NIE Energy Limited
Power Procurement Business (PPB)

CPM Medium Term Review
Work Package 6 onwards

Discussion Paper

SEM-11-019

Response by NIE Energy (PPB)

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NIE energy
Power Procurement Business

Introduction

NIE Energy – Power Procurement Business ("PPB") welcomes the opportunity to respond to the CPM Medium Term Review discussion paper.

Work Package 6 – Treatment of Generator Types in SEM

The consultation paper erroneously comments that "The SEM Committee is mindful that the remuneration of wind generators is subject to two regulated components", namely the CPM and FIT. However FIT only applies in RoI and the ROC regime applies in Northern Ireland.

The Capacity Credit scenario

PPB does not see any value in further consideration of a capacity credit scenario. It adds complexity and risk for market participants with little benefit. The credit would need to be determined by the RAs and in theory should be different for each individual generating unit since each one will have had different historic performance. However, ultimately the credit should reflect historic availability although reward for flexibility is also proposed. In a centrally dispatched market, we believe the CPM should concentrate on generation security, reflecting solely the availability of capacity and ignore flexibility which relates to operational security and which is more closely associated with ancillary services. The actual availability in any trading period provides the only correct assessment of the capability to meet customer demand in that period and should not be adjusted by an arbitrarily determined factor.

Capacity Credit of Wind Generation

The current mechanism probably does over-reward wind, not least because the flattening power factor spreads the CPM pot too evenly such that night-time payments tend to be too high relative to the risk to security of supply at that time. PPB has also pointed out the risk of wind volatility (as is evident from the historic variation in wind capacity factors) which means that in windy years, wind generators capture a larger share of the CPM pot to the disadvantage of conventional generators, while in poor wind years the opposite occurs resulting in increased payments to conventional generators. The inherent volatility of wind is therefore reflected in the volatility of CP receipts for conventional generators which we believe is not in line with the principles for the CPM. We have previously argued that there should be a mechanism (e.g. separate pots) to remove this volatility. However, we recognise this would require significant changes to the TSC and while we await clarity on the future for the SEM in the context of the EU Target model, do not believe further consideration would be worthwhile at this time. However, if in the longer term the SEM model is retained and includes a CPM, then the increasing penetration of wind would only exacerbate the volatility in the CPM and a correcting mechanism may be needed at that time.

CPM Impact on Interconnectors

Increasing the ex-post component of CPM increases the risk for interconnector trading and will only result in a greater "dead-band" where the interconnector neither imports nor exports because of the price differential that traders will require before committing to interconnector trades. This conflicts with the desire for market coupling and for more efficient utilisation of interconnectors. While recognising there are such issues for interconnector users, PPB considers that it is more important to resolve the future of the SEM and market coupling between the Irish and GB markets before considering how the CPM (if it exists in the medium to long term) makes payments or charges to interconnector users.

Energy Limited Units

The nature of Energy Limited generating units and Pumped Storage Units means that with perfect hindsight, the capacity could have been utilised differently. However, it is likely that while this may result in a perceived loss on some occasions, it is also likely to have been of benefit on other occasions. PPB does not believe the current methodology should be modified. The ongoing uncertainty over the target model and the extent to which SEM can be modified to comply also points to retaining the existing arrangements pending the outcome of those considerations.

Work Package 8 – Incentives for Generators

Ancillary Services and the CPM

PPB agrees with the RAs belief that the "responsibility of incentivising the type of operational generation capacity required to maintain security and reliability may be better dealt within the remit of ancillary service payments". In this context, the reference to "security" relates to operational security standards and not generation security (which relates to the probability of there being sufficient generation available to meet demand in line with the generation security standard, as opposed to operational security which is more concerned with being able to meet unexpected demand changes, carrying adequate spinning reserve to cope with unplanned outages, maintaining system voltage, etc).

We agree that the two payment streams have separate objectives although we recognise there is some interaction between the CPM and Ancillary Service arrangements. However, there is a risk that merely transferring revenues between the CPM pot and the HAS payments will create risk for participants that will discourage appropriate new entry which would increase security of supply risks which will be to the detriment of customers.

If the SEM continues to exist in its current form, we believe the design will need to be reconsidered to ensure the aggregate revenue components are sufficient to provide a reasonable return to generators in the market. As we have highlighted in responses to other consultations, the theory behind the SEM market model has its origins in a system comprising a traditional blend of baseload, mid-merit and peaking plant but that paradigm is likely to change significantly if the target of 40% renewables is ever to be achieved. A wide ranging review of the remuneration for the

various classes of generation needed in this market model will be required to ensure the future market is sustainable.

Capacity Penalties

PPB does not agree that retrospective penalties should be applied where a generator is declared unavailable. Generators have Grid Code obligations to declare the true capability of a generating unit and hence if a generator was making a false declaration, it would be in breach of Grid Code which is in turn a breach of its licence which has potentially very significant consequences.

It must also be remembered that generators are already exposed to a range of risks and penalties. A generator who fails to provide capacity will be penalised as a result of Trip and Short Notice redeclaration charges under the HAS arrangements and will not receive CPM payments until such time as it can prove it is capable of delivering output to its declared capacity. In PPB's view, these are sufficient incentives to maintain availability. We consider that any back-dating of penalties through a rebate arrangement would be very subjective and will only serve to increase the risks and hence cost of capital faced by all generators in the market and such costs will ultimately be borne by customers. While an appeal mechanism is proposed, we would expect that could become a very technical process that could be unwieldy and expensive to operate.

The TSOs are responsible for ensuring compliance with the Grid Code and if the TSOs have suspicions about the availability of a generating unit, then it should dispatch a unit to test its capability.

New Entrant Scenarios

PPB does not believe new entrants should be treated differently to existing capacity. The paper suggests that the certainty of a guaranteed rate for 5 years would reduce the cost of capital, however, the BNE assumes financing over 20 years and hence for the remaining 15 years once the new entrant protection has expired, the generator will be exposed to greater volatility because of the impact of alternate new entrants in that period. Hence any perceived advantage to the costs of capital in the first 5 years will be offset by the additional risk in the following 15 years.

We therefore agree with the conclusion in the consultation paper that this is likely to result in a sub-optimal outcome with greatly increased regulatory risk.

Work Package 9 – Timing and Distribution of Capacity Payments

Fixed, Variable and Ex-Post Allocations

PPB has always expressed the view that the ex-post allocation does little other than increasing the volatility of payments for generators, particularly non-portfolio generators while having little impact on the actual availability of generating units since in most circumstances a generator has little choice over whether or not it can be available (i.e. it is either available or on a planned or forced outage). While there may be a few infrequent occasions where a generator has discretion over when to

undertake an outage, this is usually discussed with the TSO and where possible aligned with the TSO's requirements.

There is a general agreement among generators that the ex-post allocation has virtually no bearing on its decision making and there is no evidence presented by the RAs to show any evidence of generators' response to the purported ex-post signal.

The current 30% ex-post allocation already exposes generators to the TSO decisions in relation to outage scheduling and if the ex-post allocation were to increase, this would need to be married to either compensation where the TSO decision making imposes a cost on the generator or else with the abandonment of centralised outage planning such that generators have full scope to manage their CPM revenue risk.

PPB considers there is already a significant incentive for generators to be available, if at all possible. During periods of low margin as SMP will generally be high and the generator would be missing out on the potential for infra-marginal rent, and/or be exposed should it have entered into a CfD that will likely require settlement payments to the CfD counterparty when SMP is high even though the generator is not receiving energy payments in the market. Hence there is already significant incentive for generators to maximise their availability during periods of low plant margins.

These risks are magnified for non-portfolio generators who do not have other generating units upon which to capture any offsetting upside and hence increasing the ex-post allocation serves to reward dominant portfolio generators and penalises smaller independent generators.

PPB would prefer a reduction in the ex-post allocation and for the reasons outlined above, would vigorously oppose any increase in the ex-post allocation. Furthermore, as we have previously noted, the uncertainty over the future of the SEM in the context of the target model means that it may be prudent to maintain the current allocations pending clarity on the future evolution of the wholesale market.

Flattening Power Factor Analysis

Where there remains parts of the CPM payments that are related to LOLP, then the Flattening Power Factor tends to reduce the risk of missing a few peak payment periods by spreading the payments over a wider period. This is of greater benefit to single plant generators since if they were not available at the peak periods, it would be a direct reduction in their payments whereas for a portfolio generator, the impact is largely cushioned because they earn the higher rates on their remaining available units.

This indicates there is the potential for dominant generators to game the mechanism to maximise their share of the CPM pot and to expose smaller, independent generators. However, on the alternate, adopting an FPF does result in payments being allocated to periods where capacity is not as useful (e.g. night-time). A balance needs to be struck to address these two issues and PPB considers that, having lived with the existing values which are at least understandable, then they should be

maintained (at least until the outcome of how Ireland complies with the target model is established).

PPB does not believe the ex-post weighting should be increased as there is no evidence it has had any bearing on the availability of capacity. However, if it were increased then the FPF should be reduced to dampen the volatility, thereby avoiding penalising smaller generators and advantaging portfolio generators.

The SOCAP Alternative

PPB considers the SOCAP model to be totally inappropriate and conflicting with the objectives of the CPM. It is likely to increase risk for new investors thereby creating a barrier to entry that will protect and sustain the position of large portfolio generators, effectively increasing their dominance in the market.

The prospect of ex-post reconciliation that could involve significant reconciliations is also unsatisfactory for a number of reasons. It will provide difficulties for audit purposes as revenues could not be fully credited until after the ex-post annual wash-up. This volatility will also have an impact on interconnector trading and market coupling since volatility in CPM revenues/charges will increase the risk of interconnector trades which would most likely result in an increase in the spread required before conducting trades and this will be inefficient.

The consultation paper indicates a benefit of the proposal is that it "maximises the fairness objective of the SEM". However, while this might be the case for portfolio generators, it is likely to represent a significantly higher risk for generators who do have the protection of a significant portfolio.

The paper also claims that the model "improves the tools available for prevention of load shedding". However, as most generators have highlighted, there is generally little that a generator can do as they are either available or they are not and discretion on whether to declare availability on a generator, that would otherwise be unavailable, is a rare occurrence.

The mapping of capacity signals to generation and demand would be also be totally out of synchronisation if the SOCAP model were adopted for payments to generators but with the existing arrangement retained for demand. Given that both contribute equally to the margin (i.e. an extra 1MW of generation is worth the same as a 1MW reduction in demand), then there is little equity or "fairness" in the proposal.

<u>Work Package 10 – Impact of CPM on Suppliers</u>

In theory capacity charges to demand should track payments to generators since both determine the margin at any given time. However, in general terms there is even less visibility of price signals at a customer level and hence there is limited opportunity for demand management except perhaps among the largest customers. It is unlikely that suppliers could find a counter-party with whom to hedge floating capacity charges and hence suppliers would most likely find it very difficult to manage this price risk. As a result a fixed tariff would appear to be the best solution at this time.

However, it appears from the analysis that while supplier charges follow the same profile as generator payments, the supplier charges are flatter such that night-time charges are higher and peak charges are lower. It would be better if the profiles were more closely matched and indeed we have argued that night-time payments to generators are currently too high. Hence we believe the profiling of capacity payments should be more heavily weighted towards periods where plant margins are tighter. The current demand weighting of capacity charges distributes too much of the charge to periods where there is little risk to security of supply and it would be better to distribute capacity charges based on an ex-ante LOLP forecast (similar to the monthly ex-ante allocation used for capacity payments to generators).

Conclusions

The primary concern for generators is the annual volatility of the BNE price and resulting CPM pot and this is the main area that needs to be addressed.

PPB does not see any material benefit from changing the CPM by changing the profile of payments, in particular such that more of the revenue is exposed to ex-post volatility. There has been no evidence presented to demonstrate that even under the current 35% ex-post weighting, generators have or can take any significant action to make capacity available that would otherwise not have been. In any event, there are a number of other incentives to generators to be available when margins are tight and prices are high (as we outlined earlier).

A further concern with increasing ex-post weighting is that it results in a much greater risk for non-portfolio generators and would therefore tend to increase the market dominance of the large portfolio generators.

PPB considers that while the CPM review was required when the project was initiated, matters have been over-taken by the Third Package and the emergence of the EU Framework Guidelines. The current thinking on the EU Target Model raises serious questions about the sustainability of the SEM and therefore it is now more important to understand the impact of this model on the sustainability of the SEM and therefore valuable resources should be concentrated on this area such that we identify the future shape of the wholesale market in Ireland and what is required to achieve compliance. If the outcome is that the SEM survives in some modified form then it would be a more appropriate to consider reform of the structure of the CPM at that time when developing the enduring market model rather than making questionable changes now when more important and fundamental strategic issues need to be addressed.