

MINUTES

MEETING: CROWG – Control Room Operations Working Group
DATE: Tuesday, 20 August 2024
TIME: 9.30am – 12.30pm AEST
LOCATION: MS Teams Meeting, AEMO Brisbane Office

[Microsoft Teams Meeting Details](#)

NAME	INITIALS	ORGANISATION	NAME	INITIALS	ORGANISATION
Mario Rositano	MR	AEMO	Lewis Wan	LW	Iberdrola
Alexis Bowman	AB	AEMO	Ragheel Iyer	RI	Iberdrola
Daniel Lavis	DL	AEMO	Daniel Coomber	DC	NEOEN
Darren Spoor	DS	AEMO	Hal Jorgensen	HJ	NEOEN
Juan Duque	JD	AEMO	Colin Roberts	CR	Origin Energy
Kin Wong	KW	AEMO	Elise Janetzki	EJ	Overwatch Energy
Matthew Wikman	MW	AEMO	James Tetlow	JT	Overwatch Energy
Neil Gibney	NG	AEMO	Robert McCann	RM	Power Water
Alan Jenkinson	AJ	AGL	Sam Parisi	SP	Power Water
Neil O'Leary	NO	AGL	Adrian Pang	AP	Squadron Energy
Matthew Ansell-Laurendet	MA	AusGrid	Nasif Sharif	NS	Squadron Energy
Ron Whalen	RA	AusGrid	Alex Hunnibell	AH	TasNetworks
Lan Nguyen	LN	AusNet	Guy Holmes	GH	TasNetworks
Anthony Stanczak	AS	Delta Electricity	Fabian Spescha	FS	Total Eren
Russell Gordon	RG	Energy Queensland	Hoang Tong	HT	TransGrid
Daniel Powell	DP	ERM Power	Warwick Slee	WS	TransGrid
Dane Merkel	DM	Hydro Tasmania	Adam Kew	AK	Western Power
Jordan Maxwell	JM	Iberdrola			

1 Welcome and Introduction | Mario Rositano

- 1.1 Roll Call taken in person and via MS Teams.
- 1.2 Welcomed current and new members, reviewed the agenda and discussed purpose of the meeting, including continued discussions on topics tabled at the last meeting.

2 Minutes / Actions | Mario Rositano

- 2.1 Minutes of the meeting 14 November 2023 – accepted by Hal Jorgensen, NEOEN - [18 April 2024 - Minutes](#)
- 2.2 Actions of the CROWG meeting 14 November 2023 – reviewed – [18 April 2024 – CROWG Actions Register](#)

3 CROWG Meeting Administration | Mario Rositano

3.1 Rotating CROWG “Chairing” role:

- No volunteers to take the Chairing role for this meeting. Volunteers will be sought for the November meeting.

- **** PLEASE NOTE: Volunteers will have full support and direction from Mario and Alexis as to the format, content and running the meeting. They will also assist during the meeting to ensure things stay on track. Volunteering can be for one meeting only, if preferred. ****
- MR will reach out to members again via email and were encouraged to contact Mario if interested.
- DS agreed that it is a great opportunity for control room staff within the TNSP organisations and could even be added to staff performance plans as way to demonstrate that their skill is being refined.

3.2 CROWG on the AEMO website

- Created on the AEMO Website –
 - [Forums and Working Groups section > List of Industry Forums and Working Groups > CROWG page.](#)
 - Feedback Survey link - [CROWG Feedback Survey.](#)

3.3 CROWG Mailbox

- Email account for Control Room Operations Working Group (CROWG) communications - CROWG@aemo.com.au.

3.4 Face to Face Meetings – What's next for the rest of the year?

- Members were asked for their input on continuing meeting face to face. The consensus was to keep the face-to-face meetings and provide the MS Teams option for those who cannot attend. It is envisioned that meetings will be held at DNSP and TNSP offices over the coming year.

4 Power System – Recent Events and What's on the Horizon

4.1 Update from members

MR – Listed a few events that have occurred since the previous CROWG meeting in April 2024:

- Administered Price Cap for NSW – 08 May 2024
 - MR asked NSW members if any additional considerations were necessary due to the Administered Price Cap and mentioned that a concern in other regions was that it might cascade into those regions, as it has done previously.

4.2 Winter Observations

- New record minimum demands in SA and VIC – 264MW in SA | 2810MW in VIC. This is becoming typical across each of the seasons.
 - DS commented that MSL is an emerging threat that may cause issues for the NEM in terms of Limits Advice. There was also a new minimum in QLD – around 3100MW.
 - MR discussed that in the October/November period it is likely that there will be negative minimum values in SA and if there are any major outages, this could have serious implications.
- Global tech outage – 19 July – Crowd Strikes. AEMO's control rooms were not really impacted by the outage. Members discussed impacts their control rooms encountered due to the outage.
- Load shedding event in Lismore NSW – report available on the AEMO website or the following link:

[15/07/2024 Preliminary Report – Load Shedding Event in Northern New South Wales](#)

ACTION: MR – Respond to question from JM about political pressure around MSL. In a previous discussion about rooftop solar, there is a lot of pressure around ensuring it is not being curtailed. Is that pressure still prevalent, or is it better understood as far as seeing potential rooftop solar curtailed, especially with the upcoming shoulder seasons?

ACTION: MR – Add Minimum System Loading to the Agenda for November's CROWG meeting.

- MR mentioned that ACRNA have their [2024 annual conference](#) scheduled for 23-24 October at the Langham in Melbourne.

5 Presentations, Addresses and Suggested Viewing Material

5.1 Impact of Space Weather in the NEM | Darren Spoor, AEMO

- Link to presentation – [Impact of Space Weather in the NEM](#)
 - Impact of Geomagnetic Disturbances
 - Space Weather History
 - Space Weather Events: 06 November 2023, 25 March 2024, 11-12 May 2024, 12 August 2024
 - The G Scale
 - Potential NEM Actions and NZ Actions
 - Environmental Threat Portal
- DS and members discussed the impact of space weather after the presentation, in relation to NEM.
- MR discussed the market notice 117660 Reclassify Contingency – [Reclassification of non-credible contingency event due to existence of widespread abnormal condition/s – NEM regions](#) which can be found in the [Market Notices section](#) of the AEMO website.

5.2 WA Power System | Warren Mumme – Western Power

- Ongoing and carried over to the next CROWG meeting.

5.3 ACRNA Conference in Melbourne | Russell Gordon – Energy Queensland

- RG discussed a group called the ACRNA - [Australian Control Room Network Association](#) , in Salisbury Queensland, represent all control rooms, not just electricity and gas, but things like motorways are in their portfolio. They can introduce all of the supplier, provider and information people that have an impact on all things that are done in control rooms. The ACRNA is set up to support members with a resource gathering, sharing and development forum, and to provide a network of individuals and corporates who want to actively participate in pursuing control room best practice.
 - ACRNA have their [2024 annual conference](#) scheduled for 23-24 October at the Langham in Melbourne

5.4 Recommended YouTube Videos – “Normalisation of Deviance”

- Members were encouraged to view “Normalisation of Deviance” [human factors] (~23 mins) ([Part 1](#)) and ([Part 2](#))
 - How does this apply in your control room?
 - Ignoring alarms
 - SLD’s not up to date
 - Procedures not updated

6 Generator Protection

6.1 A discussion on obligations under NER 4.8.1 and SO_OP_3715 – Power System Security Guidelines

- DS discussed how there are occasions where participants need to be reminded of NER obligations. This instance is a reminder for generators that under the agreed Power System Operator Guidelines, if you are running on a single protection for more than 12 hours, that is something that has to be communicated and agreed with by AEMO. That requires AEMO signoff.

7 What makes a Control Room Great?

7.1 Discussion on various aspects of a control room development

- This topic will become a standing item for future CROWG meetings. This is an introduction to this topic and how it came about. It will be formalised in the future with presentations and discussions.
- MR discussed the origins of this idea and three topics to begin discussions:
 - Leadership
 - Soft Skills
 - Culture

- There are experts in the member group and a lot of expertise that can be drawn upon. These subjects are not spoken about openly.
- Members brainstormed the question ‘What makes a Control Room Great?’ – key components discussed:
 - Be willing to share things with a new person’s ideas in mind, as not all control room staff have the same number of years’ experience.
 - Compatibility – open, honest and non-judgemental relationships. A sense of camaraderie in a control room environment. Fostered by everyone in the team.
 - Understanding that no one goes to work wanting to do a bad job. An understanding of why a mistake occurred and closing the learning and feedback loop. Doing that in a timely manner. Work out why, be open about the mistake and know there is a ‘Just Culture’, not a ‘Blame Culture’.
 - Culture of being in the situation together – collaborative and encouraging environment – Lack of ego and willingness to own mistakes and learn from them. Foster team growth.
 - Support – Experienced Controllers support newer Controllers. Empowered Controllers who know where and when they are able to make a decision and when to ask for guidance.
 - In smaller control rooms, often there is only one person on shift – Managers should make allowances for these situations, where Controllers do not know each other well or do not often work together and not to assume that everyone working the same job should work well together.
 - AusNet night shift is one Controller. When a new Controller commences a night shift, for the first three months other Controllers do not put their phones on silent and are contactable by the new Controller if needed. Management also encourages diversity of skills, age, gender etc.
 - New Controllers shadow not only experienced Controllers, but other new Controllers so they learn different ways of working and develop their own style.
 - Have both personal and group KPIs and goals. Also have a register of competencies and experience, to call on when new people come into the control room and will assist with succession planning.
 - Training and assessment sign off is carried out by multiple controllers, to avoid any conflicts or favouritism.
 - Consideration should be made for younger generation whereby ‘The right to disconnect’ and other initiatives, may be a contributing factor. Other considerations could include incorporating updates in line with indigenous seasons or encouraging catch ups with people outside of your normal circle. Promotes understanding and empathy.
 - Transparent reporting capabilities that require accountability and the same action by all.
 - Show new Controllers and offline staff where they are in the big picture. How their work contributes to or comes into the control room. Show them that connection and build on it.
 - Utilise technology and new ideas to automate tasks where possible. Reports may be self-service and automated.
 - DL asked if there is a mechanism we could use to produce guidelines around this topic that could be distributed to members and feedback funnelled back to update the document.

• **ACTION:** MR – Investigate feasibility of producing guidelines around ‘What makes a Control Room Great’, the draft of which will be distributed to members for feedback. It will be a live document that can be updated as needed.

8 Workplace Health, Safety and Environment in Power System Operations

8.1 Discussion on how WHSE applies to the Power System

- Ongoing and carried over to the next CROWG meeting.

9 Power System Operator Training (PSOT) | Daniel Lavis

9.1 Update of Power System Operator Training Framework (PSOT) - Dan Lavis (AEMO)

- **PSOT Module Testing** - Four Pilot Modules have been delivered for testing, with 11 NSPs invited to participate in the testing program. It is envisioned that initial testing will be complete by the end of September. Two further modules due for testing by the end of September, with the remaining Pilot Modules available by the end of 2024.

- **RTO Training SharePoint Collaboration Site** – Created within AEMOs SharePoint. A site where NSP domains have been whitelisted, so we can invite OTWG members/PSOT testers to upload feedback or other training collaboration documents.
- **Power System Operator Exchange Program** - in development stages to initiate Controller exchange visits for AEMO Controllers to visit TNSP Control Rooms and vice versa. A 2–3-day exchange program that will focus on knowledge sharing and awareness of the varying obligations that motivate and direct AEMO & TNSPs. Initially the program will be offered to TNSPs and they will have the discretion to schedule visits for new controllers or more experienced controllers. AEMO's RTO Managers are providing input to guide development of the Exchange Program Framework and ways to minimise impact on all stakeholders involved, whilst implementing a much-needed, sustainable program. Further details will be provided at the next CROWG meeting.
- **SA System Restart Training** – commences 17 October, with six sessions between October and December 2024. Relevant NSPs are encouraged to email RTOTraining@aemo.com.au if they have not yet received an invitation to attend.

10 Shift Work | Mario Rositano

10.1 Update from members

10.2 Expectations of recent shift workers

10.3 Other business

- Ongoing and carried over to the next CROWG meeting.

11 Communications | Darren Spoor

11.1 Update

- Ongoing and carried over to the next CROWG meeting.

12 Electricity Industry Terminology and Phraseology

12.1 System Restart Document Update

- Final version created and been used as part of System Restart Training. Available for members on the CROWG page in the AEMO website.

12.2 Emergency and Time Critical Document Update

- Members will be asked to read and review the document as it needs amendments and additions. Comments are welcome. A meeting of the subgroup will be scheduled to finalise the document and it is envisioned that process will be concluded prior to the July CROWG meeting.

12.3 What's Next?

- Ongoing and carried over to the next CROWG meeting.

13 Control Room Technology and Ergonomics | Mario Rositano

13.1 What are the latest upgrades, ideas, proposals, projects, etc. What currently works and what issues have been experienced.

13.2 Headphones, phones, recordings, etc. What is best practice in the NEM?

- Ongoing and carried over to the next CROWG meeting.

14 Other Business

14.1 Feedback / Survey

14.2 Frequency of meetings. What should the CROWG aim for?

- Members were asked to consider if going forward there will be two CROWG meetings per year and if anyone would like a third meeting, they can initiate the chair for that meeting. Further discussions will be held at the next meeting.

14.3 VDS Update

- Ongoing and carried over to the next CROWG meeting.

15 Next Meeting

The next meeting will be scheduled in August 2024. MR will send out meeting invitations.

DATE	HOST	LOCATION
08 November 2024	TBA	TBA

Meeting closed at 12.32pm (Market Time).