9 May 2014

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

Reference: ERC0168

Dear Mr Pierce

SYSTEM RESTART ANCILLARY SERVICES

Macquarie Generation welcomes the opportunity to comment on the AEMC's *Consultation Paper: System Restart Ancillary Services Rule 2014*, outlining the separate Rule change proposals put forward by the National Generators Group & other generators and AEMO.

Powering Our Community

Macquarie Generation is currently engaged by AEMO to provide SRAS services by way of the restart of the Hunter Valley Gas Turbines. AEMO's Rule change proposal and the recent changes outlined by AEMO in its *SRAS Documents Consultation March 2014* would substantially reduce the number of SRAS services that AEMO procures across the NEM. Against this background, Macquarie Generation considers that it is timely that the AEMC is revisiting all of the Rules and governance arrangements associated with setting the System Restart Standard and the SRAS procurement process.

Macquarie Generation has reinvested the funds received from its existing SRAS contract into maintaining and improving its restart facilities. As we noted in the AEMO Review of SRAS Services during 2013, should we be unsuccessful in the next round of SRAS tenders, Macquarie Generation would seriously considering decommissioning the Hunter Valley GTs. We question whether actions by AEMO to scale back services and reduce payments is worthwhile when the economy-wide costs of delayed full restoration times are taken into account.

Macquarie Generation has provided comment on five issues:

- 1. A more robust process for setting the SRAS frameworks
- 2. AEMO's directions power would be ineffective in the restoration process
- 3. Improving the competitive tendering process

Corporate Office

- 4. Regional or NEM-wide recovery of SRAS costs?
- 5. Codifying AEMO's power to suspend the market following a black event

Macquarie Generation supports the package of measures detailed in the NGF & other generators' Rule change proposal.

Yours sincerely

TIM ALLEN
GENERAL MANAGER

MARKETING & TRADING

SYSTEM RESTART ANCILLARY SERVICES - RULE CHANGE PROPOSALS, 2014

1. A more robust process for setting the SRAS frameworks

Macquarie Generation considers that the NGF & other generators' Rule change proposal would deliver a more robust set of Rules for overseeing the setting of the System Restart Standard and for the procurement of an efficient level of SRAS services. The Rule does this by establishing a stronger governance model through a clearer delineation of roles, responsibilities and consultation procedures.

The Generator Rule change proposal requires that the SRAS objective and System Restart Standard take into account all relevant economic costs including consideration of "the total opportunity costs, financial, social and non-financial, to energy users and the market, generally and to include sensitive loads". Such a clarifying statement adds balance and limits the scope for an approach that simply seeks to minimize procurement costs.

The System Restart Standard as currently worded sets a target timeframe of restoring 40% of peak demand in a sub-network within 4 hours. It is possible that given recent changes proposed by AEMO in its *SRAS Consultation Documents March 2014* that the restart service that Macquarie Generation provides using the Hunter Valley Gas Turbine facility may not be considered eligible for the next round of SRAS contracts. While such an outcome would not be in the commercial interests of Macquarie Generation, it does have implications for the wider market:

- Limiting the number of potential restart providers reduces the field of tenderers to any SRAS contract round. As a result AEMO may find the overall cost of SRAS services increase even under its proposed reduction in the number of tendered contracts. AEMO makes a great deal out of its concern that there is limited competition in some electrical sub-networks given the number of existing facilities that qualify to participate in the tendering process. AEMO is excluding the possibility of giving itself the scope to make decisions where it can award one or more contracts based on a trade-off between cost and the level of restart service offered.
- Under the proposed changes, AEMO could only rely on a single contracted service in each sub-network. By reducing redundancy in each sub-network, AEMO is increasing the concentration risk of meeting the System Restart Standard by effectively ruling out the possibility of awarding a combination of SRAS contracts to a mix of restart facilities in different parts of a sub-network;

Offering multiple SRAS contracts in each sub-region has improved and widened
the skill set of industry personnel able to respond to a black system event. SRAS
contracts require regular and thorough testing of restart services by operators
specifically trained in the necessary procedures. Limiting the number of services
procured reduces the capability of industry to manage emergency conditions in
a practical and effective way.

The NGF commissioned ROAM Consulting to look at the SRAS Requirements in the NEM (part of the NGF submission). The ROAM modeling work includes NEM case studies showing restoration times in particular sub-networks assuming either a single or two SRAS services for that sub-network. ROAM shows a much shorter restoration period and quantifies the net economy-wide benefits of earlier action in the scenarios where there are two SRAS services available.

Macquarie Generation supports the proposal whereby the Reliability Panel would conduct a periodic review of the System Restart Standard. This could include consideration of a possible dual trigger, requiring 40% of peak load restoration within 4 hours and 80% of load restoration within a set timeframe for each sub-network based on the wider economic costs of a black event and the costs of procuring sufficient restart services.

2. AEMO's directions power would be ineffective in the restoration process

The Consultation Paper notes that AEMO has a "power of direction" to require market participants to undertake certain actions during a black system event. Macquarie Generation would caution against any reliance on such a power in these circumstances. If AEMO procures fewer SRAS services, generators capable of providing black start support may mothball or decommission plant. Even if existing SRAS facilities were kept operational, such as a trip-to-house load capability, there is no guarantee that the service would perform if it is not maintained and tested regularly.

3. Improving the competitive tendering process

From a policy and market design perspective, Macquarie Generation believes it would be unwise to introduce any form of compulsory price arbitration using cost-based benchmarks for the procurement of SRAS.

The NEM Rules are fundamentally based on the notion that generation is a contestable activity, where entry is, within limits, free. The concept of market power in the NEM must be considered in the context of barriers to entry. While SRAS providers may be the sole providers of services in the short term, they face competition from potential entrants, both brownfield and greenfield plant, in the longer term.

Macquarie Generation considers that the following measures would lead to more competitive outcomes in the SRAS tendering process:

- AEMO has a practice of tendering at short notice and agreeing contracts a
 matter of weeks before contract start. This excludes the possibility of a
 generator offering an SRAS service, being awarded the tender and then
 investing in the service. Potential investors in SRAS facilities need notice and
 certainty about the timing of the tendering processes.
- Setting longer contract periods. The current SRAS contract periods runs for 2 years, with AEMO holding an option to extend by one year only. (AEMO had originally intended to contract for a period of 5 years with an option to extend by one year.) Minimum contract durations of 4 to 6 years would provide a more certain return period for those prepared to invest in existing or new generation facilities to offer SRAS services.
- AEMO should market the opportunity to participate in SRAS tenders more
 actively to existing and potential providers. Publishing tender results at an
 electrical sub-regional level, including individual tender amounts for
 particular services, would provide the clearest price signal possible for
 participants willing to enter a future tender contest with existing providers.

The threat of AEMO altering the term of procurement following tender consolidation, initiating changes to the Rules and making payments on accounting costs not opportunity costs is the problem, not the failure of market mechanisms themselves.

AEMO suggests an alternative to competitive procurement is some form of price arbitration process, possibly based on good faith negotiations requiring providers to reveal accounting costs followed by arbitration if the parties are unable to agree. Macquarie Generation is of the view that such an approach would fail:

- AEMO has no experience or understanding of actual business costs, how costs are managed within a portfolio, or the alternative uses of different assets.
- AEMO would need to isolate those areas of plant dedicated to the restart service and somehow value those particular assets and calculate a separate rate of return. AEMO would have no way of measuring certain risks and costs associated with the obligations under an SRAS contract, such as the plant risks associated with switching arrangements necessary to comply with testing procedures.

4. Regional or NEM-wide recovery of SRAS costs?

Macquarie Generation does not consider that there is a strong case on efficiency grounds for NEM-wide or regional recovery of SRAS costs from generators and customers. Given that SRAS costs represent less than half of 1% of wholesale turnover in the NEM, and generators pay 50% of that total, it is not credible to argue that regionalizing SRAS costs would in some way encourage more efficient locational signals by generators.

As noted in the AEMC's consultation paper, AEMO has proposed a new electrical subnetwork with boundaries spanning New South Wales and Queensland. Macquarie Generation does not see how the costs of developing and measuring "regional benefit factors" and the costs of changing AEMO IT systems to calculate regional allocations could outweigh any perceived benefits of moving to a regional recovery approach.

5. Codifying AEMO's power to suspend the market

Macquarie Generation has concerns relating to the current drafting of the Rules as they apply to the suspension of the NEM spot market following a black system event. While we note that this particular section of the Rules is not directly covered by the Rule change proposals, the application of these provisions has the potential to affect the behavior of generators and large loads during any restoration period and create substantial financial gains and losses should a black event occur.

Chapter 3 of the National Electricity Rules sets out the processes associated with market suspension. Clause 3.14.3(a)(i) states that "AEMO may declare the spot market to be suspended in a region when in respect of that region the power system has collapsed to a black system". Clause 3.14.3(d) states that the spot market is to remain suspended until "AEMO declares and informs all registered participants that spot market operation is to resume in accordance with Chapter 3".

From Macquarie Generation's reading of the Rules, there is no clause that specifies or provides guidance on the circumstances or conditions that would be sufficient to resume spot market operations. Without an explicit trigger, AEMO has discretion to make decisions about the resumption of spot market trading should AEMO suspend the market following a black system event.

Macquarie Generation is concerned that AEMO may see the early restoration of spot market operations as way of sending a price signal to market participants, thereby encouraging behavior that reduces restoration times. AEMO may view this approach as

superior to the procurement of additional SRAS services above a bear minimum required by the System Restart Standard.

Resuming spot market operations before all load is fully restored would in all likelihood see high and volatile spot prices, possibly at the market price cap for a period of hours. Such an approach could result in unintended or inequitable outcomes. For example:

- generators may rush units back into service in order to cover forward contracting positions, potentially running the risk of unit trips or damaging equipment as decisions are made in haste;
- generators may be ready to synchronise but unless the transmission system was
 re-energised and capable of receiving supply at that location, the generator
 would not be dispatched. Similarly, the transmission and distribution system
 may not be sufficiently re-established to support the re-energisation of
 customer load sufficient to dispatch generators adequately or securely.
 Generators would suffer losses on any forward contract position, caused by
 circumstances completely outside of their control;
- larger commercial and industrial customers receiving supply under spot passthrough contracts may respond by curtailing load. Such unpredictable demand responses may disrupt and delay the staged restoration process.

Macquarie Generation is of the view that any package of changes to the SRAS Rules should consider the interplay of the spot market suspension rules and the SRAS arrangements. We would support the insertion of an explicit trigger in the Rules that set minimum conditions for the resumption of spot market operations in any affected region. One option would be the restoration of a minimum of 80% of load before AEMO could commence spot market operations. This would provide market participants with at least some degree of guidance on when AEMO may take certain actions. More importantly, it would focus AEMO's attention on the procurement of an efficient level of SRAS services.