CMM TECHNICAL WORKING GROUP MEETING NOTE

Friday 18 February 2022 (10am-12pm AEDT)

Chair: Neil Gibbs

Attendees: Anthony Rossiter (Powerlink), Amin Masoumzadeh (AGL), Marghanita Johnson (AAC), Marilyne Crestias (CEIG), Shevy Moss Feiglin (AGL), Con Van Kemenade (Enel Green Power), Brian Spak (ECA), Katie Yates (Ausnet), Andrew Richards (EUAA), Chris Tetzke (Intergen), Matthew Dickie (RWE), Dev Tayal (Tesla), Manas Choudhury (Edify), Bill Jackson (Electranet), David Heard (ECA), Sarah-Jane Derby (Origin), David Calder (Alinta), Jess Hunt (ESB), James Hyatt (ESB), Tom Meares (ESB), Suzanne Falvi (ESB), Tom Livingstone (ESB), Arista Kontos (ESB), Tom Gibson (OnLine Power)

Apologies: Robert Pane (Intergen)

Time	Topic	Key points/action items
10:00	TAR objectives - presentation	 The ESB notified the working group that ECA was leading work to refine the case for change for this reform. The ESB presented the draft objectives for the project from the project initiation paper published in November 2021.
10:10	TAR objectives – open discussion	 Some issues noted by members of the working group were: Any changes to the congestion framework should seek to give rise to market outcomes that are aligned with the ISP. It was noted that under the existing rules the ISP models the "least-cost" system plan. It is not necessary for the ESB to design risk management tools for generators, and instead it was better for the market to come up with the necessary instruments. The ESB noted that the TAR objective was intended to reflect the idea that access reform should reduce subsequent connection risk (if subsequent connection is inefficient from a whole of system perspective). Some working group members considered that it was important to focus on longer-term investor confidence as a key part of the reforms. On objective 4, perhaps the wording "risk management" isn't appropriate, and should rather be "investment certainty".

10:25	TAR assessment criteria - presentation	 Need to keep in mind the timeframe that we are focussed on. Are the reforms focussed on issues seen in the market now or issues that we anticipate will occur in the future. The ESB should clarify how transmission network investment relates to the problem statement, given that the focus of access reform is on how supply-side resources access and utilise the transmission network. The issue of whether the reform aims to manage or solve congestion was noted. The issue of whether MLF volatility forms part of the objectives was noted. A generator connecting side-by-side and causing congestion is different to a cheaper generator undercutting a more expensive generator. Noted that investor confidence shouldn't come at the expense of the consumer. Important to get clarity on what 'rewards' for storage actually mean in objective 3. The ESB presented the proposed assessment criteria for assessing the alternate models from the project initation paper in November 2021.
10:30	TAR assessment criteria – open discussion	 Some issues noted by members of the working group were: Criteria 4 of the assessment criteria looks to be about transmission cost sharing, and is perhaps out of place in this set of reforms. The ESB noted that part of ESB's task is to develop a model that accommodates government REZ schemes. Some government REZ schemes seek to allocate at least part of the cost of new shared transmission investment to investors rather than customers. The ESB wishes to explore whether there is an appetite to develop an access model that enables investors to fund incremental investments to unlock additional transmission capacity in return for access rights over the additional capacity. This idea stems from concerns that the CMM could act to put a brake on new generation investment. Criterion 3: That risks should be allocated to the party best able to manage the risk, including deciding who bears the risk where it is not possible to mitigate the risk. Criterion 5: There may be two separate points/issues in relation to implementation. Does an overall net benefit criterion need to be applied here? The ESB confirmed it would leverage AEMO's Regulatory Implementation

		Roadmap to inform implementation considerations. Criterion 5: The implementation description could consider dependencies, system complexities and whether mitigation strategies exist for these dependencies/complexities. A key criteria should be the impact on other market and system components. On criterion 5, should government decisions be included in this point? The ISP and RIT-T are based on a least-cost model for everyone in the market, i.e. by assuming that the market delivers the least cost outcome, it implicitly assumes that investment decisions are guided by LMPs. The ESB notes that LMPs have been proposed in the past but this model does not have stakeholder support. The group noted that we may like to include "achieveability" as part of implementation.
10:45	Presentation of alternative models from submissions with open Q&A on alternative models	Participants and the ESB presented the alternative models: Congestion Relief Market: Some issues raised by members of the technical working group were: It is unclear why the congestion relief provider would have to pay more than \$0/MWh for energy behind a constraint. Asked for clarification on the mechanics of the model. Is it a winner takes all model? It was noted that to the extent that you have an overlapping set of bids and offers, the trade will be made. There could be multiple parties that would receive the service. It would be interesting to see what would happen to a generator who was affected by multiple binding constraints, and traded accordingly (complexity). How would the market be scaled up to deal with multiple constraints in NEMDE? It was suggested that the existing constraint violation process could be used to determine the order in which the constraint market would clear. One potential issue noted is if the majority of the congestion relief providers are attached to existing generators (e.g. co-located BESS) or demand response within very integrated entities. How thin will the CRM then be? What incentives would providers have to increase access for others?

 Question on how does a participant determine its congestion relief bid.

Clean Energy Investor Group Model:

- o Issues noted by members of the technical working group were:
 - This seems to be a solution that doesn't account for other factors. Queuing doesn't account for the cost of the energy being provided.
 - Curtailment would only come into play when there is congestion. This will crystalise the assessment of curtailment risk, and provides certainty to the investor.
 - This proposal would promote investment certainty for incumbent generators, but that is not necessarily the right answer for consumers.
 - The rebates under the CMM seem to achieve the same outcome in terms of protection. Does this mean that all generators still receive the RRP? How does it help to soak up excess energy behind the transmission constraint? Does it create a signal that the marginal value of the energy is low or zero at that point?
 - A group member suggested that LMP create a risk premium on the cost of capital.
 - There are issues with queuing, multiple markets are investigating changes to queuing approaches because they aren't working.
 - The model potentially makes the assumption that all new generators have zero marginal cost power.
 - Potential alignment with the "deep connection charging model". The model has operated in many parts of the US and has been controversial due to the long queue it creates.

Locational connection fees/physical access:

- The working group noted:
 - Clarification that the assessment of costs is done in the connections process, and that the connection fee is the cost to remedy harm.
 - This model would exclude all existing generators, and would therefore reduce customer benefits.
 - This puts a lot of reliance on accurate network modelling, it would be interesting to hear how accuracy would be guaranteed/realistic.
 - There will always be some efficient level of congestion in the network. This seems like an add-on rather than a complete solution.

		 How would stand-alone storage be treated – noting it would be exempt or have cost-reflective connections fees given it ould actually "do benefit" more than "low harm". Dual price floor: Issues noted by members of the technical working group were: These models are discriminatory towards renewable generators.
		 This will lead to a higher cost dispatch, will not be efficient. Shaped MLFs: Issues noted by members of the technical working group were: Dynamic losses, or information about losses would be helpful to participants. AEMO should be able to publish this information at five-minute or 30-minute intervals. Losses and congestion are not as different as the ESB is making them out to be. Things that focus on marginal loss factors have a potential impact on the possibility of congestion before you get to the congestion point. Loss factors at individual times are useful, and do impact congestion. Might be part of the solution. Noted improvement in risk analysis during project locational selection with half-hourly loss factor data against each connection point. PIAC model: The working group had no comments on this model. Other: Should elements of the NSW CWO model also be added for consideration here? Noted NSW policy is different from the aim of this process.
11:55	Next steps	 Public seminar on 24 February. Next TWG session – 1 March – a reflection on the seminar and models.
12:00	Thanks and close	