

## MEETING OUTCOMES

MEETING:	WEM Reform PSO Working Group – Meeting #2	
DATE:	Monday 15 October 2018	
TIME:	1:00 PM	
LOCATION:	PUO Offices, L23, 23 Barrack Street, Perth	
ATTENDEES:	Aden Barker, PUO Anlee Khuu, Jackson MacDonald Christopher Wilson, AEMO Clayton James, AEMO (Chair) Daniel Kurz, BlueWaters Dean Frost, Western Power Glen Carruthers, Western Power Jenny Laidlaw, RCP Laura Koziol, RCP Leon Kwek, AEMO	Liz Aitken, Perth Energy Matthew Fairclough, AEMO Mena Gilchrist, PUO Natalia KostECKI, AEMO Noel Schubert Oscar Carlberg, Synergy Patrick Peake, Perth Energy Sabina Roshan, Western Power Sarah Silbert, AGL Steve Gould, Eureka Electricity Tessa Pittendrigh, AEMO
APOLOGIES:	Sara O'Connor, ERA Simon Middleton, AEMO	

The chairman opened the meeting at 1:05

### 1. Minutes of Last Meeting

Following update to item 3.1 to change the word 'group' to 'droop' in the second bullet point, and to include AEMO at second bullet point of item 4.1, the minutes were accepted as an accurate record of events.

### 2. Actions and Corrections from Last Meeting

The Chair shared amended items from last meeting:

PSO WG Principles:

- Clarified third principle to "Adopt a simplified approach where possible *with regards to the wording of the WEM FOS*"
- Added an additional principle "*include recommendations where appropriate to ensure a robust and effective review and governance cycle*"
- General acceptance with the variations to the principles.

Contingency events

- Following proposal at the meeting on 26 September, consideration was requested to include "Above 4x.xHZ within y min" as a stabilisation target for the Credible Contingency Event category (non-island)
- Based on review of previous event data and consideration of the impact to the current Ancillary Service quantities, AEMO indicated that there is no urgent need for an additional stabilisation target, and proposed this target not be included.
- General acceptance to leave the Credible Contingency Event stabilisation targets as they are.

#### Islands

- Acceptance from the working group to remove the word ‘the’ from “supplying the load” to supplying load.

#### Recover

- Acceptance of the addition ‘to allow 15 minutes for full recovery’.
- Suggestion from LA that the 15 minute recovery timeframe might be too long and should be reviewed in the future.

#### Separation Event

- The working group accepted the expanded definition to increase the clarity of what is meant by a Separation Event.

#### Multiple contingencies

- There was some discussion regarding what constitutes a multiple contingency, with the general agreement for the addition of ‘reasonable endeavours’ to apply within the FOS for this condition.
- GC noted that it was becoming increasingly difficult for generators to comply with the generator connection standards (eg. TR Ch3) as they relate to maintaining connection to the network when the frequency is around the extreme lower limit (47Hz). General discussion that the extreme frequency limits should align with the operating standards for equipment connected to the network going forward.

**Action: Updated FOS paper to be circulated with abovementioned corrections**

### 3. Frequency Operating Standard (FOS) Discussion Paper – continued discussion from Meeting 1

- Recommendation 14 (Protected Events) – general acceptance
  - It was agreed to consider protected events in the future as unlikely to be relevant for the SWIS currently, and leave out of the Frequency Operating Standard at this point in time.
- Recommendation 16 (Scarcity of Supply) – general acceptance
  - CJ proposed having rules in a word-based approach, rather than another numeric table within the FOS.
  - Members discussed the merits of including management of scarcity in the WEM Rules rather than in the FOS. AEMO clarified that changes in the WEM Rules would be required to cover reliability aspects of scarcity conditions in any case.
  - Proposed to address the matter in the future, when designing for new ancillary service, though noting having it all together in the FOS makes some sense. For the time being recommendation for the FOS not to include an additional table of frequency settings was agreed.

#### 3.1. Island

##### 3.1.1. Performance – Recommendation 13

- CJ noted the current TR FOS has very limited specification around frequency performance within an island.

- Good discussion around the fact that when islands occur, there is typically limited capability within the island to maintain strict adherence to standards (including via the use of automated load shedding/generator tripping) and that the design intent for the FOS for an island should ensure:
  - It does not result in an outcome where it would require load to be manually shed prior to an event occurring in order to maintain FOS island settings
  - It allows for the fact that islands may initially be de-energised and then subsequently “started up” and operated separately
- Proposed changes to the recommendation are that reasonable endeavours will be taken to ensure islands meet the proposed frequency operating standard (in the NOFB), also removing the 99% obligation.
- Members discussed the merits of separate standard to apply to islands. Agreement that customers should be the priority, with preference for the standard to be less prescriptive.
- CJ proposed the option of a single frequency band that could accommodate a single and/or multiple contingency ie. 52Hz to 47Hz
- General agreement to remove island settings for credible contingency events and separation events, and for AEMO to publish principles for how continuity of supply will be managed in each relevant island.

### 3.1.2. Autonomous Islands – Recommendation 15

- The working group generally agreed that the WEM/SWIS FOS should not apply to Autonomous Islands.

It was noted that Jessica Shaw, Chair of the Economics and Industry Standing Committee is delivering an Inquiry into Microgrids and Associated Technologies in Western Australia, which may have future implications for this recommendation.

- How autonomous islands are defined was questioned. CJ stated that currently anything that can connect to the SWIS is part of the SWIS by definition.
- The possible use of s.25 of the *Electricity Act 1945* as reference for the frequency obligations that apply in an Autonomous Island was discussed.
- LA suggested that an “opt-in” arrangement could be an option here, where someone would request AEMO to operate the island and it would therefore be covered by the FOS but otherwise not. General discussion around the merits of an “inclusive” rather than “exclusive” definition, CJ noted that one issue with a “inclusive” definition is that it still results in the location/operator of other islands unknown/undefined.
- SR proposed the SWIS FOS apply whenever autonomous islands are connected to the SWIS and wording of the TR be amended to ‘at times of disconnection from the SWIS’ for clarity that the standards do not apply when the island is operating autonomously. Noted that once these are identified, this could be one mechanism for identifying a relevant standard that would apply, however consideration would still need to be given to “behind the fence” sites that manage their own load (e.g. refineries) to ensure this does not apply in circumstances where it should not.
- It was suggested that a list be created to understand where autonomous islands exist and name the operator. Propose the list be held and maintained publicly. DF noted that there may also be issues for Energy Safety to be involved with in relation to operation of DER.
- CJ noted AEMO need to be clear about what they are operating, and which island requirements might apply, as it’s not possible to manage islands not aware of. It is likely there will be an ever-increasing number of autonomous islands in the future.
- General agreement with recommendation 15 though it was noted WP would like more time to consider how autonomous islands are best identified due to general concern

around the number of connections to maintain and the size of the list, and will come back to the Working Group in 10 days (by 30 October).

- **Action:** WP to advise position on recommendation 15 by 30 October.

### 3.1.3. Rate of Frequency of Change

- CJ advised that while there is no specific recommendation now, the need for it will be guided by the GHD analysis.

## 4. General Discussion

The timing for GHDs next set of analysis was queried. CJ noted analysis would be shared with the Working Group as it becomes available and the intention is that this will be an standing item for future working group meetings.

CJ queried timing for Working Group meetings – general agreement to hold working group meetings once a month.

## 5. Actions

Agenda Item	Action	Responsible
2	Updated FOS paper to be circulated with abovementioned corrections	AEMO
3	Recommendation 15 (Autonomous Islands) – Western Power to consider proposals and provide advice by 30 October	Western Power

The Chair closed the meeting at 3:25pm.