9th May 2014
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Lodged by e-mail to: http://www.aemc.gov.au
Reference: ERC0168

Dear Mr Pierce

NGF response to Consultation Paper – National Electricity Amendment (System Restart Ancillary Services) Rule 2014

The National Generators Forum (NGF) appreciates the opportunity to respond to the AEMC's rule change 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 one of the Rule change Proponents advocating amendment to the current Rules. The logic and economic justification for our Rule change has been succinctly outlined in our Rule change proposal. As such is there no need to repeat these arguments.

The AEMC has amalgamated AEMO's rule proposal change with the PGG/NGF rule proposal. The NGF was not privy to AEMO's rule change prior to it being lodged with the AEMC and hence some of the issues AEMO has raised in its Rule change had not been addressed in our Rule change proposal.
The most contentious issue in the AEMO rule change would allow AEMO to negotiate the prices of SRAS and to introduce an option for arbitration by the Dispute Resolution Adviser under the NER clause 8.2 if agreement cannot be reached. This arbitration would be available to all aspects of the SRAS tender including the offered price.

The NGF strongly opposes this aspect of AEMO's rule change proposal on the basis that:

- AEMO has not established a case that the SRAS market is uncompetitive. The NGF believes the SRAS market is competitive with the threat of new entrants constraining prices.
- The option for arbitration would perversely reduce the competition by potentially deterring incumbents from continued participation in the SRAS market and by introducing additional risk for any prospective new entrants.

AEMO has noted in its final report that there was a divergence of views among AEMO and stakeholders on the key issue of NEM-wide or region-wide black system event as the appropriate basis

for SRAS procurement. Consequently, it recommended that the Reliability Panel should review the SRS to clarify the extent to which SRAS is to minimise the economic impact of a "major supply disruption" in various risk scenarios[1]. The NGF and PGG have commissioned Roam Consulting to provide advice on this issue.

ROAM surveyed the available literature of the probability of large blackouts in power systems around the world. ROAM has estimated the probability of blackouts of varying magnitudes for the NEM. One way to represent the probability of particular event is the "return period", which refers to the number of years between events, on average. The estimated return period for the NEM for various blackout magnitudes (ie. demand in MWs affected) is noted in the table below.

Estimated return period of NEM blackouts, compared with actual data

Blackout Size	Estimated Return Period (Years)	Observed Return Period (Years)
≥ 500 MW	1.6	1.25
≥ 1,000 MW	2.7	2.5
≥ 1,800 MW	4.5	5
≥ 5,000 MW	12.1	N/A
≥ 10,000 MW	24.6	N/A
≥ 15,000 MW	37.3	N/A
≥ 20,000 MW	50.3	N/A
≥ 25,000 MW	63.4	N/A

What has become apparent from the Roam study is that the probability of major black system events is a significantly higher in practice than what has been assumed in AEMO's 2013 review of SRAS. For instance Roam states:

> *On page 10: "However, large blackouts can occur and their probability of occurring in the NEM is not zero, including those involving multiple sub-networks. Even a full system blackout does not have a zero probability anywhere in the world, including the NEM."*
> *On page 41: "ROAM estimated the probability of a significant system disruption of varying magnitudes occurring in the NEM and found that a blackout involving multiple sub-networks in the NEM or even the entire NEM does not have a negligibly low probability."*

ROAM identified two hypothetical network contingency events involving multiple regions in the NEM and analysed how the resulting impact of the outage may be affected by the proposed SRAS policy changes.

By taking the average of the risk-cost estimates for the two scenarios studied, ROAM estimated a reasonable robust risk-cost of procuring one SRAS per sub-network instead of two to be **$28.4m/year**. This means that procuring an additional SRAS per sub-network delivers an estimated economic benefit of $28.4m/year. In addition to this Roam states on page viii that:

> *AEMO won't meet the SRS Objective of re-energising 40% of the demand within four fours with one SRAS per sub-network in either of the two hypothetical scenarios investigated.*

The Roam report in section 3.3 also has relevant literature which highlights the operational difficulties in system restoration including the probability of success of restart sources, frequency and voltage

[1] Australian Energy Market Operator, System Restart Ancillary Services - Final Report, AEMO, February 2014, p.4.

control issues, and consideration of protection schemes which could materially impede the restoration process.

The NGF provides the Roam report as part of our submission. The key finding by Roam is that there are strong economic grounds to procure more SRAS than what has been notionally proposed by AEMO (ie. one per sub electrical network) to satisfactorily meet the SRAS objective.

These views are outlined in greater detail in the attached submission. The NGF looks forward to positive consideration of our Rule change proposal to ensure the procurement of SRAS meets the NEM and SRAS objective.

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

Yours sincerely

Tim Reardon
Executive Director

Question 1 Clarity and guidance in the SRAS frameworks

1.1 Do the current SRAS frameworks, including the NER, SRS and SRAS Guidelines, provide adequate guidance to the market regarding the objective and economic basis of SRAS?

The current regulatory arrangements for SRAS are very loose and effectively allow AEMO to materially change the number of SRAS procured without rigorous third party scrutiny. The SRAS objective is the overarching objective which guides the System Restart Standard (SRS) and the AEMO SRAS procedures (AEMO procedures). Both the System Restart Standard (SRS) and AEMO procedures must be consistent with the SRAS objective.
The SRAS objective is:

> "…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".

The SRS is written in a very general way. Effectively the AEMO procedures become the domain by which key assumptions underpinning SRAS procurement to meet the SRAS objective are made. The NGF believes these governance arrangements are not best practice and as a result the SRAS objective may be compromised.

Through the AEMO procedures AEMO are then tasked with procuring the SRAS to meet the SRAS objective and SR Standard. The requirements of the SRS are specified under clause 8.8.3(aa) of the Rules, which states that:

"The *system restart standard* must:

1. be <u>consistent</u> with the *SRAS* objective referred to in clause 3.11.4A(a)….. (emphasis added)"

AEMO commenced as review of System Restart Ancillary Services in 2012. At the conclusion of this review AEMO has changed key assumptions underpinning the SRAS quantities it needs to procure to ensure it meets the SRS and SRAS objective. Under the current regulatory arrangements and Rules the key assumption changes AEMO has unilaterally made are:

- Region black system versus the current NEM wide black system assumption;
- The number electrical sub-networks; and
- Changing the number of required SRAS in each sub-electrical network from the currently required 2 to 1.

These changes will significantly reduce the total number of black start services procured by AEMO. Currently AEMO is required to procure 20 black start services to meet the System Restart Standard. This could be reduced to only 7 black start services. This reduction would significantly increase the risks to the public of achieving an efficient system restart in the event of a major supply disruption thereby breaching the SRAS objective. Instead the public will be reliant on the good will of generators to maintain black restart capability at potentially significant cost.
AEMO states in its Draft Report[2] that:

> AEMO conducted a number of technical studies to understand what impact changes to the size of electrical sub-networks would have on the timeframes set out by the SRS. Using one SRAS and assuming the adjoining region is available, these studies showed that the SRS timeframes could be met.

Under the current regulatory framework AEMO can change its key assumption of a region black system as opposed to the current NEM-wide black system condition, modify the sub-electrical

[2] AEMO, System Restart and Ancillary Services: Draft Report, 10 May 2013, page 26 of 39.

boundaries, and reduce the number of SRAS required to be procured in each sub-electrical boundary without external and independent scrutiny to assess whether the quantity of SRAS procured would continue to meet and be consistent with the SRAS objective.

The NGF believes AEMO's assertion that the SRS timeframes could still be met to be inconsistent with AEMO's requirement to be consistent with the SRAS objective. That is, by reducing the number of actual SRAS from 20 to 7 the NGF believes that the SRAS objective is adversely compromised.

For example using independent estimates of the value of customer reliability, every hour of unserved energy in NSW would cost customers around $1 billion. AEMO's SRAS costs of $23 million for NSW is the equivalent of less than two minutes of lost supply time each year.

The NGF has commissioned Roam Consulting to assess the probability of a black system event affecting varying demand levels. The results from this study suggest procuring an additional SRAS per sub electrical network delivers an estimated economic benefit of $28.4 million per year.

The NGF therefore believes that AEMO has not given sufficient weight to the economic costs of a system black event, or the benefits for customers of lower restoration timeframes through the procurement of reliable and well-tested black restart services.

The NGF has therefore advocated in its Rule change proposal that the Reliability Panel approve changes made by AEMO to the SRAS assessment guidelines, quantity guidelines, and the description and boundaries of electrical sub-networks.

1.2 If further guidance is required regarding the objective and economic basis of SRAS, what changes should be made to the frameworks?

The Roam study has empirically shown that the probability of a major supply disruption affecting significant load within a sub-network or more than one single electrical sub-network is substantially higher than what has been assumed by AEMO (see Figure 1 below).

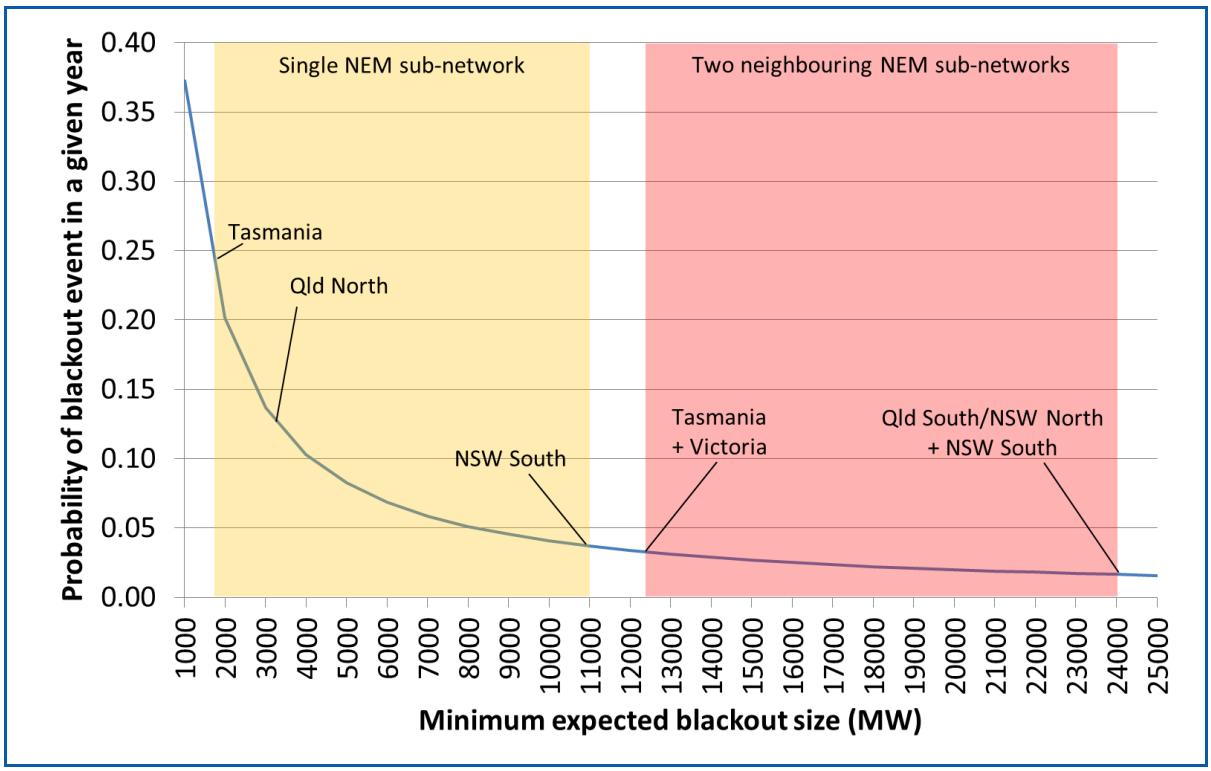

Figure 1: Probability of blackout greater than a particular size occurring in the NEM

Mainly for this reason the NGF rule change proposal has amended the NER to specify that the NER term major supply disruption be redefined to specify that it includes but is not limited to a NEM-wide or multi-region black system event. This would make explicit that AEMO must consider the possibility of a major disruption event in its procurement of SRAS for each sub electrical network.

Question 2 Potential analytical approaches

2.1 What analytical approaches could be used to inform any required changes to the SRAS frameworks to provide improved guidance regarding the objective and economic basis of SRAS?

The NGF believes the Roam Consulting probabilistic framework provides an objective, credible and robust analytical approach to assess the risk adjusted benefit of procuring sufficient SRAS per sub electrical network to meet the SRAS objective.

By taking the average of the risk-cost estimates for the two scenarios studied, ROAM estimated a reasonable robust risk-cost of procuring one SRAS per sub-network instead of two to be $28.4m/year. This means that procuring an additional SRAS per sub-network delivers an estimated economic benefit of $28.4m/year.

2.2 Are there particular strengths or weaknesses associated with any of these potential analytical approaches?

The strength of the Roam Consulting approach is that it is underpinned by actual data collected over many years from electricity markets with similarly strong regulatory obligations and reliability standards with to those of the NEM.

Question 3 Allocation of responsibilities

3.1 Does AEMO face conflicts or difficulties reconciling its role as procurer of SRAS and its role in determining certain aspects of the SRAS frameworks?

The NGF believes AEMO is conflicted in its role as the central purchaser and decision maker on the amount of SRAS required in the NEM. Through-out the 2013 AEMO administered review of SRAS AEMO's primary focus has been on the direct cost of SRAS.

Under the current regulatory arrangements there is insufficient governance in place to ensure that consumers are getting the most efficient service/cost balance. In the current regulatory arrangements AEMO liaises 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. It is one of our concerns that AEMO are structuring their purchases to meet the SRS at least direct cost, rather than minimising the overall cost including the economic cost of an event whilst meeting the SRS.

The Rules require AEMO to develop and amend the SRAS guidelines in accordance with the Rules consultation procedure. AEMO is currently consulting on the SRAS guidelines in parallel to the Rule change process as advised in the AEMO SRAS Review Final report. AEMO is making several significant changes in its consultation process including:

- Assuming any widespread black system condition would be contained within one electrical sub-network with sufficient supply expected to be available to restart the affected electrical sub-network from adjoining electrical sub-networks[3]; and
- Reducing the number of electrical sub-networks from 10 to 6 with a new Qld South and NSW North and single Victorian electrical sub-network.

Given the significance of these AEMO proposed changes and impact on achieving the SRAS objective through meeting the SRS there is a strong case that these assumptions should be prescribed in the Rules or the SRS with the AEMO Rules consultation process an inadequate threshold for making such significant assumptions/changes. This is particularly the case where it is unclear if regional TNSPs have been sufficiently consulted in developing and recommending these changes.

The NGF therefore believes the current governance arrangement needs to be tightened to implement more objectivity as to whether the SRAS objective is being met and in meeting the short and long term interest of consumers.
For these reasons the NGF/PGG rule proposal has inserted clauses in the Rules to:

- Require the Reliability Panel to approve amendments to a number of relevant guidelines.

- Require AEMO to assess the maximum amount of time each type of service will restore power and the manner in which each type of service will be relied upon to restore supply in neighbouring electrical sub-networks.

- Provide guidance on and demonstrate where each electrical sub-network can be energised from an adjacent electrical sub-network.

- Linking restoration timeframe targets and service procurement, and requiring AEMO to detail where a service has been procured which will not meet restoration targets and the possible impact on sensitive loads.

- Placing an explicit obligation on AEMO to consult with network service operators and advise the Reliability Panel of any outstanding issues.

[3] Where AC links exist.

- Require AEMO to publish a methodology for assessing restoration under system black conditions and requiring appropriate modelling where material changes are identified or proposed.

- Strengthening the link between the Reliability Panel's Annual Market Performance Review and system restart reporting.

3.2 Would there be benefits in additional oversight of AEMO in its development of the various SRAS Guideline documents?
The additional oversight of AEMO as proposed in our Rule change would improve delineation of roles of the Reliability Panel and AEMO.

In recent times SRAS procurement arrangements have been subject to change creating unnecessary uncertainty for both incumbent and prospective SRAS service providers.
If ratified these improved arrangements will reduce uncertainty and should ensure procurement of SRAS occurs in a manner which minimises costs to industry and consumers.

Question 4 Reliability Panel's process

4.1 Is it necessary to include a specific requirement in the NER for the Reliability Panel to consult with certain stakeholders, or are existing provisions sufficient to ensure adequate consultation?

The NGF asserts a specific requirement in NER clause 8.8.1 is required on the basis that through-out the 2013 AEMO administered review of SRAS it was evident that a wide array of stakeholders including TNSPs, Market Participants, and Market Customers provided both technical and economic advice which was in the NGF's opinion discounted by AEMO.

4.2 Is there merit in requiring a periodic review of the SRS by the Reliability Panel? If so, what might be an appropriate time period for such a review?

The NGF believes too frequent reviews from AEMO has created uncertainty and as a result discouraged new entrants and potentially reduced competition in the SRAS market. In our opinion the AEMO 2013 review should have been conducted by another body such as the Reliability Panel to ensure objectivity and to minimise any potential conflict of interest to arise. In general we advocate that reviews should only be conducted when there is a demonstrable market failure of the current arrangements or Rules.

Question 5 Restoration timeframes

5.1 Would there be any benefits associated with making the restoration targets in the SRS operational standards?

While we acknowledge that restoration timeframes may be inherently problematic given the uncertain cause and extent of a major supply disruption and condition of the network, restoration targets should not be treated as aspirational where any target is dismissed as being only a target, relieving the obligation on the procurer (AEMO) to meet the timeframe.

Given restoration timeframes are used as a guide to procure SRAS there should be a reasonable expectation that the timeframe could be met. In addition, load above the restoration target should also be reasonably expected to be restored to meet community expectations. Hence the NGF supports making the restoration targets in the SRS operational standards.

5.2 Are there are specific classes of participants who may face significant costs associated with a power failure and who may benefit in having a "firmer" restoration time frame?

Large industrial users including smelters where the loss of supply could damage a plant to the point of forcing a closure with consequential impacts for unemployment. Relatively early restoration of such large loads may also provide operational benefits to the system remaining stable during the restoration process.

Vulnerable users such as hospitals and those with life support equipment should also be considered, however given their likely diverse locations within the (distribution) network, this complexity is likely to be beyond the ability of the market to manage under wide spread system black conditions.

5.3 Are there likely to be any cost or implementation issues related to turning the restoration timeframes into operational standards?

This should be a core competency for AEMO. Any cost increase would be incremental but the benefit to the market would be substantial since all stakeholders would have improved confidence that the SRAS objective will be more efficiently met.

5.4 Is AEMO's proposal to undertake transient or dynamic modelling of SRAS a relevant consideration? Would such modelling provide the market with improved certainty regarding the capacity of procured SRAS to restore power?

The NGF is unable at this stage to provide an appropriate response to these questions since AEMO has not provided further details as to how it plans to conduct the modelling process and how it plans to provide objectivity to the proposed model results.

Question 6 Definition of primary and secondary restart services

6.1 Is it appropriate to remove the definition of primary and secondary restart services from the NER?

NGF members have some concern that there is a risk that removing these definitions could result in AEMO procuring lower quality services. Currently AEMO is required to prefer primary sources if available.

We provide in principle support that the current primary and secondary services definition may be redundant on the proviso that a single definition and reliability standard can be used to procure sufficient SRAS in each sub electrical network to meet the SRAS objective.

6.2 What impacts would the removal of these definitions have and would it be necessary to develop some other guidance regarding what forms of restart services should be procured?
As highlighted in question 6.1 the NGF expects to see documentation that provide adequate evidence that amendment of this definition would not compromise the SRAS objective.

Question 7 Competition in SRAS markets

7.1 Do SRAS markets display characteristics which would imply ineffective or limited levels of competition? Do increases in SRAS costs identified by AEMO reflect such an outcome in SRAS markets?

While the AEMO nominated increases in SRAS procurement cost has been significant the NGF notes that there are a number of aspects of the SRAS market and procurement which are not reflected in the headline.

- 2007-08 year was the last of a long period of virtually no growth in SRAS costs implying that rising provider input costs prior to this were not being reflected in AEMO procurement costs.

- The price increases are presented as occurring over a 6 year period however the procurement round in 2012 included pricing for multiple additional years which are unlikely to exhibit the same rate of increase.
- The cost increases include the contracting of additional services and the abolition of a NEM region make a high level like-for-like comparison as presented by AEMO problematic.

The NGF considers that the AEMO procurement process has been and continues to be a barrier to entry for new participants. A new entrant SRAS was awarded a SRAS contract through the 2012 tender process but it was subsequently not accepted following AEMO reducing the contract period from 5 to 2 years making the SRAS proposal commercially unviable. Similarly, the current tender period of 2 + 1 years is likely to be too short for new entrants to achieve capex payback leaving such potential providers exposed to significant market risk in subsequent procurement processes.

The NGF are of the understanding that the current procurement process will prevent one existing provider from being able to tender, with another provider already having been removed due to the decommissioning of third party plant.

With general aging of the existing black start capable plant, maintaining capability at these sites is likely to become more expensive. That does not however mean that the current providers are charging too much as the lack of (successful) new entrants confirms that the current offer prices are below the cost of new investment. Additionally all incumbent SRAS Providers know there is the threat of new entry from potential new suppliers of SRAS should AEMO contract with them. This is fundamental principle that any Provider would be foolhardy to overlook.

The NGF would like to note that neither the current rules or the NGF rule change proposal require AEMO to continue to procure the current number of SRAS services if the cost of those services exceeds their overall value, subject to the SRS being met.

7.2 To what extent have or would changes to the quantity of SRAS procured influence the price of SRAS?

One could expect the purchase of fewer services will decrease the price of SRAS, although this is not certain. If a generator is to be the sole contracted supplier of SRAS within a sub-network it may consider that there is an increasing onus on service quality and potential liability and therefore may increase offered prices commensurate with this risk. Some may even be unwilling to provide the service under such an environment. In addition, over time AEMO may be creating a monopoly provider as other providers decommission their equipment and procedures. If AEMO continues with its present contracting policy, 2 year +1 year option, yet where only one supplier wins the favour of AEMO, a new market dynamic will exist, participants may conclude it is a market they wish not to supply as the risks of failure and the costs of participation (tender costs, equipment costs, procedure costs, liabilities) are too high.

If we assume the price goes down and AEMO buys fewer services, this does not necessarily mean the cost will change. The cost is still there in paying off capital, maintaining equipment and procedures/expertise. The truth is that this cost will be borne by the generator that failed to win a contract. Will they continue to bear these costs for 3 years in the chance AEMO may select them next time – if they were uncompetitive with the first tender they entered they could assume that they are never going to win a contract, write off their capital, sell the assets (if possible), cut costs (staff expertise) and decommission their facilities.

The main reason why AEMO believes it can reduce SRAS prices and costs paid to generators is because it is to rely on the network monopoly to make available its equipment to restart an adjacent sub network. The NGF is concerned at this approach by AEMO. If AEMO thinks it is likely to reduce costs to

consumers in turning its back on the competitive procurement of SRAS from generators and instead rely on a network monopoly, it will come as no surprise when that monopoly starts extracting rents from AEMO.

Network businesses should ask AEMO if it is willing to pay the TNSP for the services it is receiving in that it will become the primary SRAS provider under its model. NGF members have asked AEMO this and they appear to think the network monopoly will act in a benign manner and in AEMOs interests.
In particular AEMO's model only relies on one service provider in each sub-network to help if the network cannot easily be reenergised from the adjacent network. The contract specifies, although this depends on the provider, 90% availability of the SRAS service. This leaves up to 36.5 days a year when there could be no provider of SRAS in a sub-network. The NGF would like to know what commitments AEMO has from TNSPs regarding the availability of the transmission network and re-energisation paths. Should an outage of an SRAS provider fall when the TNSP has a major outage planned, such as major cutovers, what will happen to meeting the SRAS objective.

The NGF can see parallels between the provision of SRAS and the procurement of voltage support. Generators are ideal assets to provide reactive power, voltage support for the network as they can adjust their reactive power capability when compared to static voltage compensation equipment embedded in the transmission network. The Rules specifically place the obligation of voltage support through the NSCAS provisions on the network companies and not AEMO. AEMO procures NSCAS as a last resort from generator participants, if the network company does not. This has resulted in a lot of additional voltage regulation equipment being installed by the network monopolies (at an increase cost to consumers, for the duplication of reactive power assets) and a reduction in AEMO's costs. The AEMO SRAS proposals have the potential to perversely result in higher costs overall to consumers.

7.3 Have increases in the price of SRAS driven new entry or new investment in SRAS in recent years?

Increases in price of SRAS may have been driven by many factors some of which may be inferred and others which may not be known. Factors like ageing technology and the quality of some of the current black start NEM plant may mean older SRAS plant has become more expensive to maintain and operate leading to higher SRAS costs being passed through. However the threat of new entrants ensures competitive discipline on incumbent Service Providers.

The NGF asserts the current AEMO tender process is a barrier to new entrants.

The current duration of tender contracts (2 years) is too short for new entrants to recoup capital expenditure payback. The current tender durations are also too short to justify any brownfield SRAS construction works.

As indicated above, a new entrant SRAS service was awarded a SRAS contract in 2012 but subsequently not accepted when the tender period was reduced from 5 to 2 years. There has been a number of gas fired-generators commissioned in the NEM since 2009 but developing a business case to install additional on-site generators to enable black start capability requires a stable regulatory environment where tenderers can have confidence in the SRAS arrangements in the NEM.
These issues also extends to retro-fitting other thermal baseload generation.

Question 8 Potential price arbitration in SRAS procurement

8.1 Would price arbitration or regulation effectively address any inefficiencies in the SRAS procurement process? Is the Dispute Resolution Adviser an appropriate body to administer such regulation?

As per our response to question 7 the NGF believes the SRAS market is competitive. As noted earlier competition could be enhanced by removing the barriers to entry created by the AEMO procurement

process. From the Firecone[4] 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;"

Having established the SRAS is competitive, it is not appropriate for an economic regulator and market monitor like the AER to intervene in a commercial arrangement between a private or government business and AEMO for the provision of SRAS. The AER's role is for regulating monopolies and monitoring and preventing market abuse and not prices a party may voluntarily offer to AEMO for the provision of SRAS.

Under 8.2.2 (b)(4) the Advisor must not be a Registered Participant or AEMO or directly or indirectly associated with a Registered Participant, AEMO or the AER. Given the size of the NEM and subject for deliberation there is unlikely to be a range of adequately qualified and experienced Advisors available. In summary the SRAS market is competitive and the threat of price arbitration or regulation would perversely deter new entrants from entering the market and hence AEMO's proposal should be rejected.

8.2 Would a price arbitration option influence SRAS providers' decisions to enter an SRAS tender? Would it influence their decision to invest in new SRAS facilities?

The threat of arbitration is any additional risk that has to be appropriately factored into any Service Providers decision to invest in new SRAS facilities. We argue that is an unnecessary risk that would deter potential new entry.

8.3 Have the arbitration provisions included in the NSCAS procurement processes ever been utilised? Are these processes applicable to SRAS?

It is the NGF understands that the arbitration provisions in NSCAS procurement were introduced on the basis that network/voltage services are very localised and hence a Service Provider may have localised market power to extract economic rent for its service.

These arbitration provisions are simply not required in the SRAS market since these services can be provided by Service Providers more widely within each sub-electrical network. Further to this, AEMO have made it clear that a service in a different sub-electrical network can supply restart services to an adjacent regions. Having multiple sources of SRAS for each sub-network ensures and competitive tender process and hence negates the justification for arbitration provisions.

8.4 Are there any other alternative solutions that should be considered?

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

In the absence of identifying a market failure or establishing that the SRAS market is uncompetitive reflecting monopoly characteristics no further solutions should be considered.

Question 9 Recovery of SRAS costs

9.1 Does the current smeared, NEM-wide approach to SRAS cost recovery result in any inefficiencies? Would there be benefits associated with the recovery of SRAS costs on a regional basis?

The NGF does not support regional SRAS cost recovery and notes that both the establishment of cross-border sub regions and the use of inter-regional transmission links confirm that SRAS is a system, not region issue.

Further to this our comment in this section is directed at the recovery of SRAS from Market Customers and Market Generators and on a 50/50 basis.

The NGF can see no reason as to why the payment for SRAS is allocated to generator participants. The concept is based on a beneficiary pays principle that has no sound economic rationale. Generators supply electricity at a cost of approximately $50-$60/MWh well below the benefit consumers receive in receiving a reliable supply. The "benefit" to a generator from SRAS is the lost profit from a black event from the reduced electricity consumption, which is extremely low, given the potential of a black event. As a result the true test of whether generators value or benefit from black start capability is whether they invest in it. If this is the case, generators should pay the full cost. We know that this is not the case because generators would not invest in such capability because the cost is theirs alone, but the "benefit" diffuse. Given new generators have entered the market without investing in such capability shows this to be true.

The NGF recommends the cost of SRAS be allocated to TUoS and charged to customers given it is largely a fixed system cost, rather than a variable energy charge. As for how the SRAS costs would be allocated between TNSPs, this could be up to the AEMC to determine, although the NGF, given our view that system black is not a single sub-network, or NEM region problem, should be shared equitably amongst all TNSPs, potentially in proportion to the AARR. It does not follow that local customers should pay the local price paid by SRAS providers, the "cross-subsidy" argument raised by AEMO is not entirely true given the findings of the ROAM report.

9.2 Would the establishment of sub-networks that span multiple NEM regions create disproportionate complexity in the implementation of regional SRAS cost recovery?

In relation to the specific sub regions proposed by AEMO, in the proposed process the NGF note that either Queensland generators would be required to cover the cost of restoration to Northern NSW customers, or NSW generators would be required to cover the cost of restoration to those same customers who are unable to tender for the supply of SRAS. Neither scenario sits comfortably with the "beneficiary pays" principle.

Question 10 Minor and consequential changes

10.1 Is AEMO's proposed amendment to clarify that SRAS is procured by AEMO rather than TNSPs appropriate?

The NGF supports the proposed amendment.

10.2 Is it necessary to specify that AEMO should consider any other matters in NER clauses 3.11.4A(d)(3) and 3.15.6A(c4)(2)?

No comment.