

MINUTES

MEETING:	Control Room Operations Working Group (CROWG)
DATE:	Tuesday, 6 August 2019
TIME:	10:00AM – 12:30AM
LOCATION:	Via Teleconference
TELECONFERENCE DETAILS:	1800 465 102
ACCESS CODE:	578 168 368

ATTENDEES:

NAME	COMPANY / DEPARTMENT	
Lenard Bayne	AEMO	
Mario Rositano	AEMO	
Malcolm McNicol	AEMO	
Mark Pollock	AEMO	
Rob Kruger	APA	
Martin Cavanagh	AusNet Services	
Phil Gay	AusNet Services	
Rod Joyce	Endeavour Energy	
David Gray	Energy Queensland	
Russell Gordon	Energy Queensland	
Edward Sellwood	Essential Energy	
Leylann Hinch	Evo Energy Canberra	
Matthew Corney	Powerlink	
Michael Edmonds	SA Power Networks	
Colin Sharp	TasNetworks	
Brad Shipp	TransGrid	
Geoff Cook	TransGrid	
Mark McKinnon	WesternPower	

APOLOGIES:

NAME	COMPANY / DEPARTMENT	
Paul Elliot	AEMO	
Joo Ean Prasad	AusGrid	
Colin Taylor	ElectraNet	
Doug Deans	ElectraNet	
Robert Armstrong	Endeavour Energy	
Nikki Barbi	Energy Queensland	
Matthew Turner	Evo Energy	
Steven Saunders	Powerlink	
Michele Lindsay	AusNet Services	
Stephen Jolly	SA PowerNetworks	

1. Welcome and Introductions

Mario Rositano (Chair) welcomed attendees to the meeting and in addition provided an overview of the meeting agenda.

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2. Previous Minutes

Previous minutes were accepted.

3. Review of actions items

Action items were discussed, and updates made accordingly.

- 4. Discussion
- 4.1. Operation Communications

Discuss and flesh out a viable communications plan if there were a "critical incident" affecting supply – e.g. a black start. (Note: this could be a standing item for a few CROWG meetings). Discussions to include but not limited to:

- A high-level review of operational communication channels between AEMO / TNSP / DNSP within each jurisdiction. For each:
 - The average availability (i.e.: recent test data)
 - The expected longevity of the link (e.g.; expected battery capacity)
- Ultimate development of a skeleton 24hr comms plan:
 - Are there reliable communications options up to 24 hrs?
 - Is there a need for additional communications channels between control centres?
 - o Is there a need for reinforcement of existing channels?

AEMO opened the discussion regarding the recent black out event and posed the question to members regarding their experiences relating to test data.

AEMO Gas Control room representative Mark P added that there was an event where a bush fire occurred. During this time, they had experienced a loss to SCADA and mobile comms within the affected area. As a result, the main communication during this time was via Satalite phones. With this said, there are limitations when using the Satalite phones within the office building.

AEMO noted not all phones (Telstra into control room) were recorded – identified following the system black incident in SA. Has now been resolved.

AEMO added that they currently have back up diesel generators at their Norwest and Brisbane sites. AEMO asked the group if they had similar facilities in place at their sites, in which majority did. In addition, most had multiple redundancies in place.

All TNSP's confident that they have multiple redundancies to their communication options and are well tested. Back-up site supplies are adequate (+24 hours).

TasNetworks added that there is project in place called TasGRM which will see a replacement of mobile radio set ups which they added will be common use throughout Tasmania's emergency services.

TNSP's and DNSP's feel there is no need for additional communications channels between control centres or reinforcement of existing channels.

In addition, the group discussed telephone pre-recorded messages and beep tones during a system event such as a blackout and if these were necessary. A lot of the members agreed that these messages can take up a considerable amount of time and can delay vital



communications between control rooms. The group added that they are all aware that commutations are recorded but felt that the message was unnecessary. A few TNSP's don't have the recorded message and have an arrangement (in writing) to cover off on any legal implications. The group also agreed that the "beep" tone required review.

4.2. Operation Protocols

There is a need to discuss the use of Operating Protocols (scripts), during load shedding events.

TOA 274 provides some useful scripts that can be applied in real-time, but it would be valuable to understand whether the TNSP's/DNSP's see any issues with the use of these scripts.

Note: See also Other business section (NEM Communications Protocols Survey)

AEMO provided an overview of the operating protocols in particular "scripts" where they are applied in real time load shedding events. These are usually provided to TNSP's and traders. AEMO shared a short brief on their internal procedures called Temporary Operating Advice (TOA) 274/5 which provides AEMO controllers pre populated scripts in the event that a direction is required.

All member agreed that the use of scripts, in terms of system operations, may not be in the best interests of the power system.

Using scripts at critical moments are not beneficial in terms of looking after the power system and that it is implied that NEM participants are covered in terms of being liable. This removes focus on the important security/reliability tasks in play and erodes valuable time at a crucial period.

A verbal direction/instruction followed up with a Market Notice should suffice

Members universally agreed that there is a real need to improve communications with wind farms, solar farms, embedded generators and batteries. All members - AEMO, TNSP's, DNSP's – detailed various instances where it was critical to contact these participants in a timely fashion (delays or no response) but were not able.

There is a concern that there was a language barrier where English was not their first language (many contacts are set up in foreign countries).

There is also the issue that there is a great turn-over of contacts/staff at these facilities.

AEMO suggested that there should be automated processes put in place as the number of non-synchronous plant (looking into the future) will be unmanageable (i.e.: voltage control, system security issues.

Operating protocols should be in place. i.e.: there's a lack of operational experience and know how on hand when contact is made at these facilities.

Currently if there is not an adequate response, TNSP's and DNSP's will open the relevant circuit breakers. Issue with number of inverters in service is also at play.

5. Other business

5.1. NEM Communications Protocols Survey

You may have received a survey from the Operations Training Working Group (OTWG) (via consultant) regarding NEM Communications Protocols. This will be used as part of the Operation Training Groups review of communications.



AEMO thanked the TNSP's that had participated in the recent NEM Communications Protocol survey.

AEMO outlined initial findings from the survey.

Some members noted that they haven't seen or participated in the survey.

Essential Energy (Ed Sellwood) detailed the work his organisation has done on terminology and phraseology. All members agreed this is an area that can be tightened up across the industry. Agreed that this work may fit in well with what the OTWG is currently working on.

6. Other business

7. Next meeting

The group decided that these meetings should commence 6 weeks prior to the Power System Security Working Group (PSSWG) meeting to allow adequate time to prepare any updates and complete any actions.

Meeting Forward Plan

Date	Host	Location
1 October 2019	Via Teleconference	Via Teleconference