I am pleased to hear that you will consider extending the review period beyond 25th February 2019, pending the extent of the issues raised during Monday's consultation meeting. I look forward to meeting you then.

Meanwhile, please see below, the questions we would like addressed on Monday.

Generator Performance Standards

Consultation Paper

1. Summary of NTC amendment process (page 5) – The intent to address 4(c) of the NT Government's Renewable Energy and Electricity Market Reform Implementation Plan 2018-2020 (increase levels of RE) is welcomed. But this intent seems to be at odds with the Code changes. Can you please outline how the proposed changes address this objective? In our view the changes made (such as the removal of semi-scheduled generation classification) will decrease the levels of RE on the system rather than increase. Too much focus has been placed on system security and reliability not on increasing RE levels.
2. Following on from question 1, who were the stakeholders involved in the suggested changes that was advocating for 4(c)? Changes to Codes need the input of a wide variety of stakeholders, and the holding of this session and extension of time for submissions is welcomed.
3. Who will evaluate consultation submissions and what is the process of deciding on their inclusion into the Codes?

Network Technical Code

1. General – References to non-scheduled and semi-scheduled have been removed. This places a significant technical and cost burden on intermittent RE to meet the Code, and/or uncertainty due to the requirement to negotiate an access standard. Please explain why both of these classifications have been removed? This makes the NT more onerous than the NEM and WEM for example.
2. General – Further in the NER, Non-scheduled was up to 30MW and semi-scheduled for intermittent generators above 30MW. Would it not have been better to keep these classifications but to set more appropriate MW values for the NT system?
3. Clause 3.3.5.1 – Reactive Power Capability - The reactive power requirements are onerous (0.55 x Active Power at any time). Why was a reactive requirement under normal operation and under contingency operation specified? In this way a more reasonable requirement

under normal operaton could be specified (such as 0.95 pf) and the 0.55 x Active Power only in contingency scenarios. This would reduce the cost burden on generators to meet this requirement. This would also be consistent with what was previously in the Code.

4. Clause 3.3.5.14 – Active Power Control - Ramp rates should be set on a MW basis or % of name plate rating per minute basis for semi-scheduled and/or non-scheduled generation. For example in WA the requirement is 10MW or 15% of name plate per minute whichever is greater for non-scheduled generation, “except when more rapid changes are necessary due to the strength of the energy source moving outside the power station’s design range”. This is a more reasonable basis that takes into account system security whilst not unnecessarily restricting generator output.
5. Clause 3.3.5.14 – Active Power Control – over what time period is compliance to ramp rate to be assessed? This needs to be specified to avoid potential disputes. It would be reasonable that ramp rates comply on a 5 minute basis.
6. Clause 3.3.5.15 - Inertia and Contingency FCAS – The requirements are onerous on intermittent RE generation, as it forces a synch con, BESS, etc to comply. Would this not be better provided as an Ancillary Service, and not a requirement on intermittent generation? The service can then be delivered much more efficiently centrally rather than increasing the connection costs of generators. This should be considered in the Code.
7. Clause 3.3.5.6 – System Strength – the requirement to not cause an adverse impact on system strength is onerous as it assesses against the existing level of system strength (which may be higher than necessary) rather than what an appropriate level of system strength should be. Has or can this issue be reviewed and included in the code?
8. Attachment 5 – Test Schedule – is mostly around synchronous generation. Need a test schedule that includes other forms of generation including inverter coupled solar generation. Why has this not been addressed? There is enough experience on the NEM and WEM for these requirements to be specified. This will reduce the need for each generator to negotiate these test requirements. Such negotiations represent significant risk for generators.

System Control Technical Code

9. Clause 3.2.3 (b)(2) – allows for a generator to be classified as “non-scheduled generating unit, if the output of the Generator is not capable of being varied by, or in response to, the requirements of the Power System Controller.” Under this definition intermittent RE

generation would be classified as non-scheduled, particularly as the semi-scheduled generation has been removed. Please confirm that our interpretation is correct?

10. Clause 3.11 – forecasts – Is very light on for detail in terms of what forecasts are required from generators. Can this be specified in more detail for generators what is required?
11. Clause 4.4B - GENERATION COMMITMENT AND DISPATCH SUBMISSIONS IN RESPECT OF THE DARWIN-KATHERINE POWER SYSTEM – Is it reasonable to assume that this section will be incorporated and/or re-written in light of the NTEM?
12. Same question in respect of Clause 4.7 and 4.8.

Best regards,

Ilana

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