

5MS Program Consultative Forum (PCF) Meeting Notes

MEETING: 6
 DATE: Tuesday, 4 December 2018
 TIME: 10:00 AM – 1:00 PM
 LOCATION: AEMO Offices Melbourne, Sydney, Brisbane, Adelaide and Video/Teleconference

ATTENDEES:

ATTENDEE	ORGANISATION	OFFICE
Dean Lane	Origin Energy	Sydney
Anders Sangkuhl	Alinta Energy	Sydney
Chris Muffett	AEMO (Chair)	Sydney
Gary Eisner	AEMO	Sydney
Emily Brodie	AEMO	Sydney
Hamish McNeish	AEMO	Telephone
Jennifer Fikret	AEMO (Secretariat)	Melbourne
Graeme Windley	AEMO	Melbourne
Mal Borschman	AEMO	Melbourne
Peter Spittle	Jemena	Melbourne
Robert Lo Giudice	IntelliHub Pty Ltd	Melbourne
Justin Betlehem	Ausnet	Melbourne
Adam Brown	Stanwell Corporation	Telephone
Elizabeth Burns	Stanwell Corporation	Telephone
Owen Self	Stanwell Corporation	Telephone
Adrian Honey	Tas Networks	Telephone
Carolyn Hope	Energy Queensland	Telephone
Chris Streets	AGL	Telephone
Corinna Woolford	Aurora Energy	Telephone
Georgina Snelling	Energy Australia	Telephone
Linda Brackenbury	Plus ES	Telephone
Neville Lewis	Select Data	Telephone
Damien Lynch	Ergon Energy	Telephone
Divya Kapoor	Flow Power	Telephone
Robert Pane	InterGen	Telephone
Stephanie Lommi	Red and Lumo Energy	Telephone
Trevor Lane	Powercor	Telephone
Piera Lorenz	Telstra	Telephone
Peter van Loon	Powershop	Telephone
Paul Greenwood	Vector	Telephone

Preliminary Matters

- Attendees were noted and welcomed to the Program Consultative Forum.
- The Program Consultative Forum confirmed the minutes of meeting number five held on 5 November 2018.

The actions from meeting four have been reviewed and updated (see list below).

Matters for Noting

3. Overview DER Program – C. Cormack (Slides 4-7)

Increases in Distributed Energy Resources (DER) have resulted in industry investigating how to integrate DER into the energy system. Twenty percent of homes now have solar PV and governments are looking at subsidising batteries. DER will impact both the wholesale market and distribution network. Currently DER is utilised for self-consumption (behind the meter). New business models are aiming to aggregate and orchestrate DER. The current system and regulatory environment may not accommodate these models, resulting in the need for a solution.

Technical challenges of high DER can include voltage issues, the need to review FCAS and management of the supply/demand balance. AEMO are examining the challenges and availability of solutions.

A two-way system is needed to allow DER to meet wholesale and FCAS requirements. Currently, customers install DER at their own expense, so there is a need to incentivise and ensure prices are kept affordable for customers and also for those that do not have DER.

The DER Program consists of five streams – Slide 7.

1. Pilots – a partnership with DEIP – led by ARENA, including market bodies and peak organisations. The first trial is the VPP Demonstrations Program being ran by AEMO. The VPP Consultation Paper is [here](#) and closes by 21 December.
2. Markets – Open Energy Networks is a joint project between the Energy Networks Association (ENA) and AEMO. Stakeholder workshops have “deep dived” into models. Contact derprogram@aemo.com.au if you would like further information. A recommendation paper will be published mid-2019.

The OEN project is also working with AEMC on three rule changes regarding wholesale demand response (WDR) and building an understand of operational and procedure impacts to these rule changes.

Three models for WDR outcomes will be put through a rule change request relating to multiple trading. Currently there are no timeframes set.

The DER Program will endeavour to keep the 5MS PCF up to date should any items have an impact of 5MS.

3. Operations – Focusses on the technical system impacts that may come from DER i.e. effect of disturbances on solar PV, inverter responses etc. Higher DER in the distribution network and cyber security are included in this workstream.
4. Standards – review of AS4777 and other standards are being reviewed. Recommendations at an international level in respect to DER are also being investigated.
5. Customer Data – The DER Register rule has been made and AEMO has conducted stakeholder sessions and are building a model to capture data flow. The DER Register will go live by end of 2019 with consultation occurring around Feb 2019. Distribution networks will be providing the information into the DER Register.

Integration of DER will bring in a much wider group of participants into the electricity market, therefore a DER communication and education program will be developed to assist non-traditional market participants in the future (installers, software providers, inverter manufacturers).

Action 6.3.1: Distribute next month's DER program timeline.

Contact DERprogram@aemo.com.au for further information.

4. Program Update – G Windley (Slides 8-10)

Global Settlement (GS) rule is likely to be introduced by the AEMC this week, however the timing is unknown. Further clarification is required.

It was noted that Victorian Meter Providers, due to state legislation, do not have a 5MS compliance obligation for retail customers until 1 Dec 2022. AEMO views any 2022 work as not part of the 5MS program (all systems development would need to be completed for other states) but recognises there is likely to be a requirement for environment access, managed testing stages and/or market trials.

Action 6.4.1: E. Brodie to discuss with P. Spittle, R. Lo Giudice and J. Betlehem (others welcome) on MPs system test and delivery requirements from AEMO in 2022.

Stanwell and Infigen raised concerns their programs may not have enough time to deliver their internal solution within the program timeline. AEMO noted that the conceptual timelines have been available for six months, and the SWG have published dates for technical specifications.

Concern was expressed that consideration was not given for organisations to be ready in time to deliver their internal program. AEMO noted that it does not have program dependencies on participant systems to be ready, however monitoring and reporting of participant readiness would be part of the Readiness Workstream.

Action 6.4.2: Robert Pane (Infigen), Owen Self (Stanwell) and Hamish to follow up on timing of the industry's program as there may be an emerging risk with a relationship to R02. PCF will await feedback and decide on further action.

Accreditation/Certification – readiness monitoring. Readiness will commence June 2019, as there is an overlap with procedures work. Participants requested this requirement be identified as early as possible; AEMO will attempt to, with the caveat that a number of solutions are still to be determined, and therefore cannot understand what accreditation would be required.

Action 6.4.3: AEMO to consider if readiness planning can be bought forward with respect to procedures, systems and resources.

5. Industry Risks & Issues – G. Windley (Slides 11-12)

Industry Risk/Issue Register is updated and available [here](#).

It was agreed that risks and issues should be reviewed quarterly at the PCF.

Action 6.5.1: Review risks and issues quarterly at the PCF.

Dean Lane (Origin) noted the due date for R06, and suggested that it be pushed out.

Action 6.5.2: Review and amend due date for R06.

6. Procedures Work Stream – E. Brodie (Slides 13 & 16)

Procedures work is largely running to plan. Noted that consultation on the Prudentials package is now being postponed until after the Reallocations package has been completed. This is because AEMO identified that the Reallocations work is an input into the Credit Limit Procedure.

5MS Actions Log was presented to the PCF and will be uploaded to AEMO's website this month. The actions log will be a one-stop shop for the key actions across the 5MS program. To keep the log manageable, it will focus on actions that involve information sharing between AEMO and participants, rather than on items that are trivial or administrative.

A 5MS consultation "landing page" has been designed and will be available this month at <http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement>

The web page will help stakeholders to navigate AEMO's website through to the 5MS specific consultations.

7. Systems Work Stream – H. McNeish (Slides 23-28)

Bidding interfaces, APIs, pre-despatch and metering solution options are currently being focussed on by the SWG.

Action 6.7.1: Updated vendor list to be re-circulated by G. Eisner.

Action 6.7.2: Resend SWG invite.

Monday's Vendor Information Session webinar went well covering programs, procedures and systems approach.

Action 6.7.3: Vendor feedback to be reviewed.

8. Stakeholder Update – G. Eisner (Slide 16)

Results of survey were given.

Matters for Discussion

9. Recap of Technology Update from Executive Forum – G. Windley (Slide 29)

AEMO's CTO and CEO want to move AEMO's technology forward. Industry requested minimal changes and was assured there is alignment between the two.

Action 6.9.1: G Windley to come back with benefits and API costs.

Other Business (Slide 30-31)

10. General Questions – C. Muffett

Request was made for meetings to be held by webinar.

Action 6.10.1: Review technology options for PCF, including webinar.

11. Next meeting

The next Program Consultative Forum meeting is scheduled for Friday, 8 February at 10 am.

The meeting closed at 12.22 pm.

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12. Update of Previous Action Points & New Actions Raised

Item	Topic	Action required	Responsible	By
PCF 2				
PCF 3				
3.1.1	Program Update High Level status	AEMO to consider items discussed in one-on-one meetings being published. 4 Oct – To be published towards end October 2018.	Gary Eisner	4 December To be distributed to PCF in 2 weeks OUTSTANDING
PCF 4				
4.4.2	Industry Risks and Issues	Participants to supply list of their vendors to AEMO to be circulated anonymously.	Chris Muffett	4 December Vendor list to be distributed CLOSE
PCF 5				
5.3.1	Program Update	Understand what AEMO are prepared to share with the industry regarding internal architecture.	Graeme Windley	4 December 4 Dec - Discussed internally and Architect will present internal solution to PCF in New Year OUTSTANDING
5.4.1	Industry Risks and Issues	R06 and R09 - Rewrite descriptions to articulate impacts.	Graeme Windley	4 December CLOSE
5.6.1	Systems Work Stream Update	Distribute Dispatch FG notes to be distributed to PCF and ensure they are included on AEMO's website.	Emily Brodie	4 December CLOSE
5.6.2	Systems Work Stream Update	Victorian MPs & MDP do not need to deliver full 5MS compliance until 1 December 2022. PWG to discuss transition requirements and the role required AEMO leading up to this date.	Emily Brodie	31 March 2019 4 Dec – Complete next quarter. OUTSTANDING

5.8.1	Matters for Discussion	AEMO to investigate how co-ordination to occur across workstreams.	Chris Muffett	4 December 4 Dec - Revisit early in New Year. OUTSTANDING
PCF 6 – New Actions				
6.3.1	DER Program	Distribute next month's DER program timeline for DER to give industry an understanding of high level timings.	Chris Cormack	
6.4.1	Program Update	Industry moving to five-minute settlement anytime from Jul 2021 to Dec 2022 and a testing environment. Discuss requirements and consider impacts across SWG and PWG.	Emily Brodie Peter Spittle Justin Betlehem Robert Lo Giudice	Jan 2019
6.4.2	Program Update	Robert Pane (Infigen), Owen Self (Stanwell) and Hamish to follow up timing of the industry's program and possible emerging risk with a relationship to R02.	Hamish McNeish	
6.4.3	Program Update	AEMO to consider if readiness can be bought forward with respect to procedures, systems and resources.	Graeme Windley & Chris Muffett	
6.5.1	Risks and Issues	Review risks and issues quarterly at the PCF	Chris Muffett	Next PCF meeting - Feb 2019
6.5.2	Risks and Issues	Review and amend due date for R06.	Graeme Windley & Chris Muffett	
6.7.1	Systems Workstream	Updated vendor list to be re-circulated.	Gary Eisner	
6.7.2	Systems Workstream	Re-send invite.	Jenny Fikret	
6.7.3	Systems Workstream	Vendor feedback to be reviewed.	Chris Muffett and PCF members	

6.9.1	Matters for Discussion -Recap of Technology Update from Executive Forum	G Windley to come back with benefits and API costs.	Graeme Windley	
6.10.1	Other business	Review technology options for PCF, including webinar	Chris Muffett	