

POWERLINE BUSHFIRE SAFETY COMMITTEE

MINUTES OF MEETING No. 05

Held: Tuesday 12 December 2017, at 10:00 am

Location: Level 5, Building 2, 4 Riverside Quay, Southbank

Attendees:	Status	
David Harris	Member	Chairman
Claire Noone	Member	Principal, Nous Group
Gail Moody	Member	Director, Wilmin Consulting
Gary Towns	Member	Director, Facio Pty Ltd
Gaye Francis	Member	Director, R2A Pty Ltd
Tony Marxsen	Member	Director, Marxsen Consulting Pty Ltd
Paul Fearon	Observer	Director of Energy Safety, ESV
Ian Burgwin	Observer	General Manager Electrical Safety & Technical Regulation, ESV
Tom Hallam	Observer	General Manager Regulation and Network Strategy, AusNet Services
Mike Carter	Observer	Program Executive REFCL, AusNet Services
Steven Neave	Observer	General Manager Electricity Networks, CitiPower and Powercor
Matt Thorpe	Observer	Head of Network Compliance, Electricity Networks, CitiPower and Powercor
Neil Watt	Observer	Technical Director REFCL Project, Electricity Networks, CitiPower and Powercor
Steve MacDonald	Member	General Manager Infrastructure, Orion NZ Ltd
Neil Saul	Observer	Powerline Bushfire Safety Program, DELWP
Robert Skene	Secretariat	Senior Technical Advisor, ESV
Apologies:	Status	
Ashley Hunt	Observer	Powerline Bushfire Safety Program, DELWP

Agenda item Discussed:

Item	Matter	
Part A	Committee Members and secretariat only	
1	Committee Discussion	David Harris
Part B	Committee Members and Observers	
2	Introduction	David Harris
3	DB progress to-date	Steve Neave/ Tom Hallam
4	Discussion	David Harris
8	Future meetings	David Harris

Part A - Committee members and secretariat only

1. Committee Discussion

1.1. Committee procedural

The Chair advised that Paul Fearon (DoES) had been invited for this extended Committee Only discussion which was to include a briefing and discussion of Paul Grimes interim Review of Victoria's Electricity and Gas Network Safety Framework report.

The Chair confirmed earlier advice that there may be a need to schedule an additional members-only meeting were the committee requested to provide advice on exemptions, extension to time lines, and the regulatory framework associated with the requirements contained in bushfire mitigation legislation.

1.2. Register of Engagements – Committee Members

Members reported no further declarations of engagements.

Standing Action: Members to provide advice to the Secretariat by email on matters where there may be a perceived conflict of interest.

1.3. Review of Victoria's Electricity and Gas Network Safety Framework

The Chair provided a summary of the interim report of the Review of Victoria's Electricity and Gas Network Safety Framework which contains findings and recommendations which directly relate to this committee.

The DoES provided some context and additional insights into the interim report from ESV's perspective.

The members then discussed the interim report, its recommendations and what contributions the committee might make to the DoES and government.

Following the release of the final report, the Chair further expressed the view that the committee meet to discuss the report and that it may be beneficial to have both the DoES and the General Manager Electrical Safety & Technical Regulation, ESV attend that meeting.

1.4. Other business

It was noted that the Essential Services Commission Victoria (ESCV) has commenced its review of the Electricity Distribution Code, fast tracking the review of the specified voltage levels. The ESCV has revised its review process with stakeholder engagement being conducted prior to the publication of an issues paper.

Part B - Committee Members and Observers

2. Introduction

2.1. Attendance and apologies

The Chair informed the meeting that Ashley Hunt had advised he would not be attending the meeting and that for this meeting Neil Saul would be the Powerline Bushfire Safety Program, DELWP nominee.

2.2. Previous meeting minutes

Minutes of the previous meeting were circulated out of session with comments received from Members or Observers. An additional item was raised by a member at the meeting for incorporation in the minutes. This additional item was accepted.

The Chair requested Members approve the minutes as a record of the meeting held on 12 September 2017.

Committee decision: Passed without dissent.

Action Secretariat to adjust the minutes, post on the ESV web page and redistribute to members and observers.

2.3. Outstanding actions from previous meetings

Meeting date	Matter	Action	Status
13/06/2017	2.3 Outstanding Actions	Members to consider the content of the process/protocol for the provision of advice to the DoES, when requested.	No progress
	2.3 Outstanding Actions	The secretariat to produce an outline of the process/protocol for the provision of advice to the DoES, when requested.	No progress.
12/09/2017	3.2 AusNet Services Woori Yallock update.	AusNet Services are to confirm if the cross country fault was the result of a surge diverter failure.	AusNet confirmed that country fault was the result of a surge diverter failure.
	3.2 AusNet Services REFCL progress update.	AusNet Services to include the number of HV customers connect to each of the zone substations in future timeline presentations	AusNet Services have included the number of HV customers' connection points in their update reports for this meeting.
	3.3 AusNet Services and Powercor REFCL availability.	AusNet Services and Powercor to provide a report to the December committee meeting on the expected REFCL availability for the 2017/18 summer period.	AusNet and Powercor have included in their update report to the meeting the expected REFCL availability for the 2017/18 summer period.

Meeting date	Matter	Action	Status
	6.1 AusNet Services and Powercor progress updates.	AusNet Services and Powercor to consider including the additional information sort by members in their update reports.	AusNet Services and Powercor indicated that they have included the additional information sort by members on progress in their update report to this meeting.
Outcome legend			Open
			Closed

Standing Action: Secretariat to provide Members a list of matters where the industry is likely to seek relief from requirements with each meeting agenda.

3. Electricity Distribution Business - progress to-date

Tom Hallam and Steve Neave each separately provided updates on their businesses' progress in implementation of the requirements contained in the Electricity Safety (Bushfire Mitigation) Amendment Regulations.

3.1. Powercor

A PowerPoint presentation was provided on their REFCL program.

- **REFCL Trials – Current Status, including HV Customers**

Powercor advised that both Gisborne and Woodend zone substations would be in operation this summer, with the remaining six Tranche 1 zone substation shown on the slide commissioned for the 2018/19 summer.

- Gisborne zone substation

Powercor reported that this trial site has been in service since April 2017, and was expected to be in operation over the 2017/18 summer fire season at the required capacity.

Powercor advised that they were currently working on proposals for their testing protocol which are required to be documented in their bushfire mitigation plan and submitted to ESV for acceptance.

- Woodend trial zone substation.

Powercor reported that this trial site had been commissioned into service in October 2017, and would be in service over the 2017/18 summer fire season; albeit at a capacity lower than the required specification, as it would operate with a single GFN.

Powercor advised that the installation and operation of two GFNs on the site had proved difficult with a number of inconsistencies in the soft fault confirmation operation. Whilst the two GFNs are operating on separate networks there appears to be a sympathetic response generated in the second GFN when the first GFN operates. Swedish Neutral have been asked to do further work on their algorithms to allow the two GFNs to work collaboratively.

Powercor further advised that in 30 days of operation of this station that there had been 22 operations, including 20 transient faults without interruption, 1 cross country fault initiated from a bark contact and the resultant elevated voltage causing a surge diverter failure, and one fault where the GFN had been by-passed.

Action: Powercor to provide further details of the circumstances requiring the GFN to be by-passed.

- Tranche 1 deployment program.
A slide was shown depicting the three groups of work for each of the Tranche 1 zone substations, namely; distribution works, zone substation works and HV customer treatments.
- REFCL Tranche 1 isolation substations.
A further slide was shown depicting the isolation transformer delivery and construction schedule. Two isolating transformers are shown on the schedule to enable the segregation of the extensive underground HV network associated with the Winchelsea zone substation resultant from the government's Powerline Bushfire Safety Program initiatives. This initiative was proposed to reduce the number of GFNs required to achieve the required operating capacity and is subject to acceptance of a future exemption application.

Powercor explained that the schedule envisaged the installation of the isolating substations in a time coincident with the installations of a station REFCL, thus allowing the testing to take place without the need for HV customer outages. In some cases it was explained that one isolating substation would serve several HV customers.

Powercor stated that conversations had commenced with HV customers and that in principle agreements had been reached with approximately half of those customers. In one case agreement had been reached for a HV customer to become a LV customer.

An additional slide was shown containing the additional HV customer information associated with each of the Tranche 1 zone substations, as sought by the committee members at the last PBSC meeting.

- **REFCL Program Risks Summary.**
A slide showing what Powercor believe to be their top three strategic risk areas was displayed. This assessment was said to have been undertaken at a time coincident with the review of the network safety framework undertaken by Paul Grimes.
- **Future Exemption Requests.**
Powercor listed the exemptions already applied for and what they saw as future requests.
- **SWER Deployment Status.**
Powercor's slide displayed the status of the number of SWER ACRs installed by the end of 2017 and those to be installed in the next three years.

- **Powerline Replacement.**

The amount of conductor replaced in the Powercor network as part of the government's Powerline Replacement Fund was shown in a slide.

Action: Copy of the Powercor's Power Point presentation to be distributed to Members and Observers and made available on the ESV PBSC web page.

3.2. AusNet Services

A PowerPoint presentation was provided on their REFCL and other bushfire mitigation programs.

- Grimes Review Implications

AusNet Services confirmed that they supported the government in undertaking the review. AusNet Services reflected that with the tight rollout associated with the REFCL program that there was not an obvious window in which to undertake this review without heavily disrupting the implementation. Further that whilst there were opportunities for significant cost savings, that these needed to be offset against the significant costs associated with de-mobilisation and re-mobilisation were there to be a brake placed on the program.

- Woori Yallock zone substation – current status.

AusNet Services advised that commissioning of the second REFCL was currently underway with the target that the zone substation be in service prior to Christmas, but not at the required capacity. Were technical issues to be encountered to prevent the full operation of both REFCLs, then the fall back position has been determined to have one inverter driving the two arc suppression coils. This would result in a reduced sensitivity.

Following hardening of a HV customer sub-network, AusNet Services advised that they have secured agreement with that customer to operate at voltages higher than that specified in the Electricity Distribution Code.

AusNet Services confirmed that the previously reported cross country fault was the result of a surge diverter failure.

- REFCL Installation activities overview

- Barnawartha zone substation (BWA)

Functional testing of the REFCL has been completed on a reduced network configuration (about 50%).

This zone substation has 2 major HV customers, with AusNet Services advising that it took 3 months to secure an outage to undertake the required testing.

HV customer and balancing work is required to be completed before compliance testing can be carried out and the REFCL placed in service by October 2018.

- Rubicon A zone substation (RUBA)

All construction work is now complete and the REFCL ready for pre-commissioning. The expectation expressed was that this pre-commissioning

would be undertaken by the end of December 2017, with commissioning postponed until May 2018 after the summer fire season.

Negotiations were said to be continuing with HV customers associated with this station.

- Program Status

AusNet Service provided a slide showing the status of each zone substation

- Program update & Schedule

AusNet Services provided a slide showing the schedule for each of the zone substations in Tranche 1. AusNet Services reported that the program for Tranche 1 is currently on-track and that scoping for tranche 2 was well underway, with an expectation of submitting a proposal to the AER around the end of quarter 1, 2018.

A dashboard slide for Tranche 1 HV customer was shown and contained the additional HV customer information sought by the committee members, confirming that conversations have now commenced with all Tranche 1 HV customers. This slide also identified one HV customer which whilst currently supplied by Lang Lang (a zone substation not mandated in legislation to have a REFCL installed), could be supplied by the mandated Wonthaggi zone substation.

- Other bushfire mitigation programs

- ACR Program

AusNet Services confirmed that they had completed their SWER replacement program in 2015 and that these remained in service with status monitored on a monthly basis.

Further advice was furnished regarding the continuing research into increasing the sensitivity of network ACRs so that the current Distribution Feeder Automation system could be maintained following conversion to a REFCL network.

AusNet Services advised that following a recent review of their ACR sensitivity setting regime that they no longer used a two setting regime for the summer periods, applying the most sensitive (Total Fire Ban day) setting throughout the summer season.

- Powerline Replacement

AusNet Services provided a slide showing the status of the conductor replacement associated with the government's Powerline Replacement Fund (PRF) contracts.

In addition to the PRF initiative AusNet Services reported that they had replaced approximately 17,000 km of conductor in the 2010-15 period, with another 700 km of conductor identified to be replaced in the 2015-20 period.

Further AusNet Services reported that their surveys of conductors in the highest risk areas were generally in good condition with no large scale replacement programs scheduled.

Action: Copy of the AusNet's Power Point presentation to be distributed to Members and Observers and made available on the ESV PBSC web page.

4. Discussion

4.1. Committee Member raised matters

4.1.1. Presentations

The Chair reflected that the quality and content of recent presentations was such that it greatly assisted the member's in their considerations.

A discussion was held regarding the benefit to members in receiving presentations prior to the meeting, to enable some modest study of the information being presented. Both AusNet Services and Powercor agreed to the early distribution of their presentations.

Action: Presenters to send the Secretariat a copy of their presentation a clear two business days before the meeting for distribution to members.

4.1.2. REFCL operation

Clarity was sought as to the proposed total fire ban day REFCL operating modes and practices adopted were the REFCL not to be available.

The businesses confirmed their intent to have the REFCL operational modes documented in their bushfire mitigation plans delivered to ESV for acceptance.

Action: AusNet Services and Powercor to confirm that their current intended REFCL operation modes are specified in their bushfire mitigation plans.

4.1.3. Electricity Distribution Code (EDC)

With much emphasis being placed by businesses on a revision to the EDC, to move forward with HV customers on a REFCL protected network, a question was raised as to what if any consideration had been given to operating the REFCL on TFB days both within the current voltage levels and the durations contained with the EDC.

Powercor explained that the question of the operating voltage was extensively discussed as part of their recent application to the AER for REFCL contingent project funding, and that the AER had determined that funding should be provided to maintain the current EDC voltage requirements through technologies like isolating transformers.

4.2. Electricity Distribution Code – ESCV update

Confirmation was given that the ESCV had commenced their review of the EDC, with an initial focused review of the specified voltage requirements to be completed by mid-2018. The review process being followed has been revised from that

previously adopted by the ESC, with initial round table discussions being held prior to the issue of a formal issues paper.

4.3. Other matters

4.3.1. Review of Victoria's Electricity and Gas Network Safety Framework

The committee discussed this review in the members-only section of this meeting and a brief summary of those deliberations was provided to the observers.

The Chair reflected that the final version of the review was scheduled to be given to the Minister in December and offered the view that the current interim report was an input to the final report. As such it should not be assumed that any particular recommendation contained in the interim report be considered as final.

A brief discussion of the process going forward was held.

4.3.2. Referrals to the committee

There were no matters referred to the committee by ESV for advice.

5. Meetings

5.1. Next meeting

Meeting scheduled for 13 March 2018, starting at 10:00am and finish at 12:30pm, preceded by a "meet and greet" at 9:30 am.

5.2. Subsequent meetings

The Chair signaled that there may be a need to schedule an additional members-only meeting prior to the 13 March 2018 to discuss the:

- Review of Victoria's Electricity and Gas Network Safety Framework Report,
- Government's response to that report, and the
- Committee having been requested to provide advice to the Director of ESV on any exemptions referred to the PBSC.

Confirmation was given that subsequent meetings are scheduled for;

12 June 2018, 11 September 2018, and 11 December 2018.

The Chair thanked the presenters for interesting and informative papers, and the members and observers for their endeavors to ensure the meeting were productive.

The DoES also thanked the members and observers for their time and effort over the past year.

The Chair then closed the meeting.

Meeting closed at 12:40 pm.

List of Attachments

POWERLINE BUSHFIRE SAFETY COMMITTEE

- A. Powercor presentation,
- B. AusNet Services presentation