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Mr. Brett Fox Head of Regulatory Assurance Energy Safe Victoria Level 5, Building 2 4 Riverside Quay Southbank VIC 3006

31 August 2018

Dear Mr. Fox,

RE: Annual Compliance Report (Additional Bushfire Mitigation Duties)

Please find the attached Report, if you require any further clarification, please contact Chitresh Mukherjee on (03) 9173 7989 or Chitresh.Mukherjee@jemena.com.au

Yours sincerely,

Johan Esterhuizen Jemena

General Manager Asset Strategy Electrical

RESOLUTIONS

BOARD (BY CIRCULATION)

COMPANY

JEMENA ELECTRICITY NETWORKS (VIC) LTD (JEN /

COMPANY)

SUBJECT

ANNUAL COMPLIANCE REPORT

(ADDITIONAL

BUSHFIRE MITIGATION DUTIES)

FOR

APPROVAL

PREPARED BY

JOHAN ESTERHUIZEN

VETTED BY

PETER HARCUS

CLEARED BY

: PAUL ADAMS

DATE PREPARED : 27 AUGUST 2018

1 **PURPOSE**

1.1 This Paper seeks the Board's approval of the Annual Compliance Report (AC Report), for submission to the Victorian safety regulator Energy Safe Victoria (ESV), in accordance with section 120P(1)(e) of the Electricity Safety Act 1998 (the Act).

2. RECOMMENDATION

- 2.1 Management recommends that the Board approve:
 - (i) the AC Report;
 - (ii) inclusion of a signed statement on behalf of the Board that confirms the Board's approval (draft statement is provided in Annexure A); and
 - submission of AC Report and statement to ESV. (iii)

3. BACKGROUND

- 3.1 JEN is required to submit an AC Report to ESV before 1 Aug each year. The JEN report was submitted by the required date and ESV responded by highlighting the requirement that the AC Report must be signed by the Chairman of the JEN Board. The amended AC Report is attached to this Paper as **Annexure B** for Board approval.
- 3.2 The format of the AC Report is provided as a template by ESV and covers the status of three additional bushfire mitigation duties as prescribed by the amended Act, being:
 - (i) installation of Rapid Earth Fault Current Limiters (REFCL) (or similar technology) with performance capacities as prescribed in the bushfire mitigation regulations;

- (ii) construction of electric power lines in areas defined "Electric Line Construction Areas" (ELCA) in the Act; and
- (iii) installation of Automatic Circuit Reclosers (ACR) for Single Wire Earth Return (SWER) lines.
- 3.3 The AC Report confirms that:
 - (i) JEN is compliant with all of the requirements of the Act;
 - (ii) the status of the delivery of prescribed REFCL at Coolaroo zone substation by May 23 is on track; and
 - (iii) the other two mitigation duties are not applicable to JEN as there are no ELCA areas or SWER lines within the JEN territory.

4. NEXT STEPS

4.1 Once approval is provided, the AC Report along with a signed statement from the Managing Director and signed resolution will be promptly lodged with ESV.

LIST OF ANNEXURES

Annexure No.	Title
Α	Draft Statement
В	Annual Compliance Report

ANNEXURE A

DRAFT STATEMENT

The Board approves the Annual Compliance Report and its submission to ESV in accordance with section 120P(1)(e) of the Electricity Safety Act 1998.

FOR AND ON BEHALF OF JEMENA ELECTRICITY NETWORK (VIC) LIMITED:

date & time	29/8/18 C 14:32 AEST
sign here ▶	Managing Director
print name	PAUL ADAMS

ANNEXURE B

ANNUAL COMPLIANCE REPORT

S 120 P Annual Compliance Reports

3.1.1 REFCL Program Status [S120 P (1) a(i)].

NAME REFCL Pro	ject Activities	Date Completed	Percentage Completed	Weightings (indicative only)
Initiate	Business Case Commenced		0	5
	Business Case Approval		0	5
Design	Design Commenced		0	5
	Design Complete		0	5
Procurement	No. of REFCL units required	Two (2)	š	
Trocurement	REFCL order placed		0	5
	REFCL delivered to site	Particular States	0	10
Construction-	Line works commenced		0	5
Lines	Line works completed		0	10
Construction-	Station works commenced		0	5
Stations	Station works complete		0	10
Construction- Third Party	No. of affected HV Customer Connections	Two (2)		
Timurarty	HV customer works commenced		0	5
	HV customer works complete		0	10
Testing/Comm issioning	REFCL testing/commissioning commenced		0	5
	REFCL commissioned and operable		0	5
Close-out	REFCL at "required capacity"	a ve ^p rophysikaniko.	0	10
	Total Weighted Percentage Comple	ete	0	100

Notes:

Table above reflects the status of REFCL program for the current reporting period (1 August 2017 to 31 July 2018). During this period JEN did not plan to perform any work on projects relating to the installation of REFCLs at mandated zone substation, Coolaroo (COO). REFCL at COO is not due for service until 1 May 2023. Refer to the detailed notes under Table 3.2.1 for proposed project delivery schedule.

As a precursor JEN has installed a partial REFCL device (this is only the Arc Suppression Coil component) at Sydenham (SHM) zone substation (a non-mandated station) to identify any learnings which would benefit the installation projects at the mandated zone substations. The objectives of the pilot project were to prove the technical performance of the REFCL/ASC technology and to confirm the cost of installation from both a capital and operational perspective.

3.1.2 ELCA Program Status [S120 P (1) a(ii)]

Total HV Electric Line Volumes	At 1 May 2017	At 30 April 2018	Progress over Reporting Period
Bare Construction in ELCA	Route Km	Route Km	Route Km
Polyphase	0.0	0.0	0.0
SWER	0.0	0.0	0.0
Covered or Underground Construction in ELCA	Route Km	Route Km	Route Km
Polyphase	0.0	0.0	0.0
SWER	0.0	0.0	0.0

Note: There is no areas mandated as ELCA in the JEN distribution area. Therefore as defined by legislation JEN is fully compliant with this bushfire mitigation obligation/duty.

3.1.3 SWER ACR Program [S120 P (1) a(iii)]

FEEDER	Completion Date
Not Applicable	Not Applicable

Note: JEN do not own or operate any SWER lines. Therefore as defined by legislation JEN is fully compliant with this bushfire mitigation obligation/duty.

3.2.1 REFCL Program Status [S120 P (1) c(i)]

Coolaroo (COO) I	REFCL Project Activities	Date Completed	Percentage Completed	Weightings (indicative only)
Initiate	Business Case Commenced	See note 1	0	5
	Business Case Approval	See note 1	0	5
Design	Design Commenced		0	5
	Design Complete		0	5
Procurement	No. of REFCL units required	Two (2) - see note 2		
	REFCL order placed	THE PERSON NAMED IN	0	5
	REFCL delivered to site		0	10
Construction-	Line works commenced		0	5
Lines	Line works completed	E. T-1-19	0	10
Construction-	Station works commenced		0	5
Stations	Station works complete		0	10
Construction- Third Party	No. of affected HV Customer Connections	Two (2)		
	HV customer works commenced	See note 3	0	5
	HV customer works complete		0	10
Testing/Comm issioning	REFCL testing/commissioning commenced		0	5
	REFCL commissioned and operable		0	5
Close-out	REFCL at "required capacity"	See note 1	0	10
	Total Weighted Percentage Compl	ete	0	100

Notes:

- To meet the requirements of the Electricity Safety (Bushfire Mitigation) Regulations 2013, JEN is required to install a REFCL at Coolaroo (COO) zone substation by 1 May 2023. Prior to initiating a business case for COO REFCL project, JEN would need to carry out the following tasks:
 - a. Assess what needs to be done to ensure the 22kV network of COO will be hardened and ready for REFCL deployment. Present plan is to have an approved business case for feeder works by 29 Mar 2019.
 - b. Assess what needs to be done to ensure the REFCL at COO will have the *required* capacity as defined in the Regulations. Present plan is to have an approved business case for zone substation works by 29 Mar 2020.
- 2. Based on COO 22kV network information captured in our GIS, it is assessed that COO will require two REFCL units.
- 3. JEN has already visited the two HV customers supplied from COO and discussed the impact of REFCL on their network.
- 4. Jemena owns feeders supplied from the prescribed substation, Kalkallo (KLO) owned by AusNet Services. Jemena is working closely with AusNet to ensure the REFCL(s) installed at KLO will have the required capacity.

3.2.2 ELCA Program Status [S120 P (1) c(ii)]

Total HV Electric Line Volumes	At 1 May 2017	At 30 April 2018	Progress over Reporting Period
Bare Construction in ELCA	Route Km	Route Km	Route Km
Polyphase	0.0	0.0	0.0
SWER	0.0	0.0	0.0
Covered or Underground Construction in ELCA	Route Km	Route Km	Route Km
Polyphase	0.0	0.0	0.0
SWER	0.0	0.0	0.0

Note: There is no areas mandated as ELCA in the JEN distribution area. Therefore as defined by legislation JEN is fully compliant with this bushfire mitigation obligation/duty.

3.2.3 SWER ACR Program [S120 P (1) c(iii)]

FEEDER	Completion Date
Not Applicable	Not Applicable

Note: JEN do not own or operate any SWER lines. Therefore as defined by legislation JEN is fully compliant with this bushfire mitigation obligation/duty.