Response to UREGNI call for evidence on - 
Review of Electricity Distribution and Transmission 
Connections Policy

on behalf of AES Kilroot Power Ltd and AES Ballylumford Ltd

11 January 2016
AES Response – Qs.1: Do you agree with these strategic priorities?

AES agrees that connections should maximise efficiency and investment to deliver a secure, affordable and sustainable electricity system. It is understood that Connection Policy exists to facilitate the overarching Energy Policy, and therefore emphasis should be on the management of connections in order to enable required generation to access the network. Further to this point, and in support of the priority to maintain or improve secure supply of electricity in Northern Ireland, AES suggests that consideration be given to how connections, and therefore volume of capacity are allocated to differing types of generation (e.g. synchronous Vs non-synchronous generators) in order to maintain security of supply in Northern Ireland. This scope of this priority should also encompass flexible technologies such as energy storage, which have a valuable role to play in increasing network stability, and also reducing overall cost by way of averting network upgrade works.

With respect to the principle of providing a timely, robust and flexible connections process, the current approach of forming a process queue on a first-come-first-served basis, without splitting of technologies regardless of their contribution to security of supply is considered by AES to be detrimental to the long-term interests of NI consumers, and risks pre-empting market outcome and inadvertently setting – as opposed to delivering – energy policy.

Overall, connection policy should seek to:

- Deliver on Energy Policy;
- Support, and be responsive to market structures (I-SEM Capacity Market, DS3); and
- Catalyse investment and enable competition within the energy market.
- Delivery of the quantity, quality, and location of generation required to meet the system needs
AES Response – Qs.2: Do you agree that these are the main developments we should be mindful of? Are there any other developments which are important?

In reference to Section 2, the forthcoming consultation should address the policy of non-discrimination between technologies when allocating connections, given the implication for security of supply, as detailed in AES’ response to Qs. 1. For example, if a broad first-come, first-serve methodology is maintained, ca. 900 MW\(^1\) of renewable generation would be connected prior to new dispatchable capacity required to meet security of supply needs in Northern Ireland, potentially preventing winners of the T-4 CRM from securing connections in sufficient time to deliver on the auction commitments.

AES supports the ability to tailor connection agreements, and to make them bespoke, as each technology, location, and approach may differ. This should be viewed in the context of maintaining a secure and sustainable energy system, with emphasis on the need for diversity of generation.

The introduction of the ISEM and associated CRM means that market participants across the island will be competing in multiple energy, capacity, and system services markets. The delivery of new generation – of any technology – will be enabled or hindered by the connection policy. Specifically as it pertains to the CRM, if connections are offered to one competitor and not another, the connection policy would have the effect of excluding a participant from competing in the auction, or increasing risk and/or cost of connection thereby reducing the competitiveness of one against the other. The consultation should assess how to ensure the connection policy does not reduce competition, pre-empt auction results or favour one market participant over another (within and across jurisdictions). Synergy needs to exist between the connections process and the Capacity Remuneration Mechanism with a clear connect between receiving a Reliability Option for new capacity and receiving a connection offer. Overall, connection policy should support investor confidence, thus catalysing investment. In a competitive auction situation, the ability to de-risk elements of a development is key. With respect to connection policy, providing certainty on the process, timeline, and cost of achieving connection provide significant incentives to investors.

The consultation should further take into consideration the distinct characteristics that different technologies offer in meeting the systems needs. For example, energy storage can be a source of both supply and demand, and can help to defer and defray investment in grid infrastructure. Specifically, how should an energy storage project that creates capacity on the grid be treated in the connection policy?

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\(^1\) Under the Phase 1 connection queue, in addition to the ca. 1GW of renewable generation already connected
AES Response – Qs.3: Is there a role for connections policy to promote effective network management? If so, what are the issues which need addressed and potential solutions as part of this review?

No further comment.
AES Response – Qs.4: Should we review the distribution charging framework, with a view to making connection charges deeper? If so, how should this be designed? What are the benefits, costs and risks of doing so?

The need to understand the costs associated with their proposals is critical to developers, and therefore the costs associated with shallow or deep reinforcement and the magnitude of cost that will be passed to the applicant requires to be as transparent as possible. Clear decision making on shallow Vs deep reinforcement is key. In this topic, as well as others, the consultation should take into account policies in the Republic of Ireland and how difference can create competitive disadvantages between market participants in the two jurisdictions that will be competing side-by-side in the ISEM. For example, should Northern Irish market participants be required to pay more for connections than their ROI counterparts, this would lead to increased development cost, rendering NI projects less able to compete in the ISEM. Given the need for generation in NI, any such disadvantage may then ultimately be borne by the Northern Ireland consumer. Referring to AES’ response to Qs.2, providing certainty on the process and cost of grid connection are key to de-risking development, and securing investment.
AES Response – Qs 5: Should we review how the connections process and queue is managed? If so, what are the issues which need addressed and potential solutions?

Security of supply should be the overarching policy concern in the connection process, which in itself promotes a safer, stable energy system. The present first-come-first-served process presents a bias towards connection of renewable energy technologies, which hold shorter lead times to achieving connection. This is detrimental to development with longer lead times, for example conventional thermal generation, with ca. 4 – 5 year lead time. Cognisance needs to be given to the benefits differing technology classes bring to the system, and therefore longer lead-time development should not be held up due to short term system capacity issues, and should be assessed separately, as should energy storage technologies which bring the potential to realise system benefits in the near term.

The issue of hoarding capacity, and therefore sterilising connection for others, should be addressed. Consideration should be given to the different tools available to incentivise the release of connection applications of non-viable or reduced probability projects. For example, use-it-or-lose-it principles, milestones (reflecting the technology, size and the development timescale of an application), assessment of viability in achieving route to market, reimbursements, etc should be assessed. The potential contributions to the grid from non-renewable generation may be prevented should hoarding of capacity occur, therefore resulting in diminished stability and safety.
AES Response – Qs 6: Should we consider connections customer service, engagement and pricing transparency as part of this review? What are the issues which need addressed and potential solutions?

Please see the above answer to Qs.4.
AES Response – Qs.7: Are there other issues we should review? Which issue(s) are in your view the most material and why?

There are issues to be reviewed as part of this policy paper, and these are highlighted in the diagram on page 23. These are issues within the Connection application process only, and it should be suggested that additional factors should be incorporated into the process to ensure the best outcome for the consumer:

1. Locational selection
2. Security of supply
3. Long term planning of infrastructure investment
4. Facilitation of market mechanisms, in particular the I-SEM Capacity Market, and DS3