MODIFICATION PROPOSAL FORM						
Proposer (Company)	Date of receipt (assigned by System Operator)		Type of Proposal (delete as appropriate)		Modification Proposal ID (assigned by System Operator)	
DRAI	ТВС		Standard		CMC_03_21 (v2)	
Contact Details for Modification Proposal Originator						
Name		Telephone number		Email address		
Jon Sedgwick				Jon.sedgwick@viotas.com		
Modification Proposal Title						
Modification to the provisions for Substantial Financial Completion						
Documents affected (delete as appropriate)		Section(s) Affected		Version number of CMC used in Drafting		
Capacity Market Cod	Capacity Market Code		J.2, J.3, J.4, J.6, J.7, , Glossary		Version 4 (31 July 2020)	
Explanation of Proposed Change (mandatory by originator)						

Awarded New Capacity is required to achieve Substantial Financial Completion within the Substantial Financial Completion Period 18 months from the Capacity Auction Results Date. The intent of this requirement (as per SEM-16-022) is to identify failing projects early to minimise costs to consumers for replacement capacity or as a result of decreased security standards, and failure to achieve this milestone results in termination of a unit's Reliability Option and payment of the associated Termination Charge.

CMC J.2.1.3 recognises a number of significant differences between Awarded New Capacity delivered by a DSU / AGU vs. other unit types, and modifies or removes a number of milestones for such units. J.2.1.3 also makes clear that Awarded New Capacity being delivered as part of a DSU / AGU achieves Substantial Financial Completion when a contract is in full force and effect between the Participant and the provider of the physical capacity and evidence of this is provided to the System Operator.

While the CMC provides for an application to extend the date for Substantial Financial Completion, this requires significant resource from the Participant, the System Operators, and the RAs. The DRAI believes a modified process for meeting Substantial Financial Completion for DSUs / AGUs would provide significant additional delivery flexibility, without increasing the risk or cost for consumers.

The current requirement for DSUs / AGUs to meet Substantial Financial Completion within the defined period is a significant impediment to the delivery of New Capacity by such units. New demand sites being brought into a DSU / AGU typically only require the installation of communications and control equipment to enable remote dispatch. With existing grid connections, generators and/or on-site loads already fully operational, this process can be completed in a number of weeks, a significant difference vs. other unit types which require major construction projects with long timelines to deliver New Capacity.

To illustrate the impact of this, a DSU securing New Capacity in the 2024/25 T-4 Capacity Auction needs to achieve Substantial Financial Completion by 12/09/2021, more than 2 years prior to the start of the Capacity Year. This requirement to have contracts in place more than 2 years in advance of bringing a new Demand Site into the market is a major barrier to the delivery of New Capacity. This barrier prevents the full and optimal utilisation of existing demand side assets on the power system, and the associated benefits in terms of lower prices which would otherwise accrue to end consumer.

The DRAI proposes the following modifications to the CMC to rectify this issue:

Provide an alternative route for DSUs/AGUs to achieve Substantial Financial Completion.

- Amend J.2.1.3 to provide an alternative route for Substantial Financial Completion for DSUs / AGUs delivering Awarded New Capacity with a capacity duration of one year by voluntarily increasing the Termination Charge payable (and associated Performance Security) based on the next upcoming termination charge rate (€/MW).

- For a typical T-4 auction requiring Substantial Financial Completion 18 months from the Auction Results, this would increase a Participant's Termination Charge exposure (and associated Performance Security) to 30,000 €/MW approx. 1 year earlier than would otherwise be required.

Retain a further financial commitment increase 13 months prior to the start of the Capacity Year.

- Add new clause J.7.1.9 bringing forward the 40,000 €/MW Termination Charge rate (and add new sub-clause J.3.2.8 to modify the Required Level of Performance Security to match this) so that this applies from 13 months prior to the start of the Capacity Year, where a DSU / AGU has achieved Substantial Financial Completion by bringing forward the 30,000 €/MW Termination Charge rate.
- This material decision point to further increase the financial commitment to Awarded New Capacity will maintain an incentive to terminate Awarded New Capacity if it becomes clear it cannot be delivered, and for this to happen prior to the T-1 window where it is possible to replace capacity.

Still require Proof of Contracts, but closer to the start of the Capacity Year.

- Insert an additional Proof of Contract milestone in J.2.1.3, requiring a Participant that has availed
 of the alternative Substantial Financial Completion route to provide evidence of contracts in place
 with the physical capacity provider not less than 4 months before the start of the Capacity Year.
- This retains this important milestone, providing the SOs with the same legal proof of contracts, but at a time, closer to the start of the Capacity Year, which is more appropriate for the delivery of new capacity from DSUs which have the inherent ability to deliver capacity with short lead times.

The proposed Modification will ultimately act as a key enabler for as much demand side capacity as possible to participate in the Capacity Market, which the DRAI believes is the most beneficial outcome for both security of supply and end consumer prices by maximising the utilisation of existing assets.

Legal Drafting Change

(Clearly show proposed code change using **tracked** changes, if proposer fails to identify changes, please indicate best estimate of potential changes)

Amend J.2.1.3 (modifications to Implementation Plan Milestones for DSUs / AGUs):

- **J.2.1.3** Where the Awarded New Capacity is an Aggregated Generator Unit or Demand Side Unit, the Major Milestones set out in paragraph J.2.1.1 and the Additional Milestones set out in paragraph J.2.1.2 are modified as follows:
 - (a) the Awarded New Capacity achieves Substantial Financial Completion when either:
 - (i) a contract is in full force and effect between the Participant and the provider of the physical capacity and evidence of this is provided to the System Operators; or
 - (ii) only in respect of Awarded Capacity with a duration of one year, the Participant has elected to voluntarily both:
 - (A) increase the Termination Charge payable under section J.7.1.9; and
 - (B) increase the Required Level of Performance Security under J.3.2.8 and posted Performance Security equal to or in excess of this revised Required Level with the System Operators in accordance with the requirements of J.3;

$$[...(b)...(c)...(d)...(e)...(f)...(g)...(h)...]$$

. . .

(i) an additional milestone is added: Proof of Contract. This milestone only applies where Awarded New Capacity has achieved Substantial Financial Completion under J.2.1.3.(a)(ii), and is achieved when a contract is in full force and effect between the Participant and the provider of the physical capacity and evidence of this is provided to the System Operators.

Add new sub-clause to J.3 (Performance Security):

- J.3.2.8 Where a Participant has elected to increase the Termination Charge and associated

 Performance Security under section J.2.1.3(a)(ii), the €/MW Performance Security Rates
 specified in the Initial Auction Information pack for the relevant Capacity Auction in which the
 relevant Awarded New Capacity was allocated are modified so that both:
 - (a) the Performance Security rate will, from the Trading Day starting immediately after the Financial Completion Period, increase to the Performance Security rate (€/MW) that would otherwise have applied at the next upcoming Performance Security Posting Date / Event after the end of the Substantial Financial Completion Period; and
 - (b) the €/MW Performance Security rate after that which is brought forward under J.3.2.8(a) will also be brought forward to apply from the date at which the Performance Security rate modified under J.3.2.8(a) would otherwise have applied.

Modify sub-clause J.4.3.2 within clause J.4.3 (Verification):

- J.4.3.2 For the purposes of paragraph J.4.3, verification comprises:
 - (a) in respect of the Substantial Financial Completion Milestone, either:
 - (i) where a Participant has elected to increase the Termination Charge and associated Performance Security under section J.2.1.3(a)(ii), notification to the System Operators confirming the Participant has posted Performance Security equal to or in excess of the revised Required Level;

otherwise:

- (ii) a certificate addressed to the System Operators and signed on behalf of the Participant by a Participant Director certifying that, having made all due and careful enquiry and to the best of the knowledge, information and belief of the Participant Director, the Substantial Financial Completion Milestone has been achieved, and in particular that each of the statements in paragraphs J.2.1.1(a)(i) to J.2.1.1(a)(v) is true and correct in relation to the Milestone; and
- (iii) a copy of the resolution, agreement or approval referred to in paragraph J.2.1.1(a)(iv);

Add link to new Proof of Contract milestone to J.6 (Termination of Awarded New Capacity):

J.6.1.3 The System Operators may, subject to paragraph J.6.1.5, terminate all Awarded New Capacity in respect of a new or refurbished Generator Unit or Interconnector if:

$$[(a)...(b)...(c)...(d)...(e)...(f)...(g)...(h)...(i)...(j)...(k)...(l)...(m)...]$$

. . .

(n) the Proof of Contract milestone, if applicable, has not been achieved by the date that is four months prior to the start of the relevant Capacity Year.

Add new sub-clause to J.7 (Termination Charges):

- J.7.1.9 Where a Participant has elected to increase the Termination Charge and associated Performance Security under section J.2.1.3(a)(ii), the termination fee rates set out in the Initial Auction Information Pack for the relevant Capacity Auction in which the relevant Awarded New Capacity was allocated are modified so that both:
 - (a) the termination fee rate will, from the Trading Day starting immediately after the Financial

Completion Period, increase to the termination charge rate (€/MW) that would otherwise have applied at the next upcoming date / event after the end of the Substantial Financial Completion Period; and

(b) the termination fee rate (€/MW) after that which is brought forward under J.7.1.9(a) will also be brought forward to apply from the date at which the termination fee rate modified under J.7.1.9(a) would otherwise have applied.

GLOSSARY (insert new definition)

Proof of Contract has the meaning given in paragraph J.2.1.3.(i)

Modification Proposal Justification

(Clearly state the reason for the Modification)

Amending the Substantial Financial Completion milestone for New Capacity delivered by a DSU / AGU, to reflect the high flexibility and short timelines within which such unit types are able to deliver New Capacity will remove a significant barrier which currently requires demand side aggregators to have contracts in place with new Demand Sites more than two years prior to them entering the market. Removing this barrier will act as a key enabler for the full and optimal utilisation of existing demand side assets on the power system, with consequent benefits in terms of lower prices for end consumers.

The DRAI believes this modification is well aligned with the existing intent and scope of CMC J.2.1.3 which recognises the inherent delivery characteristics of DSU /AGU capacity and reflects these in modified requirements for a number of Implementation Plan milestones.

The proposed modification enables Participants to effectively voluntarily increase their financial commitment to the delivery of Awarded New Capacity, *in lieu* of the standard Substantial Financial Completion milestone. The requirement to significantly increase the financial commitment will continue to provide a strong financial incentive for participants to either deliver Awarded New Capacity or to terminate this as early as possible if it becomes clear it cannot be delivered. In addition, the proposed modification ensures that a very strong financial commitment to delivery is in place significantly prior to the window for a T-1 auction for any Capacity Year, continuing to ensure the opportunity to procure replacement capacity for any Awarded New Capacity not successful in meeting this milestone.

The proposed Modification retains the requirement for DSUs / AGUs to provide proof of contract with the physical capacity provider (including the right for the System Operators to terminate Awarded New Capacity if this is not achieved), but moves the deadline for this provision significantly closer to the start of the Capacity Year (not less than 4 months prior). This retains this significant milestone, but in a manner which does not unnecessarily limit the period during which aggregators can continue the sales process to recruit and enrol the new customers required to meet their obligations. Given the flexibility of DSUs, this milestone could be met significantly later, however recognising the SOs' requirement for delivery certainty in advance, the DRAI believes 4 months in advance is a fair compromise.

Ultimately, in any market which procures capacity in advance, a critical design element for demand side participation is the milestone which effectively determines the "end of sales"; the date by which aggregators must have enrolled all customers needed to meet their obligations. Reducing the amount of time available for sales and enrolment by setting this deadline multiple years in advance of delivery (as is currently the case with Substantial Financial Completion) will act to limit demand side participation. In other capacity markets internationally the effective "end of sales" deadline for demand side aggregators is significantly closer to delivery (4 months before the start of the capacity year in GB, less than 1 month before in a number of North American markets) without negative consequences.

The DRAI believe the proposed amendments are reasonable and justified, and will provide significant additional flexibility to enable DSUs / AGUs to deliver New Capacity without any detrimental impact on security of supply nor of the value of the CRM hedge to consumers.

When considering the financial commitment to delivering Awarded New Capacity it is important to highlight that, as the Termination Charge is a fixed amount per MW of Awarded Capacity, a Participant

(such as a DSU) delivering New Capacity with a 1 year duration takes on the same financial commitment as another unit type (such as a new-build conventional generator) delivering New Capacity with a 10 year duration. When evaluating the risk / reward profile based on the expected Capacity Payments over 1 or 10 years, the same Termination Charge exposure within the existing market design equates to a higher significant financial commitment to the delivery of Awarded Capacity with a 1 year duration.

A critical market design element is maximising the level of certainty for consumers that Awarded Capacity will be delivered, and the Substantial Financial Completion milestone is a clear part of this, and well suited for the delivery of New Capacity which requires a major construction project. This Modification proposal, by significantly increasing the financial commitment to capacity delivery by the same deadline as for Substantial Financial Completion (well ahead of the last opportunity to replace any capacity which fails to deliver) continues to provide very high certainty to end consumers, but in a manner which removes a material barrier to demand side participation, which has significantly different delivery characteristics than major infrastructure construction projects.

Within any pragmatic market design it is never possible to completely guarantee that New Capacity will be delivered for a given Capacity Year. For example, Awarded New Capacity with a 10 year duration could meet Substantial Financial Completion but still fail to be delivered (e.g. due to an EPC Contractor bankruptcy), or could be significantly delayed up to the Long Stop Date which is 18 months beyond the start of the Capacity Year. Nevertheless it is highly important that the market design provides the highest possible level of delivery certainty to consumers, and the DRAI believes the proposed Modification maintains the same level of delivery certainty as is provided within the current arrangements.

As can be seen within the existing arrangements, it is prudent to apply different requirements and milestones for different unit types, but ultimately to ensure that all Participants provide the same level of commitment and delivery certainty. This is already reflected in both the modified nature of a number of milestones for DSUs / AGUs as well as the extended Long Stop Date periods for New Capacity with a 10 year Max. Capacity Duration, reflecting the risk profile associated with major construction projects. The proposed Modification builds on this principle of differentiated requirements, customised to different unit types, but ultimately requiring the same level of delivery commitment from all providers.

The DRAI believes this Modification proposal strikes an optimal balance between providing demand side aggregators the flexibility to recruit customer sites until closer to the start of the Capacity Year while ensuring they retain a strong financial incentive to deliver as early as possible and maintain the current high levels of delivery commitment and ultimately certainty provision to the end consumer.

The DRAI believes the most beneficial outcome for security of supply and for consumers is to have as much demand side capacity as possible participate in the Capacity Market. This modification will act as a key enabler for this, supporting the optimal participation of demand side unit types within a process (in particular four year ahead capacity auctions) which is inherently optimised to enable the delivery of new-build power generation projects with materially longer and less flexible delivery timelines.

Code Objectives Furthered

(State the Code Objectives the Proposal furthers, see Sub-Section A.1.2 of the CMC Code Objectives)

This Modification contributes to the following CMC Objectives (as set out in A.1.2.2):

- **B)** "to facilitate the efficient, economic and coordinated operation, administration and development of the Capacity Market and the provision of adequate future capacity in a financially secure manner." The Modification will encourage increased demand side participation in the Capacity Market in an efficient manner.
- **D)** "to promote competition in the provision of electricity capacity to the SEM." By enabling increased / more efficient demand side participation in the Capacity Market, the proposed Modification will increase competition.
- **F)** "to ensure no undue discrimination between persons who are or may seek to become parties to the Capacity Market Code." The proposed modification removes a key barrier which effectively discriminates against aggregated demand side units (which are able to deliver New Capacity with high flexibility and short timelines) by requiring them to comply with the same Substantial

Financial Completion requirement as is required for other unit types (which have significantly different inherent delivery characteristics).

Implication of not implementing the Modification Proposal

(State the possible outcomes should the Modification Proposal not be implemented)

The requirement for all units to achieve Substantial Financial Completion within the Substantial Financial Completion Period is a significant barrier to the growth and development of demand side participation in the SEM, as well as the market liquidity for demand sites to transfer between aggregators.

The CMC currently requires AGUs / DSUs to meet this milestone principally focussed on the early identification of major new-build power generation projects with long construction timelines that will not be delivered as envisaged. Requiring AGUs / DSUs to meet the same milestone, by the same deadline, despite being able to deliver New Capacity flexibly and quickly is a significant unnecessary constraint, without providing increased certainty to consumers that Awarded New Capacity will be delivered.

Impacts

(Indicate the impacts on systems, resources, processes and/or procedures)

No material impact to systems, resources and processes/procedures.

Please return this form to the System Operators by email to CapacityModifications@sem-o.com

Notes on completing Modification Proposal Form:

- 1. If a person submits a Modification Proposal on behalf of another person, that person who proposes the material of the change should be identified on the Modification Proposal Form as the Modification Proposal Originator.
- 2. Any person raising a Modification Proposal shall ensure that their proposal is clear and substantiated with the appropriate detail including the way in which it furthers the Code Objectives to enable it to be fully considered by the Regulatory Authorities.
- 3. Each Modification Proposal will include a draft text of the proposed Modification to the Code unless, if raising a Provisional Modification Proposal whereby legal drafting text is not imperative.
- 4. For the purposes of this Modification Proposal Form, the following terms shall have the following meanings:

CMC / Code: Modification Proposal: Derivative Work: means the Capacity Market Code for the Single Electricity Market means the proposal to modify the Code as set out in the attached form means any text or work which incorporates or contains all or part of the Modification Proposal or any adaptation, abridgement, expansion or other modification of the Modification Proposal

The terms "System Operators" and "Regulatory Authorities" shall have the meanings assigned to those terms in the Code.

In consideration for the right to submit, and have the Modification Proposal assessed in accordance with the terms of Section B.12 of the Code, which I have read and understand, I agree as follows:

- 1. I hereby grant a worldwide, perpetual, royalty-free, non-exclusive licence:
 - 1.1 to the System Operators and the Regulatory Authorities to publish and/or distribute the Modification Proposal for free and unrestricted access;
 - 1.2 to the Regulatory Authorities to amend, adapt, combine, abridge, expand or otherwise modify the Modification Proposal at their sole discretion for the purpose of developing the Modification Proposal in accordance with the Code;
 - 1.3 to the System Operators and the Regulatory Authorities to incorporate the Modification Proposal into the Code;
 - 1.4 to all Parties to the Code and the Regulatory Authorities to use, reproduce and distribute the Modification Proposal, whether as part of the Code or otherwise, for any purpose arising out of or in connection with the Code.
- 2. The licences set out in clause 1 shall equally apply to any Derivative Works.

- 3. I hereby waive in favour of the Parties to the Code and the Regulatory Authorities any and all moral rights I may have arising out of or in connection with the Modification Proposal or any Derivative Works.
- 4. I hereby warrant that, except where expressly indicated otherwise, I am the owner of the copyright and any other intellectual property and proprietary rights in the Modification Proposal and, where not the owner, I have the requisite permissions to grant the rights set out in this form.
- 5. I hereby acknowledge that the Modification Proposal may be rejected by the Regulatory Authorities and that there is no guarantee that my Modification Proposal will be incorporated into the Code.