



127 Baggot Street Lower,
Dublin 2,
Ireland.

DATE 5th of October 2016

By email to Thomas Quinn (tquinn@cer.ie) and Karen Shiels (Karen.Shiels@uregni.gov.uk)

RE: EAI Response to ISEM Capacity Requirement/Capacity De-rating methodology consultation

Dear Thomas and Karen,

- EAI welcomes the opportunity to respond to this consultation.
- EAI has consistently highlighted the potential for conflicts of interest within the Eirgrid Group and therefore welcomes the RA-led independent consultation on the de-rating factor to apply to the interconnectors in ISEM as part of this consultation.
- As explained by ESP at the workshop on 29 September, the methodology employed “relies on a range of estimations, simplifications and a view of the future”. EAI appreciates the challenge of running a forward looking model of I-SEM/BETTA prices in the current circumstances and therefore believes that ESP’s overall approach of instead forecasting the relative supply and demand balance between I-SEM and BETTA seems broadly sound provided that the assumptions made are sensible and prudent.
- However, we have concerns that some key assumptions made are overly optimistic and / or have been oversimplified and other important considerations omitted with the risk that the reliability of the ICs are over-stated **and** an insufficient volume of capacity will be procured in the capacity auction.
- We therefore advocate a more prudent approach to the estimation of both the de-rating factors for the ICs and the capacity requirement to apply in I-SEM · We believe that this would be in the consumers interests as:
 - The cost of over-procuring (at CONE) is less than the cost of under-procuring (at VOLL).
 - An over-reliance on the ICs may also imply increased costs for suppliers (via a widening of the hole in the hedge as ICs only pay out during a physical outage/“technical failure”]).

IC De-Rating

- We know that GB is facing scarcity over the coming years, as evidenced by increasing exports from SEM to GB over recent months and recent price spikes in GB of £1000/MWh.
- The prolonged forced outage of the Moyle IC in the past and the current EWIC forced outage expected to endure for 6 months throughout the peak winter months to end of February 2017, highlights the physical risks relating to ICs as a means of procuring long term security of supply.
- The proposed approach does not make adequate provision for either of these considerations. Despite the assertion that the Interconnector technical availability is 'derived from historical data obtained for EWIC and Moyle', the recent extended outage on Moyle and the ongoing outage on EWIC are not included. The outputs from the modelling exercise therefore overstate the actual contribution of both assets to the provision of security of supply on the island.
- The likelihood of coincidental scarcity events between SEM and BETTA is high and it is difficult to predict when a period of coincidental scarcity between these markets might occur and the domino impact that might follow.
- Using the capacity requirement (as opposed to installed capacity) as the baseline assumption for the SEM over-estimates the number of scarcity events in SEM and therefore over-estimates the reliance we have on flows from GB and the contribution of ICs to scarcity events in SEM.
- We would seriously question the assumption that SEM will couple 100% with GB in the DAM/IDM timeframes because continuous trading in the IDM under the interim IDM solution for I-SEM will be de-coupled. There is also a significant lead-time relating to the two proposed Intraday Auctions, which only enables re-trading in the last 12 and 6 hours of a trading day.
- Furthermore, scarcity will occur in real time (after Gate Closure) and therefore any reliance on IC capacity in this timeframe requires effective SO-SO cooperation and a willingness on the part of National Grid to export power to I-SEM when its margins are tight.

In summary, the EAI believes that there are a number of flawed assumptions made in the derivation of the IC de-rating factor, the effects of which are to over-estimate the reliance that can be placed on the ICs during scarcity events, under-procure capacity to meet the island's 8 hour LOLE security standard and put suppliers at risk of an increased hole in the hedge. For these reasons, the EAI believes that the assumptions used to calculate the de-rating factors for the ICs should be revised to include more realistic estimates of; a) the actual availabilities of the ICs, b) the level of future expected scarcity and price spikes in GB, c) the likelihood of scarcity events in the I-SEM, and d) the efficiency of market coupling in the absence of XBID for the intra-day market.

Capacity Requirement

- The objective of the CRM is to provide a margin of capacity that gives business and consumers a secure and reliable supply of electricity over the longer term.
- We estimate that the TSOs' estimate of 7,312 MW de-rated capacity (equivalent to 8,012 MW Installed) falls short of the volume required to meet the 8hr LOLE standard (9,066 MW - before any uplift for operational reserve) which is a simple derivation from the capacity and surpluses identified in the latest Generation Capacity Statement. Given that the GCS is the primary assessment of the capacity requirement, the EAI would expect that the capacity requirement determined for the CRM should align with the GCS assessment but it appears to be

significantly understated. There must be alignment between these two assessments rather than the attempted reconciliation with the SEM CRM Capacity requirement that EAI has previously challenged as being flawed and understated.

- Using Cost of New Entry (CONE) estimates in the current scenario of excess capacity overvalues the cost of capacity and therefore underestimates the capacity requirement.
 - The capacity auction is unlikely to clear at CONE. The calculation could be amended to account for cost in both a surplus (calculate at net going forward cost) and deficit (use CONE) scenario respectively.
 - We would suggest a further input to this analysis is an estimate of the clearing cost of the I-SEM CRM. In an oversubscribed auction (and further depending on the inclusion of locational distortions), rational economics would indicate the cost of over procurement is substantially less than a BNE cost. A true reflection of this cost might reduce the disorderly exit of marginal units needed to maintain system security.
- We disagree with the proposed approach to net the anticipated generation of de-minimus wind from projected demand (thereby depressing demand and overall capacity requirement) in advance of calculating the capacity requirement. This generation set should be included as part of the marginal de-rating calculation and only then considered as part of the de-rated capacity requirement calculation.

Conclusion

- In light of the above, EAI advocates that the assumptions behind the methodology be revisited and revised accordingly and a number of sensitivities be considered in combination to ensure that a prudent estimate of the reliability of the ICs is approved. This is particularly important given that interconnectors into I-SEM represent a relatively high proportion of overall capacity and given the uncertainties associated with the new market arrangements, including the effectiveness of market coupling.

Yours sincerely,



Stephen Douglas
Senior Advisor
Electricity Association of Ireland (EAI)