F - Factor Report 2016 (January - June)



United Energy F - Factor Report 2016 (January - June)



1 APPROVAL RECORD

This fire start report has been compiled by United Energy to comply with the F-Factor Scheme Order 2016 under Section 16 of the National Electricity (Victoria) Act 2005 dated 22 December 2016. This Order revokes the previous F-Factor scheme order dated 21 June 2011.

AUTHOR			
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Title	Fire Prevention Manager	Date	

SPONSOR										
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APPROVER											
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2 PURPOSE

The purpose of the fire start report is to comply with the Victorian F-Factor Scheme Order 2016 under Section 16 of the National Electricity (Victoria) Act 2005 dated 22 December 2016. This Order revokes the previous F-Factor scheme order dated 21 June 2011¹.

Please note that although the information contained in the Fire Start Report is correct to the best United Energy's knowledge, the information regarding the timing and location of fires and the element of the network that caused the fire has been obtained from a variety of sources and United Energy cannot confirm the accuracy of the information.

The inclusion of this information is not an admission that individual fires actually occurred or an admission as to their causes. Further, the information contained in the Fire Start Report should not be taken as an admission of legal liability of any kind in relation to any of the individual fires listed in the report."

3 SCOPE

This report contains fires that have emanated from, or as a result of coming into contact with the United Energy (UE) electricity network assets from 00:00hrs on the 1 January 2016 to 24:00hrs on the 30 June 2016.

Australian Energy Regulator (AER)	The AER is Australia's national energy market regulator and an independent statutory authority.						
F-Factor Scheme	On 23 June 2011, the Victorian Government introduced an 'f-factor scheme', F- factor Scheme Order 2011. This scheme was intended to provide incentives for Distribution Network Service Providers (DNSPs) to reduce the risk of fire starts and to reduce the risk of loss or damage caused by fire starts.						
	On 22 December 2016, the F-factor Scheme Order 2011 was revoked and replaced with the F-factor Scheme Order 2016 through Victorian Govt. Gazette 51.						
F-Factor Event	See section 6						
Fire	For the purposes of Fire start (F-Factor) reporting a fire is defined as having heat, light and flames that are occur when something burns						
Service Provider (SP)	An organisation contracted by UE to provide infrastructure services, this includes the UE call centre, dispatch, NCC and field crews						
United Energy (UE)	The owner of the electrical distribution network in the southern and eastern suburbs of Melbourne and the Mornington Peninsula.						
UE Events	Any outages, faults and requests inputted into the UE DMS that require a response from UE.						
UE Distribution Management System (DMS)	The UE DMS records all events that are communicated to the UE call centre, UE dispatch, the UE NCC (including automated events on the HV network where devices have operated) that require investigation.						

4 **DEFINITIONS**

5 **RESPONSIBILITIES**

UE Fire Prevention Planning Manager	The Fire Prevention Planning Manager is responsible for ensuring all fire starts are reported and recorded and determining if the fire start constituted an F-Factor event.
UE General Manager Regulatory	The GM Regulatory Manager is responsible for providing the F-Factor data to the AER in the format requested.

¹ http://www.delwp.vic.gov.au/__data/assets/pdf_file/0010/369262/f-factor_Order_in_Council__Gazetted_22_December_2016.pdf



6 F-FACTOR EVENTS

The Victorian Distribution Network Service Providers (DNSP) jointly issued a memorandum dated the 30th March 2012 to AER providing guidance to what they considered constituted an F-Factor event under the F-Factor Scheme.

This memorandum is included in this report as "Attachment A" and was used by UE to determine any F-Factor event. This memorandum is still relevant and meets the requirements of Clause.4 of the F-factor Order 2016.

7 SUMMARY

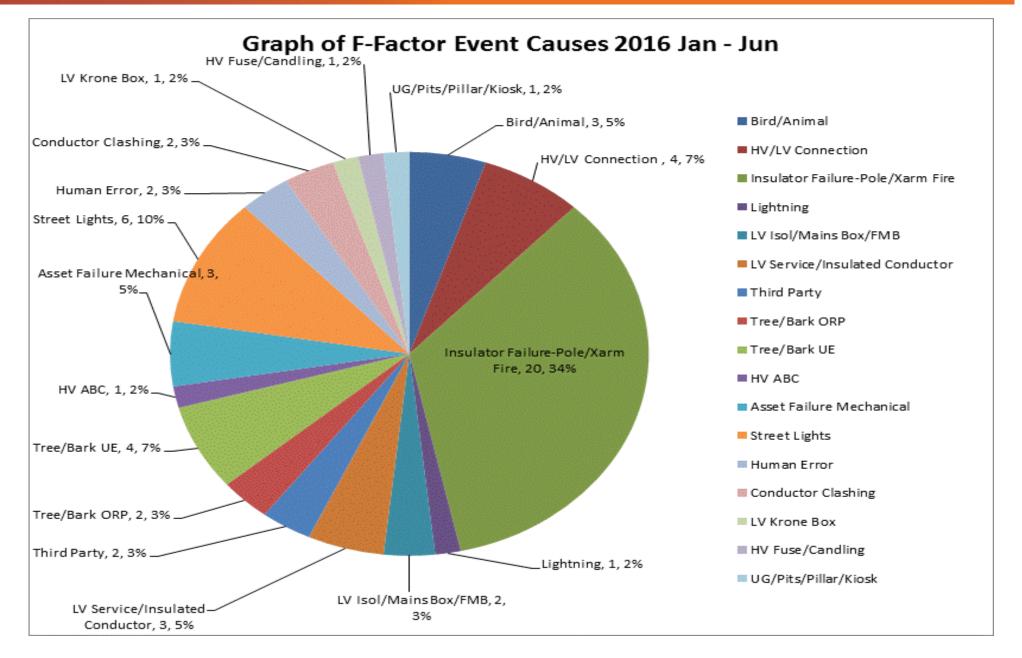
F-Factor Events by Fire Hazard Rating

	Number of Events	% of Events
Hazardous Bushfire Risk Area (HBRA)	10	17.2%
Low Bushfire Risk Area (LBRA)	48	82.8%
Total F-Factor Events	58	100%

F-Factor Events by Equipment Type

F-Factor Events	Number of Events	% of Events		
Insulator Failure-Pole/Xarm Fire	20	34%		
Street Lights	6	10%		
HV/LV Connection	4	7%		
Tree/Bark UE	4	7%		
Bird/Animal	3	5%		
LV Service/Insulated Conductor	3	5%		
Asset Failure Mechanical	3	5%		
LV Isol/Mains Box/FMB	2	3%		
Third Party	2	3%		
Tree/Bark ORP	2	3%		
Human Error	2	3%		
Conductor Clashing	2	3%		
Lightning	1	2%		
HV ABC	1	2%		
LV Krone Box	1	2%		
HV Fuse/Candling	1	2%		
UG/Pits/Pillar/Kiosk	1	2%		
Total F-Factor Events	58	100%		







8 Attachment A – F-FACTOR GUIDANCE

For Information

Subject: Definition of a fire start under the f-factor scheme

Explanatory note for the AER from the Victorian electricity distributors	Date:	30 th March 2012
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Purpose of this memorandum

The AER has released its final decision on the f-factor scheme for Victorian electricity distributors. The f-factor scheme determinations cover the period from 2012 to 2015, and an f-factor target is applicable to each year of the four-year interval.

This memorandum represents the consensus view of the five Victorian electricity distributors on the manner of fire start reporting under the f-factor scheme. The conventions discussed in the document are consistent with those that were applied by the businesses when responses were being prepared to the f-factor Regulatory Information Notice. The businesses propose to follow the definitions that are set out in the following sections.

Definition of a fire

• Normal arcing and sparking

- Arcing and sparking are commonly observed as a result of faults, or may be symptomatic of the normal functioning of the distribution network. Arcing or sparking does not give rise to flame, unless the heat ignites combustible material, in which case a fire should be reported.

Melting

- Most of the materials used in the construction of the electrical elements of the network do not sustain fire, but may melt if subjected to heat. The heat may result from high electrical load, or local overloading. Flames will not normally be evident unless other combustible material is ignited, in which case a fire should be reported.
- Smoking
 - Smoke may be emitted due to local heating caused by a range of factors, in circumstances in which the temperature is not raised sufficiently to produce flame. The existence of smoke without flame may result in singling or charring, but the incident will not generally be classified as a 'fire'.

Local charring or blackening

 Local charring or blackening is frequently observed during routine maintenance. The charring may not be sufficiently widespread as to provide evidence of the past occurrence of heat, light and flames. Charring which is limited in scale will not generally be classified as a 'fire'.

For Information



For Information

Proposed treatment of fires by category

Cause	Description	Proposed treatment				
Trees and/or Bark contacting live wires	 Includes contact by: Trees or parts of trees outside the clearance space, which have fallen onto wires. Trees which are managed by other responsible persons (such as councils) and that have grown into the clearance space. Windborne bark or parts of trees that have made contact with overhead lines. 	Singeing/burning at the point of contact is not regarded as being a fire.				
Clashing/Arcing/ Sparking/Lightning	Arcing and sparking are commonly associated with faults, but are not generally the cause of the fault. Incidents of arcing and sparking can be reported as fires by members of the public, and will also occur during normal network functions such as fuse operations. Conductor clashing and lightning are not	These events will be categorised as fires if there is evidence of a fire in vegetation, or elsewhere, the cause of which can be directly ascribed to arcing, sparking, lightning and/or clashing. However, arcing and sparking will not normally give rise to a fire or fire start.				
Possum/Bird/Animal/ Crow/Magpie	regarded as being fires in their own right. Contact with high voltage devices by birds and animals typically results in a fire as the burning bird/animal falls to the ground. It is also possible that arcing or fuse operations resulting from the contact could cause a fire start.	Incidents of this type will be enumerated as fires if there is evidence of a fire in vegetation or elsewhere that can be directly attributed to the burnt animal or bird. An animal that makes a connection with an HV device will not ordinarily cause a fire.				
High Voltage Fuses/Surge Diverters	HV fuse operations have been linked with fires historically, as have surge diverter failures.	A fire should be recorded if there is firm evidence of burning in a piece of apparatus, such as a high voltage expulsion drop-out fuse. The apparatus would need to have been destroyed by fire. More generally, however, HV fuse operations should be excluded from consideration unless there is evidence of a fire in vegetation or elsewhere that can be definitively traced to the fault.				
HV Conductor/ Connectors/Joints	A conductor or a joint/connector failure may cause arcing at the point of failure, or at another point which makes contact with combustible material on the ground.	A fire should be recorded if evidence of a flame can be found at ground level, but not otherwise.				
Burn/Burnt (mostly leads)	This kind of report originates from an asset failure that causes burning, typically of the insulation surrounding bridging and connecting leads.	Damage of this type should be exempted from consideration unless there is evidence of a fire that, either destroys part of the asset, or else occurs in				

For Information

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For Information

Cause	Description	Proposed treatment
	Note that the terms burnt, burnt out, and blown (up) are common industry jargon and do not represent a 'fire'.	vegetation, or elsewhere, and can be directly attributed to the burnt material.
Melting (Mainly Boxes)	This type of report refers to melting of plastic parts, normally due to overheating of connections or internal contacts, etc.	Evidence of melting will not normally be written down as a fire, unless there are firm indications of fire in the surrounding vegetation or infrastructure, and the causes of fire can be directly attributed to the melted material.

For Information

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9 Attachment C – F-Factor Events 2016 (Jan – Jun)

Fire Star ts						Risk Factors						Reporting					
	Date	Time	Location	Feeder ID	Network categorisation	High Bushfire Risk Area	Fire Sart by category	Fire Sart by Asset	Kind of Fire Start by F. Iacor Order - Cause 4	CFA fire danger rating	Fire Danger period	Estimated area burnt	Description of types of property damaged	Reported to a relevant entity? Shedule 2	Record Number (UE Event ID)	Additional evidence available?	Fault description
Fire Start 1	03/01/2016	0:12	1110 Derril Rd, Moorooduc	MTN22	RURAL	HBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from trees contacting network assets	Started by any tree, or part of a tree, falling upon or coming into contact with a distribution system		Yes	20	Grass/Veg etation	4795	849675	2202	A Council gum tree fell onto the LV sub bus nth of Derril Eramosa, crew replaced a 5a pff on white phase, cause tree lis #1103553 As this is in an undeclared area the tree is regarded as UE's responsibility
Fire Start 2	09/01/2016	1:44	Merricks Beach Rd, Merricks	HGS23, MTN32	RURAL	HBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	30	Grass/Veg etation	4800	850995	1632	LIS # 1106353. A 2 ph folcb and its fuse holder at the pole end. Supply 39 Merricks Beach Rd. Small grass fire at base of pole Fire was approx 30mtrs 2.
Fire Start 3	10/01/2016		Nepean Hwy Carrum - [Cnr Progress Ave]	CRM22, FTN21	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from other causes (vehicle strikes, vandalism etc)	Number of fire starts in grass/vegetation resulting from third party (eg. vehicle into pole, vehicle contact conductor, etc.)	No	Yes	10	Grass/Veg etation	4801	851086	4561	Fire ignition report# 04561 - lis 3303240 - photos taken - in hand with construction crew to replace HV/ Iv t off pole and repair conductor after a car into pole caused the HV conductor to hit the ground igniting a small grass fire.
Fire Start 4	11/01/2016		Donald St, Blackburn South	NW 1	URBAN		Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4802	851308	1303	Replaced burnt off HV termination x-arm, LIS - 0639742 cause - insulator breaking down
Fire Start 5	12/01/2016	11:21	Mount Pleasant Rd, Nunawading	NW33	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4805	851452	1042	HV inter x-arm to be replaced cnr Station and Mt Pleasant rd Nunawading - lis: 7031287 - X- Arm was burnt out on the red phase road side
Fire Start 6	12/01/2016	19:10	Greenacres Ct, Langwarrin	LWN21	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4806	851548	2384	Construction crew required to replace HV sub station xarm on lis # 3311334, Potts Cranbourne S/Stn. Brown fog insulator, xarm burnt through around the pin.
Fire Start 7	13/01/2016	18:13	Swift Dr, Wheelers Hill	MGE34	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from trees contacting network assets	Started by any tree, or part of a tree, falling upon or coming into contact with a distribution system	Yes	Yes	15	Grass/Veg etation	4816	851757	3005	Tree branch @ 17 swift drive council tree to Swift Brentwood S/S LIS 0609013
Fire Start 8	14/01/2016	6:31	Healey Rd, Dandenong	DVY32	URBAN		Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4809	851939		As per mfb LIS #21512 with broke xarm Replaced X-Arm at lis 0621512.
Fire Start 9	14/01/2016	10:24	Coomoora Rd, Springvale South	NP14	URBAN		Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4810	852006		HV inter arm snapped in half - inter arm and pole #0631003 to be replaced
Fire Start 10	14/01/2016		284 Warrigal Rd, Oakleigh South	OR23	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4811	852016	1302	lis # 2334974, X-Arm replaced after pole fire
Fire Start 11	14/01/2016	18:26	Singer Ave, Glen Waverley	GW2	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4812	852141	3934	X arm fire on SINGER YORK S/S LIS#0637896.
Fire Start 12	18/01/2016	13:23	69 Garden Rd, Clayton	SV23	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	Yes	Yes	10	Grass/Veg etation	4817	852981		Replaced blue ph Iv IPC - fire report #3142 - grass area in front of factory 10m2 area - cause unknown - lis 13632



Fire Start	18/01/2016	18:02	Porter St, Templestowe	DC2	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	Yes	Yes	5	Grass/Veg etation	4821	853047	3087	LV ABC connection burnt out on cnr hillhouse & porter st replaced lv cct fuses x7 small
13 Fire						1			-		-	-		1			grass fire at base of pole lis 7065399 Replaced r ph lead after overheated and
Start 14	18/01/2016	18:16	York St, Glen Waverley	GW11	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	Yes	Yes	16	Grass/Veg etation	4822	853053	2732	dropped molten metal/plastic igniting a small grass fire
Fire Start 15	19/01/2016	10:42	Hendersons Rd, Bittern	HGS23, MTN32	RURAL	HBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	Yes	Yes	1	Grass/Veg etation	4823	853147		HV ABC has failed mid spaninitially no evidence of a ground fire however subsequent investigation discovered several blades of grass burnt underneath, o/s #90 Henderson Road, LIS#8831124.
16	20/01/2016	11:57	Strachans Rd, Mornington	MTN34	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4827	853550	2086	is 1101409 xarm was on fire in STRACHANS rd, STH of STRACHANS ESPLANADE S/S; xarm replaced and supply restored.
Fire Start 17	20/01/2016	12:32	Highbury Rd, Glen Waverley	EB32	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4824	853562	3027	HV conductor hanging about 150mm from LV. HV buck X/Arm burnt through at LIS#0604517.
Fire Start 18	22/01/2016	12:13	32 Nonna St, Clayton	CDA11	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4828	854057	3867	Broken HV Xarm - LIS #2324203 - HV inter xarm replaced
Fire Start 19	23/01/2016	19:39	Langhorne St, Dandenong	LD7	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from trees contacting network assets	Started by any tree, or part of a tree, falling upon or coming into contact with a distribution system	No	Yes	1	Grass/Veg etation	4831	854206	5702	Cut large customer palm tree from 22kv line fire report 05702 - several fronds burnt
Fire Start 20	25/01/2016	11:05	Douglas St, Noble Park	NP25, NP34, NP36	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from animal contact with network assets	Started by any person, bird, reptile or other animal coming into contact with a distribution system	INO	Yes	20	Grass/Veg etation	4832	854313	7761	Fire Ignition Report #: 7761 - Grass fire confirmed, caused by crow (approx 20m sq grass fire) - lis: 9841987 - r
Fire Start 21	27/01/2016	16:25		STO22, STO13	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Any fire triggered by any asset failure caused by Lightning	Started by lightning striking a distribution system or a part of a distribution system		Yes	0	UE Asset Only	4847	854823	6521	OLD brown fog type Insulator struck by lightning LIS#1307262, replaced with new 5 shed insulators x3 under A/P.
Fire Start 22	28/01/2016	15:27	Mill St, Aspendale	MC2	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4837	855117	5804	X-Arm broke Suspect HVI. LIS 3303517. HV conductor laying on LV conductors EIO on route, EIO checked all ok, no signs of HVI evident
Fire Start 23	29/01/2016	4:03	Chenier St, Rye	STO21, STO14	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Oil-filled plant	Otherwise started by a distribution system	No	Yes	10	Grass/Veg etation	4838	855204	1869	Fire Ignition Report #:01869, oil on ground and fire in trees and on ground oil spill kit also req - lis: 1318399
24	31/01/2016	13:05	North Rd, Bentleigh East	OR32	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4840	855522		Broken HV int xarm at tee pole NTH rd cnr of Marlborough st- burnt through brown fog insulators
25	01/02/2016	15:18	Graydens Rd, Tyabb	HGS23, MTN32	RURAL	HBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	250	Grass/Veg etation	4843	855680	2203	Crossarm broken (due to rot) at lis # 1109381, Fire Report # 02203 Fire damage is 250 mtrs2 approx. Fire is extinguished.
Fire Start 26	03/02/2016	21:04	Bamfield St, Hampton	SR13	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4848	856088	1304	A 250 HPS head caught fire and was subsequently replaced - LIS# 1817909. TO 856093 raised for ace
Fire Start 27	04/02/2016	11:07	Arena Sq, Noble Park	NP36	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Oil-filled plant	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4846	856176	3228	A wrong type (11kV instead of 22kV) VT at Switch DN8598 CHANDLER RD blew up, ruptured and caught fire up the pole only. lis 0619096
Fire Start 28	07/02/2016	9:07	Clayton Rd, Clayton	SS11	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	1	Grass/Veg etation	4866	856735		After a planned s/down a HV circuit was energised however a stay wire moved thus allowing pole to move causing conductors to touch a tree causing 1sqm of the canopy to ignite - LIS 2310920



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Fire Start 29	23/02/2016	17:16	Frankston- Flinders Rd, Somerville,	FSH23	RURAL	HBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from animal contact with network assets	Started by any person, bird, reptile or other animal coming into contact with a distribution system	Yes	Yes	500 00	Grass/Veg etation	4856	859113	3229	An ESV investigation into the cause of fire start S/S "FTN FLIND P27 Gomms" concluded a possum found underneath was the cause of this fire start
Fire Start 30	23/02/2016	17:16	Frankston- Flinders Rd, Somerville,	FSH23	RURAL	HBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	Yes	Yes	6 0	UE Asset Only	4856	859127	3230	Cruciform construction pole top burnt out and required replacement lis # 3321208
Fire Start 31	25/02/2016	16:09		BU9, BU14	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from trees contacting network assets	Started by any tree, or part of a tree, falling upon or coming into contact with a distribution system	No	Yes	6	Grass/Veg etation	4861	859547	3105	Customer tree branch at #10 Glendale ave fell onto Iv street mains causing Iv conductor to clash and subsequently fail - Fire Report #: 3105 (small n/strip grass fire) - fire already out when crew arrived
Fire Start 32)2/03/2016	3:03	Marine Pde, Hastings	HGS22, MTN22	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from animal contact with network assets	Started by any person, bird, reptile or other animal coming into contact with a distribution system	No	Yes	6 4	Grass/Veg etation	4868	860371	6522	A Possum @ LIS 1106570 concrete pole caused a fire at base of pole attended by CFA
33)2/03/2016	16:25	Moorooduc Hwy, Moorooduc	MTN24	RURAL	HBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	5 100	Grass/Veg etation	4869	860487	2365	A fault occurred which caused Iv lead to tx to melt & catch fire resulted in a 100 sqm of grass ournt fire report# 02365 Lis #1104823
Fire Start 34)3/03/2016	6:29	Wellington Rd Clayton	SV23	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	6 0	UE Asset Only	4870	860621	3868	A burnt hv xarm to be replaced at LIS #0613707
Fire Start 35)3/03/2016	6:43	Sandham St, Elsternwick	EL13	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	6 0	UE Asset Only	4871	860623	3841	HV xarm to be replaced at LIS #2303356
Fire Start 36)3/03/2016	14:41	Wallarano Dr, Noble Park	NP24, NP31	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	5 3	Grass/Veg etation	4873	860718	7821	Lis 0617285 (top cct), road side conductor damaged shed caused conductor to fail causing a small grass fire. Fire Ignition report no - 7821
Fire Start 37)3/03/2016	18:22	Evelyn St, Clayton	SVW54	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	6 0	UE Asset Only	4872	860759	3761	Emergency switching to replace x-arm in DOOGA ST. Tip of x-arm burnt off, Lis - 0613913
Fire Start 38	06/03/2016	14:15	Ryburn Ave	MTS- SUB VR126 FDR	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	s 20	Grass/Veg etation	4875	861106	3088	Upon attempted restoration of this feeder at 16:53 hrs Fault current caused clashing which resulted in a cable failure @ LIS8803304 CHP Strain pole 8 near Ryburn Ave
Fire Start 39	08/03/2016	21:05	Baxter Tooradin Rd, Pearcedale	HGS33	RURAL	HBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	Yes	6 0	UE Asset Only	4876	861634	2366	CFA advised address is #: 530 Baxter Tooradin rd, 3 phase fmb failed & caught alight, replaced FMB, Fire ignition report 02366, fire was only on pole, LIS - 3301596
Fire Start 40	0/03/2016	17:38	Emerald Dr, Springvale	SS22	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	6 0	UE Asset Only	4879	861994	3028	Fire @ 66 kV xarm to be replaced cnr Emerald Dr & Donald St Springvale lis # 0621276
Fire Start 41	2/03/2016	0:19	Reserve Rd, Beaumaris	BR9	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	5 1	Grass/Veg etation	4877	862220	5625	Replaced krone switch blue ph - melted - was a small fire at base of pole, no actual damage to pole. LIS # 1811769
Fire Start 42	5/03/2016	15:35	Watt Rd, Mornington	MTN21, MTN34	URBAN	LBRA	Contact with assets (non- asset failures) resulting in Grass/vegetation fire	Fire starts in grass/vegetation resulting from trees contacting network assets	Started by any tree, or part of a tree, falling upon or coming into contact with a distribution system		Yes	5 10	Grass/Veg etation	4880	862649	2205	Fire Ignition Report #: 02205 - (fire out when crew arrived) large Cyprus tree belong to racecourse has bought down all 3 hv conductors (not live) causing small grass fire cnr Racecourse rd and Watt Rd - lis: 1112353
Fire Start 43	5/03/2016	16:45	Forster St, Noble Park	NP33	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	5 150	Grass/Veg etation	4881	862675	5821	Fire ignition report - 05821, Spreader installed, appears fire started by clashing of o/h mains, LIS - 0631423, cust fence garden (approx 10 mtrs x 15 mtrs) & shed damaged by fire



Fire Start 44	6/03/2016	611:00	Trent St, Glen Iris	RD4	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	1	Grass/Veg etation	4888	862768	2703	After a planned s/down a HV circuit was energised however a stay wire moved thus allowing pole to move causing conductors to touch a tree causing 1sqm of the canopy to ignite - LIS 2310920
Fire Start 45	7/03/2016	8:08	Jeffrey St, Lower Templestowe	BU10	URBAN	LBRA		Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4882	862991	2736	As per mfb, lis #7068470 - replaced 3w pole unction box at pole end burnt out. Confirmed fire start - box and service wire burnt out, slight charcoal marks on pole. no fire on ground
Fire Start 46	7/03/2016	21:57	Teal Ct, Hastings	HGS23, MTN32	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4895	863187	6581	CFA reported fire but no fire when crew arrived - lis: 9691910 - s/light head need to be changed 80w m/v head - s/light located in park
Fire Start 47	8/03/2016		Roseberry Gr, Glen Huntly	CFD24	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4897	863360	2737	Crew replace burnt off HV lead and 35.5 amp PFF on Blue phase. ROSEBERRY GLENHUNTLY S/Stn restored HV and LV and LV // removed. LIS#2328150
Fire Start 48	8/03/2016	313:37	Lancaster St, Ashburton	EM7, EM5	URBAN	LBRA	asset failures) resulting in	Fire starts in grass/vegetation resulting from trees contacting network assets	Started by any tree, or part of a tree, falling upon or coming into contact with a distribution system	No	Yes	6	Grass/Veg etation	4896	863504	2738	MFB state wires clashing caused tree fire o/s property. Cause was council tree branch in Lancaster St o/s #12 at LIS # 2317447.
Fire Start 49	25/03/2016	13:34	Nepean Hwy, Chelsea	CRM22, FTN21	URBAN	LBRA			Otherwise started by a distribution system	No	Yes	0	UE Asset Only	4891	864849	518	hv/lv inter pole replacement is required - lis: 3302939 - pole was on fire when crew arrived - fire ignition report #: 00518
Fire Start 0 50)3/04/2016		Old Mornington Rd, Mount Eliza		URBAN	LBRA	Asset failures resulting in grass/vegetation fire		Otherwise started by a distribution system	No	Yes	2	Grass/Veg etation	4893	865999	1635	FREEMANS TINTAJEL s/s had 2 blown fuses also blew spur fuse FS1170 (at cnr Old Mornington Rd), PFF exploded causing very small vegetation fire at base of pole, LIS 3315406. CFA had already extinguished fire
Fire Start 0 51)4/04/2016		Nepean Hwy opp Watkins St Mordialloc	MC1, MC2	URBAN	LBRA	Asset failures resulting in grass/vegetation fire	Other Assets	Otherwise started by a distribution system	No	Yes	1	Grass/Veg etation	4899	866134	4028	Probable possum at LIS#8816848. No damage at this location however at pole 3302249 the fault current caused a ampact connector to fail causing the HV conductor to drop to the ground causing small burn marks
Fire Start 52	06/04/2016	20:45	Thornton Cres, Mitcham	RWT16	URBAN	LBRA	accet fire (no	Pole and cross arm fire (including 'smouldering' or 'smoke')	Otherwise started by a distribution system	No	No	0	UE Asset Only	4911	866602	3810	Pole fire at LIS #7029748 at alley way (pole down Alley way) - burnt xarm to be replaced.
Fire Start 53	26/04/2016	20:45	High St, Doncaster	WD15	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	No	0	UE Asset Only	4912	870092	3811	MFB called back to advise street light has started arching/sparking a pole located o/s # 15 high st, LIS #7055681 - refer to ace to replace street light, #870100
Fire Start 54)4/05/2016		Western Port Hwy, Somerville	HGS33	RURAL	HBRA	grass/vegetation fire)	Othor Assots	Started by any other thing forming part of or coming into contact with a distribution system	No	No	0	UE Asset Only	4918	871720	1636	LIS - 3307284 Centre Ph Hv dropped off insulator on to Xarm after an unknown vehicle hit the pole dislodging conductor.
Fire Start 55	5/05/2016		Boneo Rd, Boneo	RBD21	RURAL	HBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	No	0	UE Asset Only	4944	873584	6601	A S150w Sodium lantern caught fire out the front of the local CFA depot - light rain at the time lis # 1318653.
56	25/05/2016		Asling St Brighton	NB13, NB21	URBAN	LBRA	grass/vegetation fire)		Otherwise started by a distribution system	No	No	0	UE Asset Only	4929	875172	2443	Per mfb - mfb advised that s/light was on fire but has been put out by fire brigade - mfb on site. Crew arrived Isolated supply to S/L, cut clear, new S150w Sodium lantern required
57)4/06/2016	12:33	Tennyson St, Elwood	EW2	URBAN	LBRA	grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	No	0	UE Asset Only	4965	877306	2624	When crew attended mfb was not in attendance, sI o/s 196 Tennyson st Elwood lis # 2305522. Burnt - no other fire damage.
Fire Start 58	26/06/2016	4:14	Fernlea Cres, Doncaster East	DC1, DC4	URBAN	LBRA	Asset failures resulting in asset fire (no grass/vegetation fire)	Other Assets	Otherwise started by a distribution system	No	No	0	UE Asset Only	4952	880973	3762	Crew found a blown up pillar. Casing of the pillar under lid is b/out. Closest LIS # S/Light pole 7065656





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Independent Auditor's Report to the Directors of United Energy Distribution Pty Ltd

We have audited the accompanying Fire Factor annual reporting Regulatory Information Notice ("RIN") Templates ("f-factor templates") of United Energy Distribution Pty Ltd ("the licensee" or "UED") for the six months ended 30 June 2016. The f-factor templates have been prepared by the directors in accordance with the Regulatory Information Notice under Division 4 of Part 3 of the National Electricity (Victoria) Law. The RIN is issued by the Australian Energy Regulator ("AER").

Directors' responsibility for the Regulatory Non-Financial Information

The directors are responsible for the preparation of the f-factor templates in accordance with the Regulatory Information Notice under Division 4 of Part 3 of the National Electricity Law, and for such internal controls as the directors determine are necessary to enable the preparation of the f-factor templates that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the f-factor templates based on our audit. We conducted our audit in accordance with Australian Auditing Standards. Those standards require that we comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the f-factor templates are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the f-factor templates. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the f-factor templates, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the entity's preparation of the f-factor templates in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by those charged with governance, as well as evaluating the overall presentation of the f-factor templates.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Independence

In conducting our audit we have met the independence requirements of the Australian professional accounting bodies.



Opinion

In our opinion, the f-factor templates of United Energy Distribution Pty Ltd for the six months ended 30 June 2016 are prepared, in all material respects, in accordance with the Regulatory Information Notice under Division 4 of Part 3 of the National Electricity (Victoria) Law.

Basis of Accounting and Restriction on Distribution

Without modifying our opinion, we draw attention to Schedule 2 of the Regulatory Information Notice under Division 4 of Part 3 of the National Electricity (Victoria) Law which describes the basis of accounting and preparation. The f-factor templates are prepared to assist United Energy Distribution Pty Ltd to meet the requirements of the UED Regulatory Information Notice issued by the AER. As a result, the f-factor templates may not be suitable for another purpose. Our report is intended solely for United Energy Distribution Pty Ltd and the AER and should not be distributed to parties other than United Energy Distribution Pty Ltd or the AER.

Ernst & Young

Ernst & Young Melbourne 4 April 2017

STATUTORY DECLARATION

Evidence (Miscellaneous Provisions) Act 1958, VIC,

I, Antonio Narvaez,

of Level 3, 6 Nexus Court, Mulgrave, Victoria, 3170

do solemnly and sincerely declare that:-

- 1. I am an officer, for the purposes of the National Electricity (Victoria) Law, of United Energy Distribution Pty Ltd ABN 70 064 651 029;
- United Energy Distribution Pty Ltd ABN 70 064 651 029 is a regulated network service provider who provides electricity distribution network services in Victoria for the purpose of section 28D of the National Electricity (Victoria) Law (NEL);
- 3. To the best of my information, knowledge and belief and after making due inquiries, the response of United Energy Distribution Pty Ltd ABN 70 064 651 029 regarding the information required to be provided and to be prepared and maintained as specified in the Australian Energy Regulator's (AER) regulatory information notice (Notice) dated 15 November 2012 is:
 - a) in accordance with the requirements of the Notice; and
 - b) is true and accurate, and in all material respects can be relied upon by the AER to determine the benchmark number of fires applicable to United Energy Distribution Pty Ltd ABN 70 064 651 029 under the f-factor scheme,

I acknowledge that this declaration is true and correct, and I make it with the understanding and belief that a person who makes a false declaration is liable to the penalties of perjury.

Declaring person's signature

Declared at Mulgrave on the 4th day of April 2017

Signature of person making this declaration (to be signed in front of an authorised witness)

Before me,

AD-

Signature of Authorised Witness

Qualification of witness eg. Justice of the Peace, solicitor, other (please specify) AUDREY WALDEGRAVE 6 Nexus Court Mulgrave Victoria 3170 An Australian Legal Practitioner within the meaning of the Legal Profession Uniform Law (Victoria)