

DRAI CONSULTATION RESPONSE: SEM-20-040

SUMMARY INFORMATION:

Respondent's Name	Demand Response Association Ireland (DRAI)
Type of Stakeholder	Industry Association
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The Demand Response Association of Ireland (DRAI) would like to make the following submission in relation to the Modification Proposals CMC_09_19, CMC_07_20 and CMC_08_20 as per Consultation Paper SEM-20-040. This submission is intended to elaborate on the comments and feedback already provided both during CMC Workshop 12 where the three Modification Proposals were discussed, and in the DRAI's subsequent additional post-workshop submission. The following sections set out the DRAI's comments on the three Modification Proposals consulted on.

CAPACITY MARKET CODE MODIFICATIONS CONSULTATION COMMENTS:

ID	Proposed Modification and Consistency with the Code Objectives	Impacts Not Identified in Proposal Form	Detailed CMC Drafting Proposed to Deliver the Modification
CMC_09_19 - Supplementary Interim Secondary Trading (Version 2)	<p>The DRAI recognises the intent of the Modification to supplement the existing Interim Secondary Trading Arrangements in the absence of an enduring secondary trading solution, and supports the RAs 'minded to' intention to approve the Modification with additional minor changes.</p> <p>In addition to progressing the proposed Modification, the DRAI reiterates its view that having a full set of enduring arrangements in place to enable the secondary trading of Reliability Obligations is an important part of the development of the Capacity Market, and part of the original European state aid approval for the mechanism was based on this being in place.</p> <p>Nevertheless, the DRAI in general supports the Modification which extends and enhances the currently available secondary trading provisions within the market (which are currently highly limited, only effectively enabling a unit to opt-out when undergoing a planned outage).</p>		<p>D.2.1.4A Irrespective of whether instructing the System Operators to conduct a T-1 Auction, the Regulatory Authorities shall instruct the System Operators to undertake a Qualification Process in respect of each Capacity Year on the same timescales as would have been required had a T-1 Auction been held.</p>

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	<p>As within CMC Chapter H, section M.11.2.7 of the Modification only allows selling CMUs (looking to take over all / part of another unit’s capacity obligation) to take part in secondary trading if they were qualified for the Capacity Year in which the proposed trade will apply. Only enabling units which are qualified to participate is a core principle of secondary trading, ensuring that only units which meet the eligibility requirements can participate (for example verifying the unit has a satisfactory Connection Agreement / Offer, the unit will comply with the CO₂ Limits, etc.). To maximise efficiency in the secondary market, the DRAI believes it is important to ensure that sufficient qualification opportunities exist to enable new units to participate in the secondary market for each Capacity Year. Therefore, the DRAI recommends the RAs make a firm commitment to hold an annual qualification window (within the T-1 timescales for each Capacity Year even if they do not have withheld capacity volumes to auction), allowing any new CMUs to qualify for the upcoming Capacity Year, and therefore participate in secondary trading. A new clause D.2.1.4A is proposed to implement this recommendation.</p> <p>The Modification defines ‘Legitimate Reasons’ for which a provider may secondary trade in respect of one of its CMUs. The DRAI recommends including an additional ‘Legitimate Reason’, explicitly allowing for utilisation of the Alternative Secondary Trading Arrangements where “one or more of the Demand Side Units comprising the Capacity Market Unit is or are adversely affected by fluctuations in the availability of its primary energy source (the availability of Individual Demand Sites to provide demand reduction or an increase in on-site generation);“</p> <p>A new limb (g) within section M.11.7.1 is proposed to implement this recommendation. This adds to the existing drafting which already provide for the distinct features of other unit types (Planned / Forced / Ambient outages for conventional generation, fluctuations in the availability of primary energy source for Variable Generator Units, etc.). Therefore the DRAI believes it is equitable and justified to include explicit provision for DSUs to avail of the enhanced secondary trading provisions based on the inherent variation in the availability of their underlying resource.</p>		<p>M.11.7 Restrictions on secondary trade</p> <p>M.11.7.1 For the purposes of this section M.11, each of the following is a “Legitimate Reason”:</p> <p>...</p> <p>(g) one or more of the Demand Side Units comprising the Capacity Market Unit is or are adversely affected by fluctuations in the availability of its primary energy source (the availability of Individual Demand Sites to provide a demand reduction or an increase in on-site generation);</p>
<p>CMC_07_20 - Change in Technology Class for Awarded New Capacity</p>	<p>The DRAI does not support the RAs ‘minded to’ position to reject this Modification, and believes that there is a strong justification to support enabling Participants to change Technology Class in certain circumstances when delivering Awarded New Capacity.</p> <p>This additional flexibility to change Technology Class after qualification is particularly important for Participants delivering new build projects which, if they were to run into difficulty, may still be</p>		<p>G.3.1.4A For a Capacity Market Unit, the De-Rated Grid Code Commissioned Capacity shall be the Grid Code Commissioned Capacity of the Generator Unit or Interconnector multiplied by the lesser of:</p>

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<p>able to deliver the Awarded New Capacity by changing Technology Class, or to put in place a form of temporary generation as a bridging solution to cover commissioning delays. The proposed Modification would provide additional flexibility to ensure (de-rated) Awarded New Capacity is delivered, which is in the best interests of consumers and system security of supply.</p> <p>Having participated in 4 year ahead capacity auctions, many new build projects still carry significant development and construction risks. The DRAI believes that Performance Securities, gradually increasing with proximity to the delivery year, ensure that Participants are already strongly committed to deliver Awarded New Capacity. In addition, the DRAI believes that it is the delivery of the (de-rated) Awarded Capacity that is of the highest importance, and that under certain circumstances providers should have the flexibility to deliver this with a different technology, or even to deploy a temporary / bridging generation solution to cover project delays. The DRAI's view is that allowing the proposed additional flexibility (irrespective of technology, unit type, etc.) is in the best interests of both developers and consumers.</p> <p>As well as providing additional flexibility to enable a change in Technology Class in certain circumstances, the Modification also proposes enhanced flexibility to Participants when delivering New Capacity within the same Technology Class.</p> <p>Specifically, it was highlighted that while previous Modification CMC_06_19 introduced additional flexibility to meet Awarded New Capacity obligations with a <u>larger</u> but <u>shorter duration</u> (lower derating factor) unit than those envisaged at qualification, within the same Technology Class, the CMC currently prevents a unit from being able to meet its Awarded New Capacity obligations with a <u>smaller</u> but <u>longer duration</u> (higher derating factor) unit than envisaged at qualification. The DRAI believes this "one way" flexibility to meet Awarded New Capacity by delivering capacity with a different de-rating factor is not justified, and this restriction should be removed.</p> <p>Modification CMC_07_20 sought to remove this limitation and provide for the situation where a Participant delivers capacity (without changing Technology Class) that has a better derating factor (such as where a Participant delivers lower Initial Capacity but with a longer Maximum Down Time). The DRAI believes this element of Modification CMC_07_20 is now of material impact, in particular to DSUs and other storage technologies which can achieve a significant improvement in de-rating factor by extending their duration (Maximum Down Time / Maximum On Time). The market has sent a strong signal with the recent change in derating factors for short duration run-hour limited units, and at the very least Participants should be allowed the flexibility to respond</p>		<p>(a) the De-Rating Factor applicable to a unit of the Technology class of that Generator Unit or Interconnector and with an Initial Capacity equal to the Grid Code Commissioned Capacity and an Initial Maximum On Time equal to the Grid Code Commissioned Maximum On Time of that Generator Unit or Interconnector as specified in the Initial Auction Information Pack for the relevant Capacity Auction in which the relevant Awarded New Capacity was allocated.</p> <p>(b) the Gross De-Rating Factor, as specified in item 3 (b) of Appendix E "Qualification Capacity Register Data";</p>
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	<p>to that signal by reshaping their units to a higher de-rating factor if they are technically able to do so. As ultimately the derating methodology ensures that 1 MW of de-rated capacity is of the same value to the system and to security of supply, independent of Technology Class, Maximum Down Time, etc. the DRAI does not see justification for only enabling this flexibility in one direction.</p> <p>The DRAI recommends the Modification should be progressed and approved. As a minimum, even if the rest of the Modification focussed on allowing flexibility to change Technology Class is rejected, allowing “two way” flexibility within Technology Class as was proposed in CMC_07_20 should be progressed. Modified drafting to G.3.1.4A is proposed to deliver this change.</p>		
<p>CMC_08_20 - Change of Awarded Existing Capacity to Awarded New Capacity</p>	<p>As set out at CMC Workshop 12 when the Modification was presented, and in its post-workshop submission, the DRAI is strongly opposed to this Modification and the principles therein. While we recognise the System Operators’ motive in raising this proposal, the DRAI reiterates its justifications for this not being progressed:</p> <ul style="list-style-type: none"> • The stated intent is to better align the treatment of Existing and New Capacity. The content of the proposal goes far beyond that stated objective and creates a whole new design element to the Capacity Market that would be inconsistent with the wider design. • The Reliability Option Capacity Market design is delivery-based, and this proposal would introduce an availability-based mechanism into the core of the design. It has been stated on a number of occasions that such a feature would have state-aid implications and this point was also reiterated during the process for the Mod_32_18 proposal. • The Modification would not account for the natural variation in demand-side availability and would also have significant implications for other units with a variable or energy limited availability (Variable units and storage units). • The imposition of an availability time-quota for demand side participants would actually send a market signal to demand sites to increase demand at times when it would not be required/useful. We do not think that this could be seen as a positive design feature as it would just serve to increase emissions on the system. • The proposal introduces the concept of de-rated Availability, which is not a valid construct and sets an invalid benchmark for all units. Simple availability (time weighted MW declared available) is the most appropriate determination of availability. Calculating a 		

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new metric “de-rated availability” (with different derating factors for different unit types, sizes, etc.) is effectively double counting, as the de-rating is already there to reflect that outturn availability is lower than registered capacity. The concept of de-rated availability is not used elsewhere for this reason.

- We recognise that the run-hour limitation of short-run DSUs introduces additional complexity, but it also needs to be recognised that even if two-hour DSUs were to deliver the full quantity that the System Operator’s indicated in their example for two-hours they would still be exposed to difference charges in the following hours. This illustrates that there is a mismatch between the expectation and the risks on DSUs.
- Such a measure should not be introduced while there is the lack of an approved enduring secondary trading market. The secondary trading market, once implemented, will provide a mechanism for capacity providers to appropriately manage any capacity obligation associated with Existing Capacity which for whatever reason is lost during a Capacity Year.
- The capacity market is intrinsically linked with the energy market. It was recognised during the state-aid approval process that changes to the design were needed to enable fair treatment of DSUs. The fact that DSUs do not receive energy payments puts DSUs at a significant disadvantage compared to other units. This inequity needs to be addressed before any measures would be introduced that would further disadvantage DSUs.

While we firmly believe this modification proposal should not be progressed due to the reasons above, we agreed with the System Operator’s view expressed during CMC Workshop 12 that reducing de-rating factors and locking-in low availability would not be a good approach and would send the wrong signals to high-performing units and have very negative implications for the efficiency of the market.

However, shortly before the publication of this consultation the Initial Auction Information Pack for 2024/25 was published, containing a very material reduction in derating factors of almost 40% for 2 hour DSUs and some storage units, without any supporting assumptions, analysis, or narrative. Despite the DRAI having written to both the RAs and TSOs on this specific matter, requesting a detailed technical explanation / justification of this material change, no response or explanation has been received at the time of writing. In the absence of appropriate energy payments (as outlined in detail in this response below) most DSUs rely heavily on capacity payments and a sudden decrease of almost 40% in derating factors effectively equates to a

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sudden equivalent devaluation of Participants' investments, published without analysis, assessment or comment from any party.

The DRAI recognise the TSOs' intention to ensure that all units are meeting their capacity obligations and maximising their availability and fully supports measures to achieve this. However, it is clear the proposed Modification based on reversing Substantial Completion for Existing Capacity deemed not to be delivering (based on an availability measurement) is not an appropriate way to realise this. As well as introducing the flawed new concept of de-rated availability, the proposal to measure availability "for 50% of the time over the first 6 months of the Capacity Year" is unfit for purpose to deliver what the TSOs are trying to achieve (which should ultimately be maximising units' availability during times of likely scarcity). The proposal provides no incentive to maximise availability when this would contribute most to minimising loss of load probability (units could provide >100% availability during overnight / weekend periods, satisfying the requirement without positively contributing to system security of supply at peak times).

The DRAI strongly welcomes the RAs' conclusion the Modification appears specifically targeted to address TSO concerns with DSU performance as opposed to broader market issues, and supports the RAs 'minded to' position to reject the Modification. The TSOs' misperception that DSUs underperform relative to their capacity market obligations has been the subject of detailed specific communication between the DRAI, the TSOs and the RAs, and the DRAI has explained the specific characteristics of DSUs which mean their availability varies in a different manner to that of conventional generation units. In particular, DSU availability is highly correlated with overall system demand, and therefore DSUs inherently provide their highest availability during high system demand periods when ultimately there is an increased risk of loss of load.

When interpreting DSU real-time availability, it is important to consider the market signals being sent to DSUs. Most fundamentally, as highlighted in the European Commission state-aid decision, DSUs do not receive energy payments, so the real-time signals and incentives provided to all other SEM participants to maximise their availability are not present. While DSUs do endeavour to maximise their availability within the technical and commercial constraints of operation, in the current market design there is little incentive for DSUs to increase real-time availability above their capacity market load following obligation.

It is therefore only reasonable to compare DSU availability performance against their real time load-following capacity obligation (the key real-time market signal of what participants must make

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available to satisfy their reliability option obligations and the generation adequacy requirements of the system). The availability of DSUs on aggregate consistently exceeds the real time aggregate load-following capacity obligation of all DSUs in the market, and this continues to improve.

While the DRAI is open to consultation on the wider principles of compliance with the reasonable endeavours obligation set out in CMC I.1.2 (including the potential inclusion of further compliance obligations with CEP CO₂ Limits) it reiterates that defining a new interpretation of how compliance will be measured and enforced would be a material change to the risk profile upon which Participants have bid for capacity. In this vein, such a material change should as a minimum not be introduced retrospectively (to Capacity Years for which Participants have already secured capacity), and should be analysed in detail (to ensure equitable treatment across unit types and the avoidance of any unintended consequences including double counting interaction with the derating methodology) before being implemented. On the basis of only being fairly implementable for future auctions when Participants can factor into their bidding behaviour, any such material change would apply from Capacity Year 2024/25 at the earliest. Such a material change may also trigger a need for the capacity market's state aid approval to be reassessed.

Fundamentally, the SEM market is designed with a primary incentive for capacity providers to ensure their availability is sufficient to meet their load-following capacity obligation in case of a strike price event (by difference payment exposure). Most unit types also receive an additional price signal to incentivise the maximisation of availability – namely the ability to capture energy revenues during periods of high market prices. Unfortunately, in the current market design DSUs do not receive energy payments, and therefore do not receive the same suite of market signals / incentives to maximise availability as other unit types. While an interim solution has been developed to enable DSUs to receive partial energy payments from 1st Oct 2020, an enduring solution providing energy payments on an equitable basis to other unit types is still in the early stages of development (despite being a condition of the Capacity Mechanism's EU state aid approval). While this remains unresolved, and DSUs have only a partial set of pricing signals, it is inappropriate to introduce a punitive measure aimed at perceived availability shortfalls.

The DRAI has long advocated the high importance of ensuring DSUs are subject to a full suite of market pricing signals (as other unit types are), which will encourage the higher levels of participation (availability) that is generally desired in the market. The DRAI is strongly committed to working with the RAs / TSOs to maximise the performance of flexible demand on the system, and believes the emphasis needs to be on implementing appropriate market structures to

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encourage high levels of availability, rather than additional punitive measures (with significant associated complexity) likely to only lock in low availability. This is not an appropriate alternative to getting the market signals right to incentivise maximal performance from all unit types.

As set out, there is currently no market price incentive for DSUs to increase availability beyond their real time load-following obligated capacity quantity, and while the DRAI has requested on a number of occasions that the enduring state-aid solution (giving DSUs equitable access to energy payments vs. other unit types) is progressed without delay, there has been limited progress to date. The DRAI believes that such an enduring solution, if designed and implemented correctly, will lead to the appropriate market exposures and benefits that will incentivise DSUs to exceed their performance obligations and will bring the associated benefits of incentivising higher availability, better forecasting and overall improved market participation. During this interim period and in the absence of the implementation of the changes required by the European Commission, to expect DSUs to behave like conventional generators or to implement any measure that further penalises DSU participation in the market, would be wholly unreasonable and discriminatory. In our view, it would clearly not be in line with the intent of the state aid decision.

Accordingly, the DRAI again strongly requests the RAs mandate the resources required to develop an enduring solution providing DSUs with an equitable suite of market price signals, in compliance with the state aid approval, together with further work to increase the ability of the market scheduling and dispatch tools – avoiding the continual expectation for demand side participants to fit into systems designed to accommodate conventional generation. The DRAI believes that unless there is a well-resourced and concerted effort mandated by the RAs in this regard, there will continue to be suboptimal inclusion of demand-side resources in the market and an associated unjustified perception of underperformance, and that ultimately this will continue to impact on the effective and efficient demand-side participation in the market, limit the integration of renewables and lead to a higher cost transition to a low-carbon power system.

In summary, for DSUs (a unit type likely to be significantly impacted by the Modification), there are currently major market design flaws (e.g. lack of energy payments, only partially being rectified by the State Aid interim solution from 1st Oct 2020) resulting in a significant disparity in incentives / market signals to maximise availability performance vs. other unit types. It is not appropriate to implement additional measures to penalise perceived underperformance before these fundamental barriers are addressed. If the market signals are correct (as for other units) this Modification should not be needed. In addition, while for reasons beyond the control of the DSU

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	<p>provider, the availability provided by individual demand sites will inherently vary during the Capacity Year (meaning DSU availability characteristics differ from the primarily binary availability of conventional units), the DRAI does not view the fact that DSUs have different availability characteristics and market incentives to conventional generation supports any contention that DSU providers are not making reasonable endeavours to make their awarded capacity available.</p>		
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