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Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

***Investigation into Intervention Mechanisms and System Strength in the NEM
(EPR0070, ERC0253 & ERC0255)***

Dear Mr Pierce

The Energy and Technical Regulation Division (the Division) of the Department for Energy and Mining welcomes the opportunity to comment on the Consultation Paper for the Investigation into Intervention Mechanisms and System Strength in the NEM.

The Division notes the Commission is also consulting through this process on two rule change proposals relating to the application of the Regional Reference Node (RRN) test to the Reliability and Emergency Reserve Trader (RERT) and to the threshold for participant compensation following market intervention.

The Commission foreshadowed its intention to consider the suite of intervention mechanisms and compensatory arrangements to ensure the best outcomes for consumers in its Final Report of the Reliability Frameworks Review. In that report, the Commission acknowledged the work in this area that was then underway by the Australian Energy Market Operator (AEMO) through the Intervention Pricing Working Group (IPWG). The Division notes that both rule change proposals included in this current consultation process were requested by AEMO following their development in conjunction with industry stakeholders through the IPWG.

As with two other rule change proposals that the Commission is progressing using the expedited process, the IPWG identified these two proposals as also being of value and non-controversial. All four proposals had the unanimous support of the IPWG in the context of the growing impact on market participants due to the frequency of direction events in South Australia. While the compensation threshold proposal has the potential to raise more issues, it is less clear to the Division why the Commission has elected not to expedite the RRN test rule change requests. In both instances, the Division considers that the rule changes should be progressed independently of the broader interventions review.

Similarly, the Commission's decision to consult on AEMO's methodology and approach to determining system strength requirements is questioned. It was the Commission, through its final rule for managing power system fault levels, that clearly assigned AEMO with responsibility for developing and consulting on the methodology as the best placed party to do this technical work. The Division considers that it is inefficient and potentially confusing for the Commission to do so now through this review, when AEMO must undertake consultation of its own, in accordance with the NER. Accordingly, the Division considers that the Commission's investigation would be properly confined to issues with the NER.

Unquestionably, the use of interventions has increased compared to the historical pattern and this is, rightly, cause for considering the appropriateness of market design frameworks to deliver the best outcomes for consumers. In principle, the Division supports any changes that improve the clarity, efficiency and effectiveness of the framework and minimise costs to consumers. However, the Commission's focus on the interventions – for their suitability, their cost and the frequency of use – appears somewhat mis-placed. The Division suggests the fundamental issue is the recurring need for the market operator to have cause to intervene, whether by exercising RERT or directions, rather than the design of interventions *per se*.

The fact that there has been increased use of interventions, and that this may be distorting market outcomes in the NEM, does not necessarily indicate any fundamental shortcomings in the intervention arrangements. Given the failings of the market framework, the market operator has been forced to act to maintain security in South Australia through the only mechanism available to it. The current pattern of directions for system strength is, unfortunately, necessary due to the time taken for design and implementation of new rules for system strength.

While conventionally directions should be regarded as a tool of last resort, the system security issue of low system strength is manifesting in real-time operational impacts for South Australia's power system. In the absence of a flexible, timely and market-based framework for the provision of system strength services, the market operator has little other option than to exercise these last resort powers on an all too frequent basis and for often long duration. The interim solution of requiring a minimum number of synchronous generators and imposing wind generation constraints, adopted by AEMO in December 2016, continues to this day and is expected to remain until ElectraNet's commissioning of synchronous condensers in late 2020. This surely highlights the need for the design of regulatory and market frameworks to support the changing generation mix across the NEM.

South Australia has long maintained the urgent need for a flexible solution to secure the provision of system strength services and, in mid-2016, encouraged the Commission to progress its rule change proposal for managing fault levels as quickly as possible. That proposal formed part of a package of rule changes through which South Australia sought a regulatory framework that would enable the competitive and efficient provision of system security services that could be dynamically coordinated with changing system conditions.

Despite a new rule having been made in late 2017, and allowance for certain procedural steps under the new rules to be hastened from the outset, the earliest that

any such services are likely to be made available is from mid-2020 and the declared fault level shortfall may not be met in full until end 2020. This is despite the likely need for such services being anticipated as far back as 2014 and the fault level shortfall being first identified in late 2016. The four-year lag from the 2016 NTNDP to the (forecast) commissioning of synchronous condensers in late 2020 highlights the need to consider improvements that can be made to the fault level rules to allow for more responsive solutions.

The Division welcomes the Commission's initiative to consider whether there are more appropriate settings in the Rules to ensure system security issues are addressed in a timely and efficient manner. As has been shown in South Australia, power system conditions can change relatively quickly.

The Integrated System plan identifies areas of the grid that are weak and expected to progressively deteriorate and directions for system strength outside South Australia have now occurred. From later this year, AEMO's assessment of system strength requirements will be conducted with a 5-year planning horizon, allowing a call to action where there is likely to be a shortfall rather than only once a shortfall has emerged. The ability to look forward and declare a likely shortfall is necessary given the time that can be required to implement solutions that involve long-lived assets.

The Division supports steps to make it simpler or more cost-effective to procure security services. In particular, the Division encourages the Commission to focus on how a market-based approach can be harnessed to provide system strength and other services over time, and beyond minimum requirements. The cost drivers for consumers of intervention pricing and compensation could be offset if fault current were appropriately rewarded in the market.

The current regulatory framework does not incentivise the provision of system strength except within the rigid construct of a declared shortfall, which simply seeks to 'hold the line', even while dispatch patterns may continue to change. In South Australia, non-synchronous wind generation output is regularly constrained as a consequence of depleted system strength. This also has a cost that an effective market signal for system strength could alleviate. A market-based approach would minimise the need for future directions and constraints, including in cases where a declared shortfall has been met, but actual dispatch diverges from the 'typical' pattern used to determine that shortfall, as well as for managing seasonal issues.

The current model whereby the TNSP is obligated to procure the services through building assets or procuring long-term contracts may not be sufficiently flexible to accommodate gradually depleting system strength and projected shortfalls. Because the current model locks in investments for a long time, consumers need to be assured that the investments are prudent and efficient through the regulatory investment test (or equivalent). This may inherently result in a cautious approach to declaring a shortfall, so that it is sufficiently robust, and long lead times. There is an opportunity to consider how the current model's preference for long-term investments might be complemented with other more dynamic procurement strategies, such as the market provision of services.

The Division notes that original design and value of the compensation threshold may not be fit for purpose in the current context of frequent and sometimes protracted

interventions. However, it should be noted that the current high frequency of directions is necessitated by the delay in putting in place an appropriate framework to provide system strength. Once ElectraNet has met its new obligation to meet the system strength (and inertia) requirements, it may be reasonable to expect that the pattern of directions in South Australia reverts to one more akin to that which existed prior to 2016. In that case, the appropriateness of the existing compensation threshold framework (amount and per interval basis) may also be restored. The Division therefore considers that any changes to the compensation framework be considered with both the immediate situation and the near-term outlook, where system security services are being provided as part of the 'ordinary' operation of the system, in mind.

The Division considers that the framework of intervention mechanisms needs to preserve as far as possible the right signals to incentivise the market to provide the requisite services to the power system, while providing fair, efficient and transparent processes for when those signals are insufficient. The Division also supports measures that can alleviate or avoid unnecessary administrative and operational burden, both during and following intervention events. AEMO's focus during market interventions should not be unduly diverted from the essential task of ensuring the power system is in a safe and stable operating condition.

The Division agrees with the Commission's view that it is also important to address concerns about the costs of the RERT in order to limit its impact on affordability for consumers. However, in doing so, the Commission should weigh not only the direct costs of a RERT event, such as compensation amounts, versus the costs of directions (which assumes there are resources to direct) but also the counterfactual –ie, what would have been the cost to consumers if load shedding eventuated? The Commission notes that the only directions for 'reliability' purposes occurred when there were no RERT contracts. The Consultation Paper has not identified if, during any of the recent RERT activations, there were any resources available to direct (ie in place of the emergency reserves).

In its recent determination on enhancement of the RERT, the Commission introduced changes designed to limit the impacts of the RERT on consumers, including the new principle that RERT costs should not exceed the average value of customer reliability. This recognises that the costs of emergency reserves should be less than the costs of involuntary load shedding.

The Division notes that reserve contracting may help to facilitate demand response that may otherwise not be available. Enel X in its submission to the rule change for the enhancement of the RERT noted that

“at least six months’ lead time is necessary to recruit and equip customers to build a portfolio of resources capable of providing a RERT product. Longer lead times allow for broader participation in the RERT framework and may put downward pressure on its direct costs”.

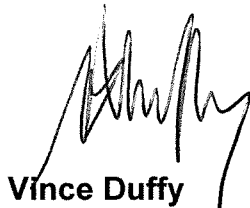
The Commission's final rule appears to acknowledge this point by extending the lead time for long notice RERT procurement. Changes to the interventions order to direct or instruct participants rather than utilise contracted reserves would seem contrary to these recent findings.

The Division supports the retention of the mandatory restrictions framework. As the Commission has highlighted throughout the Consultation Paper, various initiatives are underway that should contribute to improving reliability outcomes, minimising the likelihood of mandatory restrictions needing to be called upon, which has not occurred to date. These initiatives include the enhancement of the RERT, the introduction of the Retailer Reliability Obligation, and improvements to forecasting. Integrating demand into the wholesale market is another mechanism by which reliability can be underpinned, promoting efficient outcomes in the wholesale market.

In conclusion, any rush to change compensation arrangements due to the current situation of system strength directions should be treated with caution – if the Commission's new system strength framework ameliorates the need for recurrent security-related interventions in the market, it follows that the current market impacts of compensation costs and intervention pricing will also largely be remedied. The Division encourages the Commission to evaluate all options and frameworks that reward market participants for providing security services to support the ongoing transition and to restore market interventions to their 'last resort' place.

Should you wish to discuss the submission in further detail, please contact me on (08) 842 93181.

Yours sincerely



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