

Submission by Bord na Móna PowerGen

on

**Fixed Cost of a Best New Entrant Peaking Plant
&
Capacity Requirement for the
Calendar Year 2013**

June 2012

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Introduction

Bord na Móna welcomes the opportunity to make a submission on the consultation “*Fixed Cost of a Best New Entrant Peaking Plant & Capacity Requirement for the Calendar Year 2013*” - the mechanism by which the Annual Capacity Payment Sum (ACPS) for 2013 is ultimately determined. In a new development this year, a number of variables used in future ACPS calculation will be fixed, for a period of 3 years.

The RAs consider “*that a ‘Component Period Horizon’ of three years can bring some stability and certainty to the volatility in the annual capacity pot*”. It is therefore critical, given that 2013 is the first year of a three year ‘lock-in’, that the choice and justification of parameters are such that ‘capacity providers’ are not materially disadvantaged in the interests of expediency.

In past responses to related consultations (Annual BNE Requirement & Medium Term Reviews), Bord na Móna, has raised a number of concerns both in terms of methodologies employed and the values of parameters used in determining the ACPS. This submission recapitulates and re-emphasises these arguments now seen through the prism of a potential three year hiatus, and focuses on the Fixed Outage Probability (FOP), Infra-Marginal Rent (IMR), the Weighted Average Cost of Capital (WACC) and Ancillary Services (AS).

Fixed Outage Probability (FOP)

The Force Outage Probability (FOP) is a materially important input assumption in the ultimate determination of the ACPS and is also a mechanism by which the RAs attempt to disincentivise poor plant performance. However, the quantum associated with the FOP must be realistic if this dual purpose is to be achieved. In the past number of years, market participants, chiefly during the annual BNE consultations, have argued that the FOP employed by the RAs was aspirational rather than realistic.

While the upwardly revised figure of 5.91% is to be welcomed, it has been acknowledged that the FOP is “*lower than the average FOP on an All-Island basis*”. There is an undertone in the BNE Consultation Paper that allowing the FOP to be based on actual data would in some way create a danger of moral hazard. It is argued

that such a scenario would compensate poorly performing units, however this ascertain does not stand up to rigorous analysis. It is acknowledged that market participants are '*profit maximising entit[ies]*¹', therefore it is logical to conclude that each entity is acting to maximise its own profit, which is best achieved by having plant 'on the bars' and eligible to earn capacity and energy payments from the market, i.e. for individual plants, profits are maximised by being available. By definition individual plants that are poorly performing, i.e. not available due to forced outages, are not maximising their profitability; and thus have a much more immediate and proximate incentive or carrot to improve performance when compared with the stick of contributing to lower a system-wide average.

The FOP should be an aggregated reflection of the system as a whole, based on actual system data, on an All-Island basis, over the previous year or a rolling average for a fixed period of years (three?) but based on actual system data.

Infra-Marginal Rent (IMR)

The CPM Medium Term Review Decision Paper abandoned the Plexos based methodology for calculating the IMR deduction for the BNE peaking plant, in favour of an arbitrary formula which assumes that the BNE will earn PCAP for 8 hours every year. Interestingly, Plexos, continues to be the basis used by the RA for Directed Contracts and other system modelling.

Bord na Móna, together with the vast majority of 'capacity providers', as well as the NEAI, vociferously attempted to highlight the inherent flaws in the revised, and now adapted procedure. Bord na Móna's 116 MW Peaking Plant, commissioned in 2010, is arguably the most appropriate proxy for the notional BNE in the SEM, being the lowest marginal cost distillate fired peaking plant on the power systems and therefore gives the best real market evidence of the level of IMR that a BNE might be expected to earn. Using the same calculations, as outlined in a letter to the RA's (20/2/12), the proposed IMR deduction, in this years consultation paper overestimates, by a factor of at least 25, the projected IMR that a plant, analogous to Bord na Mona's peaking unit will earn -based on actual historical data.

For the record, and prior to discussing, other issues, regarding ambiguities in the 'new' IMR calculation methodology, lest the comments below be construed as tacit approval for the new methodology, Bord na Móna again reiterates its belief that the new process for the calculation of IMR earned by the BNE peaker is fundamentally flawed in design and should be rescinded at the earliest opportunity.

Bord na Móna are concerned, that the IMR deducted, which previously was based on an annual forward looking forecast is effectively being replaced by an algorithm which uses the 'spot' price of the bid price of the notional BNE peaker, chosen at an

¹ SEM-12-029 at pp35

arbitrary moment in time, which will then ‘fix’ this materially significant deduction for three years. While such an expedient approach may satisfy the RA’s stated desire to ‘*reduce the level of volatility*’² the level of risk for ‘capacity providers’ associated with basing an element of revenues for 3 forward years using a market spot price at least 6 months old is untenable and unwise. By way of analogy, there has been considerable flux in recent times as to the composition of ‘bidable’ short run marginal costs while the forthcoming carbon floor levy in the UK will introduce future disparities for bid prices in the SEM.

Furthermore, and again this line of questioning should not be construed as tacit approval for the proposed mechanism, it is unclear, notwithstanding clarifications provided at the recent workshop (6/6/12) how the decision was reached in arriving at the method used to calculate the Bid Price. In determining the Bid Price, there is a lack of transparency as to why ‘start-up’ costs were excluded, why an average over all price quantity pairs was used, why bids from a number of plants were averaged as opposed to being limited to appropriate units in the jurisdiction of the notional BNE, and what was the justification behind choosing a single ‘spot’ price for the bid?

Bord na Móna, would request that the decision to abandon the Plexos method be re-assessed, in the absence of this, the setting of the Bid Price for three years introduces an untenable level of risk for ‘capacity providers’ and should be re-evaluated, and finally a more robust, less arbitrary and transparent process, assuming the RA’s will not rescind the new IMR deduction methodology, needs to be introduced.

If the RAs are wedded to the implementation of the ‘new’ IMR deduction formula, Bord na Móna suggests, on a without prejudice basis, that such a formula base both OUTAGE TIME and the BID parameter on actual system performance data and indexed fuel prices respectively. In the case of BID values, these could be indexed, based on independently published price data, and incorporated annually over the ‘Component Period Horizon’ in an analogous manner to that proposed for Technology Options/EPC Investment costs.

Weighted Average Cost of Capital (WACC)

In the first instance, Bord na Móna concurs with the value of 11.27% cited as the upper bound of WACC in RoI. This, we believe to be a fair reflection of the cost of capital although, we are at something of a loss to understand how the lower limit of this range could be estimated at 5.71%, i.e. a WACC spread greater than 100% of the lower value must be construed as being too wide.

² SEM-12-016 at pp 11

One conclusion that can be drawn from the analysis and rationale behind the determination in this consultation paper, is that if a new analogous BNE peaker were required (for flexibility/system security) in RoI, it would not be able to recover its fixed costs from the CPM. In the continued absence of the North-South interconnector, is it credible that such a scenario should be allowed to exist? Surely, there is now more than just a philosophical argument which suggests that the realities of the power system be taken into consideration when ‘determining’ the factors underpinning the BNE.

Returning, and notwithstanding our stated concerns above, to the criteria used in the consultation paper and the assumption of what constitutes the notional investor – there are some inconsistencies. An analysis of cost structures in each jurisdiction suggests that the aggregated differential, as per table 10.1 in the consultation paper, is primarily driven by the country specific WACCs. This begs the question whether a notional investor, an integrated utility with a defined credit rating, with, one assumes an ability to raise finance in different markets would evaluate risk on a ‘market’ basis rather than a jurisdiction basis. This point is aligned with the logical premise of a ‘blended’ WACC articulated in the CEPA report, appended to the consultation paper. However, that particular report fails to follow through on its own logic; namely that a prudent investor basing its risk premium on market returns (cash-flow) would not elect to choose a ‘mid-point’ to determine a ‘blended WACC’ but rather the upper limit within the estimated range.

Ancillary Services (AS)

Section 5.3.3 of the consultation paper states “*that a ‘Component Period Horizon’ of three years can bring some stability and certainty to the volatility in the annual capacity pot*”. In the forthcoming three year horizon, it is acknowledged that there may be developments in the AS ‘market’, in the same way that there may be developments in fuel prices, WACC and plant performances on the system over the same time period. However, the RA reserve the option to review the AS reduction within the ‘fixed’ three year period. Such a proposal must be seen as contrary to the stated overarching objectives of the CPM, namely “*to reduce market uncertainty*”³ and “*taking some of the volatility out of the energy market*”⁴. This lack of internal consistency in the ‘Component Period Horizon’, a hotchpot of spot prices, annually indexed values and discretionary deductions fundamentally undermines the credibility, transparency and appropriateness of the proposed process.

³ SEM-11-088 at pp 5

⁴ Ibid

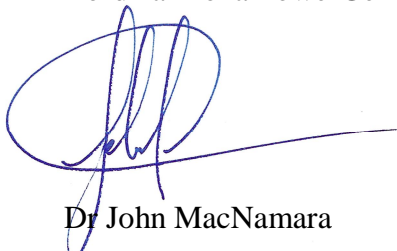
Conclusions

In summary, Bord na Móna suggest that

- The FOP should be an aggregated reflection of the system as a whole based on actual system data, on an all-island basis over the previous year or a rolling average for a fixed period (three years?).
- The ‘new’ IMR deduction formula should be rescinded. If this is not possible then employ the use of actual system performance data for OUTAGE TIME and allow BID to be indexed annually against independently published price data.
- WACC, as currently constructed fails to recognise the realities of the all-island power system, i.e. revenue adequacy for notional plants in RoI. In addition, the assumption defining how the notional investor evaluates risk is flawed. It is logical to conclude that such an investor would evaluate risk in terms of cash-flow from the market rather than simply the physical location of the proposed plant in that market. It is suggested that if the existing method is to be retained, a blended (or market) approach to WACC based on the upper points of the computed ‘national’ ranges be adapted.
- The carving out of AS as a special category of deduction, at the discretion of the RAs over the ‘Component Period Horizon’ devalues and undermines arguments regarding the internal consistency of the proposal contained in this consultation.

I trust that the above comments will be helpful in the consultation process. If you have any queries or comments please do not hesitate to contact me.

For and on behalf of
Bord na Móna PowerGen



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Projects Manager

Bord na Móna PowerGen

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