



13 August 2020

Ms Merryn York  
Acting Chair  
Australian Energy Market Commission

Lodged via website: [www.aemc.gov.au](http://www.aemc.gov.au)

RE: System Services Rule Changes ERC2090

Dear Ms York,

Tilt Renewables is a leading Australasian renewable energy company engaged across all stages of project development through to operations. Tilt Renewables currently has 366 MW of operational wind farms across the NEM and New Zealand, plus a further 469 MW in construction/commissioning and over 3 GW in its development pipeline.

Tilt Renewables (TLT) welcomes the opportunity to provide feedback on the Australian Energy Market Commission's (AEMC's) "Consultation Paper – System Services Rule Changes" of July 2020 (Consultation Paper).

The six rule change proposals from four proponents (Hydro Tasmania, Infigen Energy, TransGrid and Delta Electricity) all define problem statements and suggest solutions relating to issues previously identified by the ESB (Energy Security Board) in its ongoing post-2025 market design. The industry is undergoing unprecedented change, involving excessive reviews and consultations from a range of market bodies. TLT therefore urges the AEMC to focus on proposals that are seeking to address real problems and avoid the duplication of efforts and the potential of the rule change proposals considered in the Consultation Paper to be superseded by the post-2025 market design framework. Rule changes which have not been thoroughly justified and which do not address the more relevant challenges for the system should either be abandoned or alternatively left for future consideration as part of the ESB's wholistic market design review. TLT believes the two rule changes noted below are relevant, address urgent challenges and therefore should be progressed:

- Infigen Energy's Fast Frequency Response Market Ancillary Service rule change; and
- TransGrid's Efficient Management of System Strength on the Power System rule change.

While the Consultation Paper considers a suite of rule changes, these must be considered in a broader context of the future needs of the power system and its inherent market design. In this context TLT reiterates that given the fundamental flaws as described by TLT's submissions to the CoGATI process combined with the overwhelmingly large number of industry participants against it, the CoGATI framework continues to act as a significant distraction from necessary market reforms. TLT believes that the CoGATI process will impede rather than assist the transition towards a fit-for-purpose NEM, and considers the Fast Frequency Response and Management of System Strength rule changes to be more relevant, justifiable and helpful for the efficient operation of the system.



### **Infigen Energy - Fast Frequency Response Market Ancillary Service**

TLT agrees with Infigen Energy's problem statement, RoCoF (Rate of Change of Frequency) is increasing as system inertia declines, creating challenges in maintaining power system security. As RoCoF increases due to the exit of synchronous generation in the market, ancillary services and protection schemes have less time to react and arrest the frequency deviation, which may result in generator or load shedding, or even a system black event.

Declining levels of inertia have led to the need for faster acting response times, which are not valued in the current market design. FFR does currently exist in the NEM and has been bundled as a requirement in government grants. By appropriately valuing FFR through the creation of two new contingency FFR (raise and lower) services, efficient investment will result in providing the necessary FFR capability that AEMO has not been able to previously procure. FFR services will be required to maintain power system security into the future and should be thought of as complementary to the system strength requirements of the power system.

TLT agrees that AEMO would determine the specifications for the FFR service in the Market Ancillary Services Specification (MASS) and that the volume of FFR, primary frequency response, regulation FCAS, contingency FCAS and inertia required to support the NEM would all be interrelated. Although it is possible for faster response times, TLT suggests that a two second response requirement would be a reasonable compromise.

### **TransGrid - Efficient Management of System Strength on the Power System**

TLT has provided a response to the AEMC's Investigation into System Strength Frameworks in the NEM (EPR0076) dated 7<sup>th</sup> May 2020.

Further to the previous submission, TLT would like to highlight some issues with the current RIT-T framework. The first is that a transmission investment must require a net market benefit to consumers, and whilst this requirement beholds the interest of the consumer, it has created some perverse outcomes. Firstly, this requirement does not encourage investment in voltage support plant that is not located near an interconnector. For example, AEMO are often required to switch the Hazelwood to South Morang line out of service to reduce voltages within acceptable ranges during times of low demand. Good industry practice would be to invest in reactive plant to manage voltages. However, as the line isn't close to an interconnector, a net market benefit cannot be calculated and therefore no investment is made.

Secondly, under the current framework, an investment decision can only be made after a problem that can be alleviated by transmission investment exists. This typically results in many years' worth of congestion (damaging for investors and consumers alike) before an issue can be practically addressed, due to the requirement that the current RIT-T process only acknowledges committed and existing assets. TLT encourages the AEMC to modify the current RIT-T framework to consider planning studies like AEMO's ISP and to promote appropriate and efficient transmission investment in a timely manner.



## **Opposition to Remaining Four Rule Changes**

TLT suggests that the following four rule changes not be progressed at this stage and that the Synchronous Services Markets proposal be considered as part of the broader post-2025 market design:

- Hydro Tasmania — Synchronous services markets
- Infigen Energy — Operating reserve market
- Delta Electricity — Capacity commitment mechanism for system security and reliability services
- Delta Electricity — Introduction of ramping services

With regards to the capacity and reserve markets as proposed by Delta Electricity and Infigen Energy respectively, TLT considers these lower priorities as there are current processes in the Retailer Reliability Obligation (RRO) and Reliability and Emergency Reserve Trader schemes to ensure supply adequacy.

TLT does not agree with Delta Electricity's problem statement in its rule change request for the introduction of ramping services. TLT does not consider price volatility an issue and the upcoming PFR changes will help maintain stable frequency during solar ramping. Furthermore, Delta Electricity have not kept with a technology agnostic approach as they have suggested that synchronous generators provide the ramping services whilst VRE generators foot the bill.

Hydro Tasmania has suggested the addition of synchronous services markets whereby a SSG (Synchronous Services Generator) category is created along with a new set of constraints to manage the system strength requirements in real time. TLT opposes the idea as it does not promote new investment in system services where they are required and would simply act as an extra payment to existing generators who currently provide system strength as a by-product of generating energy, creating higher costs for consumers.

## **AEMC – Frequency Control**

TLT appreciates that the AEMC has opened the Consultation Paper to the broader context of frequency control irrespective of a specific rule change request and would like to provide some comments. TLT acknowledges the “temporal disconnect between a market participant's contribution to the need for regulation FCAS and the costs charged to that market participant” as stated in the Consultation Paper. This issue has been a contributing factor to an issue identified in the Semi-Scheduled Generator Rule Change issues paper as published by the AER. Causer Pays factors are designed to provide a disincentive to deviations from a dispatch target, however as regulation services are averaged over time, the causer pays mechanism has failed to act as a large enough deterrent to some particular semi-scheduled generators from reacting to spot energy prices directly (ie. without re-bidding and then seeking to follow their dispatch targets), resulting in poor frequency outcomes.

AEMO has engaged with industry and allowed the use of participant forecasts to improve dispatch accuracy with one of the main advantages for generators being a reduced causer pays exposure. However, the causer pays calculation is complex with the link to a proponent's costs not always clear. Furthermore, AEMO's settlement statements do not separate the regulation and contingency service fees, creating another layer of obscurity in the costs associated with the FCAS services and increasing the difficulty of proponents truly understanding and therefore improving their positive contributions to these services. TLT suggest that the AEMC explores options to simplify the regulation costs calculation and encourage more transparency via the settlements process.



TLT supports the “development of additional complementary measures to effectively remunerate providers of primary frequency response”. While TLT is not proposing a remuneration methodology, given AEMO’s Primary Frequency Response Requirements mandate that a generating system’s droop setting (and therefore PFR response) be calculated based on its nameplate capacity (despite industry requesting it to consider available power), it would be appropriate to align any remuneration to the nameplate capacity also.

In conclusion, TLT urges the AEMC to focus on the rule change proposals received from Infigen and TransGrid which are relevant and attempt to address the problem. We also seek improved coordination and sequencing of the market reform and rule change work that is under way, with the most pressing issues being addressed first along with better coordination between various work streams, to avoid duplication and unintended consequences that are ultimately born by consumers.

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](mailto:rhys.albanese@tiltrenewables.com) or 0423 423 797.

Regards,

A handwritten signature in blue ink that reads "Nigel Baker".

Nigel Baker

**Executive General Manager, Generation and Trading**  
**Tilt Renewables**