Response to the SEM Committee's Consultation Paper

on

Capacity Remuneration Mechanism Parameters Consultation Paper

(SEM-16-073)

from



21st December 2016



1 Executive Summary / Introduction

Bord na Móna (BnM) welcomes this opportunity to respond to the SEM Committee's Consultation paper on Capacity Remuneration Mechanism, Parameters consultation (SEM-16-073). While the scope of such a paper is by necessity very broad and encompassing there is one singular issue which needs addressing, which is common to both this consultation as well as that for the recent Balancing Market Offers Paper¹.

The primary area of concern for BnM is missing money and the lack of a clear and transparent channel which allows full cost recovery. This is most acute for peaking plant.

We would reiterate, as is evident from this consultation paper, that BnM does not support proposals that would prevent cost recovery and which would undermine existing recent investment decisions which have been made in response to clear market signals, potentially delivering a higher long run cost to consumers (as there is an inherent bias for new rather than existing/refurbished plant in the paper) and ultimately erode confidence in the regulatory process.

In this regard BnM welcomes the recent decision² on CRM locational issues which ensures that there will not be unhappy winners, ie, that bidders which are in-merit will not be rejected for locational reasons. Although, and for the record, BnM believe that this Auction Format and Winner Determination should carry through to the enduring design.

We remain concerned about the splitting of the different locational provisions between plant needed for local capacity deliverability constraints and plant needed for local ancillary services. The concern relates to providers of ancillary services which do not receive sufficient revenue to cover their Net Going Forward Costs through a combination of allisland ancillary service tariffs, and Reliability Option Fees. We welcome that the SEM Committee will separately review the compensation arrangements for such plant outside the CRM and note that bi-lateral contracts remain the option of last resort. We highlight once more the issue of missing money in this regard and the need to secure adequate cost recovery to the capacity provider.

To meaningfully address missing money we recognize that there are overlaps and interactions between the Energy Markets Work stream and the CRM Work stream that should not be looked at in isolation and a full exploration of the options and impacts should be considered. Also, given locational issues, there are further interactions between the CRM and Ancillary Services workstreams which need to be factored.

¹ SEM-16-059, Offers in the I-SEM Balancing Market

² By choosing Auction Format B per SEM C's CRM Locational Issues, Decision Paper, SEM-16-081



Given the complexities, BnM would gladly welcome the opportunity to explore these interactions to help reach meaningful solutions through an industry workshop forum.

2 Administrative Scarcity Pricing Parameters

The SEM Committee welcomes views on all aspects of this section, including whether you prefer Option 1 (as set out in Section 2.2 above), Option 2 or some intermediate option for the shape and slope of the ASP function, and why?

BnM supports the initial use of Option 1 particularly as its utilisation should have a beneficial impact on price volatility. We note that its adoption is not aligned with the provisions under SEM-16-075a Draft TSC Part B which would result in considerably higher pricing in market scarcity and consider that this approach is on balance more appropriate until such time as operational experience confirms that intra-day energy and secondary capacity markets function effectively thereby allaying concerns over scheduling and dispatch risk.

3 Cost Recovery and Charging

A. Which of Options 1 to 3, as set out in Section 3.2, do you think is most appropriate, and why? Alternatively, what other definition of the Supplier Charging Base would you chose and why?

BnM sees little reason to not choose Option 3 given that, of the options considered, its relative impact on customers is most closely aligned with that of SEM. We would also note that with Option 3 the charging base will be spread throughout the year, somewhat in sync with the option fee payments.

B. Which LIBOR (or other such reference rate) should be used as the BIR, and what the values of the SPR and DPR should be?

The LIBOR chosen should be denominated in GBP & EUR proportionate to currency exposures. Expert advice should be sought in relation to specific instruments and rates.

4 Reliability Option Parameters

A. Do you agree with the SEM Committee's proposed approach to set the DSU floor price at €500/MWh?

BnM recognizes the SEM Committee's need to maximize the potential of DSU in the I-SEM. A key aspect of this is the adequate financial covering off of their shut-down costs. In consideration of a €500/MWh floor price we note that 17% of existing DSUs shutting down for 1 hour have an associated shutting down cost in excess of €500/MWh. On this basis we believe that SEM Committee's proposal of €500/MWh may be too low and needs to be increased slightly.



B) On the assumption that the gas index will be a reference price related to gas obtained from the GB system, do you agree with the carbon intensity factor? Do you have another comments on the approach to setting the gas or oil carbon intensity factors?

BnM agrees with the general approach outlined in the formula detailed in §4.1.2, however BnM are of the opinion that the most critical question is not the carbon intensity factors *per se*, but rather the exact nature of the gas and oil indices and in particular how frequently these indices (and hence the Strike Price) are updated. Given the timeframe of the ex ante markets, it would be reasonable to publish these (and hence the calculated Strike Price) on a daily basis.

BnM appreciates and supports the need for expert input as discussed in § 6.2.50 of CRM3 Decision Paper (SEM-16-039) that the choice of indices "...should be judged by appropriately qualified experts to be a reasonable indicator of prices that can be accessed by traders in the market".

C) Do you agree with the approach to setting transport adders set out in section 4.4?

Again BnM agrees with the general approach.

D) Do you agree that the Billing Period Stop-Loss Limit should be set to 0.5 times the Annual Stop-Loss Limit (i.e. 0.75 times the Annual Option fee)?

No, Bord na Móna contends that a value of 0.1875 times the Annual Option fee should be the Billing Period Stop Loss Limit. Currently Capacity Payments in the SEM are made on a monthly basis to providers, the 0.75 appears to have been rationalised using this time-base. It is conceivable that a capacity provide could see 150% of its Annual Option Fee expire over a single event that straddles a Saturday/Sunday. Hence, given that Billing Period is now defined as a week, it is logical to pro rata the Stop Loss Limit by a factor of 4 (i.e. weeks/month) to arrive at a Billing Period Stop Loss Limit of 0.1875 times the Annual Option fee.

5 New Build, Termination Fees and Performance Bonds

A) Do you agree with the approach of setting the New Capacity Investment Rate Threshold at around 50% of the gross investment cost of the BNE plant, currently estimated at €310/kW? If not, what is an appropriate maximum size of termination fee for new capacity which achieves an appropriate balance between protecting consumers by the failure of new capacity to deliver, and not providing a barrier to entry for new capacity?

Whatever about the merits of the NCIRT of €310/kW, the current proposal, as outlined in the consultation paper fundamentally discriminates and forecloses the market for the efficient refurbishment of existing low cost plant. This proposal appears contrary to the



SEM Committee's provisions³ set out in SEM-16-022⁴. This effect of this high threshold exacerbates the impact of the lack of provision for 'sunk' cost recovery within the 'Net Going Forward Cost' calculation, and effectively drives any refurbishing plant to recover investment costs in a single year, while a 'new' plant has 10 years to recover the equivalent investment. The absence of a 'refurbishment' contract, which are prevalent in other successful capacity markets, has the consequence of forcing and locking in Consumers for at least 10 years and excludes the option of even examining whether a more cost effective solution over a shorter tenor exists. It is accepted that new plant will be ultimately needed on the system, and leaving aside the obvious economic advantages of shorter term refurbishment contracts discussed above, cost effectively delaying the investment signal for new plant by a number of years ensures that the Consumer ultimately 'locks in' a technologically more efficient unit when 'purchased' a number of years into the future relative to those available today.

In terms of assigning a threshold for a refurbishment contract, Table 3 of the consultation paper indicates that the level of investment required to meet financial thresholds for environmental compliance is $\leq 140/kW^5$ in ISO NE Current (22/07/2016). BnM supports the inclusion of a refurbishment contract, with a tenor of 5 years and an investment threshold of circa $\leq 120-\leq 140/kW$.

B) You think that the SEM Committee's indicative schedule of termination fees set out in paragraph 5.3 is appropriate? Please provide evidence for your answer.

The SEM Committee's stated belief is that this will not act as a barrier to entry for new capacity if termination fees are within the liquidated damages for the underlying EPC contract. However this assumes that the termination is attributable to the contractors. We have insufficient information to respond effectively to this question as we do not have information as to what extent terminations on new capacity are attributable to contactors.

It is possible that delays for new build could occur due to non-delivery of electrical or gas connection infrastructure, outside the direct control of the EPC contractor.

C) It is appropriate to place termination fees on capacity that does meet the definition of New Build, and if so, at what level, including:

⁴ CRM 2 Decision Paper

³ That existing plant with substantial investment should be eligible for long term RO contracts

⁵ Is this low enough for EPL IED or do we need to put forward a case for lower threshold?



a. Minor refurbishment or other upgrades to capacity which does not meet the financial threshold to qualify as New Build;

b. Unproven DSUs;

c. Any other capacity provider which has not already demonstrated its ability to physically deliver; or even

d. All existing capacity

BnM believes that in the case of 'a', 'b', 'c' and 'd', ie, 'other capacity', which includes existing capacity, upgraded facilities and DSUs or AGUs, that such capacity should not bear termination fees because any risk is partially mitigated by the requirement to lodge collateral against difference payments. As acknowledged in the paper if the capacity provider has already had to lodge collateral against difference payments its incentive to exit the market and renege on its RO may be limited if still has to make the difference payments from the collateral that it has lodged. Also relevant in terms of containing risk is that such facilities are only eligible for one year contracts.

D) Performance Bonds should be required for 100% of termination fees, and should this vary by type of capacity?

Performance bonds should not be required for existing capacity for reasons set out in the preceding response.

For new build it is difficult to present a case for otherwise.

6 Auction Parameters

6.6.1 Net CONE - Do you agree with the proposed adjustments to the BNE calculation approach set out in section 6.2.8 to 6.2.10 If not, explain why.

Firstly BnM have perennially pointed out fundamental flaws and inconsistencies in the methodology and parameters employed in the existing SEM BNE calculation. Accepting that BNE costs will be used as the basis of setting auction price caps within I-SEM, we recognise that it is important to be cogniscent of important changes arising in moving from SEM to I-SEM. Aspects of the BNE calculation which need attention in trying to adapt BNE to an I-SEM environment are:

- a) The tenor of the evaluation period needs to be revised to 10 years vs the current 20
- b) The WACC rate needs to be substantially increased so as to reflect the significantly higher risk attaching to investment in I-SEM. In I-SEM, failure to deliver will see a penalty applied (both in the Capacity and Energy markets) rather than a simple loss of income in the SEM, debt providers will price this risk into their cost of capital.
- c) The higher working capital requirements under I-SEM need to be reflected (collateral levels, order of magnitude greater than those required in the SEM will need to be posted)



- d) The IMR expectation needs to be reduced. We recognise the RO calculation whereby the RO Strike Price could be €500/MWh for most of the time vs the existing €1,000/MWh Pool Price Cap.
- e) We would also recognise the assumed forced outage rate of 5%, and consider this to be very low.

Auction Price Cap

6.6.2 Do you agree with the choice of multiple of 1.5 x Net CONE in setting the Auction Price Cap?

From 6.6.1 it is apparent that Net CONE is understated based on a BNE price which is set within the SEM regime and which needs to be adjusted to I-SEM conditions, as discussed above.

Existing Capacity Price Cap

6.6.3 Do you agree with the proposed methodology of estimating a generator's Net Going Forward Costs (NGFC) at:

Max[(Fixed operating costs – gross infra-marginal rent from the energy and ancillary service markets),0] + Expected Reliability Option difference payments

This definition brings into focus an omission common to both this consultation for CRM as well as on another recent consultation on balancing markets⁶.

The omission relates to under recovery of costs by capacity providers and the lack of a fair and transparent mechanism which allows the capacity provider to recovery missing money to cover its fixed operating costs or sunk costs. This shortfall forces the provider to try to recover such costs through its IMR in the energy markets as well as from ancillary services which distorts such markets making them inefficient and ultimately reducing the competitive process for capacity into a 'rolling of the dice' within the markets for energy and ancillary services.

We refer to BnM's response to the recent consultation on balancing markets and our expressed belief therein that the prescriptive approach and the proposed changes to the cost elements which make up SRMC, including VOM, opportunity costs and foregone revenues will lead to under recovery of costs for participants. We expressed that this may cause real risk and premature exit signals for specific technology types such as peakers which benefit system security by being available to provide flexibility for non-energy actions in the balancing market.

⁶ SEM-16-059 Offers in the I-SEM Balancing Market Consultation Paper; lack of recovery in nonenergy action



6.6.4 Do you agree with the proposed process and data inputs to calculate NGFCs as set out in 6.3

No, for reasons outlined in 6.6.3.

The paper acknowledges that peaking plant, by virtue of infrequent running is most likely to have missing money. So too will 'constrained on' BM plant in respect of payments for non-energy actions under current proposals within SEM-16-059 (ref footnote 4).

6.6.5 Do you agree with the proposed approach of setting the Existing Capacity Price Cap at 0.5 x Net CONE? If not explain why, your preferred alternative approach and your rationale for the alternative.

No, for several reasons. We note that the SEM Committee envisages that the Existing Capacity Price Cap will be set at a level which will allow the majority of existing de-rated capacity to meet the all-island capacity requirement to bid at a price which is at least equal to its unit specific Net Going Forward Costs.

The most fundamental issue is 'missing money', which will likely be particularly acute in the case of peaking plant as well as 'constrained on' plant in the BM in respect of payments for non-energy actions under current proposals within SEM-16-059 (ref footnote 4).

Secondly, and equally significant, is that there is insufficient clarity within the proposed approach to set the Existing Capacity Price Cap at 0.5 x Net CONE. We note that:

- i) Using current data⁷ 0.5 x Net CONE would equal €38.90/kW. We note that this will be subject to further RA review and evaluation by comparing Generator Financial Reporting information with international benchmarks.
- ii) The provision to apply for a higher limit is entwined within the narrow definition of Net Going Forward Costs which expressly excludes sunk costs and costs of capital – leading to missing money.
- iii) Where this higher limit option is taken by the capacity provider the SEM Committee does not preclude requiring the capacity provider to bid at a level consistent with efficiency savings.

6.6.6 Do you think that the NOFC costs reported by generators to the RAs as part of the SEM Generator Financial Reporting are a good proxy for the Fixed Operating and Maintenance costs that a capacity provider may need to recover via the I-SEM CRM, or do you think that the NFOC contain material variable cost which can be recovered via the energy / ancillary services market? If the latter, how big an adjustment should

⁷ Based on Net CONE for 2017/18 being €77.81/de-rated kW/year



the SEM committee make to exclude any variable elements of the NFOC from NGFCs included in the Existing Capacity Price Cap?

Again the basic point around the around 'missing money' is being ignored. The interactions between NFOC and FOC need to fully take into account missing money, which is most likely to occur in the case of 'constrained on', pay as bid peaking plant. This is important given the system need for such plant to be able to deliver both non-energy actions and the provision of localised ancillary services.

6.6.7 Why are reported SEM generator NFOC/FOM costs substantially higher than international benchmarks? Do you think that existing SEM generators have material scope to cut fixed operating and maintenance costs, and if yes, do you think that this should be reflected in the Existing Capacity Price Cap? Explain why.

No, we do not believe that existing SEM generators have material scope to cut fixed operating and maintenance costs owing to the old age of existing plant and the inherent increased operating and maintenance costs vis a vis newer plant.

7 Demand curve parameters

6.6.8 Which of options A, B or C with respect to the demand curve set out in Section 6.4 do you think is appropriate for the first transitional auction, and why?

BnM believes that of the options presented option A is the most appropriate for the first transitional auction on the basis that has the shallowest net CONE to zero-crossing point set at 20% in excess of the Capacity Requirement. This option most closely meets the principles presented by the SEM Committee within CRM Decision 3 (SEM-16-022) in setting the slope and position of the demand curve with regard to system security, competition, price stability and practicality.

6.6.9 Do you have any other comments on the shape and/or positioning of the demand curve for the first transitional auction? Not at this juncture.

8 Locational parameters

6.6.10 If the SEM Committee proceeds to incorporate locational requirements within the I-SEM CRM, do you agree that the costs/risk of implementing local demand curves (as opposed to a minimum requirement) outweighs the benefits?

This needs to be answered in the context of two time horizons:

a) the transitional period and b) the enduring solution.

CRM Parameters Consultation

BORD MÓNA Naturally Driven

BnM welcomes the recent decision⁸ on CRM locational issues which ensures that there will not be unhappy winners, i.e., that unconstrained in-merit bidders will not be rejected for locational reasons. This rewards the fundamental principles of fairness, equity and transparency.

It is critically important that this principled based approach of unconstrained in-merit bidders not being rejected for locational reasons is retained for the enduring solution.

On this basis BnM agrees at this juncture that the cost/risk of implementing local demand curves (as opposed to a minimum requirement) outweighs the benefits.

In BnM's response to CRM 3 Supplemental Consultation SEM-16-052, BnM strongly expressed the view that locational issues should be solved through ancillary services arrangements. While we are heartened by the general thrust set out in the decision paper we remain somewhat concerned as to a) the enduring solution and b) the nature of the arrangements provided for to secure ancillary services.

We note, from the recent decision paper on locational issues⁹ that it has been decided that any locational constraints taken into account within the CRM mechanism would only be used to represent local capacity deliverability constraints. We note the comment in 2.2.14 that there is recognition of and consideration of some plant which is required to support local ancillary services, but not local capacity delivery, which does not receive sufficient revenue to cover its NET Going Forward Costs through a combination of all-island ancillary service tariffs, and Reliability Option Fees. We welcome that the SEM will separately review the compensation arrangements for such plant outside the CRM and note that bi-lateral contracts remain the option of last resort option. We highlight once more the issue of missing money in this regard and the need to secure adequate cost recovery to the capacity provider.

9 LOAD FOLLOWING FOR SECONDARY TRADING

7.2.1 Do you have any comments on the approach to setting the load following parameter set out in the section? Specifically do you agree with the granularity of the parameters, the proposed historically based methodology, and proposed governance approach? If not, why not and what other arrangements would you propose?

BnM sees merit in adapting an approach similar to that outlined in §7.1.10, i.e. a time of day in blocks comparable to those 'products' already available in the SEM available for each month.

A five year historical averaging period should also be sufficient to determine the profile of available 'secondary' capacity.

⁸ By choosing Auction Format B per SEM Committee's CRM Locational Issues, Decision Paper, SEM-16-081

⁹ SEM Committee's CRM Locational Issues, Decision Paper, SEM-16-081



7.2.2 Do you think that capacity providers should be able to trade against load following margin in calendar year +2 and any subsequent years, and should the parameters for subsequent years be scaled to 75% of the calendar year Y+1 values or some other percentage?

We see the advantage of having a facility which allows participants to plan, and noting that a 5 year averaging period will be used, it should be conceivable that upwards of 100% of the Y+1 quantum could be made available, with the figure decreasing to 75% in Y+2.

10 Summary & Recommendation

As a final comment BnM would like to reiterate, as is evident from this consultation paper, that we cannot support proposals that would prevent legitimate cost recovery, which fundamentally undermines existing (and recent) investment decisions which were made in response to clear market signals.

With regard to missing money which is the primary area of concern, there are overlaps and interactions between the Energy Markets Work stream and the CRM Work stream that should not be looked at in isolation and a full exploration of the options and impacts should be considered. Also there are further interactions between the CRM and ancillary services workstreams which have been somewhat addressed within the recent Locational Issues Decision Paper¹⁰ but where important issues remain. Chief amongst these is the need to provide for full cost recovery for plant which is needed for local ancillary services supply, by means of bi-lateral contracts or otherwise.

Given the complexities BnM would gladly welcome the opportunity to explore these interactions as well as potential solutions through an industry workshop forum.

Finally, we are available (and would welcome the opportunity) to discuss the contents of this submission with the TSO & RAs if considered useful.

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¹⁰ Capacity Remuneration Mechanism Locational Issues, Decision Paper SEM-16-081