

3 July 2020

Audrey Zibelman  
Chief Executive Officer and Managing Director  
Australian Energy Market Operator (AEMO)

Dear Ms Zibelman

### **System Restart Ancillary Services (SRAS) Guideline Consultation**

Hydro Tasmania appreciates the opportunity to respond to the Australian Energy Market Operator's (AEMO) consultation on the System Restart Ancillary Services (SRAS) Guideline.

Hydro Tasmania recognises the importance of having robust system restart arrangements in place for the unlikely event of a major system disruption. It is essential that the regime for system restart testing (and associated costs) is appropriately balanced between the risks and costs associated with a system black event.

Hydro Tasmania is broadly supportive of AEMO's amended SRAS guidelines. However we would like to raise the following observations and concerns for AEMO's consideration:

1. The extent/expansion of data reporting requirements outlined in the draft SRAS guidelines.
2. The need to ensure clarity of obligations/accountabilities when testing of a contracted SRAS is undertaken in conjunction with testing of a system restart path.
3. Testing requirements for SRAS assets following intrusive work on relevant equipment.

These observations are listed in **Appendix A** to this submission.

We welcome the opportunity for further engagement with AEMO on the draft SRAS Guidelines, and in particular, the issues raised in this response. If you wish to discuss any aspect of this submission, please do not hesitate to contact [REDACTED].

Yours sincerely

[REDACTED]

## Appendix A – Hydro Tasmania’s comments on the proposed SRAS guideline amendments

### 3.3 New framework for the physical testing of system restart paths

*AEMO asks stakeholders to consider whether the draft SRAS Guideline, including Appendix B, provides sufficient guidance on the requirements under the Amending Rule for the new testing regime.*

#### **(a) Testing Data requirements**

Hydro Tasmania is concerned about the extent of the data reporting requirements outlined in Appendix B (System Restart Test) for participants involved in the testing of system restart paths. Hydro Tasmania is concerned that this requirement may create a significant imposition on participants engaging in the test, particularly if the expectation is that this data is mandatory. This concern is similar to, and expanded on, in response (a) to question 3.4 below.

### 3.4 SRAS testing and test procedures

*AEMO asks stakeholders to consider whether any additional changes to the SRAS Guideline are needed to facilitate identification of differences between test procedures and actual restart procedures, or other improvements or clarification in relation to testing.*

Hydro Tasmania would like to raise the following issues for AEMO to consider further:

#### **(a) Testing Data requirements:**

One of the major differences in the technical requirements in the proposed SRAS guideline, as highlighted in the extracts below, is the significant increase in data requirements from the existing 2017 SRAS guideline to the proposed 2020 SRAS Guideline:

APPENDIX A. SRAS test requirements; 2a Start (non-TTHL):

#### **2017 SRAS Guideline:**

*As a minimum, continuous recordings of generator MW, Voltage, Frequency over the duration of the test.*

#### **Proposed 2020 SRAS Guideline:**

*Provide data showing output trends of SRAS unit. As a minimum, continuous recordings of MW, Mvar, voltage (RMS), current (RMS), frequency over the duration of the test. During transients that occur during the test also provide three phase instantaneous waveforms for voltage and current at unit terminals and other points of interest.*

While the data requirements in the existing guideline, for generating units, generally align with the Generator Performance Standards requirement for Remote Monitoring (S5.2.6.1), the requirements in the proposed SRAS Guideline are substantially increased.

Many generating units for instance do not have the existing capability to ‘monitor the three phase instantaneous waveforms for voltage and current at unit terminals and other points of interest’.

This monitoring capability would then either need to be installed permanently at substantial cost, (in the order of tens of thousands of dollars per point) or alternatively temporary monitoring equipment would need to be set-up for a particular test.

In particular, for a short-notice test (5 business days), a temporary set-up requiring specialist resources and equipment would be difficult to expedite at such short notice, and would not be part of, and indeed would complicate, the normal operational arrangements for an SRAS test.

Noting that this high speed data is for post-test analysis, not for operational use, Hydro Tasmania requests AEMO consider amending the additional new data requirements, to require the most detailed data that is reasonably available, in line with the general data requirements that AEMO has outlined.

#### **(b) System Restart Test involving a contracted SRAS source**

Whilst it is logical to incorporate the testing of a contracted SRAS source, (as one of its mandatory annual tests), within the broader System Restart Test, it is noted that these tests have different drivers and accountabilities.

The contracted SRAS source is particularly the responsibility of the SRAS provider to arrange and undertake to meet particular contractual requirements and may be witnessed by AEMO. The foreshadowed System Restart test would presumably be the responsibility of and co-ordinated by AEMO with a broader operational focus.

For both contractual and operational clarity it would be valuable for the Guidelines to provide clear accountabilities and transition from an SRAS test (presumably under the direction of a contracted SRAS provider), verifying contractual conditions to a broader restart test under AEMO's direction.

#### **(c) SRAS Testing Requirements.**

Hydro Tasmania notes the changes in 4.3.2(b) *Testing of contracted SRAS*, in the SRAS Guidelines, from a requirement to test, following maintenance of relevant equipment being out of service for 7 days or more, to a requirement to test following intrusive work on relevant equipment.

The proposed change appears more appropriate, as it is impact on the performance not duration of the outage that should be the key consideration. A change of a setting in a relay for instance may be undertaken relatively quickly, but the impact may be significant.

It is suggested however, that a discretionary element be included in this clause, with an SRAS Provider to advise AEMO of the nature of the intrusive work, and AEMO to either require an SRAS test to be conducted or other supporting information to be provided. It can be foreseen that particularly if an SRAS consists of a number of elements, that this clause may be triggered a number of times in a year.

To provide this flexibility may provide a better balance between the disruption of additional testing and the verification of SRAS functionality, for instance intrusive work that only affects normal on-line operation could be verified by return to service testing, whereas other work that affects functionality, such as Black Start capability, would reasonably require an SRAS test.