

EPUKI Response to SEM-22-054

EPUKI welcomes the opportunity to respond to the *EY Review of Performance of the SEM CRM*. This review comes at a crucial time in the context of the Security of Supply crisis which is threatening Ireland's energy security. This response is broken into three sections. The first section is an Executive Summary outlining our key points in response to the EY review, the second section addresses each of the recommendations contained within the EY report, and the final section includes general comments on the design and performance of the Capacity Remuneration Mechanism (CRM).

Section 1: Executive Summary

EPUKI is concerned with the nature of this review, specifically in terms of the limited scope, lack of engagement with participants and developers by the authors of the review, and its failure to recognise ongoing challenges facing developers in the CRM. These challenges have resulted in a significant number of projects, which were successful in previous capacity auctions, terminating their contracts before delivery. Out of a total nine gas projects which were successful in the T-4 2022/23, 2023/24, and 2024/25 auctions, eight have already terminated. If these issues are not urgently acknowledged and addressed by the SEM Committee (SEMC), the current Security of Supply crisis will worsen. We believe that a more comprehensive review of the CRM should be conducted by the Department for Energy, Climate, and Communications (DECC) in Ireland and Department of Economy (DoE) in Northern Ireland. This would result in a more robust independent assessment and recommendations in relation to CRM performance.

We are concerned that the SEMC does not recognise the obstacles which currently face developers in the CRM. These issues were not fully explored within the EY paper or the Consultation document. Additionally, the SEMC has recently rejected a modification (CMC_10_22) which would have been instrumental in addressing one of these obstacles. While we recognise the SEMC's objective of trying to lower costs for the consumer, we believe that any saving achieved in the short term will be vastly outweighed by the damage to Ireland's reputation as a place for inward investment if capacity shortfalls result in Loss of Load events. This coupled with the excessive cost of providing emergency generation during periods where there is a significant capacity shortfall should be balanced with the requirement to update and modify the Code to ensure capacity can be built when needed.

We believe that EY's review falls short as its recommendations are short-sighted and fail to address the evolution of the Capacity Market which is required as we transition to a low-carbon system in line with 2030 objectives. Conventional units expect reduced energy market revenue as a result of higher renewable penetration, and reduced System Services revenue following the System Services Future Arrangements project. In order to secure New Capacity and retain existing units this lost revenue will need to be made up through the Capacity Market. This challenge is not acknowledged in the EY review.

The primary reason new capacity has not been delivered through the CRM is due to investment challenges. While the EY review seeks to address singular issues such as consents or performance bonds, the material issue is the inability for investors to achieve a solid and sound investment case. There are a number of factors contributing to this investment risk:

- Low Capacity Payments driven by an Auction Price Cap which needs to be increased;
- Ten-year contracts for New Capacity compared to 15 years in Europe;
- Lack of indexation to Capacity Payments;

- No opportunity for generators to earn scarcity margin as a result of the Strike Price;
- No protection from third-party delays and subsequent contract erosion;
- High regulatory risk environment (e.g. the recent Annual Run-Hour Limit decision, which was made without taking into account the clear opposition from industry and changes to fuel security requirements in Northern Ireland) which has a substantial effect on participants' revenue and creates an uneven playing field between Ireland and Northern Ireland;
- Small pool of experienced construction contractors in Ireland meaning that costs of delivery are high; and
- A growing requirement for location specific capacity requirements limiting competition, due to a lack transmission infrastructure investment.

Due to finite resources Ireland needs to compete for inward investment with other countries in Europe. All of the above points discourage New Capacity because the business case is simply not as strong as in other markets. Given the high level of risk and potential for loss, investors require greater levels of return from the Capacity Market and this is currently not available.

We welcome recommendations around greater Transmission System Operator (TSO) transparency but believe that this needs to be expanded further. Additionally, we are concerned around EY's suggestions to introduce more punitive measures as a means to secure capacity. We believe that the reasons for non-delivery to date are unrelated to the current level of downside exposure and hitting participants with "a bigger stick" will not achieve more secure delivery.

In order to correct existing shortcomings in the CRM we have a number of suggestions outlined below and expanded in our response. Each of these points should be considered carefully by the SEMC and EPUKI would welcome further engagement should any further discussion on these points be desired:

- A comprehensive assessment of New Capacity terminations to date;
- A historic review of the accuracy of historic capacity requirement calculations;
- An immediate unbundling of assets which compete in the CRM from the TSO;
- Increased transparency around capacity requirements available several years in advance of auctions to enable better quality projects to enter the CRM. The Capacity Requirement should be developed completely independently to all other auction parameters, including prices;
- A comprehensive review, and engagement with industry on revenue streams out to 2030;
- Immediate measures to address risks currently facing 1,500 MW of New Capacity which faces possible termination as a result of volatile market conditions including third-party delays and high inflation rates;
- A review of Best New Entrant (BNE) which acknowledges the reduced IMR environment and regulatory risk which face developers of New Capacity;

- Amend the methodology for setting the Existing Capacity Price Cap (ECPC) as it has no relevance to the BNE figure; and
- Introduce penalties to the System Operators for missing previously published Capacity Auction timetable dates.

Section 2: EY Recommendations

This section addresses each of the potential remedies included in the EY report:

Move to tighter reliability standard in line with other European markets.

EPUKI is cautiously supportive of a transition to a higher reliability standard, with the caveat that this is reflected in subsequent auction parameters and that awarded capacity is compensated for the associated reduction in margin. We agree with EY's conclusion that the costs associated with under-procurement of capacity will significantly outweigh the costs of potential over-procurement. As such, a move to a higher reliability standard would represent a better outcome for consumers and further the objective of Security of Supply.

However, the procurement of a greater volume of capacity will reduce the inframarginal rent available to participants when New Capacity comes online. This will need to be captured through an increased Auction Price Cap (APC) for Existing Capacity which reflects the reduced market revenues available to participants. Similar changes will need to be implemented for existing units which have already procured capacity contracts, given that the investment case for these units will have inherently changed from when the contract was secured. This should be captured in the Existing Capacity Price Cap (ECPC) and accounted for in the Unit-Specific Price Cap (USPC) which need to be increased in response to any change to reliability standard.

Awarded contracts for New Capacity which has not yet achieved Final Investment Decision (FID) will also be negatively impacted as a result of this and will require compensation. Failure to address this negative impact may result in those projects deciding not to go ahead.

Greater transparency of target setting through a panel of technical experts' assessment of EirGrid's recommendations.

While we acknowledge the intent behind EY's recommendation, we believe that further actions are required to address issues associated with the capacity requirement forecast. EPUKI has three recommendations associated with the capacity requirement; (i) transparency on how the Generation Capacity Statement (GCS) is developed and how it translates to a capacity requirement, (ii) a historic review of target-setting in the CRM, and (iii) increased independence with relation to the capacity requirement setting and GCS development.

Clarity on how the GCS is developed, and how this feeds through to the auction capacity requirement, would enable potential investors to calculate volumes of capacity required and locations where capacity is required. Similarly, information on where grid connections may be available would deliver greater transparency. The earlier this information is available to participants; the earlier projects can be planned for. This would be expected to deliver better quality and more robust projects, as investors would have an extended window to assess the feasibility of New Capacity projects. In order to deliver this transparency, the TSO should publish detailed analyses of how the GCS and capacity requirement are developed. It should be clear how the capacity requirement is calculated both on a national and a regional level, particularly given the impact which Local Capacity Constraint Areas (LCCAs) have on capacity auctions.

In order to properly assess the performance of the CRM and capacity requirement forecasting to date, we believe a historical assessment should be carried out on how the TSO has developed its CRM targets. For a number of years, the capacity requirement targets have been set at a level which EPUKI believes is too low. This has contributed towards the current Security of Supply crisis which comes at significant cost to consumers and leaves the market in a state of distortion. To ensure this issue is

remedied, and to facilitate continued improvement of the target-setting process, we believe that the TSOs should publish a detailed breakdown on how historic requirements were set including highlighting assumptions and acknowledging where these turned out to be incorrect. This recommendation, if implemented, would aid transparency for both participants and consumers, and allow investors to benefit from increased clarity as outlined above, hopefully delivering more robust capacity projects.

Additionally, we believe that a panel of technical experts (PTE) alone is not sufficient to ensure independence and transparency in the target setting process. To ensure full transparency, the GCS itself (and capacity requirement) should be assessed and possibly developed completely independently of the TSOs.

Finally, we believe it is imperative that the TSOs are not permitted to own assets which can participate in the CRM. The current implementation, where the TSOs set the capacity requirements for the auctions as well as qualifying new interconnectors represents a substantial conflict of interest which must be resolved.

As the arrangements currently stand, the TSOs can (and do) benefit from capacity shortfalls through the integration of additional interconnection to the market, and potential ownership of temporary emergency generation. Furthermore, it is unacceptable that the TSOs can receive revenues through the CRM while simultaneously deciding which technologies are required in what locations. This gives the TSOs an unparalleled advantage over other participants in the CRM. Failure to resolve this conflict would constitute a contravention of the CRM State Aid decision and the Electricity Regulation Act.

More explicit accounting of non-delivery in setting targets.

While we recognise the purpose of this recommendation, we have questions as to how it would be implemented, and whether the impact of implementing it would be noticeable. Additionally, we believe that increased targets would need to be reflected in the revenues available to market participants (as set out previously).

If historic non-delivery of capacity is included in target-setting, the capacity requirement would be many times greater than it is now. Eight out of nine gas capacity units which were secured in the last three auctions (20/21, 21/22, 22/23) have terminated prior to delivery. If this was to be reflected in the capacity requirement, it would require an uplift of 900%. Not only would this be far too high, but it also represents the fact that significant obstacles to delivery exist in the CRM. That said we do recognise a need to the capacity requirement to be increased to account for a more pragmatic approach that, from time to time, a limited number of projects may fail to deliver at all, or on time.

Simply 'loosening the belt' and procuring greater volumes of capacity in response to non-delivery does not address the significant obstacles which exist to delivering New Capacity. EPUKI has been working to resolve these issues through modifications to the Trading and Settlement Code (TSC) and Capacity Market Code (CMC), the latter of which (Mod CMC_10_22) the SEM Committee has rejected. The failure to deliver New Capacity through the CRM is a real and present risk to Ireland's Security of Supply, as demonstrated by the significant volume of projects which have terminated prior to completion.

Increasing the capacity requirement without addressing challenges to delivery will not secure the delivery of projects. Additionally, as previously outlined, any increases to capacity requirements need to recognise the reduced revenue available to conventional units through the energy markets and reflect this in an increased APC. Should new projects continue to be terminated, not only will this

result in further Security of Supply shortfalls in the medium to near term but also a complete lack of market confidence for new investment in the long term.

Greater investment in infrastructure to enable more competitive all-island market and reducing pressure for new build to be situated in particular locations.

EPUKI agrees with this proposal, as this is an issue which is essential for a strong-functioning market. A highly constrained network will result in distorted and inefficient market outcomes, as well as greater likelihood of non-delivery if projects have less flexibility in where they can locate. We find it difficult to envision how the CRM can ever function as intended (a competitive, open market) if existing infrastructure challenges are not resolved. Furthermore, as outlined above, the SEM Committee need to address the fact that the TSO, who are responsible for investment in key infrastructure, also own assets which compete in and receive revenue through the CRM. This represents a significant conflict of interest which needs to be remedied for the CRM to operate successfully. A continued reliance on locational outcomes will prevent the Capacity Market clearing at the actual price expected by New Capacity which distorts competitiveness in the SEM.

This issue currently affects the CRM in a number of ways. Most notably are the inability of New Capacity projects to secure connection dates in a timely manner due to lack of key infrastructure (over which the participant will have no control), and the continued implementation of LCCAs which represent a restricted and distorted market. In recent years LCCAs have been introduced to the CRM and subsequently expanded in both number and scope (i.e., now apply to maximum volumes). It is unclear whether these LCCAs have been effective in locating capacity in where it is required, but they do represent a continued distortion of the market. When LCCAs were originally introduced, they were not designed to be included in T-4 auctions (this decision came quite a bit later), and we believe that the continued reliance on LCCAs to deliver in areas of scarcity is counterproductive.

We believe that the issues intended to be addressed by LCCAs (i.e., ensuring investment in the right areas) would be better achieved through ensuring existing transmission infrastructure is adequate. This would also be likely to significantly reduce non-delivery of New Capacity. While we appreciate the challenges and timelines involved with addressing these issues, we are also aware that these issues have been present on the system for a number of years without resolution.

Functioning and effective transmission infrastructure is key to an efficient CRM, and we believe that the implementation of this recommendation should be a key priority in the coming years. Current incentive regimes which exist for electricity and gas system operators, should be focused on ensuring existing challenges with infrastructure are resolved as soon as possible. Additionally, the TSO currently benefits from heavy constraints and supply deficit in the market, through increased interconnector import revenues.

Requirements of new prospective capacity to have all necessary consents to pre-qualify for auction.

EPUKI recognises the intent of EY's recommendation, however we have concerns around its practical implementation. Introducing this recommendation will require a well-defined transition period to account for the expected lag in projects as a result. Additionally, we envision difficulties in aligning the organisation of consents with electrical connection. Finally, as with other recommendations, key obstacles to delivery need to be addressed and remedied for this recommendation to have a positive impact.

If the CRM is amended so that qualifying projects require consents to be in place, there will be additional preparation time required pre-qualification. This will cause a significant period (c. 18-24 months) in which would-be New Capacity is awaiting approval of consents. This will create a significant dip in delivery for the period for which this capacity is required. To avoid such an issue from developing, it will be important to implement clear and robust transitional arrangements to ensure that projects can still enter the CRM ahead of future auctions.

Unless electrical connections are included as one of the necessary consents to enter the auction, it is unclear how this recommendation can be implemented, and whether it would be successful. Specifically, in Ireland where it is not possible to obtain a timely connection due to the emphasis on renewable generation in the Enduring Connection Policy (ECP). . Additionally, as seen in the most recent batch of New Capacity, if the TSO is unable to deliver an electrical connection in accordance with the CRM delivery timelines, then projects will be likely to terminate regardless of what other consents were in place at this time.

Currently the Capacity Market Code states in [Appendix D: 5 (g)] that a copy of the connection agreement or connection offer must be provided for qualification of New Capacity, this has been further clarified on the SEMO website as meaning:

- i. An application for connection for the Candidate Unit has been submitted, has been validated and deemed complete by the System Operator, and the associated full application fee has been paid and the System Operators are not aware, at the time they deem the application effective, of any reason why the Connection Offer would not be issued in respect of the Candidate Unit, or
- ii. The Candidate Unit is confirmed as due to receive a Connection Offer under Ireland's Enduring Connection Process arrangements.

In NI it is a licenced condition that the TSO must make connection offers for transmission level applications, therefore point 'i' above merely requires an applicant to make a valid connection application. In RoI, the Enduring Connection Process for RoI is structured such that renewables connections are prioritised and it is highly unlikely that conventional generation such as gas turbines could be confirmed to receive an offer through this process. However, for the T-3 and T-4 auctions in recent years developers in the RoI have been able to rely upon directions from the CRU stating that the TSO or DSO are to make connection offers to successful awarded new capacity. Therefore, the connection offer requirement for qualification is completely superfluous, other than to cause participants in NI to incur a connection charge in advance of qualification where participants in RoI do not.

We propose that the connection offer requirement is removed and replaced with a process whereby the TSO engages with applicants during the qualification process to provide project specific relied upon estimates for the connection costs and delivery milestones, and that the code is updated such that all successful new Capacity Market units are provided with connection offers based on these relied upon estimates.

Increase lead time to at least four years from the announcement of auction results.

EPUKI recognises the merit in the recommendation for increased lead-time. However, if this recommendation is implemented there are important caveats which need to be considered in order to maximise benefit. Once again, it seems as if this recommendation addresses a symptom rather than a cause of non-delivery.

Firstly, it is essential that if lead-time is increased that strict timelines are maintained for third-party milestones (i.e., gas connection or electrical connection). Otherwise, whilst lead-time will be increased the timeline for these essential milestones might also creep. This would essentially reduce any benefit delivered through increased lead-time and would not reduce the likelihood of non-delivery. While participants can directly manage other aspects of their projects, some of these key third-party milestones will be completely outside the control of participants.

Similarly, other obstacles which currently exist to delivery (such as high inflation particularly related to construction), must also be remedied in order for an increased lead-time to have a positive affect on delivery likelihood. Failure to account for such circumstances will mean that despite having a greater lead-time, projects may be exposed to costs which are drastically higher than would reasonably have been expected at the time of contract award. This will leave projects exposed to significant downside and likely result in the termination of capacity before delivery.

Additionally, if existing capacity is required to rely on forecast revenues further in the future to determine their Capacity Auction bid they will need to include additional margins for error and thus the ECPC must be increased to accommodate this.

Increase performance securities following the auction.

While this recommendation may have merit in representing the value in non-delivered capacity to the grid, we believe that it is misdirected as a measure to ensure projects are delivered. Non-delivery of awarded capacity and loss of performance security is already an undesirable outcome for project developers and one which participants will take every possible step to avoid. The only instances where participants will terminate a project and relinquish performance securities are where it has been calculated that the losses expected to be incurred as a result of the project outweigh the lost performance security. Increasing performance securities further will only serve to expose participants to greater downside as a result of higher performance security loss.

As with other recommendations, this will not necessarily secure more delivery of projects. It may act in some extent to dissuade more speculative projects, but even the most well-planned projects will still be exposed to third-party risks or other force majeure. This recommendation would mean that these projects are exposed to even greater downside than currently. As such, this recommendation may have the unintended outcome of reducing participation in auctions if participants are exposed to a higher level of risk, without adequate protection. Because performance securities ramp up over the lifetime of a project, New Capacity may be more likely to terminate early to avoid paying a higher rate. Additionally, performance securities are repayable to participants only after Long Stop date of New Capacity projects and therefore will have no bearing on the timely delivery of projects.

EP considers the purpose of the performance security mechanism is to prevent speculative projects, rather than to secure delivery; by creating a hurdle whereby only developers that can demonstrate to their board and investors the deliverability of a project will be able to post the necessary credit. If this measure is being considered as a means to delivery New Capacity, rather than addressing the obstacles which have prevented significant volumes of New Capacity to date, we would not expect any improvement to CRM performance and only a decrease in competition.

Require performance security to be lodged prior to the auction.

It is unclear from the EY report how this recommendation links to the sub-problem it is included under however EPUKI would be not be opposed to its implementation. It is important to note that performance securities should not be linked to an increased likelihood of delivery, however moving

the required submission forward may help by dissuading speculative investors who are unlikely to deliver on their contracted obligation.

More permissive approach to requests for extensions from new build projects.

EPUKI strongly supports this recommendation provided it does not erode contract value. This would ensure that New Capacity can be delivered through the CRM. We are highly disappointed in the SEMC's recent decision to reject a modification to the CMC which would have facilitated extensions where a third-party delay has prevented New Capacity from being delivered in line with the CRM timeline. The decision to reject this modification contradicts this recommendation. Additionally, this decision suggests that the SEMC does not recognise the true extent of the challenges which exist for New Capacity in the SEM, as well as the investment which is required in order to resolve Ireland's Security of Supply challenges.

If the CRM does not recognise and respond to third-party delays which developers have no means to control, it becomes extremely challenging for projects to complete on time, if at all. Contract erosion as a result of such delays, or projects surpassing their long-stop date will result in terminations. In many cases these are robust, well-planned projects which would help to address the supply deficit and contribute towards increased competition in the SEM. It is difficult to understand why the SEMC would favour terminating projects completely, rather than facilitating projects which are slightly delayed due to third parties. This decision is particularly strange given the current context of the Security of Supply crisis.

Additionally, the decision not to facilitate extensions will likely incur significant costs to consumers. It is noted in the report that *"a decision to not allow a full extension requested may in hindsight have led to more adverse impacts for consumers – in this case by further delaying the construction of New Capacity and by prompting the project to re-contract in a subsequent auction at a significantly higher price"*. Not only this, but the termination of expected New Capacity would also result in a continued reliance on temporary emergency generation. This generation is procured outside the CRM and comes at significantly higher cost to the consumer than contracted capacity.

If the SEMC does not recognise, nor wish to remedy these challenges, it is not clear that the CRM review or accompanying recommendations have been considered seriously. In light of the decision not to facilitate extensions, EPUKI will likely need to reassess the feasibility of its ongoing New Capacity projects. We expect other participants to be in a similar position.

Stronger incentives for generation to be reliable.

This sub-question of the EY report includes a number of different potential remedies covering an array of different issues within the SEM.

EPUKI supports the recalibration of Administrative Scarcity Pricing (ASP) to reflect the value of generation at periods of system stress. However, it is important that participants are able to benefit from high prices, and hence should be unaffected by the Reliability Option Strike Price. Failure to protect participants from Difference Charges in such instances would mean that the ASP acts as a downside incentive only. This represents an inequitable balance of risk and would be a disincentive for participants to enter the market.

EPUKI are strongly opposed to the recommendation to change the principle of interconnector flagging actions, particularly prior to a review of the TSOs' interconnector policy. The EY Report states that Mod_02_21 reduces the number of instances where units with capacity contracts are exposed to Difference Payments. However, it is clear from the development of Mod_02_21 that the modification

should only address instances where an interconnector has set the price despite cheaper units being available on the system. In many of these instances, there were no scarcity events despite interconnector actions setting a price which exceeded the RO Strike Price. It is noted within the EY Report that a number of these interconnector events were triggered by “*market scarcity in the GB market and the increased level of power exports from SEM to GB*”. It would be completely inappropriate for capacity providers in Ireland to pay Difference Charges due to scarcity events in GB, when there are no such scarcities in the SEM.

Reversing this decision would only serve to create “artificial” scarcity events where units are exposed to difference payments despite being available and being cheaper than interconnector actions which are taken. This outcome would be completely unacceptable and would represent a distorted and volatile market.

EPUKI supports greater monitoring of technology performance in stress events to inform future de-rating factor setting. We believe that accurate de-rating factors are an important part of ensuring sufficient and predictable generation availability. In particular, interconnectors are often exporting at times of system stress. It is unclear why this has not been taken into account when calculating a de-rating factor for interconnectors. Additionally, we believe that the recent decision to de-rate units with Annual Run-Hour Limits (ARHL) should be reviewed in the context of performance in actual stress events.

It is unclear whether locational administrative penalties for non-delivery would have a strong incentive on participants. Amber alerts are often raised in response to system constraints or units becoming unavailable. This means that in many instances a unit will have no control on whether or not an amber alert occurs. This means that a unit in a certain geographical location may be exposed to additional penalties if they are unavailable and an amber alert occurs due to another unit tripping or a system constraint. This additional penalty will effectively disincentivise units from locating in locations where they are most required.

Stronger incentives for DSUs to be reliable.

EPUKI does not have a strong position on this recommendation, but it appears to make sense.

Does the CRM adequately value efficient generation technologies?

EPUKI welcomes the principle behind EY’s recommendation to award longer capacity contracts for more capital intensive projects (CCGTs, long-duration storage). Broadly we are supportive of a more flexible approach to CRM policy in terms of specific technologies and the value they deliver to the grid. More specifically, it is unclear at this time whether a longer contract is the best way to address the added value of specific technologies, but we are open to this, and additional options being explored in more detail. Existing capacity will need to be accounted for in any decision to increase the project life of certain technologies. Any increase to the lifetime of these capacity contracts may reduce the required increase to APC in order to make projects feasible.

15-year capacity contracts for capital intensive projects such as CCGTs or CHPs would help to facilitate the delivery of these technologies, provided that other obstacles (such as third-party delays and inflation) are simultaneously addressed.

The EY report also recommends changes to ancillary services contracts to align the contracts with CRM timelines. We do not consider it practical to make amendments to the treatment of ancillary services contracts at this point in time given that the System Services Future Arrangements are still being

developed. It remains to be seen what the procurement of these services will be in the future and in that context of uncertainty it is not recommended to make such changes to the CRM.

Section 3: General Comments

As a general comment, EPUKI do not believe that the scope of this review is adequate and fails to recognise long-term challenges to market participants. As greater volumes of renewable energy are integrated into the system, the role of conventional generation will evolve. Conventional plants will take on a more flexible and supportive role to meet demand in the event that intermittent renewables suddenly drop-off or do not turn up as forecast. This will mean that revenues received through the energy markets will reduce.

At the same time, the ongoing review of System Services Future Arrangements is expected to significantly cut the revenues available to units through ancillary service provision. This creates a gap in the business case for conventional units which the SEMC and EY do not appear to recognise. This challenge is very real for investors and creates a hesitancy to invest through the CRM, which is reflected in the current Security of Supply crisis. Unless the CRM guarantees investors return (possibly through a floor model similar to that applied to Interconnectors), there will be no incentive to invest.

As outlined in our responses to EY's recommendations, there are a number of issues currently present in the CRM which constitute significant obstacles for new developments and have not been identified within the EY report. Third-party delays leading to contract erosion or termination and inflation causing projects to become uneconomic. These two issues are currently sought to be addressed by modification proposals to the TSC and CMC. We believe there might be additional value in further examination of the reasons why projects face termination or delay, rather than simply responding to non-delivery (i.e., 'treating the symptoms rather than the cause'). We recommend a comprehensive review of historic non-delivery of New Capacity. This review should look at projects which did not deliver as planned and assess the reasons for non-delivery. Such a review cannot be ignored given the high volume of New Capacity terminations in recent years. Finally, capacity requirements being set too low mean that the market is too reliant on every New Capacity project delivering, although this is highly unrealistic based on historic data.

A number of the recommendations contained within the EY report seem to favour a punitive approach to trying to ensure that the CRM delivers reliability. We have significant concerns on how this will worsen an already unfavourable balance of risk and reward for generators. Certain aspects of the SEM, such as the RO Strike Price, are unique across Europe and present a significant downside to CRM participants. While participants can be exposed to considerable downside through ASP, loss of performance securities, or non-performance Difference Charges, the upside available to units is effectively capped at the RO Strike Price. This potential for loss makes the SEM CRM a less attractive investment opportunity than other markets in Europe. We believe that introducing more punitive measures and potential downside would only worsen this issue, and further disincentivise new investment at a time when New Capacity is required urgently.

Furthermore, it is not clear from our perspective how effective punitive measures are in securing reliability. Often when a unit is unavailable (resulting in an amber alert), it will be the result of a plant tripping. These instances are in most cases unpredictable and difficult to mitigate against. Currently units are penalised in these instances which is fair, but we do not believe that hitting these units "with a bigger stick" so to speak, will deliver any greater reliability.

A question not reviewed is whether capacity is sufficiently remunerated in the CRM? Currently Auction Price Caps are derived from the cost of a Best New Entrant (or BNE) to the market. The current BNE has not been updated since 2018 which means the price cap has been fundamentally static for almost five years. This is highly surprising given the Security of Supply concerns which have existed within the

SEM for a similar amount of time. If capacity is not being procured and delivered through the CRM, it seems like a prudent move would be to review the BNE to make capacity contracts more reflective of the costs for generators. We understand that a review of BNE is currently being undertaken but emphasise the need to review this more frequently in the future. Furthermore, we are surprised to see the BNE review suggests a downward direction of travel. It is difficult to understand, considering the Security of Supply crisis, huge inflation rates, and continued termination of projects, how the Cost of New Entrant can move downwards. To accurately reflect the value of and need for capacity it might also be prudent to consider demand as part of the BNE formulation.

EY's report recommends assessing the GCS to determine how the TSOs calculate their capacity requirement. For the past number of years, Ireland has experienced high demand growth, largely in the Dublin region, driven by data centre connections. At a time when Security of Supply was already a critical risk in Ireland, the addition of a significant number of new data centres would make the need for New Capacity even more pressing. As such, we believe that this should have triggered an increase to the Auction Price Cap to reflect the added value that New Capacity brings to a system which is under increasing stress. EPUKI acknowledges the benefit of hindsight in making this assertion but believes that similar rationale should be used in the future to ensure that the CRM captures the value of New Capacity and delivers investment accordingly.

The ECPC needs to be removed or at least increased to reflect a future where up to 80% of electricity will be sourced from renewables by 2030 and inframarginal rent for existing generators is diminishing along with ancillary services payments. We see no justification for the ECPC to be calculated as a factor of the BNE and we predict that soon the majority of existing units will be seeking USPCs which contrasts the fact that this process is termed as an 'Exception Application'.

Additionally, we believe that a review of the Unit Specific Price Cap (USPC) application process is carried out to more accurately reflect the evolving Irish electricity market. The evolution of revenue streams as outlined above, and reduced security around lifespan of conventional units warrant a restructuring of the USPC approach. Failure to amend the USPC calculation process as necessary will result in older, necessary units being unable to secure capacity contracts and ultimately leaving the market which will exasperate current Security of Supply concerns.

There are a range of areas which EPUKI are concerned about relating to the CRM and this review. If not addressed urgently, we believe that the Security of Supply crisis will worsen, and preparations will be needed for potential blackouts. While we have already discussed elements of this review in a bilateral with the RAs, we are happy to engage further on this response, given the real and present threat which exists to Security of Supply. The continued failure to deliver New Capacity through the CRM is a real and material risk which needs to be addressed urgently in order to ensure Ireland's Energy Security.

The SEM committee will be aware that SEMO has frequently failed to meet published dates in the Capacity Market timetables, often only advising participants of the delay after the date has passed. Although minor compared to the other issues discussed in this response, this has the effect of creating further uncertainty for participants. Greater uncertainty leads to higher prices and less competition. We request that the regulator hold SEMO accountable to meeting published dates by introducing disincentives for being late.