



***Response to NIAUR Consultation Paper in Relation to the
possible Cancellation of Generating Unit Agreements in
Northern Ireland issued on the 19th March 2014***

on behalf of

AES Kilroot Power Ltd and AES Ballylumford Ltd

30th April 2014

1.0 Introduction

AES Kilroot Power Limited and AES Ballylumford Limited (together “AES”) welcome the opportunity to comment on the Consultation in Relation to the Possible Cancellation of Generating Unit Agreements in Northern Ireland published by the Northern Ireland Authority for Utility Regulation (“the Authority”) on 19 March 2014 (“the Consultation Paper”).

2.0 Summary

AES’ detailed market modelling and analysis indicates that the two remaining Generating Unit Agreements represent a significant cost and risk to customers and our analysis broadly supports the Authority’s minded-to decision to instruct the cancellation of the for effect in December 2014. In reaching this conclusion AES has evaluated both Economic and Policy Considerations.

In section 3.0 AES outlines our assessment of the economic analysis presented in the Authority’s paper. It is AES’ conclusion that the cost to customers is likely to be greater than the Authority’s base case. Taking account of the adjustments recommended by AES, the cost to customers’ increases by approximately £2M per annum compared to the Authority’s base case.

AES’ evaluation includes the impact of known additional costs, additional income due to PPB and adjustments to the capacity income but excludes the impact of:

- the latest Generation Capacity Statement’s lower forecasted demand;
- potentially increased interconnector net import to the SEM;
- applying commodity price inflation to the Authority’s base case; and
- adjusting for the inherent volatility in IMR and VOM income streams.

Assuming all the additional adjustments above were taken into account, our modelling and analysis indicates the cost to customers would significantly increase above the AES Base case. We have also updated our analysis to reflect current commodity forward prices (April 2014) and the results continue to demonstrate that the GUAs represent a significant cost and risk to customers.

In section 4.0 AES comments on the policy implications of maintaining or cancelling the GUAs. AES is of the view that maintaining the GUAs will add significant inefficiency and cost to the operation of both the market and the all-island transmission system. Furthermore the presence of the legacy GUAs will continue to dilute market signals in terms of enhancing plant flexibility and continue to be exposed to the cost risks associated with the Change in Tax and Change in Law provisions of the Ballylumford Power Station Agreement (PSA).

AES is playing an active and substantive role as a merchant participant in terms of liquidity, enhanced flexibility and improved operational performance. With our current merchant portfolio we have CFD’s in place that account for 39% of the 2014 non-directed contract market and 33% of the 2015 market. This is from a base of approximately 13% of the merchant generation capacity on an all-island basis. The addition of the Ballylumford CCGTs to our market portfolio will enhance our ability to provide further liquidity to the market.

Under contract AES must comply with the contractual performance obligations of the GUA’s (including reserve and reactive power). We are confident that cancelling the GUA’s will provide

the correct market signals to explore and enhance the envelope of operation of the Ballylumford CCGT by enabling the potential development of enhanced flexibility in line with current and future market requirements with a reduced risk to customers.

AES would also highlight the ongoing work associated with SEM redesign and the fact that it will be restructured over the coming eighteen months to become the I-SEM – a market fully compliant and integrated with the EU Target Model. This SEM redesign is creating significant uncertainty and risks in relation to energy and capacity markets and is also requiring a substantive overhaul of the Grid Codes both North and South. AES believes that the Power NI Power Procurement Business (PPB) legacy arrangement will:

- add unnecessary complexity and costs (including costs associated with regulating PPB and the increasing costs of PPB's participation within I-SEM) to the future market arrangements;
- expose Northern Ireland customers to risks which could be borne by others (including AES) who can better manage such risks; and
- introduce significant inefficiency to the detail design and implementation stages of I-SEM and its associated technical Grid Codes.

From a policy perspective, we believe these are very strong grounds for cancelling the remaining two legacy GUAs.

3.0 Economic Considerations

3.1 Review of the Base Case

AES welcomes the Authority's publication of the financial breakdown supporting table 1.1 'Benefit/Cost to Consumers' in the consultation paper. This section provides AES comments on the base case assumptions.

3.2 Demand Assumptions

As mentioned in the Authority's paper, the base case demand assumptions relate to the previous year's Generation Capacity Statement (GCS). AES would contend that this should be updated to reflect the latest GCS (2014-2023) median forecast which by 2023 is 3.8% lower than the previous median forecast used by the Authority.

3.3 Interconnector Assumptions

The decline in interconnector imports in the Authority's model across the period should be re-examined. The outcome from the Authority's model effectively reduces the net imports into the SEM by more than 50% over the period. This may be because of an assumption that there will be a rising UK carbon tax, but with the Chancellor of the Exchequer's announcement in March 14 the tax will be frozen at the 2015 levels and consequently any such assumption would need to be revisited. This would ensure that the import level would at least remain at the 2015 levels. In addition, given the generation adequacy issue in Northern Ireland post 2016 and the efforts Mutual Energy is expending in returning the Moyle Interconnector to full capacity we believe it is reasonable to assume that the Moyle Interconnector will return to full capacity in 2017.

3.4 Inflated forward commodity prices

It would seem that inflated forward commodity prices have been used in the Authority's model. This has resulted in higher SMP in the later years than should be the case. This in turn leads to the overstating of the IMR for the GUA units in the later years. It is not appropriate to inflate such market based forward/future commodity prices.

3.5 Availability Payments & Capacity Income

AES' analysis of the Authority's model indicates the base capacity value is being inflated by demand growth year-on-year whereas the base availability payment is fixed. The GUAs provide for an annual increase based on RPI indexation whilst the impact of RPI on the BNE calculation is significantly diluted by other assumptions within the BNE cost modelling. Consequently we believe that to ensure a fair comparison, availability payments should be inflated by RPI year-on-year.

3.6 Capacity Income Volatility

Whilst the base availability payments are contractually fixed and only subject to an inflationary increase, capacity income is likely to be subject to much greater volatility particularly in light of I-SEM (indications are that the existing capacity payment mechanism will have to change significantly) and under DS3 (the clear intent is to move some of the value in the capacity pot into the Ancillary Services pot). For a relatively low dispatch plant such as the Ballylumford CCGTs, the combined capacity/ancillary services income is therefore likely to reduce. The assumption that this level of income will remain stable as per the Authority's base case does not represent the most likely outcome and therefore the potential risk to customers is understated.

3.7 Variable Operation and Maintenance (VOM)

The Authority have attributed significant value to constraint payments received by PPB and are including this potential income within the overall economic valuation of the GUA's. There is an assumption in the Authority's base case that the level of constrained running will remain stable until 2019. Such constraint payments are completely at risk as they are entirely reliant on constraint dispatch decisions by SONI, which are driven by system constraints on a dynamic real-time basis and VOM costs provided by AES. This constant constraint revenue would appear to be at odds with a drive from the SEMC and Regulatory Authorities for the Transmission System Operators (TSOs) to be more innovative and robust in terms of managing the cost of constraint dispatch with a clear focus to reduce costs to customers.

Furthermore, given the forecasted wind penetration level for Northern Ireland, the current repair/reconfiguration proposals implying the Moyle Interconnector is likely return to full capacity in 2017, and the range of Energy Storage options being proposed for Northern Ireland, it is our view that the level of constrained running for Ballylumford CCGTs is likely to decrease significantly. At the very least AES believes the model should taper constraint running to equal MSQ level by 2019.

3.8 Fuel Scenarios & Inframarginal Rent (IMR)

The Authority has considered a number of scenarios in relation to the impact on customers from retaining each GUA. AES believes that the high and low gas price scenarios as modelled are simplistic and do not represent the industry standard option spread valuation approach where commodity volatility is an integral part of the base case valuation. AES would also emphasise the inter-relationship between coal, gas and carbon pricing – the IMR associated with the GUA contracted units is determined by the relative position of the commodities not the absolute value of each e.g. a low gas price could easily coincide with a low coal and carbon price (as has been the case recently) and the merit position of CCGT Unit 20 and CCGT Unit 10 remains unfavourable to customers.

AES have applied stochastic modelling techniques to determine a range of potential commodity outcomes and applied these using Plexos market modelling software to generate 100 simulations. On the basis of our stochastic analysis our assessment is the scenario of a sustained 50% movement in gas price has a probability of occurrence of less than 1% and must therefore be viewed as an extreme and unlikely scenario.

The relatively low level of market scheduling (approx. 15% capacity for CCGT Unit 20, 3% for CCGT Unit 10) reflects the position of the generating units in the merit order stack as of today. However, with the imminent commissioning of the Great Island CCGT 460MW, the planned increase in wind capacity and the coupling of the Irish market with other EU markets, the level of market scheduling is likely to decrease as the CCGT units will be pushed further out of the merit order. In addition, with the suggested review of the interconnector assumptions (see 3.3) it is AES' view that the IMR will reduce rather than increase over the period.

3.9 Other GUA Costs

In the Authority's base case the cost of fuel stocking is dropping over the period. However, as per current fuel stocking requirements from PPB, it should be retained at the current level of £150,000 per annum. In addition, the cost of credit associated with the gas contracts as borne by PPB (£180,000 per annum) has not been included in the base case.

3.10 Gas Supply Contract

The benefit of below market pricing in the current gas supply contract (for the period 2014-2016) gives a favourable pass through of gas supply costs of circa £1.3M per annum to PBB. This has not been included in the Authority's base case, but has been included in the overall assessment within the revised AES base case.

3.11 Firm Gas Capacity Costs in Northern Ireland

The current contracted firm gas transportation capacity for AES Ballylumford on the SNIP of 1m therms per day terminates at the end of Q1-16. Going forward this gives the opportunity to be more flexible with regards to the amount of firm gas transportation capacity held. However, other significant factors may also impact the overall cost including changes to the capacity/commodity split, availability of secondary products, introduction of an entry/exit regime, bidding of gas capacity and other potential changes required to comply with the EU 3rd Energy package. AES would also note the current plans for infrastructure expansion (e.g. the 'Gas to the West' project) as per the Authority's Licence Application Process Launch on 6th February 2014. Therefore, whilst firm gas transportation capacity holdings could be reduced, an

increase in the postalised tariff due to 'Gas to the West' will likely significantly offset any saving. In addition, the impact of other potential changes affecting the overall cost of holding firm gas capacity are not yet clear.

Given these risks and uncertainties, AES take the view that it is a reasonable assumption to base the quantum of gas capacity costs on existing rates in the period beyond 2015.

3.12 Short Term Gas Capacity

Following proposed modifications to the Bidding Code of Practice (BCoP) first raised in 2013 to allow inclusion of gas transportation capacity costs in generators Commercial Offer Data (COD), there have been a number of consultations culminating in the issue of decision paper SEM-14-018 on 13 March 2014. In essence the decision paper recognises that in certain circumstances a generator could potentially include gas transportation capacity costs in its COD. However, with the current gas market structure in Northern Ireland, no generator operating in Northern Ireland can include such costs. Even with the more liquid gas market in the Republic of Ireland (RoI), it is our view that the tightly defined parameters in the modified BCoP would make it difficult for a generator to justify inclusion of such costs. Since the issue of SEM-14-018 AES has seen no evidence that would indicate that RoI generators are now including gas transportation capacity costs as part of their COD.

4.0 Policy Considerations

4.1 Market Liquidity

AES strongly asserts that the cancellation of the GUAs will enhance market liquidity as AES would become a fully merchant player across a portfolio of generation technology. We note that a number of other participants supported this view in previous responses to contract cancellation consultations. In addition, the uncertainty associated with a rolling six months option to terminate is in itself a barrier to liquidity as it makes hedging over a longer timescale difficult.

In support of this claim AES would highlight that in the past 18 months AES has become a very active participant in the forward Irish Power market, offering significant volume through both hosted auctions and the OTC auctions. AES has successfully traded and continues to offer a variety of products (Base Load & Mid Merit, monthly and quarterly basis with trade sizes ranging from 5MWs to 100MWs). AES has secured a broad counter-party portfolio including smaller suppliers, such as LCC Power clearly indicating AES is offering a range of products, prices and contract arrangements that are attractive to Suppliers both large and small.

The table below (volumes traded through the Tullett Prebon Auction Platform) demonstrates the current significant presence of AES in the Irish Power CfD market. As of the 25th April 2014, excluding the PSO auctions, AES trades account for 39% of the CfD traded volume for 2014 and 33% for 2015 and these contracts cover every period from Jan 14 to Dec 15.

25TH APRIL 14		TOTAL CfD VOLUME	AES CfD TOTAL	Overall %
2014	GWhs	5,108	2,007	39%
2015	GWhs	1,938	645	33%

4.2 Market Power

In relation to market power, this has previously been considered fully by the SEM Committee and also the Office of Fair Trading. Given the diverse range of market power mitigation measures in place within the SEM, the view was that market power is not to be a significant risk on either an all Island or on a regional Northern Ireland basis. Given the breadth of market power mitigation tools available to the Authority, the transparency within SEM and increasingly robust EU regulation of energy markets (including REMIT and EMIR) we do not believe that GUAs are an efficient, effective or necessary market power mitigation tool.

4.3 Flexibility

Whilst under contract AES is tied to complying with the contractual performance obligations as set out in the GUA's. The Authority and TSOs have clearly indicated that increased flexibility and enhanced performance are essential in terms of facilitating renewables and reducing costs to customers. AES is confident that, in relation to CCGT Units 10 and 20, cancelling the GUA's is the only effective way to allow this to happen, with the least risk to customers. On a merchant basis AES would be incentivised to explore and enhance the envelope of operation so developing enhanced flexibility and performance in line with market requirements. This has been clearly demonstrated by the enhanced performance and flexibility of the AES Kilroot dual rated units since they commenced merchant operation in 2010.

4.4 Effective Competition

AES fully supports the Authority's assertion that removal of existing legacy arrangements would help improve the overall efficiency the operation of the system and more importantly of the energy market providing relevant and appropriate signals and hence promote greater competition within the wholesale market. As mentioned above, whilst under contract AES is focused on compliance with the GUA and is somewhat insulated from market signals and incentives. This will lead to a dilution of the effectiveness of market signals which is clearly undesirable particularly in light of the market reforms required for I-SEM and DS3. Therefore the GUA contracts add significant inefficiency and potentially significant costs to what should be a competitive and efficient all island energy market.