



Mr Mark Feather
Executive Director
Energy, Policy and Programs Branch
Department of Environment, Land, Water and Planning
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2 November 2016

Dear Mr Feather

f-factor Incentive Scheme Regulatory Impact Statement

CitiPower and Powercor (**the Businesses**) welcome the opportunity to respond to the f-factor incentive scheme Regulatory Impact Statement (**RIS**) published by the Department of Environment, Land, Water and Planning (**DELWP**).

We take mitigating bushfire risk very seriously and we support DELWP's more refined f-factor scheme that targets areas and locations of high risk. Nevertheless we note the f-factor scheme is only one of a number of drivers we have to mitigate bushfire risk, which include:

- company values regarding staff and community safety as business priorities;
- meeting community expectations;
- avoiding potential litigation;
- fire and safety regulations such as the publication and implementation of a Bushfire Mitigation Strategy Plan and the installation of Rapid Earth Fault Current Limiters (**REFCLs**); and
- Energy Safe Victoria (**ESV**) monitoring.

Our commitment to mitigating bushfire risk is demonstrated by our historical fire start performance, which shows a clear downward trend.

Powercor's fire starts and trend line over the f-factor scheme period are shown in the figure below.

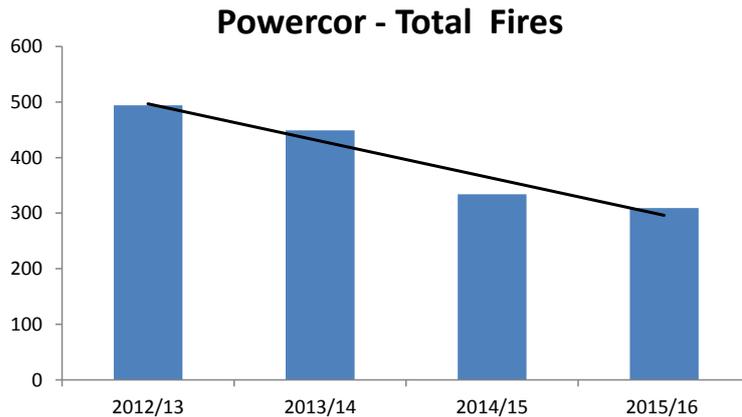
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As further demonstration of our improvement in fire start performance, in 2016 our f-factor target—which reflects historical performance—was reduced.

Below we provide comments on six matters in the f-factor RIS.

1. Financial impact of the revised f-factor scheme

In our Preliminary Response dated 3 August 2016 to DELWP’s revised f-factor scheme (**Preliminary Response**), we proposed a cap and collar on the scheme’s financial impact. Specifically, we proposed a daily cap of 99 ignition risk units (**IRU**) and an annual cap and collar at $\pm 50\%$ of the benchmark IRU. We also proposed a \$12,500 value of IRUs (lower than the proposed incentive rate of \$15,000). This was because the dataset being used to set f-factor targets is not necessarily reflective of future scenarios given, for example, no fire starts on Code Red days had occurred. DELWP has not adopted our proposal in its RIS.

It is important to remember that external factors—such as lightning strikes and motor vehicle accidents—result in uncontrollable fire start events associated with the conveyance of electricity. The proposed f-factor scheme potentially creates major financial penalties for events beyond distributors’ control. As distributors seek to avoid the financial penalties, higher network costs make their way through to consumers. When considered in context of the wide ranging drivers and actions we undertake to reduce bushfire risk, we consider the proposed scheme may not balance the financial impact to consumers with the incremental fire start risk mitigation it provides.

We propose DELWP consider daily and annual caps and collars, or at a minimum, the IRU incentive rate should be set at \$12,500. The scheme’s incentive power would still be significantly higher and better targeted than the current scheme which applies a static value of \$25,000 to each fire start.

2. IRU baseline adjustment

DELWP proposes to make a 12% downward adjustment to Powercor’s fire start targets to account for the installation of REFCLs in 2019-20, under the principle that consumers should only pay once for safety devices. The proposed downward adjustment then increases in line with the expected REFCL rollout, culminating in a proposed reduction to Powercor’s targets of 34% after 2023.

In September 2016 we requested DELWP provide us with access to the CSIRO model used to determine the fire start target adjustment. This model was not provided and so we have been unable to analyse or validate the basis or accuracy of the proposed adjustment.¹ We request a reasonable opportunity to review this model prior to finalising the f-factor scheme targets.

Additionally, to date only one of the 22 REFCLs has been installed, and the installed REFCL is still in its testing phase.² During this phase we are examining the impact of REFCLs on the network and have found, for example, that they can cause failures on HV Aerial Bundled Cable and underground network joints in some operational modes and conditions. Over the testing phase we will develop operating procedures to minimise network failure and to maximise REFCL's impact on fire start risk mitigation.

We consider it inappropriate to adjust fire start targets at this time, based on the assumed performance of REFCLs when they are still in testing phase (particularly when DELWP is considering adjustments to seven years' worth of targets). Furthermore, although our experience with REFCLs' performance is limited, we have not been appropriately consulted regarding the IRU adjustment, meaning our REFCL experience has not been taken into account.

We propose that in 2019-20 the downward adjustment be halved to 6% in recognition of the uncertainty of REFCLs' impact. By the time the second f-factor scheme period begins in 2020-21, several REFCLs will have been in operation and their actual performance should be used to determine the appropriate target adjustment. Using actual performance will help ensure:

- the adjustment is not unduly small, which would result in consumers paying twice for REFCLs;
- the adjustment is not unduly large, which would result in distributors being penalised without reason.

This is consistent with DELWP's principles that consumers pay only once for safety devices and that the scheme is cost neutral over time.

3. Availability of Fire Rating information

The value of a fire start depends in part on the Fire Rating assigned to its location and time. It is important to have a common understanding on the source of the Fire Rating information, and that this information is available to distributors. We propose:

- the Fire Rating information published on the Bureau of Meteorology website be used to underpin the scheme. A single information source should minimise disputes. Also, distributors have live access to this information, which is critical to enable them to respond to the f-factor scheme's incentive;

¹ The RIS outlines only that 'the CSIRO modelling shows that a REFCL will reduce the likelihood of ignition on 22kV power lines by between 48% and 60% depending on weather and environmental conditions experienced.' While a description of the model was provided, it did not include the model itself and was insufficient to determine or why the value of 55% was ultimately selected.

² Currently, a second REFCL is being commissioned.

- the ESV to distribute a log of the Bureau of Meteorology’s historical Fire Ratings by time and location, to be used as the agreed Fire Rating, every;
 - week for internal performance tracking (used to adjust our operational decisions and report on the scheme’s financial impact); and
 - 6 months to have our fire start records audited against.

This is necessary to ensure the scheme is transparent and auditable.

4. Grass/vegetation fire ignition vs asset fire ignition

In our Preliminary Response we submitted that fires starts not resulting in grass or vegetation ignitions should have their IRU value halved because they pose much less risk to the community.

Adopting this proposal would provide distributors with incentives to innovate and reduce the risk of pole fires reaching the ground. This is similar to the way the Service Target Performance Incentive Scheme incentivises distributors to convert sustained outages into momentary outages by placing a lower incentive rate on the latter. The potential incentive to innovation is highlighted by AusNet’s purpose built automation system to reduce outage times to under one minute.³

5. Transition to new scheme—targets and timing

DELWP has set a 6 month fire start target in order to transition the scheme from a calendar year to a financial year. To set this target, DELWP has seasonally adjusted historical fire start data. We accept DELWP’s seasonal adjustment.

In transitioning to the new scheme, clause 9(2) of the proposed Order in Council (**OIC**) results in the rewards/penalties and reporting timeframe for 2015, 2016 and 2017 revenue adjustments (i.e. for 2013, 2014, and 2015 performance) to be made in accordance with the current OIC. We do not have concern with this. Clause 9(3), however, would result in the reward/penalties and the reporting timeframe for the 2018 revenue adjustment (for 1 January 2016 to 31 June 2016 performance) being made in accordance with the *proposed* OIC. This is not possible because the proposed OIC would have required distributors to report this data in September 2016, which has already passed. We believe the OIC needs to be amended to make clear that the applicable reporting timeframe and instruments for these fire starts are outlined in the current OIC (albeit the revenue adjustment should be made in accordance with clause 13 of the proposed OIC).

We also request DELWP clarify an apparent inconsistency between the proposed OIC and the RIS. The RIS outlines that 2016-17 fires start performance adjusts 2018 revenue.⁴ From the proposed OIC, we believe this performance adjusts 2019 revenue.

6. Historical fire start accuracy

DELWP has mapped our historical fire start data against the Fire Ratings and location of the fire start to establish new targets.

³ AEMC, Draft Report, Distribution Reliability Measures 19 June 2014

⁴ DELWP, f-factor Incentive Scheme, Regulatory Impact Statement, October 2016, p. 38 and 39.

We consider there are a small number of errors in DELWP's mapping, which has resulted in Powercor's fire start target being set at 468 rather than 468.83. While the impact on the target is small, it is important there are no discrepancies as these could lead to future disputes—for example, on Code Red day the exact location of a fire start becomes very important (the difference in financial impact of a Severe and Extreme location rating would be \$1.14 million per fire start).

In appendix A we have outlined the discrepancies. We request DELWP update its model and adjust Powercor's fire start target to 468.83.

If you have any queries on this submission, please contact me on (03) 9683 4082 or RVogt@powercor.com.au.

Regards

A handwritten signature in blue ink that reads "Renate Vogt". The signature is written in a cursive style with a large initial 'R' and a distinct 'V'.

Renate Vogt
Head of Regulation

Appendix A – Fire rating location issues

CitiPower

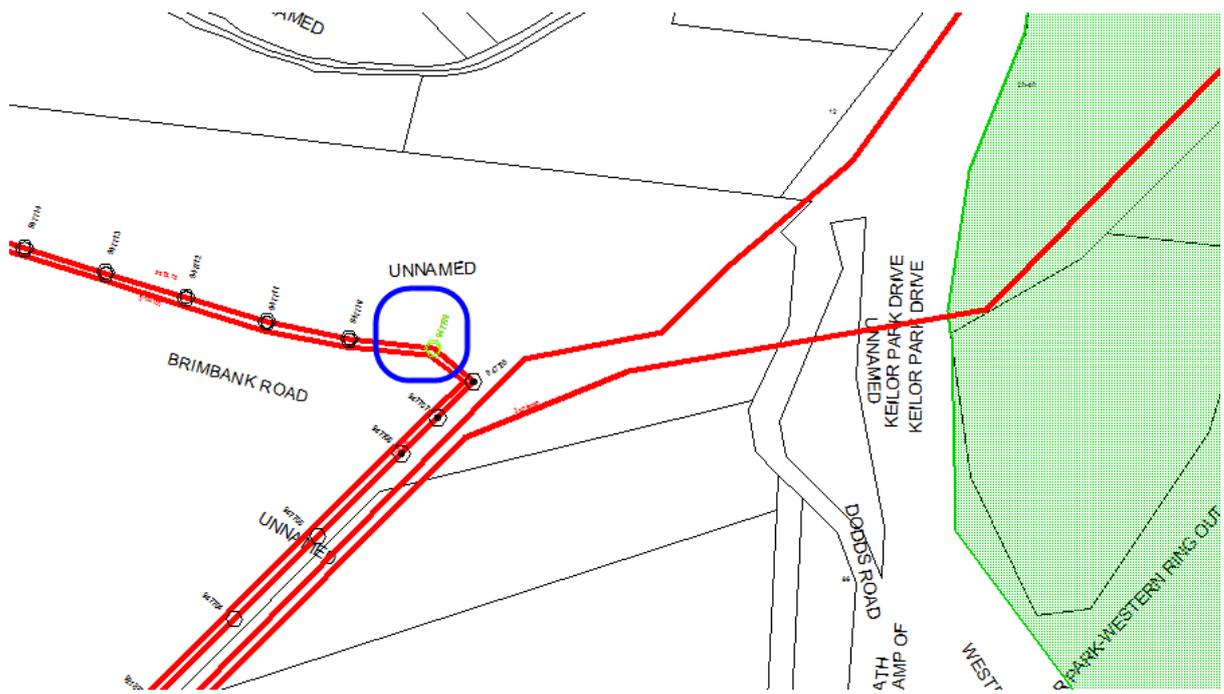
C_0097 15/3/2015 Fire start at 12:23 am. Fire rating data provided by DELWP in June 2016 from CFA data gives it as High. 14/3/15 @ 16:00 issued as High, 15/3/15 @ 05:30 issued as High. DELWP to update to High. IRU = 0.1.

Powercor

P_0033 26/1/2012 Fault on TGTSCDN 66KV Line. Geographic area covered by TRG & CDN ZSS, should be Geographic Severe rating (REFCL). IRU = 2.3

P_0055 Check LBRA/HBRA. DELWP to check their data source. Area directly around KTS Terminal Station is HBRA. IRU = 0.2

Field name	Value	Δ
Id	17597259	
Equipment Number	30149733	
Description	KTS-MLN	
LIS Area Code	7728	
Pole No (LIS)	947709	
Alternative Pole No	11	
Date Last Inspected	23/06/2015	
GIS Page 1		
GIS Page 2		
Joins		
Logical		
Suburb/Locality	KEILOR EAST 3033	
Fire Area	Fire Area	
Melway/VicRoads Ref	Melways 15 A11	
System Plan	MAP 220-7:F3	
TFB Area	Central	

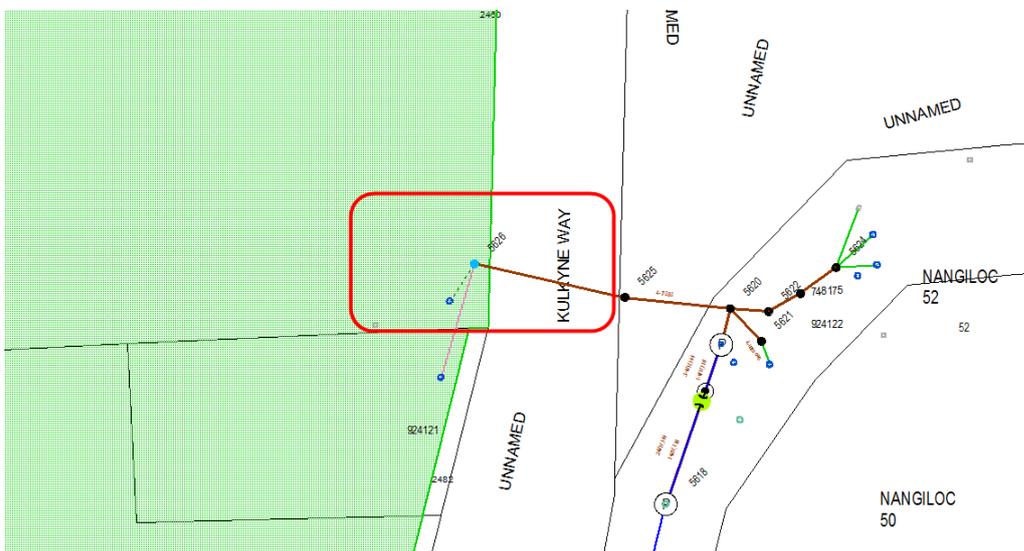


P_0064 Check LBRA/HBRA DELWP to check their data source. Area directly around KTS Terminal Station is HBRA. IRU = 0.2

Field name	Value	Δ
Id	16320357	
Equipment Number	34008303	
Description	KTS-SA2/KTS-SU1 T69	
LIS Area Code	7728	
Pole No (LIS)	30283	
Alternative Pole No		
Date Last Inspected	11/06/2015	
GIS Page 1		
GIS Page 2		
Joins		
Logical		
Suburb/Locality	KEALBA 3021	
Fire Area	Fire Area	
Melway/VicRoads Ref	Melways 26 J2	
System Plan	MAP 220-7:D1	
TFB Area	Central	

P_0084 Check LBRA/HBRA. DELWP to check location in their GIS. Ours shows as LBRA.

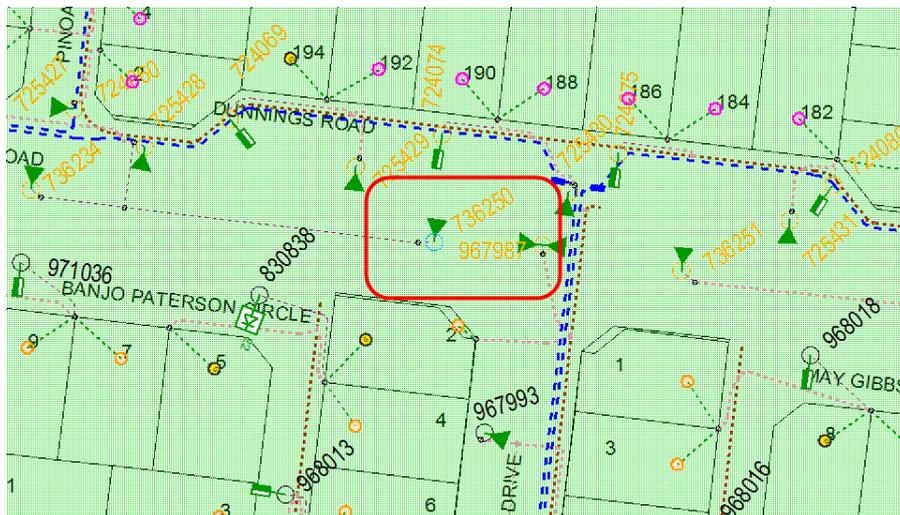
Field name	Value	Δ
Id	16892942	
Equipment Number	30098516	
Description	NANGILOC 52W X	
LIS Area Code	8770	
Pole No (LIS)	5626	
Alternative Pole No	52W X	
Date Last Inspected	25/03/2013	
GIS Page 1		
GIS Page 2		
Joins		
Isolatable Section	SWZ-2978857	
SAP Feeder	RCT013	
Logical		
Suburb/Locality	NANGILOC 3494	
Fire Area	Non Fire Area	
Melway/VicRoads Ref	VicRoads 3 G9	
System Plan	MAP 13:A2	
TFB Area	Mallee	



P_0100 2/3/2013 Fault KRTPLD2 66kv Line. Geographic area covered by KRT, should be Geographic Severe rating (REFCL).

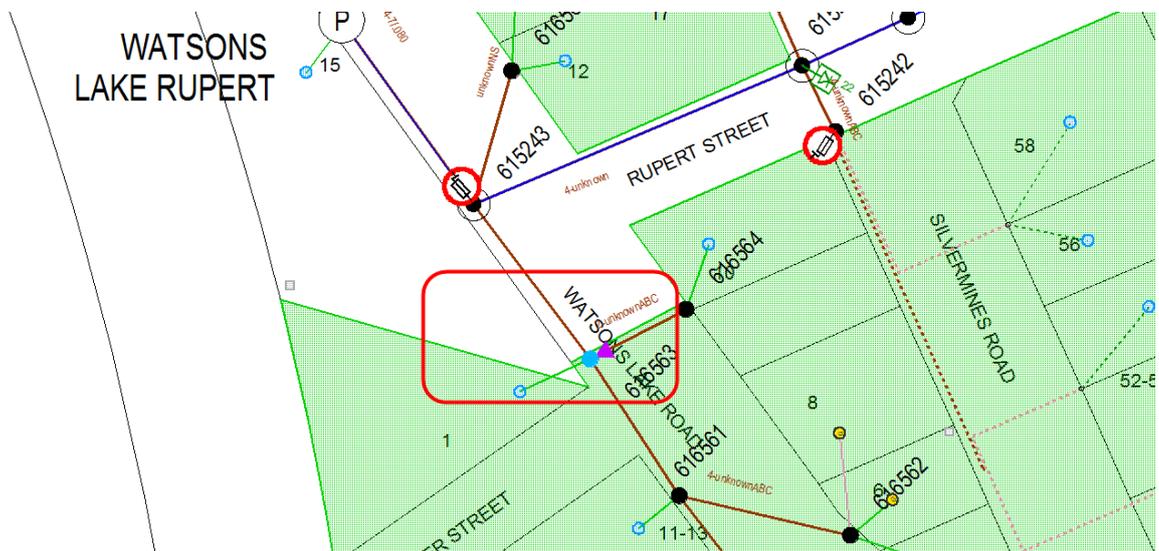
P_0132 Check LBRA/HBRA. DELWP to check data source. Should be LBRA.

Field name	Value	Δ	*
Id	17807599		
Equipment Number	30254928		
Description	DUNNINGS INNISFAIL WPL01		*
LIS Area Code	7728		
Pole No (LIS)	736250		*
Alternative Pole No			
Date Last Inspected	14/01/2015		•
GIS Page 1			
GIS Page 2			
Joins			
Isolatable Section	SWZ-0373200		
SAP Feeder	LV005		•
Logical			
Suburb/Locality	POINT COOK 3030		•
Fire Area	Non Fire Area		•
Melway/VicRoads Ref	Melways 207 E3		•
System Plan	MAP 220-33:H1		•
TFB Area	Central		•



P_0311 Check LBRA/HBRA. DELWP to check their data source. Should be LBRA.

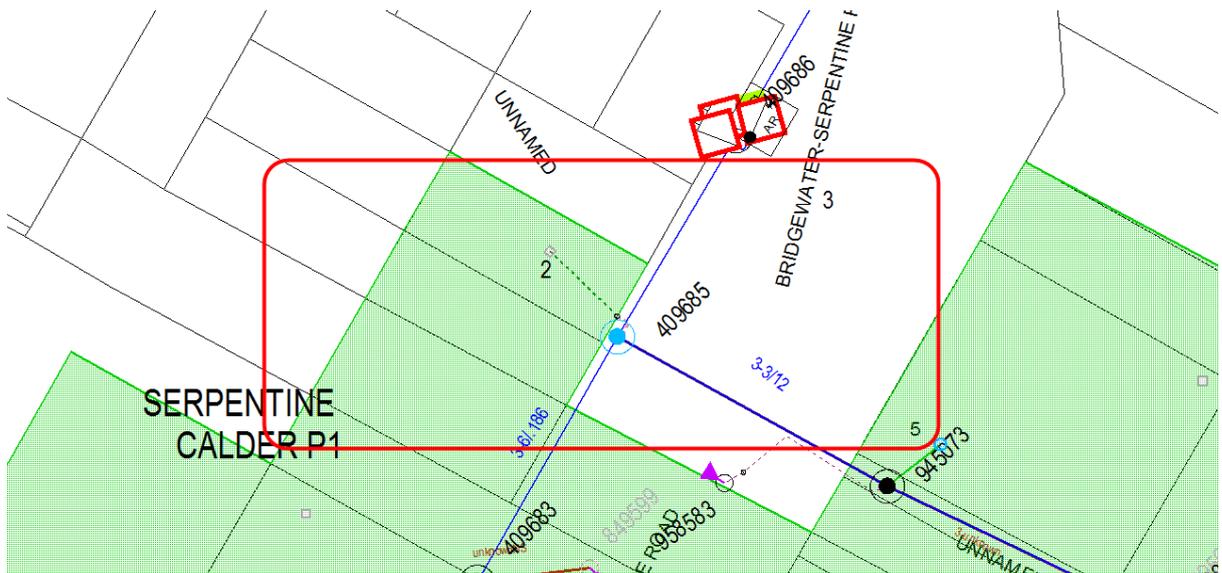
Field name	Value	Δ	*
Id	16924971		
Equipment Number	30017843		
Description	WATSON LAKE WHEELER L1N		*
LIS Area Code	8753		
Pole No (LIS)	616563		*
Alternative Pole No			
Date Last Inspected	18/06/2014		•
GIS Page 1			
GIS Page 2			
Joins			
Logical			
Suburb/Locality	ST ARNAUD 3478		•
Fire Area	Non Fire Area		•
Melway/VicRoads Ref	VicRoads 551 Q7		•
System Plan	MAP 132-1:C3		•
TFB Area	Wimmera		•



P_0372 KRTPLD2 66kv Line. Geographic area covered by KRT, should be Geographic Severe rating (REFCL). IRU = 4.6

P_0606 Check LBRA/HBRA. DELWP to check their data source. Should be HBRA, which will be REFCL area for EHK ZSS.

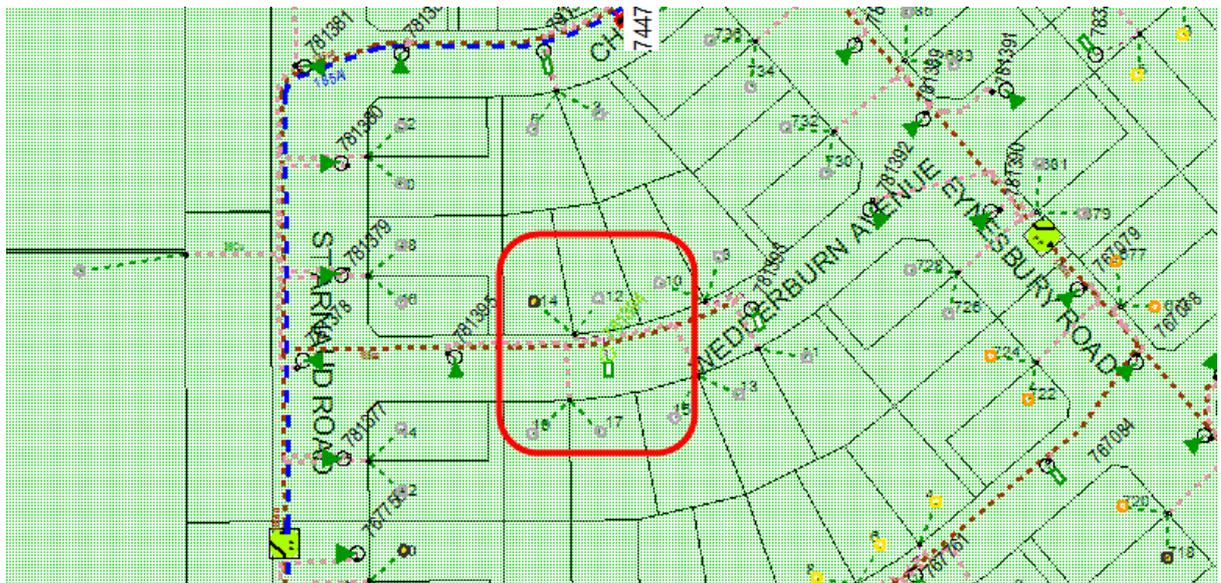
Field name	Value
Id	16006063
Equipment Number	32037148
Description	SERPENTINE 2
LIS Area Code	8718
Pole No (LIS)	409685
Alternative Pole No	2
Date Last Inspected	14/04/2016
GIS Page 1	
GIS Page 2	
Joins	
Isolatable Section	SWZ-5475564
SAP Feeder	EHK024
Logical	
Suburb/Locality	BRIDGEWATER ON LODDON 3516
Fire Area	Fire Area
Melway/VicRoads Ref	VicRoads 594 B9
System Plan	MAP 134-2.F1
TFB Area	Northern Country
Geometries	



P_0659 Check fire rating. 12/5/2013. Mallee District. High Rating issued at 16:41 on 11/5/13, No Forecast issued at 16:30 on 12/5/13. Event occurred at 19:03. Rating should be No-Forecast. DELWP to update their records.

P_0866 Check LBRA/HBRA. DELWP to check their data source. Should be LBRA. IRU = 0.2

Field name	Value	Δ	*
Id	52517212		
Equipment Number	30286942		
Description	WEDDERBURN ST ARNAUD EPL02		*
LIS Area Code	7728		
Pole No (LIS)	781394		*
Alternative Pole No			
Date Last Inspected	19/02/2015		•
GIS Page 1			
GIS Page 2			
Joins			
Logical			
Suburb/Locality	EYNESBURY 3338		•
Fire Area	Non Fire Area		•
Melway/VicRoads Ref	Melways 226 D2		•
System Plan	MAP 219.H3		•
TFB Area	Central		•
Geometries			

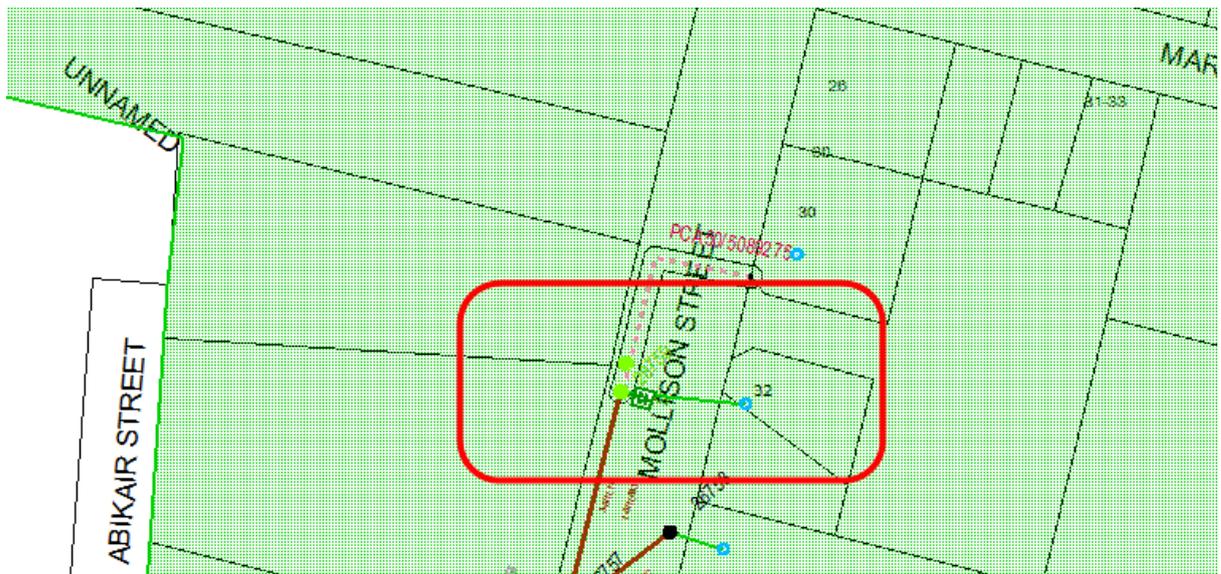


P_0889 Fault KRTPLD2 66kv Line. Geographic area covered by KRT, should be Geographic Severe rating (REFCL).

P_1050 Fault KRTPLD1 66kv Line. Geographic area covered by KRT, should be Geographic Severe rating (REFCL).

P_1333 Check LBRA/HBRA. DELWP to check data source. Should be LBRA.

Field name	Value	Δ	*
Id	15972461		
Equipment Number	32099600		
Description	MOLLISON CHARLES NL4		*
LIS Area Code	8432		
Pole No (LIS)	26759		*
Alternative Pole No			
Date Last Inspected	19/09/2013		•
GIS Page 1			
GIS Page 2			
Joins			
Isolatable Section	SWZ-7300229		
SAP Feeder	CHM011		•
Logical			
Suburb/Locality	EDENHOPE 3318		•
Fire Area	Non Fire Area		•
Melway/VicRoads Ref	VicRoads 543 Q6		•
System Plan	MAP 153:H1		•
TFB Area	Wimmera		•



P_1354 Check geo location REFCL area. Pole is located in CLC supply area. Should be assigned Severe Geographic rating. IRU = 2.3.

P_1438 Check geo location LBRA/HBRA. DELWP to check their data source. Should be LBRA.

[Gis] Pole 1 record found

Field name	Value	Δ	*
Id	15967123		
Equipment Number	30025266		
Description	ROHS NOMAD CNR		*
LIS Area Code	8718		
Pole No (LIS)	427145		*
Alternative Pole No			
Date Last Inspected	03/12/2015		•
GIS Page 1			
GIS Page 2			
Joins			
Isolatable Section	SWZ-5406239		
SAP Feeder	EHK021		•
Logical			
Suburb/Locality	EAST BENDIGO 3550		•
Fire Area	Non Fire Area		•
Melway/VicRoads Ref	VicRoads 608 E1		•
System Plan	MAP 149-12:H4		•
TFB Area	Northern Country		•



P_1606 Check LBRA/HBRA. DELWP to check data source. Should be HBRA.

[Gis] Pole 1 record found

Field name	Value
Id	16317478
Equipment Number	32116942
Description	PETERING FOUNDRY NEL3
LIS Area Code	8432
Pole No (LIS)	14150
Alternative Pole No	
Date Last Inspected	28/05/2014
GIS Page 1	
GIS Page 2	
Joins	
Isolatable Section	SWZ-7371034
SAP Feeder	STL006
Logical	
Suburb/Locality	MINYIP 3392
Fire Area	Fire Area
Melway/VicRoads Ref	VicRoads 549 T1
System Plan	MAP 116:E2
TFB Area	Wimmera

