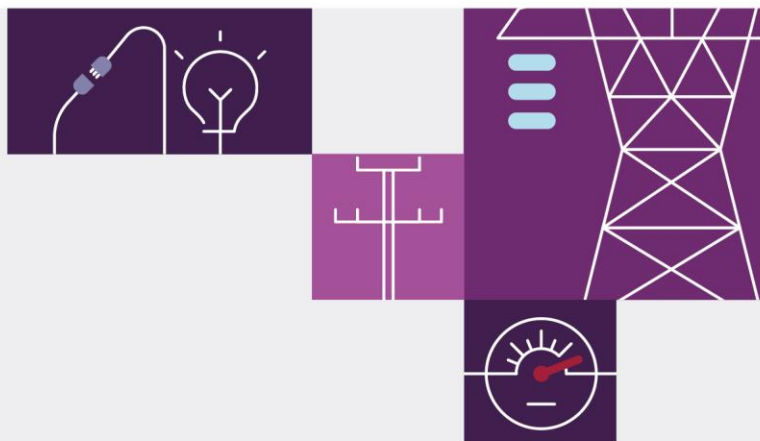


Remedial Action Scheme Guidelines Consultation

September 2022





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Version control

| Version | Release date | Changes |
|---------|--------------|----------------|
| Initial | 27/09/2022 | Not applicable |



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1 Introduction

The publication of the Final Remedial Action Scheme Guidelines (the RAS Guidelines) concludes the consultation by AEMO on the draft RAS Guidelines¹.

AEMO sought submissions from all persons interested in the draft RAS Guidelines during a public consultation between 18 July 2022 and 5 August 2022.

AEMO received one written submission on the draft RAS Guidelines from CS Energy, which can be found on AEMO's website². AEMO also discussed aspects of the draft RAS Guidelines with AusNet Services, and held informal discussions with some interested stakeholders. AEMO thanks CS Energy and AusNet Services for their contributions to finalising the RAS Guidelines.

The following sections include summaries of stakeholder feedback provided, AEMO's responses where relevant and other changes to the draft RAS Guidelines identified as beneficial during the review process.

2 Consultation summaries and responses

2.1 CS Energy Consultation submission

Summary of CS Energy comments

CS Energy's submission indicated support for the development of the RAS Guidelines in accordance with good electricity industry practice, and noted:

- The content of the RAS Guidelines helps address industry concerns identified in learnings from the Queensland and South Australia separation power system incident on 25 August 2018³.
- CS Energy encourages AEMO to consider including a summary report on the key RAS metrics detailed in the RAS Guidelines in the annual General Power System Risk Review (GPSRR).
- The RAS Guidelines provide adequate discrimination of requirements for different types/levels of RAS.
- The RAS consequence categorisations and assessment criteria are adequate.
- The modelling requirements for RASs should be included in the RAS Guidelines with a reference to the AEMO Power System Model Guidelines⁴ for the actual details and requirements.

¹ See <https://aemo.com.au/consultations/current-and-closed-consultations/publication-of-draft-remedial-action-scheme-guidelines>.

² See https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/publication-of-remedial-action-scheme-guidelines/cs-energy-submission.pdf

³ See https://aemo.com.au/-/media/files/electricity/nem/market_notices_and_events/power_system_incident_reports/2018/qld---sa-separation-25-august-2018-incident-report.pdf?la=en&hash=49B5296CF683E6748DD8D05E012E901C.

⁴ See Power System Model Guidelines, at https://www.aemo.com.au/-/media/files/electricity/nem/security_and_reliability/system-security-market-frameworks-review/2018/power_systems_model_guidelines_published.pdf. Future versions may provide additional detail regarding RAS modelling requirements.



AEMO response

Regarding inclusion of a summary report on the key RAS metrics detailed in the RAS Guidelines in the annual GPSRR, the 2023 GPSRR will investigate a prioritised set of risks to the power system identified by AEMO in consultation with industry. RASs will be considered in the 2023 GPSRR where they are relevant to the modelling and assessment of the prioritised risks.

In Section 4.1 (Modelling approach), AEMO added a paragraph to note that the AEMO Power System Model Guidelines provide detailed information regarding power system modelling requirements.

2.2 AusNet Services consultation discussion

Summary of AusNet Services comments

AusNet Services and AEMO discussed the draft RAS Guidelines in a meeting on 6 September 2022.

AusNet Services indicated its support for development of the Guidelines, however noted potential ambiguity about when AEMO should be consulted on specific RASs. In particular, AusNet Services suggested that AEMO clarify expectations for schemes at low voltage levels where there is unlikely to be a broader impact on the security of the power system, or a requirement to consult AEMO under existing National Electricity Rules (NER) provisions.

AEMO response

AEMO clarified that the intention is for network service providers (NSPs) to consult with AEMO on RASs for which there is an existing NER obligation to do so (for example under NER clauses s5.1.8, s5.2.5.8, 4.3.2 or other relevant NER provisions).


To address this feedback, AEMO has added wording such as “for which there is an NER obligation to consult AEMO” at relevant places in the RAS Guidelines.

2.3 Other changes identified through review process

Other changes that were identified through the review process are:

- Several instances of reference to “requirements” were revised to reflect the intent of the RAS Guidelines to provide a reference of good electricity industry practices, rather than interpret the NER or define new requirements.
- References to “integrated resource systems” were added where relevant to address the “Integrating energy resource systems into the NEM” rule change⁵.
- Considering stakeholder feedback, the following sentence was added to Section 1.2.2 (Remedial Action Scheme):
 - “Participation in such schemes generally results in a change in output or status (i.e. disconnection) of a generating system, integrated resource system or load.”

⁵ See <https://www.aemc.gov.au/rule-changes/integrating-energy-storage-systems-nem>.

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- In Table 2 (Related requirements), a reference was added to NER clause 5.20A.2(d) to note NSP obligations to provide AEMO with computer models of emergency frequency control schemes and emergency controls on their network, required for a GPSRR.
 - In Section 3.1 (General practices) more detail was added regarding the types of criteria for assessing RASs that are documented in Appendix A (RAS assessment criteria).
 - In Section 3.2 (Operational practices), AEMO
 - Added a reference to consulting AEMO regarding RAS design and philosophy.
 - Added a reference to consulting AEMO regarding high speed monitoring.
 - Added a sentence noting other impacted participants may need to be consulted in the development of RASs.
 - In Section 3.6 (RAS review), AEMO:
 - Edited the reference to NSP annual planning reviews to state that RASs are reviewed “as required”, to avoid implying that every RAS is reviewed each year.
 - Added a reference to review of RASs in the GPSRR.
 - Added additional context regarding investigations and actions following a RAS maloperation.
 - Added wording to note that limitations in original design of existing RASs may warrant review with consideration to current risks and good electricity industry practice.
 - In Appendix A (RAS assessment criteria), AEMO:
 - Added an illustrative example applying the criteria.
 - Combined criterion 19 with criterion 6 (so there are now 18 criteria).
 - Various minor wording edits were made for clarity.