CMM TECHNICAL WORKING GROUP
MEETING NOTES

Thursday 17 November 2022 (2-4pm AEST)

Chair: Neil Gibbs (Online Power)

Attendees: Angela Bourke (DELWP), Anthea Harris (ESB), Amanda Sinden (ESB), Alex Sundakov (Castalia Advisors), Ben Davis (ESB), Connie Liang (Epuron), Daniel Dempsey (DELWP), Daniel Zelcer (CEIG), Dave Smith (Creative Energy), Geoff Houen (DCEEW), Hugo Lewis (DELWP), James Priestly (ACT Government), Jess Hunt (ESB), Jess Young (DELWP), Jonathan Myrtle (Hydro Tasmania), Manas Choudhury (Edify Energy), Martin Hemphill (RES), Mim Balcombe (ESB), Raif Sarcich (DELWP), Sarah-Jane Derby (Origin Energy), Robert Pane (Intergen), Simon Corbell (CEIG), Scott Nicholson (OECC), Tom Gibson (Online Power), Tom Meares (AEMC), Tom Walker (CEPA)

<table>
<tr><th>Time</th><th>Topic</th><th>Key points/action items</th></tr>
<tr><td>2:00</td><td>Welcome, objectives & agenda</td><td>Neil Gibbs opened the session
Anthea provided an overview of the session agenda and introduced representatives from Jurisdictions to observe proceedings.</td></tr>
<tr><td>2:05</td><td>Open forum – discussion of Directions Paper</td><td>The ESB invited the group to make contributions, comments, and raise questions on the released paper. The TWG noted:
The Directions Paper asks if stakeholders would prefer priority access rights (i.e. queue positions) be set for: the life of the participant’s asset, a fixed duration, or a fixed duration with a glide path. It was noted that here may be instances where incumbents have already contributed to funding transmission works. It may not be equitable to treat their access rights in the same manner as other grandfathered rights (that did not contribute to transmission works).
That the length of time for priority access and grandfathered rights are likely to have an impact on financing if the period is not long enough.
The TWG noted that a project would typically expect equity returns after paying down debt. The priority access right may or may not cover the debt period and it may be difficult to assess the</td></tr>
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		commerciality of the project. There is a risk that the period of equity returns may be undermined if this coincided with diminished or lost access rights. The preference might be to assign priority rights for the life of project. ▪ Additionally, assets will have different project lives e.g. battery ~10-20 years, hydro ~50-years. There is a need to take into account the different project lives of different asset types. One option is to calculate the priority duration as a percentage of the asset's project life– this may allow for it to be technology neutral. ▪ TWG member noted that incumbents would still need to bid a price that is efficient and competitive to trigger the queue position (and priority access). As new renewable entrants price out conventional generation, fossil fuel incumbents may not need priority access because a market change has taken place (renewables are facing congestion and competing with each other). ▪ The ESB noted a need to find balance between open-ended and closed-ended options to create enough certainty and coordinate efficient new entry – to strike the right balance between the interests of existing generators and new entrants. The Directions Paper seeks stakeholder feedback on this design choice. ○ The TWG identified concerns about the complexity and cost of the CRM implementation, both for market bodies and participants (similar to the change in systems, business processes and training required for 5-minute settlement?). ▪ Given the CRM is a voluntary market, the ESB sought insights from the TWG on whether each participant would assess its relative costs and benefits of the CRM participation and opt-in, to the extent the benefits outweighed the costs.

		▪ TWG member questioned whether the CRM was truly voluntary, particularly if the priority access was introduced. Participants with lower queue positions would be more likely to need to opt-in to the CRM to achieve physical dispatch. ○ The TWG questioned whether the CMM remains as a backup option – how will the CMM be assessed alongside the CRM? Will the winner have the highest net benefits in the cost benefit analysis (CBA)?. ▪ The ESB noted that CRM remains the front-runner due to the benefits identified. The ESB is still at a point of trying to get it to 'work' by identifying any fatal flaws. ▪ The ESB will refine the implementation cost estimates of the models based on inputs from AEMO. AEMO is developing a CRM prototype as part of this exercise. ○ The TWG asked whether the CRM could see changes to the regional reference price (RRP) which may impact contracts. How would this be considered? ▪ ESB noted there is a design choice for how to calculate the RRP. The term 'RRP' as referenced in contracts would continue to exist unchanged, but the calculation of RRP could be adjusted. Preliminary modelling results may provide some insights although there are model limitations affecting RRP calculations. ○ The TWG suggested looking for simpler CRM options. ○ A TWG member noted that the hybrid model including priority access is a feasible solution in theory, but further consideration needs to be made for implementation issues and costs (and the flow-through impact on consumers). This includes system changes but also upskilling of personnel. ▪ ESB noted that since it is voluntary mechanism, presumably this would only be done if this was commercially viable?

		▪ TWG members noted that it's unlikely to be voluntary if the priority access model is included. ○ A TWG member gave thanks for consideration of alternative industry led proposals. The hybrids are genuine attempts to look at the options put forward by the industry. ○ The TWG asked if an assessment of cost of capital impacts was included in the scope of the CBA. ▪ ESB noted yes it would be considered. ○ The TWG confirmed their understanding that the hybrid model applies priority access in the energy market (and not the CRM) which addresses the original issue identified with the queue of inefficient dispatch outcomes. If the priority access results in an inefficient dispatch from the energy market, the CRM (without priority access) allows participants to trade to an efficient outcome. ○ The TWG questioned whether the hybrid model would address disorderly bidding. ▪ The ESB confirmed that participants are expected to continue bidding into the energy market in a similar way to today i.e. disorderly bidding may continue in the energy market. But, a cost efficient outcome is still achieved because generators are incentivised to bid at cost into the CRM to determine the final physical dispatch. ○ How do you balance the sunk investments/incumbents with new entrants? ▪ ESB suggest that this comes back to the question of length of the right. ▪ TWG members noted that the risk for new entrants is moderated. When new entrants connect in uncongested areas, they will receive priority access. The disincentives apply to new entrants in congested areas (which is the efficient outcome). It supports new entrants' certainty.

2:45	Overview of the Modelling Approach and Results	• The ESB covered an overview of the modelling exercise and initial 2023-24 results. • The Directions Paper includes a design choice to calculate RRPs based on the energy market or the CRM. The TWG asked whether it would be more difficult to forecast RRPs based on the CRM. ○ The ESB commented that they have found the reverse – it is more difficult to model the energy market with disorderly bidding. It is less complicated with cost reflective bidding. And it is expected that investors rely on price forecasts generated by consultants that assume cost reflective pricing i.e. more reflective of the RRP outcomes from the CRM. • The modelling report currently shows counter price flows where a positive sign indicates a flow south. This is opposite to NEM convention where a positive sign indicates a flow north. TWG requested that the published report adopt accepted market conventions given it is already a complex topic. • TWG noted it would be interesting to understand the interactions of how the BESS at Darlington Point would perform within the modelling examples.
3:55	Meeting Close	• Next meeting is scheduled in a fortnight, 1 December 2022.