Response to Integrated Single Electricity Market (I-SEM) Consultation on the Capacity Remuneration Mechanism

SEM-15-044

On behalf of
AES Kilroot Power Ltd and AES Ballylumford Ltd

17th August 2015

Forwards and Liquidity

Introduction

AES welcomes the publication of the Integrated Single Electricity Market Capacity Remuneration Mechanism Consultation document (SEM-15-044) and the opportunity to provide comments on the issues raised. AES would like to submit the following response to the Regulatory Authorities to their Consultation paper.

AES is a global energy company with assets in the all island market consisting of coal and gas fired conventional and CCGT plant with additional distillate fired peaking gas turbine plant. AES is a non-vertically integrated independent generator which owns and operates Kilroot and Ballylumford power stations in Northern Ireland with a combination of merchant and contracted base load, mid merit and peaking plant. The responses to this consultation are therefore conditioned by the nature of our current position and portfolio of assets operating in the SEM.

Key Messages.

This response is submitted with reference to the level of detail that is currently available on the detailed design of the Capacity Remuneration Mechanism and takes each of the sections of the discussion paper in sequence.

The introduction of and RO type capacity remuneration mechanism presents additional complexity and risks, specifically in its interaction with the energy markets and the forward contracting market. This has been the case in other markets where this type of arrangement has been introduced and further reforms of the arrangements in those markets have been required. Whilst AES recognises that there are still substantial details to be developed in this process, review of further developments in other markets should also be taken into consideration.

With regard to the Integrated Single Electricity Market Capacity Remuneration Mechanism Consultation document (SEM-15-044) AES has the following high level comments followed by more detailed section by section comments on the question raised in the consultation.

Capacity Requirement

- AES views that the TSO effectively operates to a aero standard currently and therefore a 3 hrs security standard is a more appropriate position to adopt as it reflects more accurately the current operational approach, would provide a signal of the reliability of the system, is the standard used by neighbouring markets and would reduce the risk of inefficient exit from the market.
- AES supports a de-rated approach to capacity requirement and due to uncertainty surrounding the completion date of the north/south tie line and the Northern Ireland security of supply concerns the capacity requirement methodology should be designed to operate with 1 or more capacity zones with a mechanism to ensure that the security of supply issue in Northern Ireland is addressed.

Product Design

- If a hypothetical plant method is chosen to set the strike price then a conservative approach should be taken to ensure that the calculation of its costs places it significantly higher than the operating costs of the most expensive peaking generator likely to be dispatched in a scarcity event.
- AES does not see the need for additional performance incentives as the difference payment incorporated in the RO design presents the required incentive.

- AES views that the purpose behind the CRM is to procure long term capacity adequacy and therefore AES favours option 3 i.e. 100% DAM price as the reference market for the RO as most forward contracts will be referenced against this market, it provides a robust market price, provides for capacity adequacy as opposed to flexibility and it aligns with other neighbouring markets.

Eligibility

- To avoid any potential for discrimination AES supports the option that all generation would be eligible to participate in the mechanism but already supported generation to participate in such a form so as to ensure that there is no prospect of over compensation for the provision of the same capacity.
- The proposition of mandatory bidding in the DAM for RO contracted plant appears to be at odds with the non-mandatory DAM decision of the high level design.

Supplier Arrangements

- Capacity provider credit requirements should not be overly onerous and should be based on net exposure i.e. enabling option fees, difference payments and any incentive payments to be netted off and so reducing the credit exposure for participants.
- Credit arrangements should be put in place centrally across work streams CRM, ETA, DS3 and additional methods other than letters of credit should be considered for I-SEM.
- Any exchange rate gain or loss should recovered by the market operator as part of its costs i.e. mutualised across the market.

Institutional Framework

- AES views that the TSO is probably best placed to be the delivery body for the capacity market but also views that, even though the TSO has a considerable role in data provision for settlement, the settlement process should be independent of the TSO.

Detailed Comments

Section 2 - Capacity Requirement

A) Feedback on our minded to position to retain the all-island security standard of 8 hours LoLE.

- In Operational terms the TSO effectively operates to a zero security standard even though the relevant standards are stated as 4.9 hrs LOLE in NI and 8 hrs in ROI.
- If procuring capacity for 8hrs security standard the potential inefficient exit of non-contracted plant could result in more frequent actual interruptions due to insufficient capacity.
- In the TSO's cost benefit analysis for additional capacity verses value of lost load showed a positive for retention of additional capacity (€255m v VoLL) and therefore due to the blocky nature of the I-SEM system, that the benefits of moving to a tighter security standard greatly outweigh the costs.
- AES views that a 3 hrs security standard is a more appropriate position to adopt as it reflects more accurately the current operational approach buy the TSO, is the standard used by neighbouring markets and would reduce the risk of inefficient exit from the market.

B) Comments from respondents as to their preferred method of accounting for unreliability of capacity in determining the capacity requirement, along with reasons behind their preference.

- For Generation AES favours a de-rated requirement approach as the method to address plant unreliability whereby forced outage rates and historical actual or typical reliability is addressed in the calculation of the total capacity required.

C) Feedback on the options presented in relation to accounting for demand forecast uncertainty, along with rationale behind any position.

- For the process of accounting for demand, AES favours a progression to the option of an Optimal Scenario i.e. where a number of demand scenarios are developed, evaluated for regret cost and the optimal solution determined.
- The scenarios should be developed and shared with industry for comment prior to selection of the optimal scenario.
- For the initial stages of the I-SEM CRM operation AES would favour a more conservative or worst case scenario approach with a greater capacity requirement to reduce the impact of the change to the new CRM and mitigate the potential for inefficient exit

D) Feedback on our minded to position to base the capacity requirement for the CRM on a single capacity zone

- The SEMCo position of a Single capacity zone assumes the construction of the second north south interconnector which now is expected to be completed in 2019 however there is still some uncertainty in achievability in this timeframe.
- Due to this uncertainty and the security of supply concerns with regard to Northern Ireland the capacity requirement methodology should be designed to operate with 1 or more capacity zones.
- If the second north/south tie line is not completed and constraint costs prove to be excessive market signals could identify the need for two or more energy price zones.
- If the result of the auction produced insufficient capacity procurement in Northern Ireland AES would like to understand what options are proposed to ensure that the security of supply issue in Northern Ireland is addressed.

E) Detail of any other considerations respondents felt that we should take account of when determining the capacity requirement for the CRM.

- AES understands that cross border participation in the CRM will be addressed in the following consultation and is eager to understand how Interconnector contribution will be dealt with.

Section 3 - Product Design

A) The approach to setting the Reliability Option Strike Price:

a. Should we adopt the “floating” Strike Price approach, which is indexed to the spot oil or gas price?

- In principle AES, opts for the setting of a floating strike price for the CRM but set at a level representative of a scarcity event thus ensuring that all RO contracted plant has the opportunity serve its obligation in such an event.
- The volatility of fuel price could have a significant impact on the ability of an RO contracted plant to deliver its Reliability Option and if a fixed price is used could result in RO holding plant being out of merit losing energy rents and having to pay a difference payment.
- The strike price should be set to ensure that, if called, all RO holding plant should be in merit and able to serve their obligation.

b. How do we choose the reference unit? Should it be based on actual plant on the system or a hypothetical best new entrant (BNE) peaking unit as currently used for setting the Annual Capacity Payment Sum?

- A hypothetical BNE type plant is likely to be of higher efficiency than any of the potential peaking plant currently available in the SEM and could result in non-reflective SEM strike price.
- AES is of the view that the strike price should be set based on a reference unit with costs significantly higher than the existing marginal plant, potentially an oil fired peaking plant. It

would make sense to ensure that the strike price is always higher than the fuel costs of actual plant as it will then be in merit during scarcity events.
- If a hypothetical plant method is chosen then a conservative approach should be taken to ensure that the calculation of its costs places it significantly higher than the operating costs of the most expensive peaking generator likely to be dispatched in a scarcity event.
- As mentioned previously the mechanism must be designed to ensure system long term capacity adequacy and avoid the risk of inefficient exit from the system.

c. Should we grandfather this reference unit where a multi-year RO is sold by new capacity?
- Long term contracts for new build or modification issued against a strike based on a BNE hypothetical unit cost price should be periodically reviewed at least in line with the auction period or in response to changes in the hypothetical reference unit if that method is adopted.

B) The implementation of scarcity pricing in the I-SEM Balancing Market?
- AES does not see the need for additional performance incentives as the difference payment incorporated in the RO design presents the required incentive
- AES considers that if scarcity pricing is to be considered as a component of the market to provide an additional incentive for performance during system stress events it should be dealt with under the ETA.
- The definition of a scarcity event i.e. actual load reduction or reduced reserve would need to be clarified.

C) The choice of market reference price options from amongst the options presented and consistency with key objectives.
- AES views that the choice of the Balancing Market price as the reference price is too close to real time and would incentivise plant flexibility rather than capacity as response would be limited to peaking and quick start plant only.
- With the current uncertainty over the IDM price formation it is difficult to see how this option could be used.
- AES views that the purpose behind the CRM is to procure long term capacity adequacy and therefore AES favours option 3 i.e. 100% DAM price as the reference market for the RO as most forward contracts will be referenced against this market, it provides a robust market price, provides for capacity adequacy as opposed to flexibility and it aligns with other neighbouring markets. AES does not favour a blended price as this adds complexity to the reference price and makes it less transparent.

D) Whether the RO volume and/or the additional performance incentives should be load-following.
- AES agrees that in principle if a scarcity event occurs outside a peak demand period then the obligation should be scaled down with pro-rata application to reflect the expected requirement.

E) The requirement for, and design of additional performance incentives, including:

a. The form of additional incentives;
- AES does not see the need for additional performance incentives as the difference payment incorporated in the RO design presents the required incentive.
- If performance incentives are introduced into the RO mechanism AES would expect an approach whereby revenue from capacity providers who have under-performed is redistributed to those who have over-performed.

b. Scarcity based triggers for performance incentives
- AES views that, if introduced, performance incentives should only apply at times when the system status meets a definition of system stress i.e. a scarcity event.

- AES favours the definition of a scarcity event to be a situation whereby the availability of capacity is less than the demand plus the operating reserve requirement.

c. Caps and floors on incentives;

- AES agrees that, if introduced, limits should be placed on the size of performance incentives to achieve the appropriate balance of risk and incentive for providers.
- As with the other markets referenced in the consultation paper performance incentive limits should be designed such that capacity providers cannot lose money over the course of the year.

d. Performance incentives for renewables and DSUs;

- AES agrees that all eligible capacity providers should face the same performance incentive regime, if introduced, as the risk faced by certain types of generation are reflected by the risk placed on the system due to unreliability.

e. Performance incentives during the pre-commissioning phase;

- AES agrees in principle with the monitoring of new build against construction and commissioning milestones but more information is required on the nature of any process to determine incentives and penalties associated with such monitoring.
- Any process should primarily incentivise plant to deliver capacity on time and AES appreciates the requirement for certainty for RAs and TSOs.

f. Detail of any other considerations respondents feel that we should take account of when determining policy in relation to product design

- The treatment and participation of interconnectors in the capacity remuneration mechanism, i.e. the interconnector led or generator led approach has to be resolved.

Section 4 – Eligibility

A) The options presented in relation to the eligibility of plant supported through other mechanisms;

- To avoid any potential for discrimination AES supports the option that all generation would be eligible to participate in the mechanism but already supported generation to participate in such a form so as to ensure that there is no prospect of over compensation for the provision of the same capacity.
- Equally if participation in the CRM introduces a loss of opportunity to earn capacity payments the relevant support mechanism should compensate the capacity provider for this.
- This is more in line with the current SEM position.
- The proposition of mandatory bidding in the DAM for RO contracted plant appears to be at odds with the non-mandatory DAM decision of the high level design.

B) The options for eligibility of demand side and storage providers

- In the interests of consistency and non-discrimination and as stated earlier all technologies should be exposed to the same incentives and penalties due to participation in the CRM.
- DSUs are rewarded through the auction fee for reducing consumption as required. They experience reduced energy costs for reducing demand but should also be subject to the difference payment if they do not.
- If additional incentives are introduced then DSUs should be subject to those for physical performance as per generators.

C) Do you have a view on the technology vs plant specific approaches to de-rating?

- AES favours a plant specific de-rating approach rather than a generic technology approach.

- Where there is no historical performance i.e. for new build a generic de-rating approach can be used until historic performance is determined.
- The determination of the de-rating factors for each plant are to be determined by a "central body" likely to be the TSO and more information is required on the process and methodology for determining the de-rated capacity.

D) Do you have a view on the historic, projection or hybrid approaches to de-rating?

- The use of historical performance data at times of system stress would appear to be a reasonable approach to determining the reliable capacity to be submitted for auction.
- A Projection approach would require a methodology to be developed and could be used where there is no previous historical evidence i.e. for new build.

E) Do you have a view on grandfathering of de-rating factors?

- As the level of wind generation that can be accommodated on the system will have to be capped for system technical reasons i.e. SNSP level of 75% the best approach may be to profile based on existing and predicted level of capacity contribution.

F) Do you have a view on options presented with respect to the non-firm generation?

- The participation of Non-Firm generation in the RO process has to be consistent with its treatment in the ETA and its ability to access the reference market.
- Our position on non-firm access generation participation in the ETA has been that a generator should be allowed to participate in the DAM up to the level of its firm (de-rated) capacity and any non-firm can participate intraday as available.
- Participation in the RO should then be on the same basis as all other generators with the same exposure to incentives and penalties.

G) What evidence should an aggregator be required to show physical backing?

- AES views that in order to participate the RO mechanism Aggregators should have to produce evidence of contacts with capacity providers and historical evidence of reliability for re-rating purposes to ensure reliable capacity is provided for auction.

H) Should there be a maximum size of unit that can bid into the RO auction via an aggregator, and if so what is that threshold?

- Again with regard to the maximum size of a unit that can bid into the RO auction via an aggregator the position should be consistent with that adopted in the ETA and as consulted on as part of the building blocks.

I) Should there be a minimum size below which a capacity provider may not bid directly into the RO auction, and must bid via an aggregator? If so what is that threshold?

- Again with regard to the minimum size of a unit that can bid into the RO auction via an aggregator the position should be consistent with that adopted in the ETA and as consulted on as part of the building blocks.
- A deminimis level of 10 MWs for generators was discussed at the RLG as also being applicable to Aggregators as per existing SEM requirement
- AES views that there should be no minimum level for participation in the CRM but that small scale generators should have the option to participate directly or through an aggregator.

J) What pre-qualification criteria should be applied?

- AES accepts the proposed prequalification requirements as stated in the consultation document such as generation licence holding, provision of data to support de-rating and data to support environmental compliance.
- However some aspects need further development such as
    - Demonstration of fitness to participate in the mechanism

- With regard to new and refurbished plant, AES supports a position that arrangements for verifying that milestones for physical and financial development have been met should be determined in conjunction with industry including processes to account for potential project delays and appeals

K) Detail of any other considerations respondents feel that we should take account of when determining policy in relation to eligibility

- A resolution to the issue of interconnector or generator led cross border participation in the CRM.

Section 5 – Supplier Arrangements

A) Whether the recovery of CRM option fees from Suppliers should be on a flat, profiled, or focused basis.

- AES would prefer a flat option fee process but also accepts that there may be a need for some level of profiling to reflect times of system stress as with increasing levels of intermittent generation coinciding with planned outages, system stress events may not be confined to winter peak months.
- The timing of difference payments and incentive payments could present a potential for mismatch. Payments passed back at the time when the difference or incentive payment arise more closely corresponds to the hedging of energy prices or could be paid back over a period of time such as monthly similar to the fee structure.

B) Whether the Supplier credit cover arrangements for the I-SEM CRM should be broadly similar to those under the SEM, and whether / what credit cover arrangement should be introduced for capacity providers.

- Credit cover arrangements should be broadly similar to that in SEM with the difference of credit cover potentially being required from capacity providers.
- Capacity provider credit requirements should not be overly onerous and should be based on net exposure i.e. enabling option fees, difference payments and any incentive payments to ne netted off and so reducing the credit exposure for participants.
- Credit cover arrangements for all markets (energy, CRM, System Services) should be considered together to net participants positions, reduce administration and levels for credit required. As mentioned during the Building Blocks RLG meetings consideration should also be given to alternative methods of credit cover including Letters of Credit, Parent company guarantees and cash collateral etc.

C) Whether the costs of exchange rate variations (arising from differences in the €/£ exchange rate at the time capacity is procured and its subsequent delivery) should be borne by capacity providers or mutualised across the market

- The issue of exchange rates was also discussed as part of the ETA building blocks and it is important that there is consistency of approach between the CRM and ETA treatment of exchange rate risk.
- AES agrees with the comments in the consultation paper and also sees no reason to change the current SEM approach where currency risk for capacity option fee is fixed at the time of bid submission and that for difference and incentive payments is fixed at the same as it is fixed for the relevant energy market i.e. bid submission in the DAM.
- Any exchange rate gain or loss should recovered by the market operator as part of its costs i.e. mutualised across the market.

Section 6 - Institutional Framework

A) Are the above outlined governance arrangements suitable for implementation of the I-SEM capacity mechanism?

- This is a broad question and the answer will be based on the evidence of the operation of the capacity market
- AES views that the TSO is probably best placed to be the delivery body for the capacity market but also views that, even though the TSO has a considerable role in data provision for settlement, the settlement process should be independent of the TSO.
- AES does not disagree with the minded to position that the market operator responsible for imbalance settlement should also be responsible for the settlement of capacity payments and charges but that the settlement process should be independent of the TSO.
- The development of the relevant rules, contracts, requirements and guidelines should be developed in conjunction with industry and consulted on.

B) Which options for contractual arrangements are the most appropriate when assessed against the listed criteria?

- AES recognises the trade-off between the need for stability and the need for change in relation to the governance of the codes and agreements relevant to participation in the capacity market.
- As European legislation is still evolving in this area there is the potential for further change in the capacity market arrangements which could be complicated and time consuming process if each provider has a separate capacity contract.
- AES therefore favours a trading and settlement code option with capacity agreements to record the key parameters.

C) Are implementation agreements required for new entrants participating in the capacity auctions?

- AES would support the proposal for implementation agreements for new build participation in the CRM to enable monitoring of progress against financial construction and commissioning milestones.
- Development of the implementation agreement should be in conjunction with industry participants to ensure relative consistency across technologies and participants.
- Further information is required on the nature of the milestones, the success criteria, the measurement against the criteria and the scope of penalties and for accommodation of partial completion etc.