Response to SEM-11-019

CPM Medium Term Review

Work Package 6 Onwards Discussion Paper

on behalf of

AES Ballylumford Ltd and AES Kilroot Power Ltd

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Queries to

Lesley Hogg
Strategic & Regulatory Affairs Director
Kilroot Power Station
Larne Road
Carrickfergus
Co. Antrim BT38 7LX
Tel: 028 93 356213 E-mail: lesley.hogg@aes.com

Introduction

AES Ballylumford Limited and AES Kilroot Power Limited (collectively "AES") welcome the opportunity to respond to the Single Electricity Market Committee's ("SEMC's") discussion paper Capacity Payment Mechanism Medium Term Review Work Package 6 Onwards ("the Discussion Paper").

Summary

AES agrees with the SEMC's view that the Capacity Payment Mechanism ("CPM") is a key feature of the Single Electricity Market ("SEM") design and should remain in place. AES believes that the CPM was designed to incentivise the provision of capacity in the SEM and that it should be retained for this purpose only. It should not be used as a substitute for the proper procurement of ancillary services which should correctly be incentivised and remunerated through ancillary services payments.

One of the other core objectives of the CPM is to reduce market uncertainty for investors by reducing the volatility of the energy market. It was for this reason that the Flattening Power Factor ("FPF") and the high ex-ante weighting were introduced into the CPM. Since there will be a tension between certainty and the volatility of real time incentivisation it is necessary to seek the optimal balance between the two, taking into account the other CPM objectives of simplicity, the provision of efficient long-term investment signals, insusceptibility to gaming and fairness. AES considers that the current CPM methodology strikes a reasonable balance between certainty and volatility and would not support any significant movement away from this.

It is also important to consider the broader context in which the CPM review is taking place. AES believes that in light of the significant uncertainty surrounding the future of the SEM as a result of regional integration and other EU initiatives it is worrying for investors that the SEMC is contemplating introducing potentially further significant change and risk within the market. Such is the current level of risk and uncertainty within the SEM (on top of the Republic of Ireland's ("ROI's") country risk) that new investment in conventional generation is unlikely. This is at a time when new conventional generation will be required to support challenging renewables targets and replace plant which will be required to close under the Large Combustion Plant Directive and Industrial Emissions Directive. AES does therefore not support any non-essential fundamental change at this time. Thus while a medium term review of the CPM was appropriate at the time it was initiated it has been overtaken by European initiatives to such an extent that the context of the original review is no longer appropriate.

The fact that the CPM medium term review has been overtaken by changes in the external environment is partly due to the often excessive period of time which is taken from the initiation of a review to the publication of a decision on the issue. It also means that changes are consulted on in piecemeal fashion without the outcome of an earlier consultation being known and without being able to consider the issue in a holistic manner. The data being used can also be out of date. For example the CPM medium term review is being carried out

without the decision on SEM-10-068 (Work Package 7 BNE Calculation Methodology published 7 October 2010) being published and a consultation published in 2011 is based on 2008 data. The two recent Transmission Use of System consultations are another example. This is neither satisfactory nor efficient nor is it conducive to optimal decision making. AES would therefore urge the SEMC to review the timeliness of its consultation process and ensure that consultations are conducted in a holistic manner.

One further concern with the Consultation Document is that while Poyry was engaged to support the SEMC in its review of the CPM and provide options for improvement, a further option was then introduced by the SEMC (with very little supporting information) which was not considered by Poyry. It is therefore difficult to gain confidence that this option was considered consistently. The lack of clarity regarding this option and the fact that it was not considered by Poyry is particularly disappointing since according to the SEMC's analysis it appears to be the optimal solution.

Work Package 6 – Treatment of Generator Types in the CPM

AES believes on the grounds of fairness and on the assumption that the purpose of the CPM is to incentivise the provision of capacity that all generators should receive the same level of payment in any settlement period provided they are declared available and capable of generating in that settlement period.

AES disagrees with the statements in the Consultation Document on page 11 that 'capacity revenue received by all generators should be reflective of their contribution to generation adequacy *in the long term* [emphasis added], and also their availability to respond to demand at times of low capacity margin on the system' as these are not stated objectives of the CPM. As published in SEM-53-05 and repeated on page 5 of the Consultation Document 'The CPM must encourage both the construction and maintained availability of capacity in the SEM. Security of the system, in both the long and short-term will be the core feature of any CPM'.

The payment for capacity should therefore increase to incentivise capacity to be built if more capacity is required on the system or decrease when there is too much capacity on the system to signal that some plant should exit. Nowhere does it indicate that capacity payments should reflect the contribution to generation adequacy *in the long term* nor is long term defined. If the payment for capacity is not sufficiently high or low then the appropriate signals will not be sent to investors.

Similarly if additional capacity is required at times of low capacity margin on the system then this requirement should be signalled to generators and investors in advance and on a timely basis through the size of the capacity payment in that period. If the capacity is available and capable of generating then it should receive the capacity payment and if it is not it should not receive the capacity payment in that period. If more flexible generation is required to support increasing levels of intermittent generation then this should be properly procured through ancillary services rather than trying to shoe horn it into the CPM.

AES therefore supports the fact that the CPM values Eligible Availability within each settlement period equally from all technology sources, irrespective of start-up times, ramp rates etc.

Capacity Credit Scenario

While the concept of capacity credit (a credit to be determined by subtracting the forecast of a plant's generated output from the electricity demand curve), which weights fixed or ex-ante payments towards generators likely to be available in times of tight system margin, may have some merit, it introduces a significant layer of complexity, uncertainty and subjectivity associated with the determination of capacity credit factors. The Consultation Document appears to indicate that individual plants would be allocated a capacity credit factor based on its historic generation adequacy, the penetration factor of the plant, the size and availability of the generating units etc but it is unclear how this would be done. There are also issues such as how frequently the capacity factor would then be calculated and the fact that historic performance is not always a fair indication of future performance. There is therefore too much uncertainty with this option to give it any meaningful consideration.

The capacity credit scenario would also require a significant change to the CPM methodology; something which AES considers unhelpful at a time when potentially significant change may be required to the SEM in order to comply with EU requirements. AES does not therefore support any significant or unnecessary change at the moment nor anything that would further reduce the predictability of the capacity revenue payment stream. There is already excessive volatility with the ACPS and the introduction of capacity credit factors would introduce further uncertainty in the predictability of revenues for generators.

Treatment of Wind

AES is concerned about the increasing levels of wind in the SEM and the volatility that it is introducing into both the capacity and energy payment streams for conventional generators. This is compounded by the extent of the divergence between the unconstrained market schedule and actual dispatch. AES believes that where long-term constraints exist the current unconstrained methodology over-rewards generators who are generally constrained off and under rewards those generators who are generally constrained on. AES also strongly believes that robust, predictable ancillary service payments need to be introduced in order to support the increasing levels of intermittent generation. Flexibility should be remunerated through the ancillary service mechanism rather than the CPM.

Interconnectors

The Consultation Document seeks views on whether interconnector users and energy limited units should be treated differently to the current methodology in the CPM. Due to uncertainty surrounding compliance with EU initiatives and UK Electricity Market Reform AES does not believe that unnecessary change should be introduced at this point. Further change should only be considered when the impact of EU compliance and potential changes to the UK electricity market are known.

Work Package 8 - Incentives for Generators

Ancillary Services

AES concurs with the SEMC view that flexibility and the type of generation capacity required to maintain system security and reliability falls under the remit of ancillary services rather than the CPM. AES does therefore not support the flexibility payment option whereby a proportion of the ACPS (25% in the scenario examined by Poyry) is separated out either as a separate flexibility pot or diverted to ancillary services. AES strongly believes that any enhancement of the ancillary services payment stream should not be at the expense of the ACPS. The ancillary services payment stream is a separate revenue stream which should reflect the cost of service provision. It has nothing to do with the provision of capacity and therefore should have no impact on the ACPS. AES believes that the efficient procurement of appropriate ancillary services should result in a reduction in constraint payments and can therefore be partially funded through this mechanism.

AES also concurs with the SEMC view that the CPM should ensure that it would pay a Best New Entrant ("BNE") peaker generator a sufficient rate to cover its long run costs. AES does not however believe that the assumptions used by the SEMC in the recent BNE peaker consultation (SEM-11-025) are consistent with this objective particularly regarding the Weighted Average Cost of Capital ("WACC") and Generator Transmission Use of System ("TUoS").

As highlighted in AES' response to the BNE peaker consultation AES is concerned that the continued use of the UK WACC as the range for the BNE WACC does not reflect the reality of an investor contemplating an investment in the SEM. The UK WACC does not reflect the risk of the geographical separation of NI from mainland GB, the SEM, the fact that energy policy is devolved to the NI Assembly and the unique circumstances of investing in a market that operates across two separate legal jurisdictions. This is further compounded by the fact that since NI makes up only about 25% of the SEM total electricity requirement the ROI is by far the dominant influence and an investor contemplating an investment in NI will place significant weight on the economy and political stability of the ROI.

Since the risk of investing in the SEM has increased significantly over recent months due to for example, the deterioration of the financial stability of the ROI; aggressive renewables targets in both NI and ROI; SEMC reviews of the CPM and Scheduling and Dispatch; EU legislation and UK Electricity Market Reform, the SEMC's assumption of a reduced WACC for 2012 seriously undermines the credibility of the CPM and the associated risk and uncertainty for investors. It is therefore essential that the BNE is recalculated using realistic assumptions. For the same reason it is also essential that the BNE is updated with the Generator TUoS charges effective from 1 October 2011 in the same way that exchange rates are updated at the end of November.

Penalties

AES strongly disagrees with the SEMC's minded view to consider a penalty mechanism for generators. AES fully supports the fact that generating units which have been declared available and are collecting capacity payments should be able to generate as and when required. However AES believes that the current market payment, penalty mechanisms and

test facilities open to the Transmission System Operators ("TSOs") are sufficient and adequate to incentivise generators to be able to generate when instructed to do so. If the SEMC or TSOs are concerned that generators are declaring units available that are not capable of complying with dispatch instructions then the relevant TSOs has the ability to test the unit and should do so.

More significantly a generator will be in breach of its Generation Licence and Grid Code if it declares a unit available which is not capable of dispatch. The penalties outlined in the Consultation Document are therefore not required, nor are they reasonable and proportionate to the risk being addressed or the revenue being earned. If the SEMC implements the penalty system outlined in the Consultation Document is will serve only to increase the risk of generators operating in the SEM and further discourage new investment.

While AES does not support the introduction of a further penalty mechanism if one were to be introduced then AES would advocate that it should be accompanied by an independent appeal mechanism. It is AES' view that any penalties collected should be redistributed to the generators who received capacity payments in that period.

New Entrant Scenario

AES does not support the concept of a new entrant guarantee as it discriminates against existing generators who are providing the same service. As outlined earlier AES believes that all generators should receive the same level of payment in any settlement period provided they are declared available and capable of generating in that settlement period. The introduction of such a guarantee would require the SEMC to change the objectives of the CPM which would once again serve to highlight the risk of continued regulatory interference and uncertainty associated with operation in the SEM.

Work Package 9 – Timing and Distribution of Capacity Payments

To reflect the trade-off between long-term stability and short-term market signals the current split of the monthly capacity pots between 30% year ahead, 40% month ahead and 30% monthly ex-post was established as the most appropriate balance between the competing objectives of the CPM. While AES understands the SEMC's desire to increase the short-term capacity shortage signal any signal which is not highlighted or flagged until after the event is meaningless as the generator has missed the opportunity to take any potentially corrective action. In reality however there is very little that a generator can do even if a capacity shortage is highlighted in advance.

In addition to generators scheduling outages with contactors to meet manufacturing guidelines and warranties and to meet statutory insurance inspections, generators are required to notify the TSO of outages 3 years ahead and this is then refined and approved again at 2 years and finally 1 year ahead. Thus there is a long lead time when generators are scheduling outages and a generator has limited opportunity to alter these. Therefore even if the TSOs were to highlight a short-term capacity shortage there is very little action that a generator can take other than perhaps rescheduling a non-urgent, short-term, ad-hoc outage. All of this must also be considered in the context of a generator's obligations under

its Generation Licence and Grid Code to act as a Prudent Operator and the obligation to make capacity available to the TSO if the generating unit is technically available for dispatch.

Therefore if TSOs wish to have maximum capacity available at times of tightest margin then they will need to forecast and communicate this as far ahead as possible. The SEMC should also review the profiling of the monthly capacity pots to ensure that these are aligned with the capacity requirements since it is highlighted that the tightest capacity period in 2008 occurred in June rather than over winter peak.

Since the reality is that generators have very little ability to react to periods of short-term capacity shortage even if they were highlighted, AES does not consider there to be any merit in significantly changing the distribution of capacity payments. The same argument is true for the FPF.

System Operator Capacity Allocation Programme Model

AES is concerned that the System Operator Capacity Allocation Programme ("SOCAP") model was introduced into the Consultation Document with very little supporting information. Neither was the option considered by Poyry. The lack of clarity regarding this option and the fact that it was not considered by Poyry is particularly concerning since the SEMC's analysis indicates this option to delivers the most benefit above the status quo.

On the basis of the limited information available AES has no support for the SOCAP model. AES considers this methodology to lack transparency, be highly subjective and almost unilaterally under the control of the TSOs who are conflicted by their ability to approve outage schedules. The independence of the TSOs in managing this model is further eroded by the fact that the transmission assets are also likely to be transferred to them in the near future as part of EU unbundling compliance.

The influence of the TSOs appears to be acknowledged in the Consultation Document (but then ignored) as it states on page 40 "In theory the constraints could be set so high as to have never had a binding effect. In this case the SO's would be free to put the provisional ACPS wherever they like during the Trading Year without constraint." This is neither acceptable nor appropriate and the option should therefore be discounted.

Work Package 10 – Impact of CPM on Suppliers

Since AES does not have a supply business it will not comment on this work package in detail other than to say that it would appear logical to align capacity charges with capacity payments in order to signal the true time cost of demand.