



30 April 2021

Ms Chloe Hicks  
Director, Energy Infrastructure and Zones  
NSW Department of Planning, Industry and Environment

Lodged by email: [rez@planning.nsw.gov.au](mailto:rez@planning.nsw.gov.au)

### **NSW Renewable Energy Zones Access Scheme Issues Paper dated March 2021**

Dear Ms Hicks,

Tilt Renewables is a leading Australasian renewables developer, owner and operator, engaged across all stages of project development through to operations. Tilt Renewables currently has 499 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 Renewable Energy Zones (REZ) Access Scheme Issues Paper (Paper) published by the NSW State Government (State). TLT congratulates the State on its November 2020 release of the Electricity Infrastructure Roadmap, a feature of which is the development of an additional 3 GW of transmission capacity in the Central-West Orana (CWO) region for which it received 27 GW of generator interest. However, TLT has serious concerns with the access arrangements proposed, and fears that the complexities and limited benefits associated with a new and separate access regime will not result in either of the stated objectives for the CWO REZ (per the State's "*Central West Orana REZ Access Scheme consultation*" presentation of March 2021) being achieved, as summarised below:

Stated objective 1: *Provide greater investment certainty, while promoting efficient utilisation of REZ infrastructure, improving competition and keeping downward pressure on prices.*

TLT concern: Inventing a whole new access regime for what is ultimately a small subset of the NEM transmission network will not provide greater investment certainty, as generators will still be exposed to broader network uncertainties (connection process delays, MLF variations, congestion further upstream) as they would today, but with the **added** (not substituted) complexity and costs of a new CWO REZ access regime. This will increase costs and uncertainty for generators connecting within a REZ, which will necessarily require them to achieve higher energy prices to make a decision to invest in the new generation capacity, thereby putting upward pressure on electricity prices.

Stated objective 2: *Facilitate active coordination of network, generation and storage investment.*

TLT concern: TLT agrees with the Paper in that transmission, storage and generation are the 3 key elements for a successful energy transition in NSW. However in the context of REZs, it is only the transmission infrastructure which is the missing link that requires government intervention and support to facilitate. Renewable energy generation, driven by a range of private investors, has proven to be agile and responsive in connecting to available transmission capacity in areas of strong renewable energy resource and TLT respectfully suggests that "*active coordination*" of generation itself by the Consumer Trustee or REZ Administrator is not required, and that attempts to centrally plan generation may be counterproductive to an efficient electricity market. In short, the gap that presently exists is transmission infrastructure, not generation planning or investment.

These concerns are explained further below.



## **LOWERING COSTS AND THE FALSE CHOICE OF GENERATORS VERSUS CONSUMERS PAYING FOR TRANSMISSION**

The Paper proposes that generators connecting to the CWO REZ will at least in part be liable for the cost of the new transmission infrastructure required to form the REZ. This differs to the current arrangements where generators pay for their own connection assets (directly or through the Designated Network Asset regime) and otherwise utilise the wider shared transmission system. TLT envisages two core issues with charging generators within the REZ for what it considers should be broader transmission infrastructure. The first is that by having extra costs compared to other like generators, generators within the REZ will be inherently less competitive than generators connected or connecting outside of the REZ. This will discourage new entrants to connect to the REZ and may result in underutilisation of the anticipated capacity of the CWO region.

The second issue, where REZ generation is the marginal generation required to be built to meet NSW demand (either through demand increases or to replace retiring thermal generation), is that the additional costs to the generator of connecting in the REZ will need to be recovered as part of any successful business case to invest, therefore generators will not invest until prices are (or are forecast to be) higher than would otherwise be the case. Delaying generation investment or increasing the hurdle rate for investment will put further upward pressure on electricity prices for NSW consumers.

TLT notes that the State's Electricity Infrastructure Roadmap also incorporates Long-Term Energy Service Agreements (LTESAs) as incentives for generators to connect within a REZ. LTESAs could be a mechanism by which generators in the REZ are able to be compensated for the additional costs and risks of connecting within the REZ, however as the LTESAs are backed by NSW electricity consumers, those consumers will still ultimately pay for the REZ infrastructure. In that context it would seem far more efficient to simply utilise the current NEM transmission access regime whereby TUOS charges provide recovery of the costs of transmission infrastructure.

There will be no windfall gain to generators connecting to the REZ even if they do not pay for the shared infrastructure through a new access regime. New generators will be competing with each other and with new and existing generators outside of the REZ to provide the lowest cost energy for consumers, so any savings in capital or operating costs will inevitably be passed on to consumers through lower electricity prices.

## **OVERSTATED BENEFITS REGARDING MLFs AND CONGESTION**

The Paper postulates that the access scheme, by either limiting subscription or through the use of financial transmission rights (FTRs), will provide investor certainty with respect to constraint and marginal loss factor (MLF) risk. TLT is of the opinion that these benefits are severely overstated, and they will not result in a lower cost of capital for investors within a REZ. With respect to constraints, TLT highlights that the access arrangements only provide investor certainty for thermal congestion risk (not, for example, constraints associated with system strength or voltage stability) and for thermal congestion only within the defined REZ area (which is a small part of the transmission network from the generator's connection point through to the Regional Reference Node). Generators within the REZ will still be subject to thermal congestion risk by additional generators connecting outside of the boundary point of the defined zone, not to mention the stability and FCAS constraints that may also curtail generation. The improvement to overall risk profile for a generator connecting in a REZ is negligible, and in fact may be worse than connecting outside of a REZ.

TLT is of the opinion that the claimed MLF benefits are also overstated in the paper. As it is expected that new generation within the REZ will largely be either co-located wind or solar, it is expected that CWO REZ wind generators will be all generating (or not) at coincident times, and similarly for solar generation within the REZ. This lack of diversity, combined with REZs being typically located in regional locations away from key load centres will result in a low MLF baseline for investors, which like constraint risk, may become worse over time as a result of additional generator connections upstream or downstream from the REZ.



## **OTHER ISSUES**

There are a range of other complications and complexities which make any new REZ-specific access regime challenging, including:

- Duration, tenor and profiles of access rights;
- Mechanisms for procurement, trading and enforcement of access rights;
- Settlement of access rights, including timing and counterparty credit risk versus NEM energy settlements;
- Challenges in having fungible access rights on a MW basis across a REZ, where different generators due to their location and technology may have differing impacts on network constraint equations, which may themselves also change over time depending on wider network conditions (eg. through flows in a REZ loop);
- Application of rights for Non-Scheduled Generators noting that Non-Scheduled generators cannot be constrained through the central dispatch process;
- Application to batteries and other storage technologies, including incentivising consumption during congestion;
- Grandfathering provisions for existing and committed generators in REZ areas;
- Inefficiencies for industry through having different access regimes in different locations across the NEM;
- Use it or lose it provisions which may avoid speculation but could put investments at risk where delays are foreseeable.

The above are significant complications in creating any separate access arrangement specific to REZs, which to date have not been adequately addressed and would need to be for any scheme to be viable.

## **PRIORITISE DELIVERY OF ACTUAL TRANSMISSION INFRASTRUCTURE**

In the above context, to ensure the timely and efficient delivery of new transmission infrastructure and the lowest overall cost to electricity consumers, TLT suggests that funding for such infrastructure should be through existing mechanisms, not through the invention of new access regimes. TLT has concerns that the creation of new cost recovery models and access schemes will lead to unnecessary complexity, fragmented outcomes, impracticalities and ultimately delays in delivering the physical infrastructure required. With those delays leading to the deferral in the connection of low-cost renewable energy generation, ultimately consumers will suffer as a result of higher energy prices, which will outweigh the contribution to electricity bills of any increases in transmission network costs associated with the proposed upgrade projects. As outlined above, even where REZ infrastructure is not delayed, there are no net benefits to consumers of supposedly having “generators pay” for the network augmentations, versus the existing transmission cost recovery mechanism of the NEM.

With regards to cost recovery, TLT is aware of some proponents arguing that there is a risk of ‘stranded’ transmission infrastructure (i.e. transmission infrastructure is built but generators do not subsequently utilise it) – TLT believes the renewable industry has consistently demonstrated that where network capacity exists, generation will be quickly and efficiently delivered by private developers, leaving a negligible risk of network investments becoming ‘stranded assets’. The risk of insufficient transmission capacity driving higher cost and delayed renewable energy generation is significantly higher, and therefore the focus for governments should rightly remain on facilitating the building and augmentation of transmission network infrastructure.

## **ALIGNMENT WITH THE ELECTRICITY INFRASTRUCTURE INVESTMENT BILL 2020 (NSW) ACCESS SCHEME GUIDELINES**

As defined in the Electricity Infrastructure Investment Bill 2020 (NSW), determination of fees payable in a REZ access scheme should take into account the following principles:

- a) Maximising the financial value for NSW electricity consumers;
- b) Recovering the cost of the operation of the access scheme; and
- c) Optimal use of the existing and planned network infrastructure in the REZ.



It is not clear how the access scheme options presented in the Paper would align with the above principles more efficiently than the simple adoption of the existing NEM transmission access regime for the CWO REZ.

In closing, TLT greatly appreciates the vision and work of the NSW Government in planning for a smooth transition to a more renewable electricity supply mix in the State and in the broader NEM. TLT believes that through the efficient development of transmission network infrastructure, including in the Central West Orana region, NSW will be well-placed for this transition, however that the approach to the access scheme for the CWO REZ warrants reconsideration to ensure that the wider objectives of the State's Electricity Infrastructure Roadmap can be met.

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 [REDACTED] or [REDACTED]

Regards,

A handwritten signature in blue ink, appearing to read "Nigel Baker".

Nigel Baker

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