ESBI RESPONSE "THE VALUE OF LOST LOAD, THE MARKET PRICE CAP AND THE MARKET PRICE FLOOR: A CONSULTATION PAPER"

INTRODUCTION

This response is submitted by ESB International on behalf of Coolkeeragh ESB Ltd, Hibernian Wind Power Ltd, ESB Independent Energy RoI Supply and ESB Independent Energy NI Supply. ESBI appreciates the opportunity to comment on these three important regulatory parameters and we have no objection to all or part of it being published by the Regulatory Authorities (RAs).

This response comments on selected sections of the Regulatory Authorities (RAs) paper. ESBI would like to highlight the following aspects of our response:

- The Value of Lost Load (VOLL) proposed by the RAs does not appear to be inappropriate however it is imprudent to determine this figure without some form of customer survey that can be used to benchmark the approach.

- It is not appropriate to couple the price-cap to VOLL when capacity payments are made to generators. The current price cap has the potential to significantly overpay generators and ESBI recommend that the level is reviewed.

- A price floor is difficult to determine and the RAs proposal appears reasonable.

SECTION 3 – THE VALUE OF LOST LOAD (VOLL)

ESBI agree with the RAs assessment that VOLL should correspond to the amount of money that customers would willingly pay in order to have their supply interrupted. ESBI recognise that it is difficult to ascertain a value for this without an active demand-side market and we propose that an appropriate customer survey should be carried out. While the trading and settlement code does not allow for VOLL to be set dynamically to represent the range and the profile of results that is likely to result from a customer survey, it is still a worthwhile exercise. The range of VOLL quoted in the consultation is from 250€/MWh to 50k€/MWh, so it seems imprudent to set VOLL without some survey of customers to establish a reasonable range or benchmark to compare.

Also as the optimal duration of outages in the year has been set at 8 hours it is not unreasonable that the same calculation is used to determine a proxy for VOLL. ESBI caution however that it is not prudent to take this figure alone as the value for VOLL and propose that some level of customer survey be carried out to establish an appropriate range.

SECTION 4 – MARKET PRICE CAP (PCAP)

ESBI agree that there is a need for a price cap in the market. Wholesale electricity is priced after it has been consumed and there is not an appropriate infrastructure to allow real-time

demand response. ESBI do not believe that the price cap in the SEM needs to be coupled with VOLL. The appropriate methodology for setting a price-cap is a function of the market design and it is not appropriate to couple VOLL and the market cap in this market.

The SEM is a gross mandatory pool with capacity payments. The total amount of money that will be paid out through capacity payments each year is calculated by the RAs. The RAs calculation determines the capacity contribution that a new peaking plant would require from the market. This calculation includes the contribution that the generator receives towards their capital costs from the energy market (infra-marginal rent). Although the price cap that was used in this calculation has not been published ESBI believe that unless the same assumptions are carried between the calculations of the price-cap and the capacity pot, then generators may be significantly overpaid. The potential for overpayment is illustrated for a peaking generator in the simple calculation outlined in the appendix.

It is important to understand that while there is a significant proposal for overpayment, the solution is not to decrease the capacity pot, since its very existence is to reduce the uncertainty of revenue for a generator. The appropriate approach in this case is to examine the price-cap used in setting the capacity pot. The modelling exercise to determine the inframarginal rent should also consider the assumed load-shedding duration. The key parameters used in modelling the capacity pot need to be consistent with those used in the price-cap calculation. ESBI has not examined the RAs modelling in detail, however our high-level modelling has shown that setting the price-cap to the proposed level of VOLL (10000€/MWh) is inappropriate. ESBI propose that a lower price cap, which is consistent with the capacity calculation is considered.

PRICE FLOOR (PFLOOR)

ESBI agree with the RAs that it is appropriate to implement a price floor. It is recognised however that there is not an obvious economic rationale for setting a price-floor in first instance. It is worth noting however that the majority of generators exposed to a negative price will be those who are limited in their ability to respond. This is similar to the situation for the inelastic demand-side. Perhaps in theory generators should be surveyed to discover the amount that they are willing to pay to remain on-load during an optimal number of over-generation events rather than become price responsive. However this approach is clearly not practical and the RAs proposed level appears to strike a reasonable balance between generator exposure to negative prices and a suitably sharp pricingmechanism.

APPENDIX – POTENTIAL FOR DOUBLE PAYMENT WITH PROPOSED PRICE CAP

This calculation shows how a 182MW generator may receive an over-payment based on the current level of price-cap that is proposed.

Quantity	Value	Comment
Marginal cost of a peaking unit	900€/MWh	This is probably on the high-side but it is conservative in this example
Duration of Load Shedding	8 hours/year	Comes from the adequacy standard so it is reasonable to assume this level of outages
Size of a peaking generator	182MW	From the RA BNE paper
Price Cap	10000€/MWh	Taken from the proposal

Calculation 1 – price cap used in calculation of capacity pot

Assumed infra-marginal contribution in the energy margin €14.19/kW (from RA paper). Based on these figures the energy revenue contribution received by a peaking unit of 120 MW would be approximately €2.6M.

Calculation 2 – inframarginal contribution with 8 hours loss of load

Inframarginal rent at times of load shedding = Price Cap less Marginal Cost

= 10000-900

=9100€/MWh

Assuming that the optimal generation standard is achieved: 8 hours per year.

Inframarginal rent in a year:

= 9100 * 8 * 182

Approximately €13.2M

Result: While the calculation used in setting the capacity payment assumes €2.6M, the infra-marginal from the market (assuming that the adequacy standard is met) will be in the order of €13.2