



Terms of Reference

NEM Emergency Communications Working Group (NEMEC WG)

1 Mission

To provide advice to the National Electricity Market Operations Committee (NEMOC) on matters relevant to the Emergency Communications of the National Electricity Market (NEM) transmission system.

2 Objective

The primary objective of the NEMEC WG is to:

 Develop a NEM Emergency Communications Roadmap to achieve the requirements of the System Restart Communications Protocol

Secondary objectives of the NEMEC WG are to:

- Provide a forum for Transmission Network System Providers (TNSPs) and AEMO communications experts to discuss matters related to Emergency Voice and Data Communications.
- Assist AEMO and the TNSPs in designing and maintaining reliable emergency communications.
- Review and report on other communications issues as requested by the NEMOC.

3 Scope

To achieve these objectives, the NEMEC WG will:

- Review the requirements of the System Restart Communications Protocol
- Develop a NEM Emergency Communications Roadmap to achieve these requirements
- Provide a forum for TNSPs and AEMO to share information relevant to emergency communications.
- Consider any relevant implications of communications equipment.
- Review of critical communication incidents for the purpose of identifying breaches to the emergency communication reliability requirements.
- Report to the NEMOC on relevant matters of emergency communications.



4 NEM Emergency Communications reliability specifications

The NEM Emergency Communications reliability requirements are:

- Achieve 99.90% availability (8 hours unavailable per year) for NEM wide voice and digital communications between control room sites across the NEM.
- Independent of Public Switch Telephone Network (PSTN), mobile phone and satellite infrastructure.
- Latency measure < 5 seconds.
- Repair of unplanned outage within 28 calendar days (aligned with SRAS Communication Protocol for emergency communications).
- Maximum of 1 unplanned outage per rolling 12 months. Unplanned outage defined as emergency communications is unavailable for > 8 hours.
- Physical and computer network security to contemporary standards and accommodate secure interfaces
 with customer IT systems if required. This may need to include the Australian Energy Sector Cyber
 Security Framework (AESCSF) Cybersecurity Capability Maturity Model (C2M2).
- Planned outage coordination protocols with users, e.g., 28 calendar days' notice, approved by AEMO,
 NOS entry required.
- Biennial testing/desktop study to confirm compliance.

Other Considerations:

- NEM communications facility available across all Control Room sites (Primary, secondary, tertiary, etc.)
- Consideration of a national (NEM) strategy which encompasses TNSP, DNSP, AEMO, MNSP, Generators
 and Jurisdictions. Willing to 'share' with other CI providers such as Gas, Water, etc. This may require
 separate consideration of:
 - Communication links between NEM Control Rooms
 - Communication links between the TNSP and regional generators, DNSPs, etc.

5 Governance

The NEMEC WG will consist of representatives chosen from the following organisations and may invite others at its discretion.

The PSSWG will consist of representatives from NEM TNSPs:

AusNet Services	Powerlink
Australian Energy Market Operator (AEMO)	TasNetworks
ElectraNet	TransGrid

6 Meetings

AEMO will provide convener and secretariat services to the NEMEC WG. Meetings will be convened at times suitable for most participants.



7 Expenses

For the avoidance of doubt, any expenses incurred because of attending meetings or activities associated with the NEMEC WG are at the expense of the individual organisation that the person represents, unless advised otherwise.

8 Version control and contact details

Version	Effective date	Comments
1	September 2021	Initial draft
2	March 2022	Review
3	June 2022	New AEMO Terms of Reference template.

For more information on the NEMEC WG please email Callan Masters.

For a list of industry forums and working groups refer to AEMO's website.