



***Response to Integrated Single Electricity Market (I-SEM)
Consultation on
Proposed Locational Capacity Constraints Methodology***

SEM-17-027

**On behalf of
AES Kilroot Power Ltd and AES Ballylumford Ltd**

16th May 2017

Capacity Remuneration Mechanism

Introduction

AES welcomes the publication of the consultation document on I-SEM Capacity Remuneration Mechanism (CRM) Proposed Locational Capacity Constraints Methodology (SEM-17-027) and the opportunity to provide comments on the mechanism for determining which constraints should be included in the first transitional auction and subsequent auctions. AES would like to submit the following consultation response to the Regulatory Authorities.

AES is a global energy company with assets in the all island market consisting of coal and gas fired conventional plant, CCGT plant, additional distillate fired peaking gas turbine plant and a Battery Energy Storage Array (BESA). AES is a non-vertically integrated independent generator which owns and operates Kilroot and Ballylumford power stations in Northern Ireland with a combination of merchant and contracted base load, mid merit and peaking plant. The responses to this consultation are therefore conditioned by the nature of our current position and portfolio of assets operating in the SEM.

CRM PROPOSED LOCATIONAL CAPACITY CONSTRAINTS METHODOLOGY

AES welcomes and supports the inclusion of the consideration of locational capacity constraints within the CRM process and the further development of a methodology to determine appropriate locational constraints to be taken into account. Whilst AES believes it is difficult to distinguish pure capacity constraints from those influenced by insufficient system services provision we support the development of a simple and transparent methodology for determining appropriate capacity constraints.

AES supports the proposed outcomes of the methodology i.e. to identify locational capacity constraint areas, the level of the constraint and the minimum de-rated MW requirement. AES also proposed that the methodology should include the identification of the minimum number of units required in the identified constrained areas.

AES also strongly supports the approach that the methodology developed will be determining locational capacity constraints that will be used as inputs to all future auctions and primarily uses the same approach, tools, standards and assumptions used to calculate the all island capacity requirement and is consistent with those used to identify transmission network constraints as detailed in the 10 year transmission forecast statement.

Additional technical references used in development of the methodology or providing input to the methodology are identified in the consultation paper including the All-island Generation Capacity Statement which includes reference to the generation adequacy standard for Northern Ireland, Ireland and All-island. This standard is quoted as the Loss of Load Expectation (LOLE) and will be used to set the demand curve on an unconstrained all

island basis and subsequently for any constrained areas identified by the network topology assessment.

AES supports the view that in the absence of a second north south tie-line, NI and IE should be treated as two non-meshed systems and therefore that NI is a level 1 locational capacity constraint area. The LOLE assessment uses a similar approach, assumptions and the portfolio and demand available to that area to identify the lower bound of the minimum MW requirement in each of the non-meshed level 1 capacity constrained areas.

As stated the methodology makes use of existing tools and assumptions taken from other publically available sources such as the Generation Capacity Statement 2017-2026 and is consistent with these such as: demand forecasts, existing network, least worst regrets scenario etc. with the notable exception of the LOLE Standard used for Northern Ireland. The GCS 2017-2026 states a LOLE standard for NI of 4.9 hours for capacity adequacy assessment which would apply within the identified level 1 locational capacity constrained area of NI. However in determining the methodology the TSOs have decided to use an 8 hour LOLE consistent with that used for an all island basis which would identify a lower minimum MW requirement in the identified area than would be required potentially impacting on the security standard for NI and security of supply.

This clearly goes against the assumptions used in the GCS and no information is provided to explain the random departure from the “simple and transparent” process, contrary to what is in Eirgrid’s own document and what was expected. Failure to use the correct security standard and procure sufficient locational capacity could place the security of supply in NI at risk. The correct LOE standard should be used for NI in determining the minimum locational MW requirement for the initial and subsequent auctions.

With respect to de-rating factors, AES’ view is that to enable sufficient time for modelling and analysis in preparation for the start of the capacity market the proposed derating factors to be used in the first transitional auction should be published as soon as possible. Little detail is provided in the amendment paper and although stability of the factors is to be welcomed the consequence of a decrease in the de-rating factors across all technologies of 3% - 5% provides cause for concern.