

**NIE Energy Limited
Power Procurement Business (PPB)**

CPM Medium Term Review

Draft Decision Paper

SEM-11-088

Response by NIE Energy (PPB)

13 January 2012.



Introduction

NIE Energy – Power Procurement Business (“PPB”) welcomes the opportunity to respond to the SEM Committee’s (SEMC) CPM Medium Term Review draft decision paper.

PPB agrees with the views of most respondents and of the SEMC that no substantive changes to the CPM should be made, and that only minor enhancements should be made. We are therefore extremely surprised, given this commonly agreed objective, that the SEMC subsequently propose a quite radical and substantive change in respect of Inframarginal Rent (IMR) that has the effect of reducing the CPM by 9%. This clearly contradicts and conflicts with the initial principle for “no substantive change”, was not supported by any respondent and following further consideration, we believe it has no basis and should be dropped.

PPB also endorses and concurs with the response to this consultation paper submitted by the NEAI which represents the consensus views of industry participants.

Infra Marginal Rent Deduction

As noted above, we find it difficult to reconcile the widely based desire to minimise change to a mechanism that has operated well with the proposal to deduct IMR on an ongoing mechanistic basis which results in a near 10% reduction in the value of the CPM. This element of the calculation, while in theory having the potential to create volatility, has not been volatile in practice and no analysis has been conducted to indicate that it would result in undue volatility over the lifetime of an investment (i.e. 25 years in the case of the BNE plant), never mind over the next few years as the market changes to comply with the EU Target model and renewable investment continues to expand. Hence we consider the perceived “volatility” from IMR is extremely unlikely to be an issue over the next few years (notwithstanding our previously stated view that in principle, no IMR should be deducted).

We would also highlight an error in the SEMC’s response in Section 7.5 of the paper which states that “*A volatile IMR depending on many circumstances that happen in system operation will result in the generators receiving an unstable and unpredictable income every year*”. Currently the IMR calculation is the result of an ex-ante modelled calculation of un-constrained scheduling which does not have any dependence on “system operation” and hence is inherently not volatile, unstable or unpredictable.

We are also concerned that the theory that seeks to base the determination at market equilibrium is unproven, particularly in the scenario with increasing renewable penetration and interconnector capacity. If new investment is to occur when required, the “theoretical world” must meet reality. PPB were responsible for generation planning in Northern Ireland up to just before the commencement of the SEM (formally to 1999 and informally thereafter) and while planning may be conducted to achieve a generation security standard, or equilibrium, it is never achieved in practice. This means that to achieve the “equilibrium” level on average over the lifetime of an investment, there would need to be an equal number of occasions where reality exceeds the equilibrium point as there are where it falls short of the

equilibrium point. Hence where equilibrium is determined as 8 hours when demand cannot be met, if there are a number of years where demand is always met, then this would need to be matched by a number of years where demand isn't met for greater than 8 hours.

This is a purely theoretical "planning" concept and it is not credible to expect a potential investor to rely on these events happening to provide the required return on investment and this was a key reason why the CPM was established in the first place (as noted in the first paragraph of Section 7.1 which quotes from AIP/SEM/124/06 : "... *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))...*").

The SEMC position of removing IMR would mean any new investor would have to rely on there being 200 hours of lost load over the lifetime of its investment (i.e. an average of 8 hours per annum), in order to remunerate its investment. Consideration of the historical hours of lost load due to insufficient generating capacity would show for Northern Ireland that there has been no instances of such a shortage in the last 20 years (since PPB was established in 1992) and from a quick review of old records, not in the 10 years before that.

Similarly from our previous role in generation planning, it was evident that on any occasion when margins were tight, the TSO, Regulator and Department became extremely concerned and would look at any measure available to them to avoid disconnecting customers. Measures such as, re-contracting capacity, establishing voluntary load management schemes¹ with large customers, establishing capacity shortfall warning/alert mechanisms, etc. have been utilised to minimise the risk of there being insufficient capacity requiring customer disconnection. There would therefore be significant political/regulatory/³rd party risk for an investor who would be relying on an average of 8 hours of disconnection every year to remunerate an investment.

Based on the historical trends and the risk of intervention, no value could be placed on IMR in such periods and the maximum IMR that an investor could consider, albeit we believe even that would be ignored or very heavily discounted, would be that determined from ex-ante scheduling forecasts as is employed in the current BNE methodology (i.e. option 3).

Rather than increasing certainty for generators, the proposal to deduct IMR based on Option 2 increases uncertainty and risk for investors and would deter efficient investment.

PPB considers the SEMC proposal to be severely flawed and while PPB considers no IMR should be deducted, we would be content for the Status Quo to be maintained and reviewed again once there is greater clarity over the form of the wholesale market that aligns with the requirements of the EU Target Model.

¹ Eirgrid continue to utilise three schemes (WPDRS, Powersave and STAR)

The BNE WACC

As we noted in our response to the 2012 BNE consultation, the SEM is an all-Ireland market and any rational investor seeking to invest in the market will view the risk of operating in the SEM as a single risk, regardless of the potential location of their generating unit. Therefore while there would be a small variation in the pre-tax WACC as a consequence of different taxation rates, the fundamental components that make up the return required by an investor in the SEM should be common. Electricity demand in RoI is roughly three times the demand in N. Ireland (NI) and hence the perception of risk by investors considering an investment in the SEM would naturally be more heavily influenced by the economic climate in RoI.

Previously, the differences in the various elements used to determine the WACC were not material and hence the calculation of jurisdictional WACCs was not an area of significant divergence. However over the course of the last two years, a significant divergence has emerged and it is now appropriate to reflect how investors will view investment in the SEM. Investors will view the SEM risks in the context of the all-island market and would not consider an investment in Northern Ireland to be the same as an equivalent investment elsewhere in the UK. Therefore the fundamental elements of the WACC determination that reflects the location of the investment should be applied on a common basis.

Forced Outage Probability (FOP)

PPB agrees that the level of FOP used since the commencement of SEM has been unrealistically low. However, PPB is disappointed that the SEMC intends to maintain a “target” FOP, albeit slightly higher at 5.91%, but which remains below the actual level of forced outages experienced since the commencement of the SEM (the average all-island FO rate since 2004, as shown in Figure 6.1, would appear to be approximately 8.5%). Similarly, it is lower than the TSOs estimate in their recent Generation Capacity Statement.

There is no information or transparency on, the derivation of the new “target” FOP and PPB considers that a rolling average (over 3 to 5 years) of historic actual forced outage rates would be more appropriate, particularly as increased cycling resulting from higher wind penetration is likely to result in higher levels of FOP.

Fixing elements of the BNE for 3 years

While the concept of fixing certain elements of BNE price determination has its attractions, as we noted in our response to SEM/10/068, there was no actual analysis of the impact of fixing (with indexation) certain elements of the BNE price and therefore it was impossible to comment on the impact and materiality of such a freezing approach on the boundary step change that could occur at the end of the period. As a result, the value of “fixing” is un-quantified and merely conceptual. A further feature of the approach is that it will intensify the need for robustness in the determination of the various costs that are to be fixed since there will be no opportunity to revisit them until the end of the fixed period.

We consider that further analysis using the historical data to illustrate the deviations that would have occurred in 2009 and 2010 had, for example, fixing been employed

in 2008 would help to illustrate the magnitude and materiality of variations that would arise from fixing each of the components.

The Flattening Power Factor

PPB wholeheartedly disagrees with the minded proposal to increase the Flattening Power Factor (FPF). As we have consistently stated, PPB considers generators are largely incapable of responding to the ex-post signals provided by the CPM as their ability to respond is normally limited. Increasing the FPF will merely serve to increase revenue volatility for no identifiable benefit. The proposed change also conflicts with the CACM requirements which will require firm day-ahead prices. Increasing the volatility of the ex-post CPM revenue volatility can only make the interfacing of the Irish wholesale market with the wider European markets more difficult and will likely result in a less efficient outcome. We therefore propose that no change be made to the FPF at this time.

Conclusions

The context has changed greatly since the commencement of the CPM Medium Term Review and we note that this is recognised by the SEMC. PPB agrees with the majority of market participants and the SEMC that no major changes should be contemplated at this time, given that the mechanism is not broken and that there is the potential for significant change in the wider market model as it seeks to align with the requirements of the EU Target model. Where small changes can be made to improve the CPM then those should be welcomed as that sends the correct signal to potential investors.

IMR

The proposal to change the determination of the IMR that is to be deducted in the calculation of the BNE cost is clearly not a minor refinement as it represents a near 10% reduction in the BNE cost and hence CPM pot. PPB wholeheartedly disagrees that there is a volatility problem to resolve. Further, we consider that no investor could rely on recovering the deducted IMR revenue in the market, not least for the same reasons an energy only market was rejected by the SEMC (i.e. the required interruptions that would lead to VOLL or PCAP prices do not happen). This would be further reinforced for any investor by the fact there have been no “Insufficient Capacity Events” since the commencement of the SEM and looking back before the SEM in Northern Ireland, that there have been no customers disconnected due to an overall shortfall in generating capacity in the last 30 years.

To be credible, the CPM framework must function consistently whether there is a surplus or shortage of capacity such that it would remunerate new entry if it were needed. However, the revenues with the IMR deducted as proposed, but with virtually zero probability of actually capturing that IMR in the energy market, would mean no peaking plant investor could recover its costs.

The proposal therefore creates a suspicion that it is an opportunistic decision to reduce CPM costs in the short term, without regard to the message the change conveys in respect of regulatory risk, or the long term stability of the market.

Other CPM proposals

On the other CPM proposals, PPB remains of the view that an investor would view an investment in a peaking plant in Northern Ireland as an investment in the SEM and would not seek a return based on UK fundamentals but rather on the specific SEM risks that are inevitably influenced by the prevailing economic climate in Ireland.

PPB does not understand the basis of the determination of a slighter higher, but still, target FOP and considers that the use of a rolling average of recent actual forced outage rates would result in a more reflective determination of the actual capacity requirement in the market.

While PPB generally welcomes the proposal to fix (and index) some elements of the BNE cost, further analysis of the potential variation would be helpful to inform the decisions on which elements are suitable for fixing. However, we would also caution that where fixing is to be employed, more rigorous scrutiny will be required for decisions that will endure for a number of years.

PPB considers the FPF should remain unchanged (at 0.35) as the proposal is unlikely to change generator behaviour, will only increase volatility and conflicts with the CACM requirement for firm day ahead prices.