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Department of Planning, Industry & Environment
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Submitted electronically via:
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Energy Security Target and Safeguard

Alinta Energy welcomes the opportunity to provide a submission to the NSW Government's Energy Security Target and Safeguard consultation paper.

Alinta Energy is an active investor in energy markets across Australia with an owned and contracted generation portfolio of nearly 3,000MW and in excess of 1.1 million electricity and gas customers. As an active participant in energy markets across Australia, Alinta has a direct interest in ensuring NSW's energy efficiency and security targets remain valid over time.

In this regard, Alinta suggests the Department should focus on the following areas to guide and inform amendments arising from the consultation paper:

EST

- Alinta Energy remains unconvinced that the EST is the most appropriate mechanism to ensure NSW's reliability concerns, given the appropriate functioning of the NEM's existing reliability frameworks.
- Nonetheless, if a specific target is to be set for NSW, the reliability standard remains the most appropriate target relative to the proposed conservative EST.

ESS

- Energy efficiency schemes should be undertaken at the Federal level. A practical compromise may be for the Department to only progress reforms which seek procedural and operational harmonisation between other state schemes
- Alinta Energy supports the proposed flexible compliance options including the ability to carry forward certificate shortfalls into future compliance periods and penalty rates remaining as is.
- In relation to the peak reduction certificates, significant technology modelling and extensive trials are necessary to ensure scheme robustness.

These positions are further explored in greater detail below.

1. Energy Security Target

Alinta Energy notes the proposed setting of an Energy Security Target (EST) mechanism, based on maximum demand forecasts under 10% probability of exceedance conditions with an additional reserve margin set as the two largest scheduled generation units in NSW (approx. 1360 MW's). If it appears that the EST will not be met over the 3-6-year period, an intervention framework is proposed with a range of potential actions including:

- o increasing the Safeguard's targets
- o government procurement
- o offering industry grants
- o fast tracking additional priority transmission projects

Whilst acknowledging Government concerns surrounding reliability and security issues as the NEM continues to transition and modernise, Alinta Energy remains unconvinced that the EST is the most appropriate mechanism to ensure this.

Existing NEM reliability mechanisms appear functional

The appropriate level of reliability and security settings across the NEM are currently comprehensively assessed and implemented via various frameworks of the National Electricity Rules. The primary mechanism of which is the Reliability Panel which is charged with setting the optimal trade-off between the cost of additional supply and the cost of customer interruption inconvenience, otherwise known as the reliability standard of unserved energy (currently set at 0.002%). From this standard, key market settings, such as the market price cap and floor, are derived to provide commercial incentive to meet reliability within the NEM. In addition, the newly established retailer reliability obligation ensures additional compliance incentives exist to ensure enough generation to provide adequate cover for retailer's forecast load within the market, including NSW over a ten-year period.

It is unclear to Alinta Energy how the NSW Energy Security Target would be in a better position to signal reliability and security shortfalls than existing NEM mechanisms.

The NEM is designed as an energy-only market under which the reliability and security settings are fundamentally driven by market participants responding to financial incentives and information provided about the need for resources and shortfalls. Under this structure, peaking generators such as those operated by Alinta Energy invest large amounts of capital to ensure they are available during select times of forecast scarcity. At private cost and risk, peaking plant is pre-prepared to ensure it is available to produce at short notice for the relatively few periods when demand is forecast to potentially not be met by other types of market generation, more often than not this scarcity is signalled through very infrequent high priced events.

When the existing market structures are amended, through intervention such as the creation of additional investment signals such as the EST, existing investment, retirement and operational decisions are impacted. In Alinta Energy's view the NEM's existing frameworks

have consistently achieved the objective of reliable power generation, despite the unprecedented energy transition underway. As such, the establishment of an additional EST set at the state level will duplicate the existing roles of the market and undermine efficient investment confidence.

It is also worth discussing the system security interventions that the consultation paper notes occur from time to time within the NEM. In practise, security interventions, when they pertain to generation commitment, frequently relate to low levels of synchronous generation units being committed into the market at times of low prices rather than a lack of installed capacity. As such, there is no reason to expect that a conservative Energy Security Target set at an installed capacity level, will change synchronous commitment patterns during periods of high wind and low demand.

Specific target set

As discussed above, the existing reliability standard requires sufficient generation and interconnection to achieve the expected delivery of 99.998% of annual electricity demand for customers. This level is an economic trade-off of consumers costs against the value of reliable power delivery.

The setting of the EST under a 10% probability of exceedance with an additional reserve margin of NSW's two largest generations (1360MW), implies a far more conservative standard (a "super peak") than the economically determined outcome set by the reliability panel. It also ignores the significant interconnection which exists between states.

If an EST is set at a level more conservative than the existing reliability standard of the NEM, Alinta Energy is concerned that existing investments, projects and contracting strategies will be affected, and may lead to an inefficient allocation of capital to address conservative demand forecasts which may not materialise at significant cost to consumers.

Alinta Energy does not support the establishment of a conservative EST POE 10% at this time for reasons of investment confidence and reducing duplication. The establishment of the NEM has served NSW well and has consistently met the objective of reliable power supply. If a target must be set, Alinta Energy suggests the existing reliability standard remains appropriate.

2. Energy Security Safeguard

Alinta Energy understands the existing NSW Energy Savings Scheme will be rebranded as the Energy Security Safeguard (ESS), which will include the following features:

- The ESS will be extended out to 2050, with energy savings targets increasing to 13% by 2030 (currently 8.5%); and
- The Safeguard will introduce a new certificate creation scheme to support peak demand reduction.

Harmonisation and scheme alignment

Alinta Energy strongly supports NSW continuing to positively contribute to emission reductions activities through the ESS program. This principle is reflected in actions taken to date through scheme participation.

For this reason, Alinta Energy believes energy efficiency programmes are most efficiently and effectively achieved at the national level through the 'harmonisation' of the existing State-based greenhouse gas emissions schemes. This would avoid complex interactions between separate schemes that act to raise the costs of compliance and administration of projects.

Whilst the preference would be for energy efficiency schemes to be undertaken at the Federal level, a practical compromise may be for the Department to only progress reforms which seek procedural and operational harmonisation between other state schemes, for example the Victorian VEU scheme. Establishing alignment would strengthen the longevity of the scheme as well as facilitate several economic and environmental efficiencies. Future linkages between state schemes would also deepen scheme certificate liquidity, lowering compliance costs for NSW energy consumers.

Alinta Energy would encourage the Department to progress scheme harmonisation and alignment between other Australian state schemes wherever possible.

Peak reduction scheme

Alinta has long held the view that the current NEM design incentivises peak reduction programmes through existing price signals. It is worth noting that in the past decade of NEM price rises, energy demand has consistently fallen and several retailer-led peak demand reduction products are currently in existence with many businesses and consumers taking advantage of these. This shows the market is functioning correctly. If anything, it could be argued that the significance of demand response has been underappreciated given the proliferation of solar PV systems at the residential and commercial level.

Nonetheless, if a decision is made to progress with the introduction of the peak demand scheme, ensuring certificate creation accuracy is essential, given the relatively unique nature of peak reduction certificate schemes within Australia. Alinta would encourage consideration of the potential consequences of any new mechanism which may act to compensate peak demand reduction twice and how possible conflicts or overlaps will be dealt with, especially at the customer level.

As such, the peak reduction scheme requires a strong focus on technology modelling and extensive trials to ensure certification and robustness of new technologies in relation to firmness, duration and delivered capacity.

Penalties and flexible compliance

Certificate creation in energy efficiency activities can often be highly variable in nature based on certain projects and installations coming online. As such, achieving ESS scheme compliance in a manner which limits price fluctuations and provides certainty to certificate creation and obligations is in the best interest of industry participants and NSW energy consumers.

As such, Alinta Energy supports the proposal for the ESS to allow liable entities to carry forward 10% of certificate shortfalls into subsequent periods, including for the peak demand certificates. Providing liable entities with tools for flexible compliance strengthens the longevity of the scheme and reduces the cost of overall scheme compliance.

In addition, Alinta Energy supports the NSW Government proposal to retain the existing penalty rate of the scheme. As noted in the consultation paper the existing spot price has remained below the tax effective penalty rate, as scheme participants have complied with their obligations and as such, changes to the penalty rate are not required at this time.

Appliance standard setting

Alinta Energy notes the discussion surrounding commercial incandescent lighting reaching near market saturation. It is also worth noting that the majority of low efficiency incandescent lamps are to be phased out in September 2021 under the Federal Greenhouse and Energy Minimum Standards (GEMS) Act. This is set to mirror the success of the European Union lighting regulations and standards which have achieved large success in residential and commercial lighting efficiencies.

Whilst outside the scope of this specific consultation, these points are worth raising for future reform processes, as it is possible to achieve significant environmental efficiencies, absent any formalised trading scheme obligation through the setting of appliance standards through regulation. Such a mechanism efficiently allocates the costs of compliance to those businesses and households who also receive the benefits in the form of energy consumption savings, reducing cross-subsidisations.

3. Conclusion

Alinta Energy welcomes the Department's analysis and encourages further consideration of the matters set out above. We look forward to our ongoing participation in the consultation process.

If you have any queries in relation to this submission, please contact me via email on anders.sangkuhl@alintaenergy.com.au or by phone 02 9375 0992.

Yours sincerely,



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