



29 May 2013

Ms Taryn Maroney
AEMO
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Baulkham Hills BC NSW 2153

Lodged by e-mail to: SRAS.review@aemo.com.au

Dear Ms Maroney

NGF response to AEMO SRAS Draft Report

The National Generators Forum (NGF) appreciates the opportunity to respond to the AEMO's consultation. The NGF is the national industry association representing private and government owned electricity generators. NGF members operate all generation technologies, including coal-fired plant, gas-fired plant, hydroelectric plant and wind farms. Members have businesses in all States.

The NGF is concerned that AEMO is proposing changes which would increase risk to consumers in the long term. These proposed changes would have the effect of prolonging demand restoration times, reduce the level of supply reliability in the event of a major supply disruption, and we believe the consideration of value derived from System Restart Ancillary Services has not been objectively assessed against the cost of procuring these services.

The NGF asserts that the changes proposed by AEMO are strictly policy related changes which should be considered by Federal and State governments. Instead under the current review process these changes are initiated by AEMO.

Further, we note that while AEMO has well defined responsibilities regarding SRAS, it does not have any direct liability/accountability for the economic/financial impacts for consumers and other stakeholders in the event the SRAS standard is not met. We consider there is benefit in exploring the option of AEMO taking on some appropriate level of financial accountability that is transparent to the market. This would provide an additional layer of confidence to the market regarding the management of SRAS and enhance the market governance arrangements.

Finally, during the consultation process, as an industry sector, generators have raised valid and relevant points based on practical industry experience. While we appreciate the level of engagement by AEMO officials, the broader consultation process does not appear to have influenced AEMO's initial position on the key issue of procurement levels and methods.

The NGF submission addresses each of the nine recommendations. These views are outlined in greater detail in the attached submission.

We would welcome the opportunity discuss the matters raised with you directly. Please contact Kevin Ly on (02) 9278 1862 should you wish to discuss this submission.

Yours sincerely

A handwritten signature in black ink, appearing to read 'TR', with a long horizontal flourish extending to the right.

Tim Reardon
Executive Director

Recommendation 1 - No change recommended to the SRAS objective.

Clause 3.11.4A(a) of the National Electricity Rules states that the SRAS objective “...is to minimise the expected economic costs to the market in the long term and in the short term, of a major supply disruption, taking into account the cost of supplying system restart ancillary services, consistent with the national electricity objective”.

AEMO states in section 6.1.3 of the Draft report that:

*AEMO considers that the SRAS objective is fit for purpose, and indicates that there is a balance to be struck between the potential short-term and long-term economic costs of a major supply disruption, and the cost of providing SRAS as a means of restarting the system, which is ultimately recovered from consumers. The objective **does not imply that the value and cost of SRAS should be equal, or even that they are directly comparable** (emphasis added).*

The NGF believes the SRAS Objective and System Restart Standard are relatively high level and AEMO has a substantial measure of discretion as to how it procures SRAS in accordance with those requirements. This includes the responsibility for determining the SRAS procedures to meet the SRS and SRAS Objective.

The NGF does not share AEMO’s view that the SRAS objective “does not imply that the value and cost of SRAS should be equal, or even that they are directly comparable”. The NGF believes that to satisfy the SRAS objective and to “minimise the economic costs to the market in the long term and the short term, of a major supply disruption...” there must be balance between the economic costs of a major supply disruption and the cost of procuring SRAS.

As stated in the NGF’s submission to the Issues and Options paper, AEMO is too focussed on the cost of SRAS procurement and have not adequately considered the value to consumers of minimising the expected economic costs of a major supply disruption.

Recommendation 2 - AEMO recommends it assumes a region-wide black system condition occurs, instead of a NEM-wide black system condition, to determine SRAS quantities. To effect this change, the SRAS Quantity Guidelines will need to be consulted on. AEMO plans to commence this at the completion of the SRAS Review.

The NGF does not support this recommendation. The effect of this change would be to reduce the overall quantity of SRAS procured in the NEM. Given the expected severity of a major supply disruption we believe the conservative assumption of a NEM-wide black system condition should be maintained. By relaxing and changing this assumption and thereby reducing the SRAS quantities procured, we believe the NEM’s insurance coverage for a major supply disruption event would be materially compromised. AEMO acknowledges this observation and it states in section 6.2.1.3 of the Draft Report that:

*While a NEM-wide black system condition is possible, AEMO considers it is so remote a possibility that it is unnecessary to procure SRAS to cover that eventuality. Further, even if there were a NEM-wide black system condition, the level of SRAS being proposed by AEMO would enable the power system to be restarted, **although potentially over a longer timeframe, depending on the cause of the disruption** (emphasis added).*

Recommendation 3 - AEMO recommends that the number of electrical sub-networks be re-determined and one SRAS be procured in each electrical sub-network, except for Tasmania where two SRAS should be procured. The following electrical sub-networks should be combined into one electrical sub-network: • North and Central Queensland • North and West Victoria and La Trobe Valley • North and South Tasmania. At the completion of the SRAS Review, AEMO will progress these recommendations by consulting with stakeholders on the Boundaries of Electrical Sub-networks and the SRAS Quantity Guidelines.

AEMO's recommendation to combine a number of electrical sub-networks into one electrical sub-network seems to be contingent on (1) that support is available from an adjoining region to restart a region or electrical sub-network in a black condition and (2) that the SRS timeframes could still be met.

There is insufficient information released from the current review process for Market Participants to ascertain whether the SRAS objective and the SRS can still be met under AEMO's recommended assumptions. Even if AEMO were to release additional system modelling data this would not provide an assurance of objectivity in the model results.

Hence, the NGF remains of the view that AEMO's analysis of changes to the boundaries of electrical sub-networks, NEM-wide versus region-wide black system condition and one SRAS being procured in each electrical sub-network must be independently assessed.

Recommendation 4 - AEMO recommends the definition of primary and secondary restart service be replaced by a definition of SRAS reflecting the following requirements: "the capability to restart generating units without external supply from the national grid, re-energise the local busbar and supply at least 100MW of capacity within 60 minutes." This would replace the definitions of primary and secondary restart service in the SRS and the NER. AEMO also recommends SRAS meets a minimum 90% reliability level in the SRS. These changes would require amendment to the SRS, and corresponding changes to the SRAS Description and SRAS Assessment Guidelines.

The NGF notes AEMO's statement in the Draft report¹ that:

Under the current primary and secondary definitions, in limited cases, AEMO contracts SRAS that only allows re-supply and energisation to the SRAS provider's generating facility, but does not contribute to the restoration of generation and transmission in that region within four hours.

The NGF agrees that if this is the case then it is a perverse outcome because the procured SRAS does not contribute to the restoration of other remote generation facilities.

The NGF believes consideration should be given to increasing the minimum 90% reliability criteria. The following table shows the number of sources required to provide overall 99% system reliability based on individual generation plant restart reliabilities ranging from 0.99% to 0.30%.

¹ AEMO Draft report page 30 of 39

The table also shows the relative value of each source.

Reliability of each source	Number of source required	Relative value of each source
0.99	1	100%
0.9	2	50%
0.8	2.87	35%
0.7	3.83	26%
0.6	5.03	20%
0.5	6.65	15%
0.4	9.02	11%
0.3	12.92	8%

Since the number of SRAS required to meet a 99% reliability target dramatically increases with decreasing generation plant reliability, the analysis demonstrates that AEMO and the Reliability Panel needs to consider amongst other considerations the effect of different SRAS source reliability in deriving an output standard.

The NGF believes if the recommendation to only procure one SRAS per sub electrical network were to pass the National Electricity Objective and become part of the Rules then the SRAS plant must at least meet a minimum 98% reliability criteria.

Recommendation 5 - AEMO recommends the NER be amended to allow AEMO to manage non-competitive outcomes in the SRAS tender process, similar to the process for network control and ancillary services included in clauses 3.11.5 (h) and (i) of the NER. AEMO would use independent benchmarking information to inform its position on reasonable terms and conditions. At the completion of the SRAS Review, AEMO would develop a rule change to address this recommendation and submit this to the AEMC.

The NGF believes the SRAS market is competitive. From the Firecone² report, the likely level and intensity of competition in provision of SRAS are likely to be the following major relevant factors:

- Number of potential providers – The number of SRAS providers may be low in some electrical sub-networks. However, this does not necessarily indicate a lack of competition. As stated by Firecone:

“It may often be clear who is the lowest cost provider, given technical characteristics of different generators in the subnetwork. This might mean that other providers would be unwilling to enter the market, but may still place an effective cap on the prices offered.”

- Barriers to entry –

“whilst the level of investment required is dependent on the type of generation plant, the costs of developing restart capacity are not prohibitive and it is technically feasible for a number of generators to develop restart capacity. It may be relatively low cost for new generation investments to include modifications to enable them to provide an SRAS service;”

AEMO states in section 6.3.3 of the Draft Report that:

² Firecone Report, December 2005, Review for AEMC of the Proposed NEMMCO Rule for System Restart Ancillary Services, section 4.3

AEMO proposes to seek further information, including cost benchmarking for different black start technologies in Australia, to enable it to further investigate the issues raised and provide a basis for evaluation of the relative merits of a cost of service approach or some form of arbitrated resolution should commercial negotiations fail.

On the 20th April 2006 the AEMC rejected NEMMCO's 2006 proposal to introduce a cost of service approach to SRAS procurement. Further to this given the diversity of location, generation type, and access to critical infrastructure of generation plant supplying SRAS across the NEM, the NGF questions the validity of cost benchmarking. Hence we do not support AEMO's recommendation to use its resources which are funded by Market Participants to benchmark SRAS costs.

Finally, AEMO considers that SRAS should continue to be procured by a single body that is able to coordinate the acquisition of SRAS across the NEM. AEMO believes it is more efficient to continue with a centralised procurer and that it is best placed to technically assess the requirements and manage the process on a NEM-wide basis.

The NGF supports the continuation of a central purchaser. The NGF is however concerned that under the current regulatory arrangements there is insufficient governance in place to ensure that consumers are getting the most efficient service/cost balance. Under the current regulatory arrangements AEMO works closely with the Reliability Panel to determine the SRS, AEMO determines the SRAS quantities to meet the SRAS objective and the SRS, and finally the Reliability Panel only does a high level check of whether the amount AEMO procured is expected to meet the SRAS objective and SRS. As can be seen there is a high degree of circularity with AEMO involved in all aspects of the current regulatory arrangements. The NGF believes the current governance arrangement needs to be tightened to implement more objectivity to whether the SRAS objective is being met and meeting the short and long term interest of consumers.

Recommendation 6 - AEMO does not propose to pursue, at this stage, any changes to market pricing or other energy market mechanisms in order to encourage a market-based response to SRAS.

The NGF supports this recommendation.

Recommendation 7 - AEMO will not pursue any change to the 50/50 basis for recovery of SRAS costs from Market Generators and Market Customers

AEMO's justification for maintaining the current 50/50 SRAS cost from Market Generators and Market Customers is very weak. All generators argued for 100% of the costs to be recovered from either Market Customers or TNSPs compared to one consumer representative who advocated for 100% of the cost to be recovered by generators. Given the widespread support from generators for direct customer payment, AEMO should note that this will also represent the views of most of the retailers given the high level of vertical integration in the market. Leaving these disproportionate views aside, the issue of cost recovery should be grounded on economic efficiency principles.

The annual cost of SRAS can be viewed as a fixed insurance premium cost. This cost varies from year to year depending on the SRAS tenders but in general it would be a fixed and recurring amount that would need to be recovered each year. The NGF sees similarities with the cost recovery of SRAS with that of fixed network cost. Using the views expressed by Putnam, Hayes & Bartlett, the NGF believes that it would be more economically efficient to recover 100% of the SRAS costs from customers via TNSPs. Putnam, Hayes & Barlett³ state:

Cost recovery from customers promotes the efficient use of the network.... This provision enables the recovery of these charges in a manner that least distorts decisions with respect to network use. Consequently, it greatly reduces potential distortions in generation dispatch, investment/retirement, and location which arise if these charges are recovered indirectly from customers via transmission charges to generators.

Further to this, using AEMO's mentioned beneficiary pays approach where those who benefit from SRAS contribute to the cost of providing it, customers benefit many times more than compared to Generators from the timely restoration of supply in the event of a major system disruption. This is because the Value of Customer reliability can reach \$95,700/MWh⁴ compared to a market suspension price that generators are expected to receive of around \$100/MWh. Clearly the major beneficiary is customers. An appropriate split based on this beneficiary pays principle would be 99.9% customers and 0.1% generators.

The NGF notes that if AEMO proposed changes are implemented there would be an increased reliance on transmission networks to re-connect supply to demand. This is because AEMO's proposed changes would reduce the number of suppliers and require the procured supply to energise longer transmission flow paths (since 10 sub electrical networks would be combined into 7). Hence under AEMO changes there is even more of an economic case to recover the full costs of SRAS through TNSPs, acting as the agent for customers, as this would provide extra incentive for network businesses to maintain reliable system controls and processes and maintain the reliability of transmission lines. The TNSP would also be able to challenge the assumption in the SRAS standard that the transmission system would be intact. It could decide whether this assumption is prudent and decide whether local procurement of services is a better option than upgrading the network.

In addition, the NGF notes the inefficiency of charging SRAS providers for the service they provide: these circular cash-flows complicate the tender process significantly and may serve to increase the costs associated with the service.

The NGF continues to advocate that there are solid efficiency arguments for SRAS costs to be fully recovered from customers via TNSPs.

Recommendation 9 - AEMO recommends greater transparency of SRAS costs and effectiveness of the SRAS arrangements. AEMO will consider the way in which it reports SRAS information to ensure it is useful and discuss with the AEMC the appropriateness of including information on SRAS in the Reliability Panel's Annual Market Performance Report.

In principle the NGF supports greater transparency where the information released does not breach legitimate confidentiality concerns.

³ Putnam, Hayes & Barlett – Asia Pacifica Ltd, "Transmission and Distribution Network Pricing review: Issues, Analysis, and Options", 26 March 1998

⁴ AEMO, Value of Customer Reliability Issues paper, 11 March 2013

In section 6.6.2 of the Draft Report, AEMO states that:

AEMO could undertake a further review of the SRAS arrangements after key changes arising from the current SRAS Review have been implemented and there has been sufficient time for the impacts to be assessed.

The NGF reiterates that reoccurring SRAS reviews creates uncertainty. Uncertainty increases risks and this risk can impact market behaviour in unpredictable ways.