

10<sup>th</sup> June 2011

Clive Bowers,  
The Commission for Energy Regulation,  
The Exchange,  
Belgard Square North,  
Dublin 24

Jody O'Boyle,  
The Utility Regulator,  
Queens House,  
14 Queen Street,  
Belfast,  
BT 16ER

Dear Clive, Jody,

**Re: Fixed Cost of a Best New Entrant Peaking Plant and Capacity Requirement for the Calendar Year 2011**

Thank you for the opportunity to respond to and input into the Regulatory Authorities (RAs) consultation on the fixed cost of a best new entrant (BNE) peaking plant and capacity requirement for the calendar year 2012.

On a general point, Bord Gáis Energy (BG Energy) is of the view that the objectives of the CPM and the assumptions made in the latest calculation of the BNE are contradictory, and send confusing signals to potential new investors. BG Energy is concerned that the proposed approach, which prioritises upfront costs over efficiency, will result in cheaper, less efficient and poorly located investments in the SEM. Such investments, while providing short term cost gains, will prove more expensive in the long term by their poor contribution to facilitating future system needs.

The remainder of this response concentrates on specific aspects of the calculation of the BNE. BG Energy respectfully requests the RAs to give full consideration to the content of this response before finalising their decision for 2012.

**1. Technology Options:**

There are a couple of specific areas with respect to the technology options where BG Energy has reservations regarding some of the assumptions used by the RAs, namely:

- The 2012 paper presents the Alstrom GT13E2 as a 193.9MW gas plant, yet Alstrom advertise the GT13E2 as producing output of 184.5MW<sup>1</sup> and
- General Electric advertises its LMS100PA gas turbine as having an output of 103.045 MW<sup>2</sup> which is in conflict with the figures presented by the RAs in its paper.

In acknowledging that gas turbine performance varies with location and ambient conditions, it is unclear from reviewing the RAs consultation documentation what weather conditions the RAs have assumed in their analysis. In BG Energy's view, it is

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<sup>1</sup> Source – Alstrom, 'Technical Performance – Gas Turbine Range'

<sup>2</sup> Source - General Electric, 'Heavy Duty Gas Turbine Products' (GEH12985)

best practice when comparing gas turbine output and performance to benchmark against ISO standard conditions<sup>3</sup>. BG Energy therefore asks that the assumptions and rationale for changes in the assumptions are outlined and substantiated as part of the decision paper.

Notwithstanding the above, BG Energy does not agree with the RA's preferred technology type in the BNE 2012 calculation on the basis that it does not encourage investment in the appropriate generation type necessary to back up increasing levels of wind penetration. An aero derivative turbine would be a more appropriate benchmark for the market in terms of meeting the best long term interests of the system as it will entice plant offering higher levels of efficiency and lower levels of greenhouse gas emissions as well as encourage greater flexibility onto the system. BG Energy believes that choosing a distillate plant is a short-term objective in trying to prioritise costs over efficiency, yet in the long-term and over a BNE's project lifetime, it will actually increase overall system and market costs.

Furthermore, the chosen BNE has a ramp rate of 20 minutes. This will not be technically optimal as peaker plant will be required to respond more rapidly than they are currently given the expected future generation mix. In short, although the chosen Alstrom GT12E2 is appropriate for negligible levels of wind generation, BG Energy considers that it will not meet the system needs in future years.

## **2. Calculation of the WACC:**

BG Energy believes that the Northern Ireland (NI) WACC values proposed for inclusion in the BNE calculation are set too low. In particular we would like to note the following points:

- 1) **Risk Free Rate:** The risk free rate for the UK of 1.75% is extremely low for a long term investment. This rate is negative in real terms given a UK inflation target rate of 2%;
- 2) **Debt Premium:** While a Northern Irish asset can avail of its sterling zone position, the fact that such an asset would be part of the SEM will, most likely, result in elevated debt pricing relative to a pure play UK asset. For example, NIE plc, a wholly owned subsidiary of ESB, operating as a ring fenced asset raised a £400m bond on the 27th of May (rated BBB+) at an initial yield of 6.39%. This was a spread to benchmark of 250bps for a regulated monopoly asset. The BNE consultation considers BBB issuance and concludes a spot margin of c.170bps. BG Energy believes that it would be more appropriate to reflect more inflated pricing given the experience of NIE and the inherent links to the wider Irish market. There is also additional risk involved in

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<sup>3</sup> ISO standards 3977-2 ( Gas Turbines - Procurement - Part 2: Standard Reference Conditions and Ratings) 'The three standard conditions specified in the ratings are Ambient Temperature - 15 deg C, Relative Humidity - 60 % and Ambient Pressure at Sea Level'.

investing in a competitive market as oppose to a regulated network. On this basis, it would be reasonable to expect the spread to be greater than 250bps;

- 3) **β:** The beta's applied are benchmarked as with the debt premium off precedent regulatory determinations for primarily regulated monopoly network assets. BG Energy believes a BNE generator merits a premium beta given the additional business risk in investing in a competitive market. BG Energy believes an equity Beta of 1.5 is more realistic for investing in a peaking plant the SEM.
- 4) **Equity Risk Premium:** BG Energy's market feedback on ERP indicates there was limited movement in the last 12 months which would support a tightening of the ERP from the 2011 assessment of 4.75%. The ERP analysis notes that 5.5% and higher would be supportable in the current market. Also, looking to recent CER precedent for the EirGrid 2011-2015 price control, the premium applied was closer to 5% (rather than the 4.5% applied in the current consultation). On this basis BG Energy believes an ERP of 5% is more appropriate.

Using the above inputs and applying the methodology as provided for by the RA's, BG Energy calculates a pre tax WACC of 7.84% as against the consultation paper of 6.26%.

Added to this, the inability of the BNE plant to earn any infra-marginal rent due to its limited running in the SEM and uncertainty regarding the timeframe and potential for changes to the ancillary services market would leave an investor dependent on the capacity pot for the vast majority of its revenues. The fluctuations in the capacity pot itself, such as the circa 19% reduction over the past three years, add further risk to this investment and would require an investor to add higher risk premiums to attract financing for a project of this kind. This is indeed something that Poyry recognised in its advice to the Regulatory Authorities as part of its recent consultation on the CPM Medium Term Review. This would infer that the WACC should indeed be higher than that calculated by BG Energy above taking into consideration the risks actually faced by a potential investor in the SEM.

### **3. Transmission & Market Operator Charges**

The current BNE calculation does not reflect the latest indicative Transmission Use of System (TUoS) charges. The current TUoS consultation provides for an all-island generator TUoS charge. It is likely that the cost of a connecting generator in NI will change significantly as a result of this new methodology and this change needs to be taken into consideration in the calculations.

### **4. Capacity Requirement:**

The short-term reduction used in the BNE calculation does not match the paper's aim to incentivise capacity adequacy in the long term. Using this approach there will not be an appropriate timely signal to provide for the long lead time necessary for the development of a power plant project.

More efficient peakers or lower capital costs should be regarded as a much more important and rational driver for the exit of older and less efficient plant from the market.

### **Summary and Conclusion**

In summary, BG Energy does not believe that the RAs underlying assumptions and inputs reflect the true costs of investing in the SEM and the commercial decisions taken by potential investors. This sends perverse signals and disincentivises new investors and investment in the right type of generation in the SEM.

In this regard, BG Energy requests that the RAs reconsider their latest proposals to better reflect market realities. This will ensure that the correct signals are given for investment in flexible and efficient generation. It will also give confidence to those parties considering investment in the SEM by providing greater regulatory and revenue stability, which will in turn reduce long-term risks and costs in the market.

BG Energy would appreciate an opportunity to discuss the above comments and points with the RAs and their consultants prior to the finalisation of a decision.

Yours sincerely,

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Bord Gáis Energy