

Single Electricity Market
Fixed Cost of a Best New Entrant Peaking Plant
Calculation Methodology

Information Paper

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2 INTRODUCTION

In May 2005 the Regulatory Authorities (RAs) set out the options for the Single Electricity Market (SEM) Capacity Payment Mechanism (CPM)¹. In the paper the RAs indicated their proposal to develop a fixed revenue capacity payment mechanism that would provide a degree of financial certainty to generators under the new market arrangements and a stable pattern of capacity payments. The principles outlined were incorporated in the design of the CPM and in the Trading and Settlement Code (TSC).

In March 2006² a consultation document was published that incorporated a more detailed consideration of the comments received on the design of the CPM and put forward a number of alternative options for the CPM and the processes that the RAs propose for determining the annual capacity payment and the general process by which it is proposed that input parameters to the CPM would be set.

The March 2006 paper reiterated the proposed outline of the CPM for the SEM suggesting that annual capacity payments should be fixed and that the annual fixed sum be divided into a number of within-year pots, i.e. Capacity Periods. The paper also set out proposals for the determination of the Annual Capacity Payment Sum (ACPS). The paper proposed that the annual aggregate capacity payments should be set by multiplying an appropriate level of required generation capacity by the relevant fixed costs of a best new entrant peaking generator. The RAs proposed that, for the purposes of determining the ACPS, the cost of new entrant generation should be assessed in terms of a 'Best New Entrant' (BNE) peaking plant. The cost of the BNE peaking plant calculated would be expressed in €/kW per year (as an annualised payment) and multiplied by the capacity requirement to calculate the ACPS.

On 11th September 2008, the Single Electricity Market Committee (SEMC) published its Decision Paper regarding the Fixed Cost of a Best New Entrant Peaking Plant for the calendar year 2009³ (SEM-08-109). In this decision paper, the SEMC signalled its intention to consult on the appropriate mechanism to address a key concern raised by industry participants regarding the stability of the capacity payment pot due to the annual determination of the Best New Entrant Fixed Cost (BNEFC) and the Annual Capacity Payment Sum (ACPS).

The RAs published a consultation paper (SEM-09-023) on 9th March 2009 which detailed out the options to reduce the volatility in the capacity payments pot and looking at the possibility of setting the best new entrant fixed cost (BNE) for a period longer than one year. Overall 18 responses were received from market participants. One party requested that their response be treated as confidential and another response is marked as 'Commercially Sensitive'. The parties whose responses are published with this paper are:

- Airtricity
- ART Generation

¹ <http://www.allislandproject.org/en/capacity-payments-consultation.aspx?page=2&article=0e5940cb-4c5d-4e01-982d-2b3587c33d2d>

² <http://www.allislandproject.org/en/capacity-payments-consultation.aspx?page=2&article=94ef0599-001a-4923-a706-7682f76ec79b>

³ <http://www.allislandproject.org/en/capacity-payments-decision.aspx?article=48679b7e-aa47-49bf-9a82-1c8e4c863014>

- Bord Gais Networks
- Bord na Mona
- EirGrid & SONI combined response
- Endesa Ireland
- ESB Customer Supply
- ESB International
- ESB Power Generation
- IBEC
- IWEA
- NIE Energy Supply
- Premier Power Limited
- Synergen
- Tynagh Energy Limited
- Viridian Power & Energy Limited

This paper addresses the concerns raised from the respondents to the consultation paper and provides the decisions taken by the RAs as a result of the consultation process.

As referenced in the consultation paper (SEM-09-023) the SEMC decided that a review of these particular aspects of the CPM should be conducted, in two phases. The first phase is covered in the consultation paper (SEM-09-023). On 8 April 2009, the RAs published a consultation paper (Scope of CPM Medium Term Review – SEM-09-35) to cover the second phase that concentrates on a wider range of issues in relation to the CPM. The areas under consideration in this paper are:

- Assessment of CPM in SEM (historical analysis)
- Impact of CPM on Customers
- Incentives for Generators
- Capacity Payments when Capacity is needed
- Distribution of Capacity Payments
- Capacity Requirement Calculation
- WACC Methodology
- Infra Marginal Rent & CPM
- Impact of Exchange Rate in CPM
- Treatment of Wind in CPM
- Treatment of Interconnector in CPM
- Relationship of CPM with Ancillary Services
- Impact on Diversity of Generation & Security of Supply

For convenience in this paper, the annualised fixed cost of the Best New Entrant peaking plant that is used to generate the Annual Capacity Payments Sum (ACPS) for a given Trading Year will be referred to as the BNEFC for that Trading Year. This parameter does not refer to the output of a given exercise (necessarily), but to the actual value that is published and used, along with the Capacity Requirement, to generate the ACPS.

3 DETERMINATION OF BNEFC – CURRENT APPROACH

3.1 CHALLENGES IN RELATION TO THE CURRENT APPROACH TO BNEFC CALCULATION

In section 5 of the consultation paper (Consultation Point 1) the RAs detailed out the challenges in relation to the current method of determining the BNEFC. The RAs face a challenge in carrying out the BNEFC exercise each year. That is, the challenge of simulating the role of a rational investor considering investment in a power plant on the island of Ireland.. The RAs engage the expertise of consultants to carry out the assessments and advise them on the likely cost a rational investor would face to procure and construct a peaking plant in the SEM. The consultants carry out a robust assessment to provide their advice, but there are many subjective questions raised as part of the process of simulating the role of an investor that can lead to potential volatility in the year-by-year BNEFCs.

One option is to diversify the estimation of parameters that are sensitive to these effects by contracting multiple consultants, to the extent possible, to provide independent unbiased estimates on those line items (most notably the EPC parameters). Another option is to include the use of a standard database or software tool that is commonly used by generation companies in the process.

The RAs welcomed comments from participants in relation to approaches that would significantly improve the method used by the RAs of determining the BNE costs, without imposing considerable costs to customers.

3.2 RESPONSES TO CURRENT APPROACH TO BNEFC CALCULATION

Eight respondents had comments specifically on this area. The main concern was around transparency in the BNE Calculation. A number of respondents highlighted the perceived regulatory risk associated with the definition of 'best' in relation to determining the BNE peaker and requested that a robust methodology for the BNE calculations should be published.

A number of respondents requested that the advice provided to the RAs in the calculation of the BNE Peaker by external consultants should be published.

One respondent proposed that in addition to the external consultants, the RAs (via the MMU team) should poll applicants for new plant to get the information on the technology used and the capital and O&M costs. This could be used to reflect the 'real world' prices and assist in the BNE Peaker calculations.

One respondent suggested that the BNE Peaker Calculations should be completed independently from the RAs and proposed a number of options of how this could be achieved.

A number of respondents suggested that the Infra marginal rent and the ancillary services revenues should not be included in the BNE Peaker calculation.

3.3 RA COMMENTS ON CURRENT APPROACH TO BNEFC CALCULATION

The RAs are aware of the comments received to previous BNE Peaker calculation consultations and to this paper in relation to transparency of the calculations. With this in mind, the RAs hosted a public forum in May 2009 to discuss the approach being used for the BNE Calculations for 2010. In addition to this, the RAs published the independent report produced by the CEPA/PB that was used as a key input into the consultation paper for the BNE Calculations for 2010.

The RAs welcome the suggestion that the capital and operational costs in relation to new entrants could be used as a check on the BNE calculations, however, as many of the new entrants are private companies, it is assumed that such information would be treated as highly confidential and would not be available to the RAs.

As the SEM Committee makes the decision on the value of the BNEFC each year, the RAs do not see how moving the calculation to an independent party could be achieved. The RAs will however consider the option of having the selected experts collate a sample of the BNE Calculations from independent sources and then consider the costs. The RAs however are aware that this will significantly increase the costs associated with the project and this cost will have to be incurred by licensees and ultimately customers.

Finally, the RAs note the comments in relation to the Infra Marginal Rent and Ancillary Services. Both of these areas are under consideration as part of the scope of the CPM Medium Term review and will not be discussed further within this paper.

4 OPTION 1 – CALCULATE BNEFC WITH ALL COMPONENTS RECALCULATED ANNUALLY

4.1 SCOPE OF OPTION 1 IN CONSULTATION PAPER

In section 6.1 of the consultation paper, the RAs outlined the main areas of consideration in the current method of calculating the BNEFC. The process is an annual activity that involves building up the various costs based on the latest prices. Under consultation point 3, the RAs welcomed comments from participants on the materiality of any adverse effects of the current method of calculation.

4.2 RESPONSES ON THE SCOPE OF OPTION 1 IN CONSULTATION PAPER

Nine respondents provided comments on this topic. Five respondents felt that the current method of calculation would have very little effect on the confidence of investors in new plants and introduced a high level of risk.

One respondent commented that in their opinion, fixed costs must be recovered over the lifetime of the plant and that the CPM must ensure that investments made during times of capacity shortfalls to meet the island's generation adequacy requirements are not penalised in times of excess capacity.

Four respondents were in favour of maintaining Option 1.

4.3 RA COMMENTS ON THE SCOPE OF OPTION 1 IN CONSULTATION PAPER

The RAs note the concerns raised in relation to option 1. Some concerns were in relation to the risks associated with the lifetime of an investment. While the CPM can be used to give investors a signal to enter (or indeed exit) the market, it cannot be used as a guarantee of covering all fixed costs. Global markets and commodity prices will impact on when investors enter the market and the fixed costs they will incur based on the timing of the investment. This is an assessment that needs to be taken by the rational investor, with the CPM being one of many factors in determining the investment opportunity.

5 OPTION 2 – CALCULATE BNEFC ANNUALLY WITH SOME COMPONENTS COSTS CONSTANT FOR A NUMBER OF YEARS

5.1 SCOPE OF OPTION 2 IN CONSULTATION PAPER

In the consultation paper, option 2 proposed the use of the current methodology to calculate the BNEFC but with some constituent elements kept unchanged for a period of, 3 or 5 years for example. The period that each element remains unchanged may vary depending on the stability of prices of that element. These elements would include both choice variables, such as the technology of the peaker, the choice of fuel, the siting of the plant, the capacity of the plant, the environmental standards to be met, etc; as well as cost/revenue variables. Under, Consultation Point 4, the RAs welcomed comments from participants on the proposed method for Option 2 including any additional options that may help to reduce the perceived volatility.

In section 6.2.2 of the consultation paper, the RAs discussed the various options in relation to the indexing that would be applicable to some of the options (options 2, 4 & 5), where the costs used are maintained over a longer period than 1 year. The RAs detailed four indexing options in the paper. These were:

- RPI
- CPI
- HICP
- PCCI

Under Consultation Point 5, the RAs welcomed views on which of the above would be the most appropriate method of indexing. In addition, the RAs welcomed suggestions from participants on other indexing options.

5.2 RESPONSES ON THE SCOPE OF OPTION 2 IN CONSULTATION PAPER

Eleven respondents replied to this option. Six respondents were in favour and five were not. Of those in favour, they commented that the period of fixing prices should be for a five-year period and appropriate indexing should be used. In addition, it was proposed that a price floor should be introduced.

Those respondents not in favour highlighted that the proposed option does not accurately reflect the market and still allows the possibilities of a step change although not every year.

In relation to indexing, two respondents were in favour of using PCCI, and one proposed giving certain weighting to HICP to reflect the proportion of 'local ' costs' in the estimate of project capital costs. One respondent commented that as PCCI is North American it may not be appropriate and the use of CPI should be used, as this is the index used for REFIT. They also proposed that a floor of zero should be used. Another respondent requested that a consultation should take place to determine with indices should apply to each component making up the BNE costs.

5.3 RA COMMENTS ON THE SCOPE OF OPTION 2 IN CONSULTATION PAPER

There was no general consensus from respondents in relation to option 2. The RAs opinion of this option is that it would help provide some additional stability for generators, as the BNE Costs would be tied down for a number of years. However, this stability will be in the short term relative to the length of an overall investment. Based on the movements of both commodity and financial markets, it is unlikely that all parameters could be set for a period of 5 years and reviewing some parameters over a shorter period increases the level of perceived volatility.

The RAs consider that this option should be brought into the scope of the CPM Medium Term Review for further consideration. Therefore the indexing options will also be considered in the CPM Medium Term Review.

6 OPTION 3 – CALCULATE BNEFC ANNUALLY AND APPLY SMOOTHING EFFECT

6.1 SCOPE OF OPTION 3 IN CONSULTATION PAPER

In the consultation paper, option 3 built on the methodology of Option 1, but adds one additional task to the end of the calculation. For option 3, it was proposed that the full BNEFC is calculated each year. However, the actual value of the BNEFC that is used in the ACPS takes account of the BNEFC calculations from the previous years. The costs are smoothed using a simple or a weighted arithmetic average in order to help reduce the volatility in the calculations.

Under Consultation Point 6, the RAs welcomed views on the following:

1. Is smoothing as described in the consultation paper a suitable tool to reduce the perceived stability of the BNEFC
2. If so, other what timeframe should the smoothing occur?
3. Should a simple or weighted arithmetic average be considered?
4. If a weighted average is to be used, what values should be used for each of the weights?

Building on the option 3 scenario, the RAs, as well as considering the frequency of calculation and the options for smoothing, also proposed the option of when the frequency and smoothing should apply and whether the work on the CPM completed in preparation for and since SEM Go Live should be considered.

There two options discussed were:

- **Option A** – Apply the smoothing on a forward basis, i.e. implement smoothing following the calculation of the 2010 BNEFC
- **Option B** – Include the impact of the BNEFC Calculations from 2007, 2008 and 2009 in the smoothing calculations.

Illustrated examples for option B were detailed in the consultation paper to explain the ‘legacy’ concept. Under Consultation Point 7 the RAs welcomed comments from participants on the proposed ‘Legacy’ measure and the options for implementing this.

6.2 RESPONSES ON THE SCOPE OF OPTION 3 IN CONSULTATION PAPER

Of the eleven respondents, two were in favour of smoothing while nine respondents disagreed with it.

Of those against the smoothing option, there were concerns that the proposals may reduce transparency without significantly reducing volatility. In addition one respondent commented that the various smoothing options presented help reduce year to year volatility but do nothing to reduce long term investment risk.

The two respondents in favour of this option were both supply companies and highlighted the benefits to customers in terms of reduced volatility. Both respondents were strongly in favour of the implementation of the ‘Legacy’ option.

Two other respondents commented that if smoothing was to be introduced it should be forward looking only.

6.3 RA COMMENTS ON THE SCOPE OF OPTION 3 IN CONSULTATION PAPER

The RAs note the many similar views held by respondents that smoothing may help reduce year to year volatility but do nothing to reduce long term investment risk. It also has the potential to over or under reward depending on market conditions.

The RAs note the strong opinions of the supply companies who responded to the consultation and their concerns in relation to reducing impact of volatility in capacity charges and payments on customers. With this in mind, the RAs have decided that the smoothing options should not be introduced at this stage but that methods to help reduce the volatility to customer will be considered under the scope of the CPM Medium Term Review.

7 OPTION 4 - CALCULATE BNEFC ANNUALLY WITH SOME COMPONENT COST CONSTANT FOR A NUMBER OF YEARS AND APPLY SMOOTHING EFFECT

7.1 SCOPE OF OPTION 4 IN CONSULTATION PAPER

In the consultation paper, option 4 built on the method defined in Option 2, but proposed that depending on the frequency of calculation, the costs will be smoothed between years using a method similar to that described in Section 6.3 of the consultation paper. A worked example was provided for demonstration purposes.

Under Consultation Point 8, the RAs welcome comments from participants on the proposed Option 4 and the merits of this implementation.

7.2 RESPONSES ON THE SCOPE OF OPTION 4 IN CONSULTATION PAPER

Eight respondents responded to this option, the majority of who were not in favour of the option. One candidate was in favour as this mechanism was similar to option 2, which they were in favour of. The remaining respondents were not in favour of implementing this option as the majority had also responded negatively to option 2.

7.3 RA COMMENTS ON THE SCOPE OF OPTION 4 IN CONSULTATION PAPER

As the RAs have decided that option 2 should not be considered further and option 4 effectively builds on option 2, the RAs feel it is appropriate to discount option 4 at this stage also.

8 OPTION 5 – CALCULATE THE BNEFC AND KEEP IN PLACE FOR A MULTIPLE YEAR PERIOD.

8.1 SCOPE OF OPTION 5 IN CONSULTATION PAPER

In the consultation paper, this option considered the method used for other price controls where the BNEFC will only be estimated every 3 or 5 years. The costs will have the appropriate indexing applied in the intervening years.

It was suggested that this method will provide more stability for the period that the BNEFC is set and should therefore improve cash flow projections for generators. This option possibly could also create the potential for step changes in the BNEFC at the boundary between the calculation periods, but this could be addressed via the concept of smoothing as discussed above.

Under Consultation Point 9 the RAs welcome comments from participants on the proposed Option 5 and the merits of this implementation.

8.2 RESPONSES ON THE SCOPE OF OPTION 5 IN CONSULTATION PAPER

Ten respondents provided specific comments on this option with half in favour of this option and half against the option. Those in favour argued that it would have material effect on the confidence of investors and improve certainty of projected revenues in the medium term. It was also stated that this option would significantly reduce volatility and would improve operator cash-flow projections, provided the BNEFC are set so that investments made prior to 2010 are able to recover their fixed costs. If option 5 was to be considered, the appropriate indexation would have to also be fully considered.

Of those not in favour of this option, most felt that it was a similar mechanism to that detailed in option 2 and therefore should be ruled out for the same reasons.

8.3 RA COMMENTS ON THE SCOPE OF OPTION 5 IN CONSULTATION PAPER

Although a mixed number of opinions were provided, the RAs see merit in this solution and consider that this should be brought into the scope of the CPM Medium Term Review for further consideration. Therefore the indexing options will also be considered in the CPM Medium Term Review.

9 OPTION 6 – FIXED PRICE FOR NEW ENTRANTS

9.1 SCOPE OF OPTION 6 IN CONSULTATION PAPER

An option that was suggested in the responses to the Consultation Paper for the Fixed Cost of a Best New Entrant Peaking Plant for the calendar year 2009 was to have a separate mechanism for new entrants. The following points were suggested under this mechanism:

- Leave the current capacity mechanism unchanged for existing generators
- Allow new dispatchable generators to lock-in the value of capacity for a long period (e.g. ten years).
- The lock-in needs to be based on a firm commitment to build such as signing a connection agreement.
- The value of capacity in the year when they entered into a connection agreement to build the facility would then set the revenue for this generator for the next ten years.
- The capacity available to lock-in could be set by the system operators based on system security standards.
- The payment for new entrants could be from the existing capacity pot.

This could be regarded as a more radical option than the other options described in this paper. It is likely to be more effective in reducing the risk for new investors (where the real issue of volatility lies). However, if this option is to be considered further, this will be addressed as part of the second phase of the CPM review (as detailed in section 4).

Under Consultation Point 10 the RAs welcomed comments from participants on the proposed Option 6 and the merits of this implementation. In addition, the RAs also welcomed comments on whether this option should be considered as part of the second phase of the CPM review.

9.2 RESPONSES ON THE SCOPE OF OPTION 6 IN CONSULTATION PAPER

The RAs received a significant number of comments in relation to option 6. Eleven respondents were in favour of looking at this option in more detail. Three respondents aired concerns in relation to this option, in particular in relation to whether this option aligned with the design of the SEM and it may remove the risk from potential new generators and transfer this risk onto customers. Another respondent queried as to whether the approach suggested within Option 6 has been validated as legally robust under EU Law.

9.3 RA COMMENTS ON THE SCOPE OF OPTION 6 IN CONSULTATION PAPER

The RAs have not carried out any detailed analysis of this option and are therefore not in a position to determine whether this option is legally robust or indeed contradicts the SEM design. Therefore the RAs have decided that this option will be included in the CPM Medium Term Review where a full analysis of the option will be completed, taking both policy and legal concerns into account.

10 OTHER OPTIONS TO REDUCE THE PERCEIVED VOLATILITY OF BNEFC

10.1 OTHER OPTIONS TO REDUCE THE PERCEIVED VOLATILITY OF BNEFC

In section 6 of the consultation paper the RAs proposed six options available that may be used to enhance stability in the BNEFC. Under Consultation Point 2, the RAs welcomed comments from participants on whether there are other options, other than the six detailed that should be considered in order to reduce the volatility of the BNEFC.

10.2 RESPONSES ON OTHER OPTIONS TO REDUCE THE PERCEIVED VOLATILITY OF BNEFC

Six responses were received to this consultation point. The main areas covered by the comments are summarised in the bullet points below:

- The RAs should complete a full medium term review of the CPM rather than a 2 tier approach
- A more certain, transparent and robust methodology for the calculation of the Annual Capacity Payment Sum, (ACPS) is required
- A floor-price for the CPM should be set by the RAs, applicable for at least 5 years.
- Allow existing market participants to fully recover their fixed costs, similar to how variable costs are fully recovered
- Have individual pots (or individual floors) for each existing market participant to enable them to fully recover fixed costs, profiled to incentivise short-term availability.

10.3 RA COMMENTS ON OTHER OPTIONS TO REDUCE THE PERCEIVED VOLATILITY OF BNEFC

Although the comments provided were at a high level, the RAs will bring these suggestions into the CPM Medium Term Review for consideration, in particular the options for a price floor and the full recovery of fixed costs.

11 OTHER COMMENTS RECEIVED

A number of other comments were received from respondents in relation to the Capacity Requirement and Gas Transportation costs. These comments are noted by the RAs and will be fed into the CPM Medium Term Review to ensure all comments and concerns are fully considered. The comments received are summarised in Appendix 1 of this paper.

12 CONCLUSIONS AND SUMMARY OF DECISIONS

The RAs have reviewed the responses and have noted a varied number of preferences for the options listed in the consultation paper. Some respondents provided alternatives to those proposed in the consultation paper and suggestions on how these could be implemented.

As a general observation a number of respondents questioned why this particular aspect of volatility was being addressed early and separate from the wider medium term review and reserved judgement until the fundamental review of the CPM was undertaken. A number of respondents also suggested that the matter should be considered holistically and within the context of the matters that will be reviewed in the medium term. Overall most respondents favoured that this matter be considered within the medium term review and some respondents questioned if there really was an issue with the BNE fixed cost and suggested that very limited changes to the methodology was required.

Based on the above observations, the RAs have decided that the following areas should be brought into the scope of the CPM medium term review and will be considered and analysed as part of the wider review of the CPM. The areas to be included in the medium term review are Option 2, Option 5 and Option 6.

Option 2 - Calculate BNEFC on an annual basis but some components cost remain constant for a number of years

Use the current methodology to calculate the BNEFC but with some constituent elements kept unchanged for a period of, 3 or 5 years for example. These elements would include both choice variables, such as the technology of the peaker, the choice of fuel, the siting of the plant, the capacity of the plant, the environmental standards to be met, etc; as well as cost/revenue variables. In principle, the fewer the variables that have to be re-estimated each year, the more stable the BNE cost will be, at least over the 3 or 5 year period.

Option 5 – Calculate the BNEFC and keep it in place for a multiple year period. Make estimates only every 3 or 5 years for the BNEFC either of all the variables or of a subset and index the cost in the intervening years.

Option 6 – Fixed price for new entrants An option that was suggested in the responses to the Consultation Paper for the Fixed Cost of a Best New Entrant Peaking Plant for the calendar year 2009 was to have a separate mechanism for new entrants.

In addition to the above, the RAs will consider the following areas as part of the CPM Medium Term review:

- The RAs should complete a full medium term review of the CPM rather than a 2 tier approach
- A more certain, transparent and robust methodology for the calculation of the Annual Capacity Payment Sum, (ACPS) is required
- A floor-price for the CPM should be set by the RAs, applicable for at least 5 years.
- Allow existing market participants to fully recover their fixed costs, similar to how variable costs are fully recovered

- Have individual pots (or individual floors) for each existing market participant to enable them to fully recover fixed costs, profiled to incentivise short-term availability.

It is expected that the CPM Medium Term review will begin in Q4/2009. As part of the review, the RAs will test that the CPM objectives have been met before any changes are proposed. The RAs will ensure that a reasonable balance between various objectives of the CPM is maintained.

13 APPENDIX 1 – DETAILS OF COMMENTS RECEIVED TO CONSULTATION PAPER

<p>Consultation Point 1: The RAs welcome comments from participants in relation to approaches that would significantly improve the method used by the RAs of determining the BNE costs, without imposing considerable costs to customers.</p>	
Name	Comments
ART Generation	<p>The decision to publish the current consultation suggests that there is a perceived lack of confidence in long-term levels of capacity payments in the SEM, which ultimately comes from the ability of the RAs to modify the BNEFC from year-to-year. Although in principle, we would agree that the BNEFC should depend on the ‘best available information’, the volatility shown in the first three years and the perceived lack of confidence in the robustness of the methodology, suggests that the allowing new entrants to fix the BNEFC when making investment decisions is a sensible option.</p> <p>..... the most important aspect would be the full publication of a transparent robust methodology for calculating the BNEFC. This would at least enable investors the confidence to understand how the BNEFC would be determined in future.</p>
Endesa Ireland	<p>Endesa Ireland does not consider that the RAs should include infra-marginal rents and ancillary service revenues in the calculation of BNEFC.</p>
ESB International	<p>ESBI believes that the current method of establishing peaker costs should be retained – that is, independent consultant reports should be commissioned to advise on appropriate input values for calculating BNEFC.</p> <p>A considerable number of peaker projects have been announced. The Market Monitoring Unit could poll applicants as to the type/manufacture of peaking plant that they intend connecting together with their projections of capital and O&M costs. This could give a more accurate reflection of ‘real world’ costs and could assist in the calculation of CPM.</p>
IWEA	<p>A number of different elements contribute to increased risk around the BNE calculation methodology. Local cost variations and the variability of international equipment prices have the most significant impact while the lack of a uniform regulatory interpretation of the scope of the “Best” new entrant across technologies increases uncertainty. The future definition and subsequent calculation of ancillary service values together with the treatment of infra-marginal rents will also have significant impacts.</p>
Premier Power	<p>The discussion on how to smooth the Capacity Payment Mechanism (CPM) is helpful and will</p>

<p>Limited</p>	<p>make it easier for market participants to plan their businesses from year to year but it does nothing to reduce the overall risk to generating plant investors. This is because investors evaluate new investment options over the expected life of the plant usually around 25 years. A two or three year smoothing mechanism will not change the fact that investors cannot forecast the CPM more than a few years forward and have no control to mitigate a falling CPM should it happen.</p>
<p>Synergen</p>	<p>In terms of potential improvements to the calculation of the BNEFC price, Synergen considers that removing elements of RAs’ discretion would significantly improve the CPM calculation process in that it would deliver calculations that are stable, transparent and robust. Such changes are more important for investors compared to volatility of outputs given that generators can internalise / hedge known reward volatility whereas regulatory risks drives higher WACCs. In terms of BNEFC inputs, these should be determined by independent experts without any RAs discretion. This could operate as follows.</p> <ul style="list-style-type: none"> • Three independent expert consultant reports are commissioned - each to advise on the appropriate input values and calculating BNRFC. • All of these reports and associated data would be published with a statement that these represent each firms’ best professional opinion (i.e.signed by director / partner of firm to confirm this). • The arithmetic average of the output would then be used within the CPM. To provide stability and reduce costs each expert firm would receive a rolling five year appointment. • A further enhancement would be for the calculation of BNEFC to be the responsible of the SEMO. The SEMO would procure the required expert advice as part of T&SC rules which would also improve investor confidence. <p>The RAs have expressed some desire to retain discretion over setting the BNEFC value – notwithstanding Synergen’s fundamental concerns with this and the increasing risk it leads to – the RAs should publish all advice received by consultants verbatim.</p>
<p>Viridian Power and Energy</p>	<p>The BNE OCGT calculation methodology</p> <p>The volatility in this section is primarily from variations in international equipment prices augmented with variation in local costs and variations in WACC. The other significant area of volatility is a regulatory risk of what the RAs consider the scope of a “best” new entrant OCGT project. This has already been subject to differing interpretation by the RAs over the three years of history of this regulated price. Issues such as how ancillary services are calculated and the RAs treatment of Infra Marginal Rent (IMR) for a peaking project further increase the scope for volatility.</p>

Consultation Point 2: The RAs welcome comments from participants on whether there are other options that should be considered in order to reduce the volatility of the BNEFC.

Name	Comments
Airtricity	<p>The current consultation identifies volatility in the capacity payments pot as ‘a key concern raised by industry participants’ and embarks on a review of the CPM to reduce this. While this is indeed of concern to the industry, it is not clear why this particular issue deserves priority over various other issues arising within the CPM...</p> <p>We believe that the two-phase approach adopted to address the CPM is likely to result in consideration of aspects of the mechanism in isolation, potentially losing sight of the multifaceted interactions between them.</p>
Bord na Móna	<p>Bord na Móna have argued consistently that this mechanism needs a more transparent and robust methodology for the calculation of the Annual Capacity Payment Sum, (ACPS), and believes that it is timely to revisit the existing methodology in some detail.</p>
Endesa Ireland	<p>Endesa Ireland considers that a floor-price for the CPM should be set by the RAs, applicable for at least 5 years. Setting a floor price will significantly reduce perceived volatility and will increase investor certainty in the ability to recover fixed costs.</p> <p>Another option would be to allow existing market participants to fully recover their fixed costs. The SEM is a regulated market, with separate mechanisms for the recovery of fixed and variable costs. The market rules ensure that if units are dispatched the operators are able to fully recover their variable costs. Similarly, operators should be able to fully recover their fixed costs.</p> <p>... additional option to have individual pots (or individual floors) for each existing market participant to enable them to fully recover fixed costs, profiled to incentivise short-term availability.</p>
ESB International	<p>The RAs have considered the options to reduce the perceived volatility in the BNEFC’.</p> <p>We strongly oppose this statement as we do not consider that the BNEFC calculation has proved to be volatile. Capital costs have increased, as have the fixed costs of existing generators. This cannot be regarded as volatility and is a function of global supply and demand in the electricity generation sector and exchange rate fluctuations.</p> <p>The revised arrangements as suggested by this Consultation introduce a degree of regulatory uncertainty for potential investors who will be considering the stability of the trading and regulatory arrangements as part of their investment appraisal. It is this uncertainty that should be reduced thereby improving year-on-year predictability by stakeholders. Transparency and consistency of approach is required in calculation of CPM.</p>

	With the increasing difficulty of attracting investment into Ireland in the current uncertain economic climate, the emphasis should be on providing a stable regulatory environment to maintain investor appetite for the electricity sector.
Synergen	<p>Certainty and transparency of approach is required, rather than a revised mechanism to smooth out perceived volatility. Consequently, removing RAs discretion as per the expert outsourcing option set out in response to Consultation Point 1 would enhance the predictability of BNEFC.</p> <p>Synergen suggests that the RAs should also consider an alternative approach within the BNEFC determination whereby a floor is applied to BNEFC e.g. the annual values would only be increased year on year with the RAs required to give 10 years notice for any reduction – this would provide enhanced certainty for investors</p>

Consultation Point 3: The RAs welcome comments from participants on the materiality of any adverse effects of the current method of calculation (Option 1)	
Name	Comments
ART Generation	We feel that Options 1 to 4 would all have very little effect on the confidence of investors in new plants.
Bord na Mona	<p>Of the options proposed in the paper, option one is the current methodology which has been applied over the last three capacity years. The application of this methodology has been over-conservative and erratic in the way that the scope of the BNE project has been defined.</p> <p>The current process introduces a level of risk that will likely prohibit the development of peaking capacity in particular, given that the bulk of revenue collected by plants with low capacity factors will be capacity revenue.</p>
EirGrid & SONI	EirGrid and SONI therefore strongly advocate the adoption of Option 1 at this time pending the Regulatory Authorities further consultation on these matters currently scheduled for Q3 2009.
Endesa Ireland	<p>Endesa Ireland considers that the current method for calculating BNEFC is too volatile. As stated in the consultation paper, the primary cost component of the BNE, EPC costs, has shown significant variance over the past ten years. When calculating the BNEFC, the RAs include the EPC costs for that year. This can result in significant under-recovery for investments that were made when the EPC costs were made at the height of the cost curve.</p> <p>This volatility is a serious deterrent to investment in the SEM. Fixed costs must be recovered over the lifetime of the plant. The CPM must ensure that investments made during times of capacity shortfalls to meet the island's generation adequacy requirements are not penalised in times of</p>

	excess capacity.
ESB International	ESBI considers that Option 1, i.e. the current approach, is the acceptable approach
ESB PG	There were a number of possible methodologies listed in the paper and after review we are strongly in favour of retaining the current methodology which is option 1.
Synergen	In summary, Synergen rejects any elements of discrimination or input smoothing and as such only considers that options 1 and 3 are valid. Consequently, all other options should be discounted at this stage. Synergen requires that the CPM provides a level playing field with differences in reward based on generator performance
Viridian Power and Energy	The BNE OCGT calculation methodology The volatility in this section is primarily from variations in international equipment prices augmented with variation in local costs and variations in WACC. The other significant area of volatility is a regulatory risk of what the RAs consider the scope of a “best” new entrant OCGT project. This has already been subject to differing interpretation by the RAs over the three years of history of this regulated price. Issues such as how ancillary services are calculated and the RAs treatment of Infra Marginal Rent (IMR) for a peaking project further increase the scope for volatility.

Consultation Point 4: The RAs welcome comments from participants on the proposed method for Option 2 including any additional options that may help to reduce the perceived volatility.	
Name	Comments
Airtricity	However to address the limited impact of this volatility on the ‘Capacity Availability’ function of the CPM, elements of Option 2, such as keeping the plant technology constant for a number of years, could be combined with elements of Option 5, by applying an index that is representative of the major cost drivers, possibly a basket of some metals and construction commodities.
ART Generation	We feel that Options 1 to 4 would all have very little effect on the confidence of investors in new plants.
Bord Gais Networks	We would support fixing those elements of the BNE const calculation which are most certain over, say, a 3-5 year period. We believe that the calculation methodology should clearly specify the principle that the duration of any fixing of the BNE calculation elements should be linked to

	their volatility
Bord na Mona	None of the options 2-4 outlined in the consultation paper address this issue adequately, as they only address the shorter term variability of equipment prices, and potentially reduce the range of prices from peak to trough in equipment market cycles
Endesa Ireland	<p>Endesa Ireland supports this proposal. Fixing some components of the BNEFC for a number of years will reduce volatility, giving investors increased certainty. However, Endesa Ireland considers that this option should also include a price floor, further reducing the level of uncertainty. In addition, the technology employed during the fixed period should be reviewed to ensure it can support the island's 2020 targets.</p> <p>Endesa Ireland suggests that this option be introduced for existing market participants, with a ten-year CPM (Option 6) designed for new entrants.</p>
ESB International	ESBI considers that Option 2, smoothing of input data is an unacceptable approach.
ESB PG	ESB PG is not in favour of keeping certain elements in the BNE calculation fixed over a number of years as this does not accurately reflect the market and still allows the possibilities of a step change although not every year
Synergen	<p>Synergen is concerned that the over / under recovery issue within Option 2 gives rise to asymmetric risks i.e. strong external pressure on the RAs to claw back "windfall gains" from generators but less pressures in the circumstances where generators are seeking to any recover historic revenue shortfalls.</p> <p>In summary, Synergen considers Option 2 (i.e. smoothing of input data) to be an unacceptable approach</p>
Viridian Power and Energy	Option 2 has merit over existing arrangements and is also preferable to options 3 and 4 because it provides extra revenue certainty to investors. As stated in our cover letter, option 6 is our preferred option but options 2 or 5 may have merit as transitional measures. Preferably option 2 would fix all E.P.C. costs, WACC, ancillary service revenues and inframarginal rent for a period of at least 5 years. VPE sees little merit in a reduction of this term below 5 years, based on our discussions with financial institutions.

Consultation Point 5: The RAs detailed four indexing options. The RAs welcome views on which above would be the most appropriate method of indexing. In addition, the RAs welcome suggestions from participants on other indexing options.

Name	Comments
Airtricity	However to address the limited impact of this volatility on the 'Capacity Availability' function of the CPM, elements of Option 2, such as keeping the plant technology constant for a number of years, could be combined with elements of Option 5, by applying an index that is representative of the major cost drivers, possibly a basket of some metals and construction commodities.
Bord na Mona	Of the options suggested for a method of indexing prices, the PCCI would seem to be the most appropriate, although it could be useful to give certain weighting to HICP to reflect the proportion of 'local ' costs' in the estimate of project capital costs.
Endesa Ireland	<p>Endesa Ireland considers that the PCCI (excluding nuclear) is the most appropriate index to be used in the annual indexation of investment capital costs.</p> <p>Endesa Ireland considers that the RAs should specifically consult on the indices that are to be used for each cost component; these should then be constant for at least 5 years. This would minimise the discretion of the RAs and would improve regulatory certainty.</p>
ESB International	As stated, ESBI believes that BNEFC costs should be established by independent consultants. None of the indices listed reflect the major cost variations to which generators are exposed in Ireland.
ESB PG This could be mitigated somewhat by indexing, but using indices which require RA discretion would not improve the predictability of the mechanism.
Synergen	Synergen considers that the approach of input smoothing is inappropriate. Consequently, the selection of the appropriate index to be smoothed would not arise.
Viridian Power and Energy	VPE do not have a strong sense for which index is most appropriate but we do observe that PCCI is North American and would seem inappropriate. We would suggest that because CPI is already used in REFIT there may be some merit in using this. Whichever index is chosen it should come with a floor of zero, as applied to REFIT.

Consultation Point 6: The RAs welcome views on the following: (Option 3)

- 1) Is smoothing as described above a suitable tool to reduce the perceived stability of the BNEFC**
- 2) If so, other what timeframe should the smoothing occur?**
- 3) Should a simple or weighted arithmetic average be considered?**
- 4) If a weighted average is to be used, what values should be used for each of the weights?**

Name	Comments
ART Generation	We feel that Options 1 to 4 would all have very little effect on the confidence of investors in new plants. Fixing the price of specific components and the use of 'smoothing' would slightly delay the impact of certain price movements but would not be significant when looking at the overall investment timeframe a particular project. We do not believe it would solve the issues outlined earlier in this response concerning confidence in long-term capacity payments.
Bord na Mona	None of the options 2-4 outlined in the consultation paper address this issue adequately, as they only address the shorter term variability of equipment prices, and potentially reduce the range of prices from peak to trough in equipment market cycles
Endesa Ireland	Endesa Ireland does not consider that the application of a smoothing effect is appropriate. These proposals reduce transparency without significantly reducing volatility.
ESB Customer Supply	ESBCS favours the options that adjust the price smoothing to allow customers to get the benefit of the lower capacity prices from previous years and in particular Option 3 with a Legacy Correction effect applied in order to gain the advantage which would have been conferred if the price smoothing approach had been in operation since the advent of the SEM.
ESB International	As stated, ESBI considers smoothing to be inappropriate and will lead to over- or under recovery of costs by generators and will expose generators to regulatory risk. However, if smoothing is adopted by the Regulatory Authorities, a simple arithmetic average would appear reasonable, as a weighted average is unnecessary complex. Consequently, Option 3 would be the most acceptable, subject to assurances that the detailed approach to output smoothing ensures that the full value of BNEFC from year to year
ESB PG	It is our view that if smoothing is to be applied, a forward weight should be forecast and used as well as a historical weight. This will reduce the lag against the market but will increase complexity, possibly to an unviable level. This is because a review mechanism will be required to compare the forward forecast v the actual outcome and then resettle the capacity payment. A number of potential options for smoothing were outlined in the paper based on the assumption that the cost of procuring a gas turbine is cyclical over time, and that it is nearing a peak. We do not favour any of these for the reasons above and also that the assumption may not be valid.

<p>NIE Energy Supply</p>	<p>NIEES is conscious of the impact of volatility in capacity charges and payments on customers and also on existing and prospective generators. NIEES is therefore in support of smoothing the impact of the Best New Entrant Fixed Cost (BNEFC) in order to reduce the volatility of the capacity payments pot for all parties. In this regard, NIEES feels that option 3 (“Calculate BNEFC annually and apply smoothing effect”) would offer several benefits over the other options listed.</p>
<p>Premier Power Limited</p>	<p>As discussed above, the various smoothing options presented help reduce year to year volatility but do nothing to reduce long term investment risk. While it may be interesting for economists to debate the subtle differences between the smoothing options the bottom line is how much smoothing actually occurs and over what period. An averaging over a longer period along with a specific capacity payment for new investments would be best. The more important issue raised in the paper is the transition from today to a smoothed CPM. If a specific capacity payment for new capacity is not implemented, the RAs should ensure that any smoothing transition does not suppress the CPM in the next three to five years as it may hamper investor decision making on the next round of new capacity</p>
<p>Synergen</p>	<p>Given the long term nature of generation investment, Synergen does not consider that material changes to the methodology at this point are prudent. It considers that a smoothing of outputs may have some advantages, assuming that the sums recovered under the CPM through such an approach are the same as a more dynamic CPM calculation. It does not consider that input smoothing can provide such an assurance.</p> <p>In summary, Synergen rejects any elements of discrimination or input smoothing and as such only considers that options 1 and 3 are valid. Consequently, all other options should be discounted at this stage. Synergen requires that the CPM provides a level playing field with differences in reward based on generator performance</p>
<p>Synergen</p>	<p>Synergen considers that smoothing described is a suitable tool to reduce the perceived stability of the BNEFC and 3 year period of smoothing would be required. A simple arithmetic average would appear reasonable, with any weighted average providing unnecessary complexity. Consequently, Option 3 would be acceptable subject to assurances that the detailed approach to output smoothing ensures that the full value of BNEFC from year to is captured as per Consultation Point 7.</p>
<p>Viridian Power and Energy</p>	<p>The difficulty with this approach is that it would under-reward in a rising capital costs scenario and conversely over-reward when capital costs are falling. On this basis, we suggest this approach is inappropriate</p> <p>Any form of smoothing or weighted averaging is inappropriate and would be worse than existing arrangements</p>

Consultation Point 7: The RAs welcome comments from participants on the proposed ‘Legacy’ measure and the options for implementing this.

Name	Comments
ESB Customer Supply	ESBCS favours the options that adjust the price smoothing to allow customers to get the benefit of the lower capacity prices from previous years and in particular Option 3 with a Legacy Correction effect applied in order to gain the advantage which would have been conferred if the price smoothing approach had been in operation since the advent of the SEM.
ESB International	Should smoothing be adopted, ESBI would prefer that the arrangements are forward looking (Option A) rather than historical to reduce the complexity of adjusting historic payments.
NIE Energy Supply	NIEES would support the implementation of Option 3 in preference to applying the smoothing on a forward basis. NIEES does however agree with the Regulatory Authorities in that a change of method should not reflect the high commodity prices of recent years for a second time. Consequently, NIEES would support the suggested “Legacy” adjustment in the smoothing calculation, and would suggest the effect of the “Legacy” adjustment also be spread over a three year period.
Premier Power Limited	Finally, it is interesting to see the “Legacy” issue raised in section 6.3.1. This appears to be an example of the issue raised in paragraph three this response. The market participants requested a smoothed CPM during SEM implementation but RAs didn’t accept the idea. Now that the CPM has shown itself to be volatile the RAs are willing to consider smoothing and indeed want to claw back what they must see as excess capacity payments in 2008 and 2009. PPL believes it would have been much simpler and cost effective to have capacity contracts with generators than a complicated and continually evolving “market”
Synergen	<p>There is clearly a requirement for this legacy issue to be addressed should any output smoothing be adopted. In principle Synergen would prefer that arrangements are forward looking, and the complexity of adjusting any historic payments is minimised.</p> <p>Synergen suggests a technical industry working group is set up to review explicit details of such arrangements should a smoothing approach be adopted</p>
Viridian Power and Energy	Legacy problems associated with smoothing add the argument that smoothing is inappropriate

Consultation Point 8: The RAs welcome comments from participants on the proposed Option 4 and the merits of this implementation.

Name	Comments
ART Generation	We feel that Options 1 to 4 would all have very little effect on the confidence of investors in new plants. Fixing the price of specific components and the use of ‘smoothing’ would slightly delay the impact of certain price movements but would not be significant when looking at the overall investment timeframe a particular project. We do not believe it would solve the issues outlined earlier in this response concerning confidence in long-term capacity payments.
Bord na Mona	None of the options 2-4 outlined in the consultation paper address this issue adequately, as they only address the shorter term variability of equipment prices, and potentially reduce the range of prices from peak to trough in equipment market cycles
Endesa Ireland	Endesa Ireland does not consider that the application of a smoothing effect is appropriate. These proposals reduce transparency without significantly reducing volatility.
ESB International	Option 4 builds on Option 2 and is therefore also an unacceptable approach.
ESB PG	Option 4 is an amalgam of the previous options and while it limits volatility, it diverges further from the true market costs. ESB PG is not in favour of this option for the reasons above.
Synergen	Option 4 builds on Option 2. Consequently, Synergen’s comments regarding the principle of input smoothing under Option 2 also hold for Option 4. According Synergen considers that Option 4 is also inappropriate and should be rejected.
Viridian Power and Energy	Option 4 would be worse than current arrangements because the BNE price may never be in the money with smoothing

Consultation Point 9: The RAs welcome comments from participants on the proposed Option 5 and the merits of this implementation.

Name	Comments
Airtricity	<p>However to address the limited impact of this volatility on the 'Capacity Availability' function of the CPM, elements of Option 2, such as keeping the plant technology constant for a number of years, could be combined with elements of Option 5, by applying an index that is representative of the major cost drivers, possibly a basket of some metals and construction commodities.</p>
ART Generation	<p>Option 5 would give more certainty to investors than Options 1 to 4. A fixed period of 5 years would not cover the complete lifetime of a project, but it would have material effect on the confidence of investors and improve certainty of projected revenues in the medium term.</p> <p>As mentioned in the paper, there is the potential for a significant step-change at the end of any fixed period. However we expect that this could be dealt with through early and transparent information on the nature and magnitude of any change. On balance, we believe it is preferable to receive the certainty of a BNEFC for an extended timeframe of 3 to 5 years, than the annual BNEFC movements that result from the current methodology.</p>
Bord Gais Networks	<p>We would not therefore support the fixing of all BNE costs for a significant period (3 to 5 years)</p>
Bord na Mona	<p>It is fair to say that a mechanism with more elements fixed over a longer period of time, and using an appropriate indexation formula, would be an improvement on the current methodology. Option 5 effectively extends the option 2 proposal to include the entire BNE cost, with indexation over a period of up to five years.</p> <p>As an interim measure, Bord na Mona suggest that option 5 with the application of an appropriate indexation formula would give the best level of certainty to the mechanism in setting the 2010 pot or until a more enduring calculation methodology is found.</p>
Endesa Ireland	<p>Endesa Ireland agrees with the proposal that a 5-year BNEFC, indexed annually would significantly reduce volatility and would improve operator cash-flow projections, provided the BNEFC are set so that investments made prior to 2010 are able to recover their fixed costs.</p> <p>Endesa Ireland supports this option for existing market participants, but strongly recommends that Option 6 be implemented for new market entrants.</p>
ESB International	<p>Option 5 uses the same methodology as Option 2 with the addition of keeping the variables constant for 3 to 5 years. Therefore Option 5 also an unacceptable approach.</p>

ESB PG	Option 5 is again an amalgam of previous options and we are not in favour of applying this for the previous reasons.
Synergen	Synergen does not support the approach adopted in Option 5, and believes that it should be rejected at this stage. Option 5 applies the failings within Option 2 to all elements of the calculation. Synergen’s comments on Option 2 also hold for this option.
Viridian Power and Energy	Option 5 has merit over existing arrangements and is also preferable to options 2, 3 and 4 because it gives greater stability to investors

Consultation Point 10: The RAs welcome comments from participants on the proposed Option 6 and the merits of this implementation. The RAs also welcome comments on whether this option should be considered as part of the second phase of the CPM review.

Name	Comments
Airtricity	<p>In terms of the narrow remit of this consultation, considerations for reducing the volatility of the BNEFC concentrate on the ‘Capacity Investment’ side of the CPM functions – incentivising a rational investor to ‘procure and construct a peaking plant in the SEM’; making capacity available to alleviate diurnal and seasonal system tightness responds less so to this volatility. Of the options presented, Option 6 most obviously responds to this requirement.</p> <p>As the consultation notes, if this option is selected for further consideration, the details of its implementation and operation will need to be worked out at a later stage.</p>
ART Generation	<p>Option 6 gives the most certainty to new entrant plant through its ability to ‘lock in’ a BNEFC for 10 years. We welcome the regulators decision to evaluate Option 6 as on balance it appears to be the most suitable solution to reduce the annual volatility in BNEFC levels that is currently a barrier to the investment in new-entrant plant.</p> <p>The introduction of Option 6 would increase the number of companies with the ability to invest in generation plant in the SEM. This could involve financially smaller companies and those that are not currently involved in the market. This would diversify the ownership of plant in the market and increase competition within the electricity market.</p>
Bord na Mona	Option 6 suggests a number of useful proposals that address the area of revenue predictability which address the main issues facing project developers attempting to bring new capacity to the

	<p>market.</p> <p>Bord na Mona recognises the appropriateness of deferring the consideration of option 6 or variants of it to the wider review of the mechanism.</p>
Endesa Ireland	<p>Endesa Ireland strongly supports the RAs proposal to secure a fixed price capacity payment for new entrants.</p> <p>In order to incentivise new investment, the RAs must provide sufficient surety for investors, particularly in the current economic climate. A fixed-price capacity payment for new entrants over a 10-year period will provide the necessary incentives and certainty to ensure the island of Ireland meets its generation adequacy requirements.</p> <p>Endesa Ireland suggests two means for allocating capacity payments to new entrants:</p> <ol style="list-style-type: none"> a. Capacity Payment Auction b. Allocation of the fixed capacity pot <p>These options would allow the capacity mechanism to more accurately reflect the capacity needs of the island of Ireland.</p>
ESB International	<p>ESBI does not support the approach outlined in Option 6 – Fixed price for new entrants.</p> <p>This approach provides no incentive for new investors to see competitive wholesale pricing signals that will deliver suitable generation margin over the investment cycle. It could also be said that this approach removes the risk from potential new generators and is transferring this risk onto customers. This approach is directly in opposition to the basis of SEM design. The RAs should comment on this in the decision document.</p>
ESB PG	<p>ESB PG is particularly not in favour of option 6 as this will create a two tier system between the existing generators and new generators. This option also is contrary to the CER criteria of fairness and non-discrimination between participants. It is also very difficult to see how this would work in practice.</p>
IBEC	<p>In considering the options presented in the consultation paper, we consider a variant of option 6 may be best placed to encourage new capacity but are disappointed that this may not be considered in phase I of the CPM review</p>
NIE Energy Supply	<p>Whilst NIEES has indicated its support for Option 3, it would also support a more thorough analysis of Option 6 – a fixed price for new entrants (or a hybrid of it).</p>
Premier Power Limited	<p>PPL has always maintained that some form of long-term contract would be better to reduce investor risk and thus reduce the BNEFC. PPL believes that Option 6 – Fixed Price for New Entrants is not at all radical and should be seriously considered. It would significantly reduce</p>

	investor risk and would therefore reduce the WACC and BNEFC. This will then lower the cost overall to consumer
Synergen	<p>In principle, Synergen rejects the discriminatory nature of Option 6, and thus believes that it should be rejected as it is inconsistent with the basis of the SEM design. Synergen does not believe that there is a robust basis for creating</p> <p>BNE Calculation Methodology within the SEM asymmetric CPM risks between generators that are all contributing on a accepted (if differential) to the MW requirements of the system as a whole.</p> <p>Synergen is unsure whether the approach suggested within Option 6 has been validated as legally robust under EU Law – and believes that the RAs should comment specifically on this question in the decision document.</p>
Tynagh	In considering the options presented within this paper, TEL supports option 6 which proposes a fixed price for new entrants. While we recognise that this is a significant alteration to the current CPM process, it would be the most effective method of addressing volatility for those market participants that are most affected.
Viridian Power and Energy	A variant of option 6 is our preferred methodology providing it addresses the main aspects of CPM volatility as outlined in our cover letter. Please see appendix 1 for further details

Other General Points Raised	
Name	Comments
ART Generation	<p>The CPM as it stands rewards all available capacity on an equal basis. It does not distinguish between flexible capacity that is able to ramp up (or down) quickly to respond to system needs, must-run baseload that cannot rapidly adjust its output, or wind generation that is not as ‘dispatchable’ in terms of reliably providing capacity at times of system need.</p> <p>Ancillary service payments, as they currently stand, do not appear to incentivise the building of flexible plants. We have identified three major options that could provide significantly increased value to flexible plant:</p> <ul style="list-style-type: none"> • adapting the SEM MSP software to fully account for plant flexibility and reserve • adaption of the CPM to include additional payments for flexible plants valuable to the system • adjusting ancillary service payment contracts to adequately reward reserve provision in line with its value to the system.

	If the use of the CPM is considered to be the best way of delivering flexible plants to the system, any moves to change the methodology of the BNEFC for new entrants should take this into account and should not be considered in isolation.
Bord na Mona	The requirement to adjust the BNE costs to reflect margins that the BNE unit may receive in the energy and ancillary services markets is another fundamental problem with the current methodology.
ESB International	The revised arrangements as suggested by this Consultation could increase the perception of regulatory risk by potential investors who will be considering the stability of the trading and regulatory arrangements as part of their investment appraisal. The key issues in the calculation of BNEFC are that it is transparent and delivers a methodology for the calculation of generation fixed costs on which to base Capacity Payment.
IWEA	The set of complex distribution calculations used to distribute generator payments increase the volatility of payments to generators. The fixed component of the capacity pot distribution should be increased and the variable components reduced. This would provide a stronger incentive on generators to meet anticipated capacity shortfalls.
Synergen	Finally, Synergen is concerned that there is no evidence to suggest that the CPM is failing to work as anticipated, and is concerned at the uncertainty, and risk, inherent in re-visiting such mechanism so soon after the start of the SEM.
Viridian Power and Energy	The set of complex distribution calculations used to distribute generator payments increase the volatility of payments to generators, and we remain unconvinced that the original SEM design intent of improving generator availability has been demonstrated through experience. In this context we suggested in our response to consultation on the CPM parameters (SEM-08-172) that the fixed component of the capacity pot distribution should be increased and the variable components reduced. Given that these parameters are set annually by the RAs, no change to the underlying SEM design is necessary. This approach would have the added benefit of improving convergence of capacity values for generators with capacity payments by suppliers.

Capacity Requirement	
Name	Comments
Airtricity	The BNEFC is only one component in determining the ACPS. The annual Capacity Requirement is the other variable in that determination. The expectation then would have been that this first phase of the CPM review 'focusing on the possibility of reducing volatility in the capacity

	payments pot' would have at least also considered the annual Capacity Requirement.
Bord na Mona	<p>It is particularly welcome that the RA's have signalled their intention to consider the calculation of the deemed capacity requirement, and the disbursement of payments to different classes of generator. These particular issues are fundamental to the viability of the CPM going forward, and will be essential to deliver the mix of plant in the generation portfolio required to achieve the government's 40% RES-E targets by 2020.</p> <p>A critical issue here is the current lack of transparency in the methodology used to calculate the deemed capacity requirement.</p>
Endesa Ireland	Using the current methodology, capacity payments for 2010 are likely to be decreased. This will arise from the projected reduction in demand, leading to a reduced capacity requirement and reduced EPC costs that are utilised in the calculation of BNEFC. If capacity payments decrease significantly, peaking plant commissioned prior to 2010 may be unable to fully recover their fixed costs. This will be of greater significance to market participants that do not have a diverse portfolio of plant.
IBEC	<p>Section 4 of the SEM-09-023 paper states that the objective of the consultation is to reduce the volatility of the capacity payment mechanism (CPM). However, the EPWG feel that the substance of the document only addresses one aspect of the volatility in the CPM namely the BNE price.</p> <p>The EPWG believe that volatility also arises from the following areas:</p> <ol style="list-style-type: none"> 1) The variation in the capacity requirement used to calculate the size of the capacity pot. 2) The volatility and complexity in the distribution of the capacity pot
IWEA	The lack of transparency surrounding the calculation of the capacity requirement further adds to CPM uncertainty. Plant availability predictions should accurately reflect current plant performance and result in an adequate capacity pot. IWEA is concerned that the current methodology does not properly reflect the full requirements of the power system.
Viridian Power and Energy	VPE has consistently raised concerns about the lack of transparency on calculating the total capacity requirement that is used in setting the capacity pot. Our concern centres on the opacity of the calculation process together with the heroic assumption that the availability of RoI plant will rise to the NI availability as a result of the SEM. The graph below shows that the latest RoI rolling average availability continues to vary by less than a small number of percent, against the RA assumption of more than 15% improvement

Gas Transportation	
Name	Comments
Airtricity	For example there is the issue that the capacity payments pot is inadequate to recover all generator capital and fixed costs not covered by energy payments, such as transportation charges for delivering gas into Ireland.
Bord Gais Networks	<p>We believe that it would be appropriate to change the fuel choice in the BNE calculation to Natural Gas because the availability of short term produces (including within day) interruptible products and secondary market capacity has significantly reduced the cost of obtaining capacity for a peaking plant.</p> <p>[See BGN full response for further details]</p>
Endesa Ireland	<p>Endesa Ireland considers that the technology selected for the BNE should be reconsidered. The BNE selected by the Regulatory Authorities to date has been a distillate-fired gas turbine. Endesa Ireland considers that this discourages investment in more efficient and environmentally sustainable peaking plant fired with natural gas, as the cost of the gas connection is not considered.</p> <p>Endesa Ireland would suggest that the Regulatory Authorities signal that investments in efficient, environmentally sustainable peaking plant are encouraged. Therefore, the cost for a standard connection to the gas transmission network should be included in the BNEFC. This would not impose considerable costs to customers, as it would be offset by reduced costs of carbon emissions, more efficient plant and long-term environmental benefits.</p>
Viridian Power and Energy	We need to reiterate our ongoing concern that we have raised consistently through the SEM design process, that a CPM + SRMC regulated market may not be sufficient to remunerate generation capacity in the market. The failure to include real costs, such as gas transportation capacity, in SRMC increases this concern