Australian Energy Market Operator (AEMO) Emergency Management Industry Benchmarking Summary – June 2024

Opportunity and impact

System Operators are responsible for responding to power system emergencies. This involves managing the incident as well as ensuring effective communication both internally and externally. This is an important (and often under-represented) element of effective power system operations today and into the future – particularly as threat vectors and emergency scenarios evolve as the power system transforms.

In 2023, AEMO's Emergency Preparedness Team engaged with the Californian Independent System Operator (CAISO) and National Energy System Operator (NESO) to undertake a benchmarking activity whereby the AEMO internal arrangements would be assessed against standard industry practices.

The goal was to identify opportunities to improve AEMO's emergency response procedures and align them with these best practices. This activity built on previous work that reviewed relevant AEMO documentation against the following International Standards:

- ISO 22320 Security and resilience Emergency management Guidelines for incident management
- ISO 22325 Security and resilience Emergency management Guidelines for capability assessment
- BS 11200 Crisis Management Guidance and good practice
- ISO 22361 Security and resilience Crisis management Guidelines.

Explore additional information regarding AEMO's emergency management in the National Electricity Market (NEM)¹.

System Operators engaged

The following System Operators were involved:

- AEMO Australia
- CAISO United States (California)
- National ESO Great Britain.

Key insights

The benchmarking exercise revealed that AEMO's emergency preparedness arrangements largely match those of System Operator partners in both structure and content, likely because all organisations adhere to similar international standards.

The alignment of AEMO's plans with CAISO and NESO was evaluated as follows:

Not recommended

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 $^{^{1}} See \ https://aemo.com.au/-/media/files/electricity/nem/emergency_management/factsheet-nem-emergency-management.pdf?la=encomplex.pdf?la=encomplex.pdf.$

- Not aligned
- Partial
- Aligned.

For those items that were 'Not aligned' or 'Partial', updates to AEMO plans were identified. These items were added to the AEMO Emergency Preparedness Team's Actions Register, to be updated in the next review cycle. Most of these updates pertained to administrative matters, specifically:

- Improved linkages and cross-referencing within AEMO plans
- Consistent and cross-referenced definitions across plans

This engagement also fostered new relationships between AEMO, CAISO and NESO, leading to further information and document sharing beyond the initial scope, with potential future collaboration relating to business continuity. AEMO found that benchmarking emergency management processes was beneficial and provided confidence that emergency preparedness documents are consistent with international standards and industry best practices.

Recommendations

It is recommended that System Operators consider these key elements of effective emergency management procedures:

- Emergency on-call structures that represent the whole of business
- Clear escalation pathways based on event severity
- Well-defined internal and external contacts and methods of communication
- Robust procedures and follow-up for post-event lessons learned reviews
- Regular emergency training exercises for all relevant stakeholders.

A potential extension to this work could be to evaluate alignment of System Operator emergency management policies with relevant standards, including any standards not covered in this exercise to date which are relevant to System Operators in other regions.

Contact

For any specific feedback relating to the content of this Knowledge Sharing Brief, please contact AEMO at emergencypreparedness@aemo.com.au.

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