3 June 2021

Ms Anna Collyer
Chair
Australian Energy Market Commission

Lodged via the AEMC website

ERC0296: FAST FREQUENCY RESPONSE MARKET ANCILLARY SERVICE

Dear Ms Collyer,

Tilt Renewables is a leading Australasian renewable energy developer, owner and operator engaged across all stages of project development through to operations. Tilt Renewables currently has 500 MW of operational wind farms across the NEM and New Zealand, plus a further 336 MW in commissioning and over 5 GW in its development pipeline.

Tilt Renewables (TLT) welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) draft determination on Fast Frequency Response (Paper). TLT supports the work that the AEMC and the Australian Energy Market Operator (AEMO) are undertaking with respect to improving system frequency outcomes. TLT considers the provision of Fast Frequency Response (FFR) to be the next logical step in maintaining system security post contingency, as system inertia continues to decline due to a changing technology mix. Given the lead times required to implement new markets, TLT is encouraged by the proactive approach taken by the AEMC to progress this rule change as a priority from the System Services Rule Changes consultation paper[1] before there is an urgent need and to send clear investment signals to those who may consider participating in FFR markets.

With that said, TLT is concerned with the rule change start date being three years from the AEMC's final determination. The Paper acknowledges that the *"… provision of response faster than the R6/L6 requirements will reduce the volumes of R6/L6 required and is likely to provide a more efficient mix of frequency control ancillary services (FCAS)-type products under projected levels of inertia*." This in combination with the expectation that the requirement for the existing fast raise service could double by 2025 under the ISP step change scenario will likely result in the inefficient procurement of FCAS (and thereby increased FCAS costs borne by generators and consumers) towards the back end of the current implementation timeframe considered in the draft rule.

AEMO currently operates six contingency FCAS markets, of which much of the design can be replicated to create the new very fast raise and very fast lower services. Given this, TLT considers that FFR could be implemented within two years from the final rule change if resourced appropriately, with the review of the Market Ancillary Services Specification (MASS) to be completed within one year from the final rule change. TLT also notes that AEMO's current implementation of the Five-Minute Settlement (5MS) rule change is at risk of not being completed by the legislated date, even after receiving a three-month extension. TLT requests that, in addition to avoiding prescribing overly long timeframes for implementation, that the AEMC ensure compliance with the specified timings to avoid further exacerbating the aforementioned inefficient procurement of FCAS and poor post contingent frequency outcomes.

TLT's preference would be for option 1 out of the options outlined in the Paper – two new market ancillary services for FFR (eight contingency services in total) after recognising that the Paper recommends against options 2a, 2c and 3. AEMO's advice has been to recommended against option 2a as this option "*would exclude or restrict the utilisation of plant that can provide a 6-second type response but are not capable of*

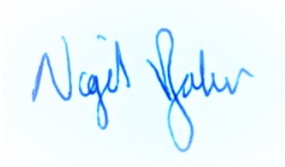
1 AEMC, System Services Rule Changes, July 2020

providing a 1-second, FFR type response." TLT notes the Hornsdale Wind Farm 2 FCAS trial[2], where it was found that Hornsdale Wind Farm 2 was deemed not capable of providing fast raise and lower services due to the wind farm's Low Voltage Ride Through (LVRT) requirements - the wind farm however was deemed capable of providing slow raise and lower second services. A similar argument against option 2b could be carried over from option 2a, whereby the consolidation of fast and slow services would exclude or restrict the utilisation of plant that can provide a 60-second type response but are not capable of providing a 6 second, fast type response. AEMO's 2020 Integrated System Plan[3] recognises that by 2034-35, renewable generation may at times deliver 85% of generation. TLT would consider it inefficient to preclude generators from providing 60 second services due to the consolidation of the 6 second and 60 second services.

TLT notes AEMO's recommendation that FFR be used for "*frequency containment under system intact conditions*." However, TLT considers that FFR will also be effective at frequency containment under at-risk or separated islanded regions by reducing Rate of Change of Frequency (RoCoF) more effectively than via the procurement of R6 alone. Since it is feasible that supply of FFR under at-risk of islanding or islanded conditions will be relatively scarce at market start of FFR, not scheduling FFR via FCAS for islanded regions and using the arrangements in place with Inertia Service Providers should be an interim solution, in order to prevent a monopoly or oligopoly type arrangement whereby generators and consumers are exposed to price gouging due to a lack of competition. As intra-regional supply of FFR increases, TLT argues that AEMO should begin taking the FFR available through FCAS markets into account when setting minimum and secure inertia levels, and scheduling FFR via FCAS for the management of at-risk or separated islanded regions.

Tilt Renewables will be pleased to meet with you to discuss this submission in more detail and provide ongoing support through the consultation process. Please contact the undersigned or Rhys Albanese at rhys.albanese@tiltrenewables.com or 0423 423 797.

Regards,



Nigel Baker

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Tilt Renewables

2 AEMO, Hornsdale Wind Farm 2 FCAS Trial, July 2018, p.20

3 AEMO, 2020 Integrated System Plan, July 2020, p.95