



***Response to***

**Single Electricity Market Committee Consultation**

**Fixed Cost of a Best New Entrant Peaking Plant  
for the Calendar Year 2009  
AIP/SEM/08/083**

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Premier Power Limited appreciates the opportunity to offer its comments on the above consultation.

PPL has used the questions posed at the end of the paper to format its reply. However some of PPL's comments are beyond the specific questions as is detailed below.

### **1. Proposed Siemens 2000E Plant.**

PPL has no objections to the specific choice of technology.

There are however inconsistencies in the logic flow of Section IV of the paper. It is not clear how the machines listed in Table 1 were chosen and why others were not considered. For example there is no mention of the GE LMS100 turbine. Presumably this is because it does not meet one or more of the criteria but there is no specific criteria for inclusion on the list. There are other manufactures and machines which are also not included.

Figure 1 also has inconsistencies. The Trent 60 DLE plant has been adjusted to have two units to meet the 100MW minimum size thus giving it some cost synergies but this has not been done for the other smaller machines. It would seem that once included on the Table 1 list, all machines should be treated the same in the evaluation. The other smaller machines should be costed in a two unit configuration for consistency.

### **2. Cost Assumptions.**

The paper suggested that the capital cost assumptions are a spot price but it is not clear at what point in time the cost assumptions were developed. The adjusted Capex of €501/kW is generally in line with the market for 2007. PPL's parent company BG Group is involved in various international power developments and during 2008 there has been significant cost inflation. We are now using €600/kW as a cost estimate for open cycle plants. As discussed in the next question it may not be appropriate to use the more recent cost inflation but it should be clear what costs are being used from what time period.

### **3. Historical EPC Cost Averaging Options.**

PPL's strongest comment is that whatever approach is used to construct the BNE cost, it needs to be consistent across all of the assumptions. This includes the WACC calculation that we comment on below. It appears that some of the data presented is at a particular point in time while other data is an historical average of some kind (e.g. the inflation assumption). Mixing approaches like this makes the whole effort of developing a cost estimate for a realistic BNE project meaningless. Either the SEMC should use a single point in time for all data or the same averaging approach. It should not mix and match to get the lowest cost.

With regard to the averaging options, PPL would support an annual average approach in an attempt to avoid choosing an arbitrary point. PPL would have supported a longer term smoothing of the capacity pot as opposed to a bottom up approach every year. Since the SEMC rejected this approach it is then appropriate to use the year previous to the current year (e.g. 2007 full year average for developing the 2009 CPM). As stated, this averaging approach should apply to all cost estimates, interest rates and factors affecting the WACC.

#### **4. Equity Risk Premiums.**

PPL does not agree with the use of the GB airports as a proxy for equity risk premium comparisons. Presumably these are “regulated” assets that have certain revenue guarantees similar to the regulated utility assets in Northern Ireland and the Republic. The BNE plant is a “merchant” plant subject to volatile long term revenues. The primary revenue for the BNE peaking plant is the capacity payment mechanism which while less volatile than the energy market, can still change significantly from year to year depending upon the SEMC consultation process and new capacity additions in the SEM. Furthermore there at present is no market for long term off-take contracts which might reduce risk to an investor. The BNE plant is a risky investment over its 15 year life and thus requires a higher equity risk premium than would a regulated asset such as the GB airports.

#### **5. Historical WACC Data Treatment.**

As mentioned in question 3 above, the WACC calculation methodology should be consistent with EPC cost development methodology. An investor makes an investment decision at a particular point in time in light of all of the factors including market conditions, investment costs, financing conditions and competing investment opportunities. He does not use average values over some historical period. However as described above, PPL believes an annual average for all data makes better sense in developing a hypothetical BNE project because as we have seen in 2008 market conditions can change dramatically from one month to the next.

The more important issue in the WACC calculation is that of leverage. While others commented on this in the 2007 BNE consultation the SEMC chose to ignore the arguments put forward at the time. PPL believes this is a significant enough error that it should be raised again. As mentioned in question 4 above, the BNE project is a “merchant” plant with volatile and uncertain revenues over its life. Therefore it would not be able to attract traditional project financing and would not be able to support the proposed 70% leverage.

A number of former IPP companies attempted to have highly geared balance sheets supported by merchant plant revenue in the early 2000's. All of these companies have subsequently gone bankrupt due to their debt burden when the global power market turned down in 2001-3. Only the IPPs with contracted revenue streams have survived.

The regulated utility market in the US has a long standing target leverage of 50% supported by rate of return regulation. These companies have monopoly franchise territories where the regulators grant tariffs that cover all operating costs, capital costs, debt costs and provide a “guaranteed” rate of return. Even with this regulatory support they can only attract 50% leverage.

The oil & gas industry is a more appropriate analogy for a merchant power plant. This industry is dependent upon commodity market revenues with volatile pricing. Oil and gas companies typically have a target leverage of no more than 25%. This allows them to weather market down turns without being strangled by their debt costs.

The SEMC put forward three reference companies, none of which are comparable to a stand alone merchant power plant. ESB is government owned and would have an implied state guarantee behind its debt allowing it to support high gearing. PPL could not reconstruct the 81% leverage presented for AES but it is important to note that over 2/3's of AES' debt is non-recourse project finance debt associated with long term off-take contracts (i.e. not merchant plants).

The example of Viridian is particularly interesting. The SEMC will have no doubt seen recent media reports about Arcapita/Viridian selling Energinor including the Huntstown power station. The reason given is that they need to dispose of the higher risk merchant energy business in order to refinance their debt. While it's not clear how they obtained the debt in the first place, the business is obviously not sustainable with such high leverage. This is a very specific local example of how high leverage is not appropriate for a merchant plant even one that might be considered vertically integrated with a portfolio of customers.

For the reasons stated above, PPL would hope that the SEMC would reconsider its earlier decision to use high levels of gearing in the build up of the WACC. PPL believes 25% gearing would be more appropriate.