

29th July 2009

Priti Dave-Stack
The Commission for Energy Regulation
The Exchange
Belgard Square North
Tallaght
Dublin 22

Mr Kevin O'Neill
The Utility Regulator
Queens House
14 Queens Street
Belfast
BT 16ER

Dear Priti, Kevin

RE: Fixed Cost of a Best New Entrant Peaking Plant and Capacity Requirement for the Calendar Year 2010

Bord Gáis Energy (BG Energy) has recently made significant investments in the Single Electricity Market (SEM). These investments are predicated on the organisations understanding of market arrangements and dynamics and subsequent assessments of the risks and returns that can be reasonably forecasted. BG Energy is concerned that the proposed approach, which prioritizes cost over efficiency, will result in cheaper, less efficient, less green and poorly located investments. Such investments will not contribute to or facilitate future system needs or environmental objectives.

The Regulatory Authorities (RAs) recent consultation paper 'Principles of Dispatch and the Design of the Market Schedule in the Trading and Settlement Code' states 'the long run objective of minimising the cost of production is achieved by market arrangements that provide incentives for generators to invest in the most appropriate mix of generating plant by giving the appropriate signals for market entry and exit'. The proposed changes in the BNE and Capacity Requirement consultation paper counteract these objectives, overturning previous signals provided to the market and undermining sensible investments which will be required for the future security and stability of the system.

The remainder of this response concentrates on a number of fundamental aspects to the calculation of the BNE Fixed Costs, Capacity Requirement and Capacity Pot and





the impact of the current proposals on participants in the Single Electricity Market (SEM). BG Energy respectfully requests the RAs to give full consideration to the content of this response before finalising their decision for 2010.

1. Stability and Predictability of the Underlying Methodology

The calculation of the BNE Fixed Cost and subsequently the Capacity Pot seeks to achieve a balance between cost reflectivity of a 'rational investor' and providing a level of stability in revenues for existing investors. The current methodology, which examines each of the costs faced by a potential new investor on *an annual basis*, creates uncertainty, thereby increases the risk and also the cost of participating in the SEM.

In previous responses to the RAs (namely the CPM Medium Term Review), BG Energy has suggested that the methodology, its underlying costs and revenues, should remain constant for a period of years (possibly 5-6 years) to allow investors and market participants to reasonably forecast their expected costs and revenues over the medium term at least. Changes to the costs and/or the methodology should be signalled with a one to two year lead-in time and potentially should be smoothed over a number of years, such that revenues will not vary greatly from year to year.

The current methodology gives rise to a situation whereby the forecasted revenue streams of an investor can change considerably even during the 2-3 year construction period. This uncertainty, particularly for a peaking plant which principally relies on capacity payments to recoup its investment costs, is an unacceptable risk to the project, which could be avoided through a more stable application of the current calculation. Investors cannot hedge against this risk under the current arrangements and therefore must account for it in their financial costs.

2. Underlying Assumptions

There is an inherent difficulty in trying to design a methodology which is based on the decisions of a 'rational investor'. This is clouded by subjectivity and trade-offs between the different objectives of different 'rational investors'. However, given the expected lifetime of a generation plant, BG Energy is of the view that it is reasonable to assume that a 'rational investor' will seek to minimise its costs over the lifetime of the project and not solely at the time of construction. Accordingly, BG Energy does



not believe that it is appropriate to prioritise cost over efficiency, as efficiency will ultimately impact on and reduce total costs over a project's lifetime.

It also appears from this consultation that the RAs are focusing on the short-term rather than the long-term system requirements. This is also reflected in the fuel choice of the Best New Entrant (BNE). According to the RAs calculations, it is currently cheaper to construct a distillate fuelled peaking plant. However, given government policies and initiatives to reduce carbon emissions, carbon prices are expected to increase significantly during the lifetime of the BNE plant. A 'reasonable investor' would factor this increase into their choice of plant and it is reasonable to question not only whether a rational investor would consider building a distillate plant at this stage but also whether the RAs should incentivise investments in distillate plants given their future potential to spike the SMP price.

Further to this, the RAs 'Principles of Dispatch and the Design of the Market Schedule in the Trading and Settlement Code' consultation paper seeks to ensure arrangements are in place to incentivise flexible, efficient plant to meet future system requirements given the levels of expected renewable generation. However this most recent calculation of the BNE Fixed Cost, and accordingly the provision of the Capacity Pot, appears to arbitrarily amend aspects of the methodology to reduce short-term costs. This perceived short-term saving is being achieved at the expense of long-term system requirements.

3. Technology Options

In general, BG Energy does not disagree with the analysis of the technology options presented in section 5 of the RAs consultation paper and section 3 of CEPA/PB Final Report and the added transparency is welcomed.

There are a few specific areas however where BG Energy has reservations regarding the RAs explanations and rationale, namely;

- The 2009 paper presents the Alstrom GT13E2 as a 180MW plant, yet the 2010 paper presents it as a 190MW plant.
- The definition of a 'proven technology' as a technology where there are 3 examples of over 8,000 running hours. Given that a peaking plant is assumed to operate for approximately 5% of all trading periods within a year, this seems



- overly stringent and could exclude a number of plants that could be in operation for a number of years but have still not generated for a total of 8,000 hours.
- The assumption that 'a rational investor would allocate a larger weighting to cost rather than plant efficiency'. Efficiency is related to total costs over the lifetime of an investment, and this is not reflected in the RAs calculations in sections 5-8, which only refer to costs in the first year of the investment. In order to accurately reflect the true costs, BG Energy believes that the total expected costs should be discounted over the total lifetime of the investment, which will appropriately reflect the relationship and choice between cost and efficiency.

4. Investment Costs

BG Energy is broadly in agreement with the assumptions and calculations presented in section 6 of the consultation. However, the 63% decrease in site procurement costs in one year highlights the need for this process to be stabilised and levelized over a number of years. The business case of an investor which decided to invest in the Irish market last year based on the signals given through the 2009 Capacity Pot has changed significantly within a 12-month period. This volatility sends negative signals to the global energy and financial markets and will impinge on future investments in the SEM.

5. Economic and Financial Parameters

The proposal to increase the assumed plant life from 15 to 20 years is a further example of the regulatory uncertainty and instability of this process. There have been a number of consultations issued on the subject of capacity payments and the BNE fixed costs in recent months, yet none suggested that a change was forthcoming in the assumed plant life.

There is competing empirical evidence regarding the economic life cycle of a plant. The principal differences are based on the perceived riskiness of the market and the investors involved. BG Energy is of the view that it would be more appropriate for such a significant change to be examined as part of the larger medium term review of the Capacity Payment Mechanism. Again, without prior consultation with industry and the provision of a proper impact assessment, the application of such an



impromptu change increases the uncertainty and risk for investors and potential investors.

Section 7.1.1 of the CEPA/PB report suggests that this increase is linked to the perceived riskiness of a market where investments are backed by long-term Power Purchase Agreements. However this perceived riskiness of the SEM is not reflected in other aspects of the BNE fixed cost calculation, most notably the WACC.

6. Infra Marginal Rent

One of the original assumptions used in choosing the BNE Peaker is that it will theoretically provide the last MW of electricity required to meet system demand. This infers that it is the marginal plant, which sets the SMP for the remainder of the plants in the market schedule and will not earn infra marginal rent. The fact that the BNE does not earn infra marginal rent following the iterations run using the Plexos model and thus relies on capacity payments to recoup their long-term investments further emphasises the need for stability in the overall level of the capacity pot.

7. Ancillary Services

The calculation of the estimated value of ancillary services is based on the harmonised rates published by the RAs in the recent consultation paper SEM-09-062. However, the proposal does not reflect the new set of charges which were introduced as part of the harmonisation process. A reasonable estimate of trip, SND and other incidences could be proposed by the System Operators for inclusion in the calculation.

On a more fundamental issue, BG Energy does not agree with the provision of ancillary service payments in the BNE fixed cost calculation. Given the subjectivity of ancillary service contracts, which are entered into on a bilateral basis with the System Operators, BG Energy does not believe that it is reasonable to assume that a BNE Peaker will receive a contract from the System Operators and therefore earn added revenues of €960,383 during the year. This assumption on ancillary revenue earnings conflicts with RAs assumption that a 'rational investor' allocates a larger weighting to cost rather than efficiency when selecting its plant technology. This is because, the BNE as currently proposed is unlikely to provide all of the services required by the System Operators for the purpose of system stability and continuity.



For these reasons, BG Energy does not believe that it reasonable or appropriate to include ancillary service revenues in the calculation of the BNE fixed cost.

8. Capacity Requirement

BG Energy recognises the difficulty in attempting to accurately forecast actual demand for the coming year. The current economic environment makes this task even more difficult. However, forecasts are not designed to be accurate, but to reflect the expected trends for the time period in question. For this reason, BG Energy does not believe that a review of the demand scenarios for the coming year will add substance to the calculation and may just add uncertainty for participants seeking to forecast and understand their environment for the coming year.

There is a lack of transparency in the calculation of the capacity requirement. Although the assumptions used in the calculation are clearly outlined, there is no information outlining how the RAs arrived at a figure of 6,832MW. In particular, market participants are unable to replicate the CREEP calculation process as described by the RAs in section 13.3.7. The lack of transparency in the figures used in the calculation make it difficult for market participants to understand, analyze and comment on the proposals of the RAs. BG Energy asks the RAs to provide more detail on this calculation.

In terms of the overall conclusions of the consultation paper, BG Energy can understand the overall reduction in the capacity requirement given the estimated economic and demand forecasts for the coming year. However, a 15 per cent decrease in the overall Capacity Pot for the year is a considerable reduction, which has a sizeable impact on the revenue streams of generators in the SEM. This is set against a backdrop where generator incomes through infra-marginal rent have fallen significantly as a result of falling fuel prices and the impact of wind on the market.

Through the numerous consultation papers to date, the RAs have highlighted the objective to incentivise investment into the SEM to enhance security of supply and better meet the future needs of the system. The magnitude of this change in a mechanism which was ultimately designed to ensure that investors' recoup their long-run costs, negates the previous policy decisions taken by the RAs. Consistency and stability is required in a market if 'rational investors' are to risk entry. It is for this reason that BG Energy suggests the fixing of the capacity pot over a period of years.



In summary, BG Energy believes the RAs approach to the calculation of the BNE Fixed Cost and the resulting calculation of the Capacity Pot does not incentivise the type of plant that will benefit the SEM network in the long term. This is not reflected in the calculation and this approach risks destabilizing the SEM, which according to the high level design presented by the RAs to industry on 6th May 2005, was established to promote energy supplies and encourage investment.

BG Energy, as a party investing in the SEM, believes that the stability and transparency of the Capacity Pot, and accordingly its underlying assumptions and calculations, is paramount to the integrity of the SEM. This in-turn has implications for the security of future electricity supplies and the all-island market. In this regard, BG Energy trusts that the RAs will consider the implications of its proposals on the future of the market rather than on the short-term gains that may be perceived to be made as a result of a reduction in the Capacity Pot for 2010.

BG Energy would appreciate an opportunity to discuss the content of this response with the RAs and their consultants prior to the finalisation of a decision.

Yours sincerely,

Jill Murray Commercial Regulation Bord Gáis Energy

{by e-mail}