

SEM Establishment Programme

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Recommendations

EirGrid and SONI welcome the opportunity to present their views on the setting of the values of lost load (VoLL), the Market Price Cap (PCAP) and the Market Price Floor (PFLOOR).

Response to Section 3: Setting the level of the Value of Lost Load (VoLL)

- The proposed value of €10,000/MWh for VoLL is at the upper end, although within the range, of that expected.
- Regarding the inequalities used to calculate VoLL, EirGrid and SONI would recommend using the Expected Unsupplied Energy (EUE) in such calculations rather than the Loss of Load Expectation (LoLE) (referred to as D^* , the generation security standard in Section 3.2.2 of the consultation paper and in the equation below). LOLE is concerned only with the likely number of hours of shortage. EUE goes further and takes account also of the extent of shortages. So while LOLE is expressed in hours/year, EUE is expressed in MWh/year. The link between LoLE and EUE is dependent on the characteristics of the electricity supply system.

$$VoLL \leq (FC_{peaker} / D^*) + VC_{peaker}$$

- There appears to be an inconsistency in relation to the description of VoLL's impact on capacity payments in the second paragraph of Section 3.1 which EirGrid and SONI would ask to be clarified.

Response to Section 4: Setting the level of the Market Price Cap (PCAP)

EirGrid and SONI wish to express some concerns at the proposed setting of the market price cap (PCAP).

- The consultation makes reference to a number of other electricity markets and the levels at which the Price Cap is set within them. The SEM has both an energy market and a capacity payments mechanism. In many markets which have a capacity element, notably in the United States, PCAP is set at a value much lower than VoLL e.g. €1000/MWh in the ISO New England and PJM markets. Capacity Markets are generally put in place to provide a revenue stream for participants to service their fixed costs thus avoiding the need for large price spikes. Setting PCAP to an appropriate level ensures that energy prices do not become elevated to the extent that they damage the economy while at the same time ensuring generators can cover their

fixed costs. The Australian National Electricity Market (NEM) referenced in the consultation paper, which also has a market price cap set equal to VoLL, has an additional cumulative price threshold mechanism which works alongside the price cap. NEM has no capacity market and no constraints payments. By comparison, the Independent Market of Western Australia which does have a capacity market has a current price cap of \$AUS413/MWh, considerably lower than that proposed for SEM.

- In setting the level of the price cap it should be borne in mind that for every hour that the SMP goes to €10,000/MWh, the load weighted average SMP will increase by approximately 3%. Therefore, if the SMP goes to €10,000/MWh for 36hrs it will double the cost of electricity. Alternatively, if the PCAP were €1000/MWh, for every hour the SMP goes to PCAP the load weighted average SMP would increase by approximately 0.3%. In this case, it would take over 2 weeks of the price being at PCAP to double the cost of electricity.
- EirGrid and SONI believe that the capacity payment mechanism combined with the bidding principles by which participants must abide, render it difficult to justify a bid greater than €1000/MWh. If PCAP is set to a level as high as that proposed, the market would be highly dependent on the success of the market power mitigation strategies to ensure that the prices do not go to very high levels as a result of participants manipulating the market.
- If a unit bids at the proposed level of PCAP i.e. €10,000/MWh, although it will not be scheduled, it could be constrained on for security reasons, whereby EirGrid and SONI would incur substantial constraint costs. This constitutes a key risk for the SMO given that tariffs are set ex-ante and that constraints must be paid regardless of whether the SMO recovers their costs from suppliers for any given billing period.
- If the uplift requires the SMP to be greater than €1000/MWh to ensure revenue adequacy and PCAP caps this at €1000/MWh, make whole payments will ensure that all units recover their costs.
- While the imposition of PCAP introduces its own cost to consumers in the form of regulatory risk and can be seen as overregulation, it is often regarded as being the lesser of two evils when compared to the boom and bust cycles of units recovering their fixed costs through price spikes.
- While EirGrid and SONI note the Regulatory Authorities provision to lower the market price cap if prices spike as a result of uplift, they believe that the current proposal to review PCAP annually lacks the flexibility to respond to such spikes and would ask the Regulatory Authorities to clarify the provisions for lowering the market price cap more frequently if deemed necessary.
- If prices rise to the proposed level of PCAP, i.e. €10,000/MWh, rising prices will have a compounding impact on both credit cover which must be financed by suppliers and imperfections charges which will need to be financed by the SMO.

Conclusion

EirGrid and SONI are of the opinion that a lower price cap (PCAP) in the region of €1000/MWh, would be more appropriate for the specific market structure proposed for SEM, given that it includes capacity and constraints payments and uses short run marginal cost bidding principles.