the IDSs before the reduction from the wholesale market. They now have physical title to the initial demand. The DSU is dispatched and coordinates the delivery of a reduction in the demand on the IDSs and gets paid for the reduction in energy. While the DSU has effectively bought the energy from the Supplier Unit, the Supplier Unit sells back the reduction to the market such that its net charge is based on the initial less the reduction. The TSSU on behalf of the DSU "buys" this energy by being cashed out in imbalance settlement (which the DSU then sells back). The net outcome is the Supplier Unit pays for the reduced demand and the DSU gets no energy payment.

By removing the quantity associated with the TSSU, the proposal introduces an imbalance into the market that results in a transfer of revenue from the Supplier Units to the DSU. While fundamental, this issue can be solved in a number of ways; some of which are already present in the market.

The current market arrangements allow the TSSU to buy the energy in the ex-ante markets, thus hedging the cost of buying the energy from the balancing market. Where the DSU is not dispatched this energy is simply "sold back" to the balancing market as cash out in imbalance settlement. Where the DSU is dispatched to the amount sold in the ex-ante market and where the Metered Quantity is deemed equal to the Dispatch Quantity, the TSSU will pay the ex-ante price and have no imbalance. The DSU will be paid for the Metered Quantity. Therefore, there is possibly no need to remove the TSSU. The TSSU may afford the DSU the flexibility to purchase the energy in any of the ex-ante market timeframes. However, given the interactions between energy payments and charges, and difference payments and charges, it may be appropriate to consider either trading through a Supplier Unit, as TSSUs only receive Imbalance Difference Payments if the site is net importing.

There are a number of potential options that could be considered to implement the intent of the RAs in their enduring solution, each with their pros and cons. Given this, EirGrid believes it would be most appropriate to allow the T&SC modifications process to determine the

exact implementation details, with the decision arising from this consultation giving the design principles to steer that development work. This would allow for design testing of all permutations of variables, with inputs from all relevant parties, to ensure the proposed approach results in the intended outcome with the least risk of unintended consequences, and with the appropriate outcomes on the correct parties.

3.2 METERED DEMAND REDUCTION AND GOVERNANCE

In the context of the enduring approach, the assumption that the DSU delivers the Dispatch Quantity may be no longer appropriate given the scale of DSU penetration in the SEM (which is approaching 1 GW). In order to determine how much the DSU generated, i.e. the demand response of the IDS and consequently how much the TSSU needs to purchase from the market, it is necessary to calculate a Metered Quantity. This cannot be measured in the same way that other generation is measured. Other generation starts at zero and increases output. By measuring the output and subtracting the start point, we arrive at the amount produced. For the DSU, the start point is the initial demand of the IDSs before the reduction occurred. Unlike other generation where the start point of zero is known, this value is not known and as the IDSs will reduce their output on dispatch of the DSU, their meters represent the second value – their actual consumption after demand response processes have been activated. It is therefore necessary to calculate the first value of their initial demand before the reduction based on a profiling methodology.

To measure the demand response, having a meter feed of the actual energy consumed on the IDS is not the main item which requires development, as most IDSs would have appropriate metering at least at the connection level with quarter hourly readings. What would be required is the methodology through which the response is calculated using that metered consumption. There needs to be a focus on the standard of the data used for this process, and the process being sufficiently robust to cater for all types of DSUs. In other markets in Europe, and as mentioned in the consultation paper, a profiling approach is taken which involves a methodology to determine a baseline level of consumption which would be expected in the absence of responding to an instruction. The actual consumption in the periods following an instruction is compared with this baseline to determine the measured demand response.

EirGrid believes that the implementation of a profiling methodology for IDSs associated with DSUs is required to fully level the playing field for DSUs and other forms of generation. This would enable DSUs to demonstrate their capability to deliver the same or greater levels of reliability than other forms of generation; and where they cannot, to face the same charges. The profiling methodology would need to be suitably robust to be appropriate for current and future developments of DSUs, and to ensure that a causer-pays principle is implemented, accurately determining the appropriate party to whom energy volumes are relevant. For example, there are different means of demand reduction, such as reducing consumption or increasing on-site generation. There may also be increased utilisation of demand reduction, meaning the methodology would need to ensure the baseline profile is reflective of the level the site would have expected to consume even in situations where there is a small sample size of instances where the unit was not dispatched. This would

require further development work with a potentially substantial impact on resources and systems.

The consultation paper suggests the Market Operator carrying out tasks which could be considered more appropriate for a metered data aggregator. The construction of Metered Quantities for DSUs, and maintaining data (with all of the security requirements they entail) on the relationship between IDs and Supplier Units, are tasks that would typically fall under the meter aggregator role; however, the proposals in the consultation paper suggesting that only changes to the T&SC are required would suggest that these tasks may fall to the MO. This also has implications for the IDs requiring some form of registration for individual sites under the T&SC which places an additional overhead on these sites to comply with the wholesale market rules if they wish to participate within a DSU.

The current Market Operator Licences do not contain an obligation on the MO to act as a meter aggregator. If the changes are to be maintained in the T&SC, and to be implemented through Central Market Systems, then there may be a requirement to amend the Market Operator Licences to reflect any such new obligations. As the MO does not currently carry out these tasks, should these obligations be placed on the MO then development work would be needed to ensure the MO is able to comply with the requirements, including a necessary impact on resources and systems.

Alternatively, the changes required could be incorporated into existing Meter Codes and carried out by the current relevant data aggregators, meter operators, DSOs with the results being sent through the existing data submissions to the MO, with the MOs having no active role in further processing through Central Market Systems or T&SC. Whether it would be necessary and appropriate for IDs to register under the T&SC to enable particular solutions should also be considered in determining the governance of these activities.

3.3 INTERIM APPROACH

The proposed interim approach suggests assurances are required on the assumption that the Dispatch Quantity (QD) is a suitable proxy for the Metered Quantity (QM). While they represent the same concept to different measurements (QD being the energy requested, QM being the energy delivered), based on the performance monitoring the TSOs have carried out to date and testing the dispatch of DSUs, the numbers for QD and QM being equal or relatively similar in magnitude would often not be an accurate assumption.

While under current arrangements it may not always be accurate to make the assumption that all of a DSU's dispatched position has been met, the impact of this is not material as the energy revenue at the Imbalance Settlement Price related to that position is removed from the unit. However, under the interim approach it is intended for the unit to receive the energy revenue related to this position, and therefore the assurance of it being a good proxy and the associated compliance has a larger impact. When the arrangements change to having QD directly affecting the level of energy revenue being received by the unit, the incentive to maximise QD would be greater.

The assumption of QD being a sufficient proxy for QM is based on an assumption of Grid Code compliance which is underpinned with effective performance monitoring. The TSOs are

in the process of making improvements to the performance monitoring process being carried out but have some way to go to ensure efficacy of the process across the board for all units. Given that there are no timelines associated with the implementation of the enduring solution, it is not possible to state whether the performance monitoring carried out currently would be sufficient to maintain the assumption over the whole period for which the interim approach is intended.

The process currently carried out is relatively manual and based on distinct dispatch events as opposed to continuous assessment over longer run periods. While this may be sufficient now, with DSUs typically being called upon similar to peaking units (i.e. a small number of dispatches per year), in the future it is possible that more mid-merit DSUs could be developed and therefore more dispatches would be carried out as these units become more in-merit. Improvements in the performance monitoring process would be needed to account for the increased frequency of dispatch and to ensure that the most accurate data is used. When increased dispatch results in fewer cases of pure metered consumption without demand response, this poses a challenge for developing solutions for profiling the baseline from which demand response is measured.

While it may be acceptable to make the assumption that the Dispatch Quantity is a good proxy for the Metered Quantity, the basis for this assumption can be made more robust and maintained over the period intended for the interim approach through improved performance monitoring. The level of monitoring being carried out with the resources currently available may not be sufficient to maintain this assumption over the whole period for which the interim approach is intended, and additional resources and systems are likely to be required to improve it to sufficient levels. Also, while it may not be possible at the moment to set a date by which the enduring solutions is intended to be in place, EirGrid would appreciate working with the RAs to determine an intended timeline in order to assist with planning activities and resource requirements.

It should also be noted that the interim approach will require a change request on the Central Market Systems to be raised in order to adjust the settlement equations around DSUs.

3.4 FUNDING THE RESIDUAL COST OF THE INTERIM APPROACH

The Socialisation Fund was set up with the primary purpose of allowing surpluses, in Capacity Market settlement and Difference Charge/Payment settlement, plus the Difference Payment Socialisation Charge, to help meet shortfalls in any other aspect of these cash flows. However, the costs considered under this consultation arise from differences in energy volumes: until such a time as the Metered Quantities for Supplier Units can be updated to remove the DSU's measured demand response, then the energy will be double counted on the DSU and the Supplier Unit.

This does not manifest itself as a "hole in the hedge", which the Socialisation Fund was intended to help manage. In fact, the reduction of the magnitude of the Metered Quantity for the Supplier Unit would tend to decrease the amount of Difference Payments the unit would be eligible to receive, in line with the reduction in energy volume they are required to purchase. The enduring approach would result in an increase in the volume eligible for the

Imbalance Difference Payment for Supplier Units, but would also increase the volumes exposed to Within-day Difference Charges for DSUs, if for example these units responded to an instruction in the balancing market which was settled at the Imbalance Settlement Price or greater. Therefore, it is not likely to lead to a new systemic “hole in the hedge”, but rather that DSUs will have the same impact on the “hole in the hedge” as any other Generator Unit.

Given these points, EirGrid is of the view that the Socialisation Fund is not the appropriate area through which to socialise the cost of the interim arrangements to Supplier Units.

This cost arising from the interim approach could be more appropriately thought of as a Residual Error Volume, where there is a net shortfall or surplus in energy balancing revenues arising through differences in the volumes settled on Generator Units (including DSUs) versus the volumes settled on Supplier Units. This is similar to the error volume arising from the amounts actually consumed in each half hour represented through the Generator Unit Metered Quantities, while the Metered Quantities for Supplier Units may not reflect what is actually consumed in each half hour to match the Generator Unit values due to the methodology for profiling the total energy consumption into each half hour for non-interval meters. Therefore we believe it would be more appropriate to consider socialising this net cost or benefit through the Residual Error Volume Charge tariff.

The application of the Residual Meter Volume Interval Proportion (RMVIP) would need to be considered if this approach is taken. Currently, the RMVIP is set to zero to ensure that the charge is levied against Supplier Units in proportion to the percentage of their customers where non-interval metering is applied. Given that it is more likely that an IDS participating in a DSU will have interval metering, the RMVIP would need to be adjusted to ensure that these customers are also accounted for in the application of the tariff. The RMVIP is an RA set parameter, set separately for each jurisdiction.

Note that the Residual Error Volume Charge only applies to Supplier Unit metered quantities, and not Trading Site Supplier Units with a net import consumption position which are sometimes included in other tariff charges. This would mean spreading this cost across general demand consumption, as opposed to site-specific and generation related consumption. There is also the effect that tariffs are recovered against the Metered Quantity of Supplier Units, which have the decrease in load resulting from the dispatch of IDSs under a DSU incorporated into the value implicitly, and therefore this impact would need to be accounted for in the analysis to determine the appropriate level of the tariff to be applied.

Regardless of the tariff to which this is applied, there are two important funding impacts to consider in any socialisation of costs. The first is the increase in the costs to be recovered through the tariff which would arise due to the socialisation, which would require an increase in the tariff itself. Given that the capacity of DSUs is approaching 1 GW, and the costs considered are the energy revenues for what would amount to approximately 1/7th of the capacity requirement of the market, there is a high likelihood that the relevant costs arising would result in a large increase over what is currently recovered through the appropriate tariff. This additional cost would increase as the instances of dispatching DSUs increase.

The second aspect is the weekly cashflow implications, where the costs are being incurred based on the actual dispatch of the DSUs following system and market requirements which would not necessarily correlate to any seasonal profile, while the recovery would typically follow a seasonal profile if recovered against supplier metered quantities. This means that it is likely that on different weeks there would be shortfalls between the costs arising and the recovery of these costs through the tariff, which would need to be funded in the short term until other periods where surpluses between the costs and recovery arise. This is potential exacerbated by a volumetric risk, where there could be differences between forecasted costs and Metered Quantities over which the costs are recovered, and the actual outturn costs and Metered Quantities. The risk arises because as the level of dispatch of DSUs increases, the cost which needs to be recovered increases, while the quantity over which it is recovered decreases. Given that these costs and risks are potentially large, this could have a large impact on the weekly cash flow shortfalls when they arise. This may require more flexibility to be built into the means of managing these shortfalls.

3.5 PROPOSED RULES DRAFTING UPDATES

While EirGrid agrees in principle with the T&SC changes proposed in Appendix A for Capacity Market settlement, we consider that it may be more appropriate to set out in the decision that it is the Modifications process under the T&SC through which detailed legal changes to the T&SC must be progressed. This will allow for a more detailed consideration of registration and settlement changes for the interim arrangement that will support an easier transition to an enduring solution with final legal drafting changes being progressed through an industry Working Group under the Modifications Panel.

Noting precedent for purposes of formatting and integrity of references would mean reference numbers of paragraphs which are proposed to be deleted in their entirety are actually maintained with the text replaced with “Intentionally blank.”, and all cross-references to these paragraphs removed. For example paragraphs F.18.7.3 and F.18.7.6 should be edited to remove references to F.18.7.1. These are examples of issues that can be managed through the Modifications process, which the RAs ultimately approve.

Appendix A outlines proposals for changes in Capacity Market settlement, but the consultation paper mentions changes required to energy settlement to allow DSUs to retain their energy market revenue. It discusses removing the TSSU in order to enact this; however, this may not be the most appropriate means of carrying this out. The TSSU can be used for other purposes such as settling on-site metered demand which is not assigned to a Supplier Unit. For DSUs, there is an additional element added to the use of TSSUs on top of what is done for other units, which has the function of removing the energy benefit from the DSU. This energy benefit is removed from the DSU because it is already accounted for through a change in the metered quantity of the Supplier Unit associated with the IDS.

This can be achieved by replacing the text in paragraph F.2.5.6 with “intentionally blank”, as this was the provision which made the TSSU’s Metered Quantity equal to the negative of the DSU’s Dispatch Quantity. Without this provision, the TSSU’s Metered Quantity will only consist of the metered quantities submitted by the Meter Data Providers, as is the case with all other TSSUs associated with Generator Units, thus providing the same treatment and

potentially allowing the DSU to be its own supplier. Under current arrangements, the setting of the Metered Quantity mathematically in the T&SC prevents the DSU from being its own supplier and Metered Quantities are submitted as zero.

For the enduring approach, while it is not known at this moment what the exact means of implementing this will be through changes in the T&SC or any other documents, there would be a requirement to change paragraph F.2.5.5 to remove the treatment where a DSU's Metered Quantity is made equal to their Dispatch Quantity. This paragraph should be maintained for the interim approach.

4 CONCLUSIONS

In conclusion, EirGrid recognises the importance of this market change both in terms of the need to comply with the State Aid requirements as well as the benefits that can be achieved by facilitating further participation of Demand Response in the wholesale market arrangements. EirGrid is supportive of the approach undertaken by the SEM Regulatory Authorities which sees the development of interim proposals while paving the way for a more robust enduring solution.

In our more detailed comments, we would note:

- EirGrid supports the process to amend the market rules to develop both an interim and enduring solution;
- While EirGrid supports some of the changes proposed, we believe this process would benefit from a working group with industry, incorporating views from the TSO, DSO, MO and DSU participants among others, which could be facilitated through the T&SC modifications process;
- We feel this will allow for further consideration of detailed implementation options as set out in section 3.1;
- EirGrid agrees that the enduring solution is dependent on resolving metering questions; however, it is significantly dependent on data systems and transfers that do not exist within the current retail and wholesale market designs and will involve significant time and investment to deliver;
- The scale of the changes to support the enduring solution should not be underestimated and may involve interim arrangements remaining in place for a number of years;
- EirGrid notes that the proposed arrangements would suggest that the MO may take on new roles as meter aggregators and that this is not currently an obligation that is reflected in the MO Licenses. We would welcome clarity as part of the decision as to how the RAs see these roles being implemented and reflected in the regulatory framework;
- Assumptions that underpin the interim solution with respect to performance monitoring of Demand Side Units need to be considered in this context. To maintain the robustness of these assumptions and to ultimately support the roll-out and enduring operation of the proposed arrangements, enhancement to the existing performance monitoring process for DSUs will be needed;
- The proposed approaches appear to suggest changes to what is recorded as a Supplier's Metered Quantity. There is a risk of unintended consequences arising from this approach that need to be considered. Changes to the Metered Quantities could have knock on implications for the tariffing, settlement, and recovery of revenue streams outside of energy costs that employ SEM metered data (eg. Imperfections, Market Operator Tariffs and NI STUoS and SSS tariffs);
- Under the interim approach, recovering the energy costs of DSUs by socialising the cost through a tariff introduces additional costs and risks which need to be accounted for, through changes in the levels to which the tariff is set, and flexibility

around managing the cashflow impacts of differences between incurring the costs and recovering those costs.

EirGrid are committed to supporting the proposed changes to the wholesale market arrangements to ensure compliance with the State Aid decision and look forward to engaging further with the SEM RAs on the development and implementation of the interim and enduring solutions.