ART Generation is pleased to submit a response to the consultation paper 'Fixed Cost of a Best New Entrant Peaking Plant - Calculation Methodology' (SEM-09-023), published by the SEMC on 9<sup>th</sup> March 2009. The Capacity Payment Mechanism (CPM) is an important element of the SEM design and developing a methodology for calculating the Best New Entrant Fixed Costs (BNEFC) that gives confidence to potential investors is crucial.

ART Generation is an investor in both conventional and wind generation and is looking to invest in new generating plant in the SEM.

Outlined below are our opinions on the issues involved, together with some comments on the specific options outlined in the paper.

#### Background

The Regulatory Authorities (RAs) have calculated the BNEFC for a peaking plant three times to date. The prices have been used to determine the capacity payment pot for the years 2007, 2008 and 2009. The volatility of these payments from year-to-year (which depends on estimated capital/fixed costs, projected energy market revenue and projected ancillary service revenue) is a major issue for potential new-entrant generation. This is particularly true for a peaking plant that would not expect to receive significant revenue from the energy market. It is vital that the Capacity Payment Mechanism (which includes the calculation of the BNEFC referred to in this paper) is robust. The market needs a transparent, stable methodology to reduce uncertainty to new entrants.

The expected connection of significant amounts of wind generation over the next 10-15 years, in both the Republic of Ireland and Northern Ireland, mean that incentivising generation capacity that can successfully operate in a 'high wind' system is crucial. Due to the intermittent nature of wind generation, it is generally accepted that the most 'efficient' mix of plant on the system will include plant capacity that will not expect to obtain significant energy revenue. The inclusion of capacity payments within the design of the SEM is an opportunity to give confidence to investors in such plants. However, if there is a lack of certainty in the long-term level of capacity payments, plant investments may have a tendency to be 'conservative', i.e. investment will continue to be in baseload plants which will receive significant energy revenues (at least in the early years of their lifetime), even if this is not the most efficient outcome for the system as a whole.

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.

#### **Options outlined in the Paper**

In the consultation paper, the SEMC outline 6 potential options for reforming the way that the BNEFC is calculated. Our opinions on each of the options, from the point of view of a new entrant generator, are given below.

### **Options 1 to 4**

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 longterm capacity payments.

If one of these four options were to be considered then 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.

## **Options 5**

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.

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.

# **Option 6**

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.

The ability to 'lock in' would enable investments to be made at a much lower risk level, than if there continues to be significant change to BNEFC on an annual basis. This is particularly important given the current worldwide financial situation. It will give investors the confidence of a guaranteed BNEFC for a fixed time-frame that should make future CPM payment levels much less susceptible to volatility going forward.

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.

Option 6 also appears to be the best option for delivering the optimal plant mix that the system requires in a 'higher wind' scenario. The ability to confidently invest in lower efficiency plant is likely to reduce the level of unneeded and expensive high efficiency baseload plant, whose costs would ultimately be borne by the electricity consumer in higher energy market uplift payments.

### Option 6 and potential interaction with ancillary services

As mentioned previously, we believe that the capacity payment mechanism is a useful mechanism that can help develop an optimal mix of plant on system as long as: there are appropriate rewards for providing value to the system, there is confidence in being able to obtain those rewards, there is transparency in payment methodologies, and that volatility is minimised.

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.

The consultation paper states that the RAs will undertake further analysis on a wider range of issues in the third quarter of 2009. However we would like mention at this stage that there is the potential to further develop Option 6 in order to encourage investment in plant that can provide 'flexible' capacity. This would further align future investment in generation plants with the type of plant required by the system operator to maintain adequate system security.

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:

- 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.

We are concerned at the option outlined in the SEMC ancillary services decision paper (SEM-09-003) that stated:

"The TSOs may enter contracts with reserve providers to take into account longer term system requirements and facilitate investment in certain types of plant. It is expected however that long term contracts would only occur in rare cases"

We would hope that any long-term contracts put in place to enable the construction of 'certain types of plant' would be completely transparent. The rewards for providing the required reserve should be open to all investors. Therefore we believe that incentivising flexible plant through the CPM could be a viable option going forward. It is available to all market participants without undertaking individual contracts with the system operator.

Despite the preference for Option 6, we are also very aware that the details of any such scheme would be fundamental to its success and would need to be thoroughly evaluated. In particular, some of the issues listed below would need to be investigated:

- the need to minimise any 'gaming' over when to 'lock in' the BNEFC price that could be detrimental to the system as a whole
- the need to minimise the effect on incumbent generators
- determining the capacity available for new entrant generators we would argue that there should not be a restriction on the amount of capacity that can 'lock in' its BNEFC and that it should be available to all potential new entrants. A firm BNEFC does not by itself guarantee sufficient revenue from the CPM, as it will still depend on the total capacity in the market. Restricting the 'locked in' price to certain new-entrant generators could be discriminatory.

#### Summary

In summary we would suggest that:

- the calculation of the BNEFC should be based on a transparent methodology that avoids volatility where possible and allows certainty for investors
- this would be best achieved by implementing some form of Option 6 as outlined by the RAs in the consultation paper
- the strong advantage of Option 6 are that it would significantly decrease the risk level of generation projects. This would in turn allow smaller and non-incumbent investors to ensure their projects are 'bankable' and thus increase competition in the electricity market.
- Option 6 is also likely to increase the confidence of investors to invest in lower cost low-efficiency peaking plant, without requiring any significant revenues from the energy market. We expect this to ultimately result in a more 'efficient' electricity system as a whole, i.e. one that is not oversupplied with baseload generation.

- an additional aim should also be to incentivise the most suitable plant capacity to meet the challenges of an 'high wind' system
- the RAs should investigate thoroughly on how the CPM can be linked with ancillary service payments. This could be a method to ensure that flexible generation capacity is given sufficient reward which in turn reflects its total value to the whole electricity system.