MODIFICATION PROPOSAL FORM					
Proposer (Company)	Date of receipt (assigned by Systen Operator)		Type of Proposal (delete as appropriate)		Modification Proposal ID (assigned by System Operator)
Bord Gáis Energy Ltd.	5 th November 2025		Standard		CMC_21_25
Contact Details for Modification Proposal Originator					
Name		Telephone number		Email address	
Julie-Anne Hannon				jhannon@bordgais.ie	
Modification Proposal Title					
Consumer-developer NPV sharing mechanism for delayed capacity projects					
Documents affected (delete as appropriate)		Section(s) Affected		Version number of CMC used in Drafting	
СМС		J.5.9, Glossary		Version 12.0	
Explanation of Proposed Change					
(mandatory by originator)					

Overview of this proposal and changes from CMC modification CMC_07_25

This proposed modification intends to provide scope in the CMC for the Regulatory Authorities (**RAs**) to determine whether a project, that is delayed in energising and receives an extension to its Capacity Quantity End Date and Time (**CQEDT**), should also see an adjustment to its capacity payments to share the NPV erosion caused by the delay between the project and end consumers.

As set out in previous modification CMC_07_25, where a project is delayed and receives a CQEDT extension, this is applied to the end of the original contract period meaning that revenue missed at the beginning of the original contract in Year 1 would be paid instead in Year 11 or later, resulting in an erosion of the net present value of the capacity revenues.

Unlike modification CMC_07_25 (rejected by SEM-25-045) however, there is no proposal in this modification that a "fault" on the part of any entity needs to be identified or attributed. Simply put, BGE suggests that the RAs have full discretion to determine whether it is equitable or not to allow a CQEDT-extended project to also have their capacity payments adjusted to compensate for a portion of the NPV erosion incurred due to project delays, taking into account relevant circumstances included in an NPV adjustment application. Like any other regulatory decision the RAs make, the RAs would be constrained only by their legal and statutory duties including CMC objectives in making a reasoned decision.

Key changes vs. CMC_07_25:

- i. Removal of requirement to identify or attribute "fault". Removal of any threshold of "fault";
- ii. **Introduction of a risk sharing factor.** Apply a 50:50 developer/consumer sharing factor of the NPV erosion caused by project delays, with the developer bearing 50% of the NPV loss and the consumer bearing the other 50%, and;
- iii. **Restrict scope to grid / planning delays.** Allow developers to apply for an NPV adjustment only if the delay relates to (ignoring the cause of any delay) an electricity grid connection, a gas grid connection or the securing of a planning permission.

We note that all the respondents to CMC_07_25, except only for the TSO, supported the principle of enabling the preservation of the NPV of delayed capacity payments. These respondents represent a large cohort of the investors in existing and new capacity in SEM at present. BGE therefore sees merit in the RAs considering this updated proposal which addresses the SEMC and TSO concerns flagged in decision SEM-25-045, overall to benefit the end consumer with a view to also treating developers equitably.

Fundamentals of this proposed modification

BGE is cognisant of the need for this proposal to minimise resource requirements for the RAs and TSOs, and to be efficient, and equitable in terms of balancing risks fairly as between developers and consumers.

Fundamental elements of proposal and updates to CMC_07_25 pursuant to SEM-25-045 decision:

- The use of the latest (current) <u>Best New Entrant Weighted Average Cost of Capital</u> (BNE WACC) as a SEM regulatory-approved consistent basis to calculate NPV adjustments and a formulaic "Capacity Payment Price NPV Adjustment Factor", are retained from CMC_07_25, removing calculation subjectivity and simplifying the overall process. These measures support efficient implementation, limiting the administrative effort required from the RAs and TSOs in assessing applications.
- <u>Removal of any "threshold" of fault</u> to maximise RA discretion to decide on a case-by-case basis as to the equity or not of allowing NPV adjustment for projects with approved delays:
 - RA discretion limited only by their legal and statutory obligations including the CMC objectives, and with intentionally broad legal drafting to reflect this intent.
 - Removal of the requirement to identify / attribute any 'fault' threshold reduces the resources required to prepare and review applications and addresses the SEMC's view in para 5.3.7 of SEM-25-045, meaning NPV adjustment applications can be considered as part of the process for granting a CQEDT extension which should bring efficiencies to the process.
- The introduction of a 50% risk sharing factor into the formula for NPV adjustment to share the NPV erosion costs 50:50 between developers / consumers. In SEM-25-045 the SEMC stated their view that many of the causes of gas and electricity connection delays are "long-running" and that "developers are better able to identify and plan ahead for these delays than consumers [and]... are better placed than consumers to take on such risks." The TSOs raised a similar view that the developer "is better positioned to manage the risks". BGE is firmly of the view that the prospect that very lengthy delays to electricity and gas grid connections would materialise even in the context of a CRU direction to connect to relevant system operators, was not reasonably foreseeable by developers at the point of submitting capacity auction bids. Such delays have only materialised in the last few years and are completely outside of the control of developers. Moreover, it would be next to impossible to try and agree construction contracts with an assumed delay of an unknown length.

While firmly maintaining that such delays can be completely outside a developer's control, with the aim of striking a balance between consumers' exposure to costs and developers' exposure to unfair risk and cost, BGE suggests that should an NPV adjustment application be successful, the developer in question would only recoup 50% of the NPV loss of the delayed capacity payments. This seeks to balance the RAs' responsibilities to balance statutory objectives to protect consumers while simultaneously being obliged to ensure market participants can finance their activities in the SEM.

- The <u>wider breadth of RA discretion proposed prevents developers presupposing with any certainty the outcome</u> of any decision to provide an NPV adjustment in respect of a delay. This undermines the supposition by SEMC in para 5.3.12 SEM-25-045 that a developer could benefit from a delay by reflecting it in their capital outlay and being granted an NPV adjustment for the same delay.
- Restricting the scope for NPV adjustment specifically to grid connection / planning delays only will limit the potential scope of the NPV adjustment application process and likely number of applications.

Addressing additional TSOs' concerns raised regarding CMC_07_25:

- To rebut the TSOs' reference to an exacerbation of the challenge in tracking capacity delivery (para 5.3.10 SEM-25-045), BGE submits that <u>the existing Implementation Progress Reports mechanism</u> <u>provides comprehensive detail to the TSO of any risks of delayed delivery</u> enabling the TSO to track capacity delivery. This modification makes no change to that process.
- We note the TSO's assertion in response to CMC_07_25 that excessive resources would be required
 to administer NPV applications. However, based on our determination of the number of CQEDT
 extension applications being in the order of ~5 per year based on a review of SEMC minutes,
 objectively the current level of CQEDT applications does not seem excessive. In any event however,
 given the materiality of the eroded NPV at issue, we submit that the resources required are justified.

Addressing the RAs' concern of embedding 'permissive' approach to delays vs. protecting consumers:

BGE agrees that the RAs' decisions in SEM-23-001 and SEM-23-101 around approving delays to projects were fair and from BGE's experience are being applied equitably in the SEM. We disagree however with the SEMC's suggestion in SEM-25-045 that adjusting for NPV erosion as a result of delays "would provide too much protection to developers and potentially weaken delivery incentives". While it could be argued that delivery incentives – by definition – would be weakened by any form of NPV adjustment for delays,

the introduction of the proposed 50% risk sharing factor ensures that, by retaining 50% of the risk, developers remain very sharply incentivised to ensure timely delivery.

This is in addition to the fact that – while capacity payments are the main source of income for most new capacity projects – developers maintain 100% responsibility for very material construction prolongation costs and losses on energy and system services revenues which accumulate as the result of any project delays. Construction case studies demonstrate for example that when time is lost as a direct consequence of a disruption event, and accounts for only ~3.5%, the interruptions flowing from the same event can cause an overall productivity loss of up to ~39%.¹ Even if this proposed modification is implemented, developers will retain a strong and enduring commercial incentive to deliver capacity on time.

Proposed process for making an NPV adjustment application in practice:

To keep the process simple, BGE envisages that should a developer decide to pursue an NPV adjustment application the process would apply as follows:

- An application can be made at the same time or subsequent to a Long Stop Date and/or CQEDT application under sections J.5.7 or J.5.8.
- The RAs decide, within a reasonable timeframe: a) whether to grant the application and b) if NPV adjustment is granted under (a), how many months of a delay the NPV adjustment will consider.
- The RAs' decision to allow an NPV adjustment can be issued at the same time as a Long Stop Date and/or CQEDT decision or after, it does not necessarily follow that a positive CQEDT decision pre-empts a positive NPV adjustment decision.

Proposed formulaic approach to modification

As per CMC_07_25, this modification proposes that NPV erosion would be recouped by uplifting the Capacity Payment Price (PCP) paid to a project. This can be achieved by multiplying the original Capacity Payment Price (as awarded at auction) by a new 'Capacity Payment Price NPV Adjustment Factor', defined as follows:

 $PCPNPVAdjFact\Omega n = (1 + r) Delay Duration$

Where: a) r = Best New Entrant WACC, b) Delay Duration is the rounded integer number of months of delay approved under J.5.9.

This spreads the cost of the NPV adjustment over the duration of the capacity contract and balances costs to consumers vs. maintaining the financial viability of new capacity projects in the face of risks outside the control of developers. It reduces regulatory risk which could undermine future investments by the same or different developers in the market, possibly undermining security of supply. It also ensures that Awarded Capacity will only be paid in line with the existing settlement provisions, i.e. following the achievement of Minimum / Substantial Completion so there is no risk of paying units that are not delivering capacity.

Legal Drafting Change

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

Proposed to introduce a new sub-section to the CMC as follows (proposed new text in red):

J.5.9 Application of Capacity Payment Price NPV Adjustment Factor

J.5.9.1 The provisions of this section J.5.9 apply to Awarded Capacity that has applied for or been granted an extension pursuant to section J.5.6 and/ or section J.5.7 and/ or section J.5.8 of this Code.

J.5.9.2 Where a Participant or an Enforcing Party (on behalf of a Participant) applies to the Regulatory Authorities for, or has been granted by the Regulatory Authorities, an extension under section J.5.6 and/ or section J.5.7 and/ or section J.5.8 of this Code the Participant or an Enforcing Party (on behalf of a Participant), may apply to the Regulatory Authorities for the application of the Capacity Payment Price NPV Adjustment Factor to their Capacity Payment Price in scenarios where the delivery of the associated Awarded Capacity has been subject to a delay specifically related to the delivery of an electricity grid connection, a gas grid connection or the securing of planning permission.

Hamish Lal, Quantifying and managing disruption claims, 2002, p. 162

J.5.9.3 The application under paragraph J.5.9.2 shall be in the form and made in the manner prescribed by the Regulatory Authorities and shall include:

- (i) Any information specified as required by the Regulatory Authorities;
- (ii) Reasons for the request in reasonably sufficient detail to enable the Regulatory Authorities to consider the request, together with sufficiently detailed supporting evidence.
- J.5.9.4 When considering any application under paragraph J.5.9.2, the Regulatory Authorities may request such further information about the application and/or about the Awarded Capacity from the relevant Participant or from the System Operator as they deem appropriate
- J.5.9.5 The Regulatory Authorities shall decide to approve or reject the application under paragraph J.5.9.2 within a reasonable timeframe.
- J.5.9.6 Where the Regulatory Authorities approve a request under paragraph J.5.9.2, they shall advise the System Operators to apply the Capacity Payment Price NPV Adjustment Factor to the Capacity Payment Price and the System Operators shall record those changes in the Capacity and Trade Register. The Regulatory Authorities shall also advise the System Operators of the approved Delay Duration in months.
- J.5.9.7 Any application made under paragraph J.5.9.2 should be made as soon as reasonably practicable.
- J.5.9.8 The System Operators shall determine the Capacity Payment Price to be the Capacity Payment Price determined in accordance with F.9.1 (adjusted by the Capacity Payment Price Indexation Factor in accordance with M.14, if applicable), multiplied by the Capacity Payment Price NPV Adjustment Factor (the "Capacity Payment Price NPV Adjustment Factor"), if applicable.
- J.5.9.9 Within 5 Working Days of receiving notification from the Regulatory Authorities under paragraph J.5.9.6 the System Operators shall determine, and submit to the Regulatory Authorities for approval the Capacity Payment Price NPV Adjustment Factor ($PCPNPV_{AdjFact\Omega n}$) for each Capacity Market Unit, Ω , for Contract Register Entry, n, as follows:

$$PCPNPV_{AdjFact\Omega n} = 0.5 * (1 + r)^{Delay Duration / 12}$$

Where:

- a) r is the Best New Entrant Weighted Average Cost of capital, as defined by the Regulatory Authorities from time to time, expressed as a decimal (for example 7.27% is 0.0727); and
- b) Delay Duration is the rounded integer number of months of delay approved under J.5.9.

BGE also proposes three additions to the Capacity Market Code - Glossary, as follows:

BNE WACC means the Weighted Average Cost of Capital factor applicable to the Best New Entrant unit as set out in the SEM Committee decision paper SEM-23-016 Best New Entrant Net Cost of New Entrant, 2026/27 as may be amended, modified or replaced from time to time by the Regulatory Authorities.

Capacity Payment Price NPV Adjustment Factor means the Factor by which the Capacity Payment Price should be adjusted in accordance with section J.5.9.9, if applicable.

Delay Duration means the integer number of months which the Regulatory Authorities grant a NPV adjustment for, as notified to the System Operators, under J.5.9.6 (and otherwise zero).

Modification Proposal Justification

(Clearly state the reason for the Modification)

This modification addresses a circumstance where a developer, in response to a signal that generation is required to safeguard electricity supply for the consumer, has developed a project in good faith and to the best of its ability but is incurring delivery delays. This modification addresses the reasons stated for the rejection of previous similar modification CMC_07_25, rejected by the SEMC in SEM-25-045 for reasons including *inter alia* the difficulty and resource intensity involved in attributing fault for a delay.

BGE believes to address the root cause of the key drivers behind electricity and gas connection delays requires the regulators to ensure there are adequate legal and financial incentives on the gas and electricity system operators to deliver connections within agreed timelines. In the absence of this however, BGE has updated its original modification (CMC_07_25) to address EirGrid TSO (as the sole dissenting party) concerns and addressing the SEMC's noted concerns from decision SEM-25-045.

BGE has mitigated concerns of resource intensity, firstly, by suggesting in this updated version that there is no need to identify or attribute fault whatsoever and with full discretion for the RAs in their decision, bound only by their legal and statutory obligations. Secondly, to minimise subjectivity, as per CMC_07_25, the use of the BNE WACC in the determination of the NPV adjustment factor remains. Thirdly, the updated version also limits any NPV adjustment application to delays related only to gas or electricity connections or the securing of planning permission. Overall, these should considerably mitigate concerns of an overly burdensome, resource intensive process to assess NPV adjustment applications.

A major increase in CQEDT numbers above today's numbers (which BGE estimates to be between 4-6 per year based on January 2024-July 2025 SEMC meeting minutes) is not expected. Even if every CQEDT extension application also results in an NPV adjustment application – which is not guaranteed, given the restricted scope of the eligibility for delays to be considered – this does not appear to be an unreasonable workload for the RAs and TSOs to assess. We anticipate it will typically be obvious on the face of applications as to whether NPV adjustment is a fair outcome for the applicant developer, considering too the 50:50 sharing factor whereby developers will recoup only 50% of NPV value even if the RAs believe a higher recovery amount would be more equitable.

While the RAs have concerns about how "permissive" their approvals of delays are, the RAs have full discretion bound only by their standard legal and statutory obligations to make a decision on NPV adjustment under this proposed modification. Removal of any threshold of fault now also enables an NPV adjustment application (if made) to be considered alongside a related CQEDT extension application for efficiency purposes. Ultimately only two decisions are required of the RAs being 1) whether an NPV adjustment application should be approved and 2) if yes, how many months of a delay NPV adjustment will be permitted for.

Code Objectives Furthered

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

BGE believes that the proposals here will further the 7 CMC Code Objectives as follows:

- (a) to facilitate the efficient discharge by EirGrid and SONI of the obligations imposed by their respective Transmission System Operator Licences in relation to the Capacity Market;
 - the TSOs have responsibility *inter alia* to maintain a secure and reliable system. This Mod should have the effect of enhancing investors' regulatory confidence in retaining the value of current investments where value is undermined by delays. This in turn should help enhance regulatory confidence for future prospective capacity market investments. Removal of any threshold of "fault" for a delay together with the use of an objective BNE reference for the NPV adjustment should also increase the efficiency at which NPV adjustment applications are processed.
- (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 Mod would alleviate the inequitable revenue losses that projects are incurring currently which will in turn improve future investor confidence in the market. BGE's proposed objective BNE WACC reference and formula for the NPV adjustment together with removal of any need to identify or attribute "fault" will enable efficiency in administration and contribute to economic development of capacity investments. The 50:50 sharing factor greatly reduces the cost for consumers in return for the same reliable capacity originally contracted for.
- (c) to facilitate the participation of undertakings including electricity undertakings engaged or seeking to be engaged in the provision of electricity capacity in the Capacity Market;
 - by protecting and maintaining investor confidence, this Mod should better facilitate participation in the capacity market resulting in prospective new investments materialising. The knock-on positive impact on regulatory confidence in capacity being fairly valued in SEM should not be underestimated.
- (d) to promote competition in the provision of electricity capacity to the SEM;
 - approval of this Mod would support new investments due to confidence in the value of capacity being fairly maintained where deemed appropriate by the SEMC and, in turn, increase competition.
- (e) to provide transparency in the operation of the SEM;
 - the choice of an industry approved standard (the BNE WACC) in the calculation of the NPV adjustment factor applies substantial objectivity to this proposed Mod and by formulaically encoding this in the Code makes it clear to existing and future investors, how such NPV value is regarded and applied with the RAs' discretion. Transparency in its treatment in turn aids investor confidence which

should result in better informed and viable investments that contribute to competition and reliability/ security of supply. The 50:50 sharing factor clearly points to equitable sharing of risk as between developers and consumers in return for effective security of supply.

- (f) to ensure no undue discrimination between persons who are or may seek to become CMC parties;
 - our proposed Mod does not seek to distinguish or discriminate between existing or future parties to the CMC. Where the RAs decide, in applying their discretion, to grant an NPV adjustment our view is that can be applied to any person(s) with Awarded Capacity that the RAs deem fit to receive it.
- (g) through the development of the Capacity Market, to promote the short and long-term interests of consumers of electricity with respect to price, quality, reliability, and security of supply of electricity across the Island of Ireland.

enhanced investor confidence leads to more investments and more competition. Better competition is good for consumer price outcomes and overall reliability, and security of supply interests will in our view be served better if the proposed Mod is approved. Furthermore, the effect on consumer payments to cover the capacity price adjustment to cater for NPV is spread evenly with no front- or back- loading of payments for consumers which is positive for consumers. Limiting NPV adjustment applications only to delays involving electricity or gas connections or involving the securing of planning permission reduces the scope for frivolous, time / resource consuming applications being made, aiding the TSOs' visibility of capacity delivery timelines, Finally the 50:50 sharing factor maximises protection for the consumer against risks of delays in terms of costs.

Implication of not implementing the Modification Proposal

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

If this proposal is not implemented, then developing projects experiencing delays due to grid or planning related issues will continue to be inequitably penalised through having to bear the entire erosion in the NPV of delayed capacity payments.

This is especially unintuitive in the case where CQEDT extensions are approved – where such extensions are granted it should follow that the scope for projects, whose end dates and times are extended, to share the NPV value erosion with consumers should at least be provided for in the Code. Making provision for such scope in the Code would greatly support investor confidence and continued bankability of projects necessary to support security of supply to the ultimate benefit of the end consumer.

Impacts

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

Aside from updating capacity payments with the NPV adjustment factor, we see no discernible negative impact from this proposal – it will ultimately benefit end consumers while simultaneously respecting the value of capacity being delivered to the system by relevant developers given the proposed 50:50 sharing factor.

Furthermore, contrary to the TSOs' views expressed in decision SEM-25-045 we do not believe an impact assessment is required. The number of CQEDTs known to the market to have been made since January 2024 to July 2025 is approximately 10. The TSOs' suggestion for an impact assessment in SEM-25-045 decision would in our view add unnecessary burden to the RAs and TSO and industry.

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.
- 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: means the Capacity Market Code for the Single Electricity Market

Modification Proposal: means the proposal to modify the Code as set out in the attached form

Derivative Work: 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 them 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 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.