Consultation on CPM Medium Term Review Draft Decision

SEM/11/088

NEAI Response

Status: Final

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1 INTRODUCTION

Continuing our active engagement in the ongoing Medium Term Review of the Capacity Payments Mechanism, NEAI members welcome the opportunity to respond to RA proposals contained in the Consultation paper on a Draft Decision (SEM/11/088). We recognise and appreciate RA efforts to facilitate direct meetings and extend consultation deadlines to date.

Over the course of this engagement, our members have received direct reassurance that no significant change would be made to the CPM in light of the changing circumstances referenced in the draft decision paper. Therefore, we are disappointed to see the proposed adoption of the revised methodology for calculating IMR deduction ('Option 2' per SEM/10/046) in the draft decision, which is poorly justified, severely flawed, and materially consequential. The significance of this change is underlined by a potential 9% reduction in the overall capacity pot in 2013 and subsequent years. Our members would certainly consider a change of this nature and magnitude to be very significant and to have a detrimental impact on the SEM investment environment with the creation of undue regulatory uncertainty within SEM and the corresponding negative impact on cost of capital. We would strongly urge you to reconsider this materially consequential proposal in light of its poor justification and profound flaws, which we will further outline in this response.

Our detailed comments on this issue and other matters arising in the draft decision are provided in the section below.

2 DETAILED COMMENTS

The response concentrates on the proposed revision to the methodology for the deduction of IMR. The issues covered in this response are:

- Infra Marginal Rent Deduction (IMR) – Section 2.2 of draft decision;
- Forced Outage Probability (FOP) – Section 2.1 of draft decision; and
- WACC Calculation (not provided for in the draft decision).

2.1 Infra Marginal Rent (IMR) Deduction

NEAI members consider that the SEMC draft decision would constitute a significant change to the CPM, and our members have serious concerns regarding it as conceived. The following sections set out these concerns.

2.1.1 Option 2 is a solution to a non-existent problem

The proposed move to Option 2 is a remedy to a problem that our members do not accept exists in reality. Our members fundamentally contest the SEMC's assertion that the existing regime is volatile[1] and are prepared to share modelling which illustrates that a continuation of the status quo for the calculation in IMR is unlikely to lead to any volatility in the short to medium term – and certainly not during the period in which the BNE price is proposed to be fixed. We acknowledge that Option 2 would counter volatility that could arise in theory but have fundamental concerns around the economic rationale underpinning Option 2 (as detailed below) and do not accept 'theoretical' volatility as a credible basis for change as this does not reflect the reality of the situation on the ground. The NEAI believes that such an approach could greatly undermine the CPM and would argue strongly for the maintenance of the status quo which we believe will not be volatile and will provide price stability (which are the two stated grounds that the SEMC have espoused as reasons for justifying the proposed change). There is no evidence that Option 3 has not functioned as intended to date, or that it is conceptually flawed. Whilst well founded changes to the SEM are to be expected, and are indeed desirable, changes such as the one proposed give rise to significant regulatory risk and this is very damaging to investor and lender confidence.

We note that Option 2 was not the preferred option of any of the respondents to the original consultation (SEM/11/019) and, notwithstanding the view of some members that IMR should not be deducted, of the options presented in the consultation paper; our membership unanimously supports Option 3.

Further, it could be perceived that the SEMC's intention in proposing Option 2 is to suppress the level of ACPS. This would lead to generators as a class under-recovering revenues as variable cost recovery is subject to the BCoP provisions. The NEAI considers that the SEMC needs to ensure that ACPS is set at the correct level given the established methodology and existing market design objectives.

2.1.2 <u>Option 2 suffers from the same flaws that led the SEMC to adopt a CPM in the SEM</u>

In the development of the SEM, the RAs recognised that a fundamental failing of an "energy only" market was that it failed to ensure generation adequacy, primarily because the required VOLL prices never materialised. This was set out in Section 3 of the paper AIP/SEM/124/06 and is repeated in the first paragraph in Section 7.1 (Theory of the CPM) of the draft decision, which quotes:

"… in practice many electricity markets have found that a pure energy price alone is insufficient to ensure generation adequacy owing to issues surrounding price volatility (generally resulting in the energy market being unable to realise a true value of lost load (VOLL))…"

By definition the energy price can only be VOLL when load is lost and therefore, in such markets, the main problem was that load was not shed for the requisite number of hours to enable sufficient occurrences of VOLL prices to fund investment.

Option 2 relies on the assumption that at "equilibrium", IMR will be earned from prices being set at PCAP for 8 hours. In the same way as for VOLL in an energy only market, this will happen when customer demand is not met for 8 hours in a year.

It is wholly inconsistent and not credible for the SEMC to deduct IMR revenues, determined from PCAP revenues being captured for 8 hours when the market is in "equilibrium", when

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[1] **"***'…The implications of a change in estimated real IMR are thus significant and represent genuine volatility in the CPM calculations. The SEM Committee wishes to remove this level of volatility if possible. While one possibility would be to simply not deduct the IMR, it is the RA's view that **at equilibrium** the BNE **does** earn infra-marginal rent and this **should** be deducted from the Annualised Cost per kW of the BNE"(p. 15)*

this was recognised by the RAs as a fatal flaw in an energy only market (i.e. customers disconnections and hence VOLL never occurred for 8 hours) and which led to the decision to develop the CPM as a fundamental element of the SEM.

It is therefore clear that, on the basis of the original premise that VOLL cannot be reached on sufficient occasions, PCAP would similarly not be captured and hence revenues will not be sufficient to deliver investment when required. The NEAI notes that there has been no PCAP price event in the SEM.

When assessing a potential investment, investors will be cognisant of the fact that there is a high level of risk (political, regulatory and other 3rd party risks) to revenues dependent on load shedding events due to a shortage of generating capacity, as reliance on Option 2 requires. A review of historic performance in Ireland would highlight few, if any, occurrences of such events in the last 25 years (i.e. the period equating to the economic life assumed for the BNE Peaker)] and hence the scope for such revenues would be disregarded by potential investors and therefore investment would not occur when needed under Option 2.

2.1.3 Option 2 is economically inconsistent and not applicable in SEM

Firstly, the original decision of the SEMC was that IMR should be calculated on the basis of the 'current competitive system state' and not from an artificial scenario (SEM-07-187). Furthermore, the SEMC has noted in its draft decision that the profits to be deducted from the fixed costs of a BNE peaking plant are those which a plant can "reasonably expect" to earn in the energy and ancillary services markets. These 'reasonably expected' profits would appear to be more consistent with the retention of Option 3 rather than on the basis of an artificial scenario.

Aside from the practical reality outlined in section 2.1.2 above, the NEAI has concerns regarding the economic rationale for Option 2 – notably whether "equilibrium" as described is correctly conceived from a theoretical point of view under SEM design.

In Section 7.2 the SEMC sets out that "*a key point in the selected design of the CPM within the broader theory of remunerating generators in the SEM is to consider the circumstances in which the market is at equilibrium.*"

In Section 7.5 "SEM Committee's Response" the SEM Committee (SEMC) clearly sets out the underpinning rationale to support their preference for Option 2, essentially to deduct 8 hours of IMR at an assumed PCAP level. It is thus critical that the SEMC's approach is economically sound in the context of the SEM design in general, and the CPM design in particular. The following two SEMC statements are therefore central to understanding the rationale for equilibrium:

- *"At equilibrium the peaker will set the market price (whenever it is scheduled) as it has the highest variable costs. Also within this system:*
    - *There must be some hours with non-served energy and a marginal price equal to VoLL, since otherwise the system cannot be in equilibrium."*

The SEMC position is thus, very clearly, that equilibrium **only** exists if there are hours of un-served load (assumed to be 8 hours) and that marginal prices equal VoLL (currently set at an arbitrary level of €10,519.75). If equilibrium does not exist as described by the SEMC, Option 2 as described by the SEMC falls away.

The NEAI believes that equilibrium is not possible given the existing SEM and CPM designs. It considers that:

1. It is not possible for the SEM to deliver a price for unserved energy and a *"marginal price equal to VoLL".* Energy prices are capped at PCAP, and thus by definition within the market rules, unserved energy cannot be priced at VoLL.

2. In practice, it is not possible for the market price (SMP + CPM) to reach VoLL. This arises because:

   i. The adoption of PCAP, which limits the energy payment available in any trading period.

   ii. The CPM payment mechanism itself. The allocation of CPM payments into ex-ante and ex-post revenue streams by month and current value of BNE costs contrasted against the level of VoLL makes it infeasible for the CPM regime to allocate sufficient CPM rewards into a single trading period to give an overall price outcome where SMP + CPM = VoLL.

Consequently, a VoLL price is not achievable under the SEM either in the manner described by the SEMC or as a result of SMP + CPM monies calculated for a trading period under the Trading and Settlement Code. Reliance on this concept is thus flawed under SEM design and as it provides a basis for Option 2, that option should be rejected.

2.1.4 A long run equilibrium solution cannot be applied to a short term timescale

An economically neutral application of Option 2 would assume that the market design and the CPM in particular, would run unchanged over an investment timeframe. It is not plausible that this would be the case, notably given the uncertainty around market arrangements post 2016. It is thus inappropriate to apply a long run theoretical equilibrium position, which is flawed in any event as outlined in 2.1.1 – 2.1.3 above, to a limited time window of the investment horizon. This would inevitably cause mechanistic under or over recovery. Where arrangements are more fluid, as is the case with market designs in general and the CPM at this time in particular, the current, more dynamic, assessment of the IMR is more appropriate.

2.1.5 Summary

Any of the above stand-alone arguments, summarised below, is more than sufficient to reject option 2.

- NEAI categorically does not accept the stated need for Option 2 that it removes volatility in the IMR deduction and its members are willing to share modelling results demonstrating this – this is sufficient grounds to reject Option 2.

- NEAI believes that the IMR revenues deducted from the BNE price under Option 2 are not feasible for the same reasons that the RAs specified in 2006 when they rejected an energy only market (effectively because customer disconnections never happened in practice as required) – this is sufficient grounds to reject Option 2.

- NEAI strongly maintains that Option 2 is infeasible in the context of SEM and CPM design – this is sufficient grounds to reject Option 2.

- NEAI considers Option 2 an ill-justified, incorrect and infeasible long-run equilibrium solution that is furthermore incorrectly applied over a short time horizon. The application of any long run equilibrium approach to a time limited period within an investment timescale is fundamentally flawed, and will lead to an artificially suppressed CPM – this is sufficient grounds to reject Option 2.

Moving to Option 2 is a radical change in the context of the CPM, and contrary to the RAs preferred "minimum change" approach adopted in other areas. In line with this 'minimum change' approach and lack of justification for adoption of Option 2, the NEAI supports Option 3, preservation of the status quo.

2.2 Forced Outage Probability (FOP)

Firstly, our members welcome the proposal for the use of a more realistic FOP based on the historically achieved system average forced outage rates. This is an improvement on the existing regime which had unrealistic expectations of plant capability. However, referring to *'Figure 6.1- Regulatory Authorities Analysis - 5 year FOP Average'* in the RAs draft decision it is difficult to ascertain how the RAs established a FOP of 5.91%. This figure would appear too low based on the RAs' own information. Therefore, we seek further clarity in relation to the methodology for calculation and a commitment to a formal transparent process for its derivation on an annual basis utilising a rolling average historic FOR as the basis of the FOP figure.

2.3 WACC

The determination of an appropriate WACC is a key factor in the calculation of the annual BNE Peaker. It is the NEAI's considered view that it is inappropriate to treat WACC in RoI separate from WACC in NI (based on generic GB fundamentals). The fact of the matter is that an investor is investing in SEM, which is a single market. The investor risk premium should therefore be more reflective of the risks of investing in SEM (RoI and NI) and the WACC should reflect this. We propose that this is a more sensible approach to choosing a GB based risk and cost of debt/equity profile which bares no relevance to costs of investing in SEM.

3 CONCLUSION

Throughout our engagement in the CPM Medium Term Review, we have emphasised our support for capacity payments as a mechanism to encourage new investment and reward the availability of existing plant, whilst arguing against any substantive change in the context of a changing legislative and investment environment. Notwithstanding the latter, we have engaged in the process to suggest improvements in the mechanism should the RAs be minded to make any changes. As outlined in our response, we are disappointed that significant material changes have been proposed in this draft decision. In our response, we have set out detailed arguments against the proposed change to the method to calculate deduction of IMR.

We strongly urge the SEMC to consider the concerns and risks we have outlined. As always, we are available to receive any queries you may have in relation to this response.

Given the importance of the issues under consideration, and the impact the draft decision has on our members, the NEAI requests a meeting with the SEM Committee to discuss these issues further. We look forward to your positive response to this request.

National Electricity Association of Ireland, 16th of January 2012