



VIRIDIAN

Power & Energy

**Response by Viridian Power & Energy to
Single Electricity Market Discussion Paper
SEM-10-046**

***CPM Medium Term Review
Work Packages 1 to 5
Historical Analysis of CPM
&
Proposed Decisions***

10 September 2010

1. Introduction

Viridian Power and Energy (VPE) welcomes this Medium Term Review of the Capacity Payments Mechanism (CPM) and acknowledges the work done to date by the Regulatory Authorities (RAs) so far in relation to this. The CPM is a central tenet of the SEM and is vital to the continued financial viability of generators in the market. The presence of a stable and certain stream of revenue has never been more important given the continued uncertainty brought about by the prevailing macroeconomic environment.

We note however, that the majority of this discussion paper, covering work packages 1 to 5, considers historical aspects of the CPM and as such our response to this paper is largely limited to the issues the RAs have called for market participants views on. Given it is the RAs intention to address proposed changes to the CPM in the next stage of this review, we urge that sufficient time is given to respondents to consider any proposed changes in full.

The remainder of this response considers the analysis presented in relation to each of the work packages (1-5) in turn.

2. Work Package 1 – Historical Analysis of CPM

VPE welcomes the analysis undertaken by the RAs into the historical outturn of the CPM but at this time has no views on the material presented.

3. Work Package 2 – Review of Capacity Requirement

VPE would like to specifically address two aspects of the analysis presented in relation to this work package and the review of capacity requirements that are considered to be central to a review and as such should be considered in more detail. The two issues relate to the Forced Outage Probability (FOP) and the 8hrs/annum Generation Adequacy Standard for Ireland contained in the capacity requirement calculation.

Forced outage probability

In the discussion paper the RAs have indicated that they are minded to continue with the use of a FOP rate of 4.23%. This rate is based on the weighted average FOP for Northern Ireland (NI) plant for the period 2002-2006. The reason stated for doing in the paper so is given as;

“[T]he RAs believe that by establishing the Capacity Requirement against a target FOP value, generators will be provided with an incentive to improve their performance toward the target level.”

VPE would like to highlight a number of issues with both the rate chosen and the rationale for doing so. Firstly, the rate itself is not reflective of FOP rates in the SEM. FOP rates in Ireland were, and continue to be, substantially higher than those in NI.

Therefore, the FOP or the likelihood that the BNE would not be available is greater than this rate which is unreflective of market characteristics.

Secondly, the RAs attempt to draw inferences between improvements in FOP rates in the SEM and the SEM's introduction, i.e. that the incentive offered by a target FOP rate is working. This relationship is speculative and not evidence is provided to support it. In fact, one could similarly remark that the reductions in the SEM's FOP rate has been correlated with reductions in demand brought about by the economic downturn and its impact on homes and businesses in Ireland.

Finally, the incentive argument presented by the RAs is flawed. In setting an artificially low FOP rate, the RA's reduce the capacity requirement below what is required in the SEM from a BNE. This reduces the size of the capacity pot below what is necessary to remunerate capacity investments. Taking money off the table is contrary to almost all theories of incentivisation. In addition to this, there has been no consideration of whether the target FOP rate is even technically a reasonable value for the portfolio of plant in the SEM.

Generation Adequacy Standard

The generation adequacy standard of 8hrs/annum for Ireland was adopted in March 2007 following work undertaken by the TSOs to determine the statistically relevant value for the system at that time. This value feeds directly into the capacity requirement calculation to determine the amount of capacity required to meet 8hrs/annum of loss of load. Given developments in the market since March 2007 it may be prudent to reconsider the appropriateness of this value, particularly in light of comments made in Eirgrid's most recent Generation Adequacy Report;¹

"The adequacy situation is strongly positive for the next seven years. A surplus of at least 700 MW is observed for all scenarios studied for each of the seven years. This is due to new generation commissioning, increased interconnection, improved generator availability, as well as a reduction in demand.

Even though there is sufficient capacity to comfortably exceed the standard of 8 hours loss of load expectation used, this does not guarantee that load shedding could not occur. It does however mean that the probability of load shedding is very low."

The report goes on to state the likely further improvements to adequacy as a result of the completion of both the East-West and the second North-South interconnectors.

In addition to this, and in accordance with the apparent appetite for aligning the CPM with the market, it appears sensible that the RAs would also consider the impact of transmission constraints in a generation adequacy/security context. This would ensure that the capacity requirement is aligned with the functioning of the SEM and the relevant generation adequacy standard.

¹ Eirgrid, 2009; Eirgrid Generation Adequacy Report 2010-2016, p.59. Available at: <http://www.eirgrid.com/media/Generation%20Adequacy%20Report%202010-2016.pdf>

4. Work Package 3 – Deduction of IMR & AS & BNE Peaker Plant Options

It is now, and consistently has been, VPE's view that it is inappropriate to deduct infra-marginal rents from the calculation of the capacity pot and that doing so is contrary to the objectives of the CPM. Specifically, subtracting IMR introduces volatility into the pot size and into subsequent payments, and perversely reduces the pot at times when incentives to invest should be made stronger.

Notwithstanding this view, consideration is given to the three options forwarded by the RAs;

- Option 1 – IMR deducted based on VOLL: As VOLL is not available to generators during insufficient capacity events, this option should not be considered any further. The RAs appear to be cognisant of this fact in noting the same.
- Option 2 – IMR deducted based on PCAP: in attempting to determine a market price for capacity, it is inappropriate to set this to an administratively determined PCAP. At no point has there been recourse to PCAP in the SEM to address an insufficient capacity event.
- Option 3 – Status Quo: of the three options forwarded, this approach at least attempts to estimate the revenue expected to accrue to the BNE through IMR and subsequently net this amount off the capacity pot.²

Furthermore, the rationale forwarded by the RAs in relation to this issue and the earning of IMR by the BNE in equilibrium is sparse and unconvincing. Additional basis for these views should be provided.

In relation to the FOP rate to be applied, VPE's views on the current FOP rate are provided in response to the Work Package 2. Leaving aside the inappropriate level FOP is administratively set at and the inappropriate deduction of IMR from the BNE fixed cost, allowance should be made for an appropriate FOP and planned outage probability, as this is not zero just unlikely according to the RAs.

On the deduction of Ancillary services, the RAs have indicated that they are minded to continue deducting AS payments from the BNE fixed costs. In light of developments in the AS market and in the technology types under consideration, it is uncertain as to whether this position is consistent with the CPM.

5. Work Package 4 – BNE Peaker Plant Fuel Options

VPE welcomes the discussion contained in this section and considers the conclusions contained herein to be reasonable. No further views on alternative technology types for the BNE calculation are given at this time.

² However, it is somewhat unclear why two runs are required for this purpose with IMR of the BNE available from the run with the BNE included.

6. Work Package 5 – Exchange Rate for CPM

There are a number of issues in relation to this work package that VPE consider it relevant to comment on. Firstly, VPE has consistently called for a non-discriminatory approach to the CPM and as such, segmenting capacity pots in the SEM is not appropriate. This view is in accordance with the stated view of the RAs.

Secondly, VPE consider it appropriate to set the exchange rate on an annual basis but in relation to this it is important that:

- The rate used in quantifying the Capacity Pot is similarly the rate used in the first capacity period (ACERy). Currently there is an inconsistency in this respect with one rate used to determine the pot size and another (ACERy) used in relation to payments from the pot.
- The exchange rate for the first capacity payment period (ACERy) is published prior to the setting of tariffs for the upcoming year. In recent years we note ACERy was set on the following dates;
 - 2008 – 31/08/2007
 - 2009 – 30/10/2008
 - 2010 – 04/11/2009

Both of these conditions will ensure exchange rate risk is minimised and market participants can hedge any exposure to this risk based on forecasts of their proportion of the pot.

Finally, it is not relevant or appropriate to use a forecast exchange rate, an average historical exchange rate, or indeed any rate that is unavailable on financial markets such that the exchange rate risk cannot be appropriately hedged. VPE agrees with the RAs proposal to use market forward exchange rates.