

REVIEW OF POWER SYSTEM RECLASSIFICATION EVENTS 1 MAY 2013 to 31 OCTOBER 2013

PREPARED BY: Systems Capability

DATE: 22 January 2014

FINAL

Contents

1	Executive Summary	3
2	References.....	3
3	Definitions	3
4	Development of Criteria for Re-classifying Contingency Events	4
5	Analysis of Reclassification Events over the Reporting Period	4
5.1	Bushfires	4
5.2	Lightning	4
5.3	Other	5
5.4	Impact of reclassification constraints	6
6	Analysis Summary	10
7	Record of Reclassification Events.....	12

1 Executive Summary

The power system is operated such that the loss of single elements in the transmission network such as transmission lines or transformers or the loss of single generating units (known as “credible contingency events”) can be accommodated without causing further problems and thus avoiding a cascade failure. This is known as a “secure operating state”.

It cannot be guaranteed that at all times the power system will withstand the simultaneous loss of multiple transmission elements or generating units or loss of more secure elements such as busbars (known as “non-credible contingency events”).

However under abnormal conditions where the likelihood of multiple failures is increased then AEMO will may temporarily adjust the operation of the power system so that it can withstand the loss of certain multiple elements which are at that time under a known threat. This process is termed “reclassification of a contingency event”. Abnormal conditions are conditions posing added risks to the power system, including without limitation, severe weather conditions, lightning, storms and bushfires.

Examples of such reclassifications might be a reclassification of the loss of both circuits of a double circuit transmission line in the presence of lightning or loss of two transmission circuits in a common easement under threat from bushfires.

Rule 4.2.3B was introduced into the National Electricity Rules on the 23 October 2008 to ensure that such reclassification processes are undertaken in a methodical and organised manner.

This Rule requires AEMO to establish criteria that it must use when considering whether the existence of *abnormal conditions* makes the occurrence of a *non-credible contingency event* reasonably possible under NER clause 4.2.3A (e).

The decision making processes have been designed with a view to providing effective actions on a practical basis. This improves the efficiency of criteria assessment and decision delivery. For instance, to be effective any decision making process regarding reclassification needs to be capable of being made within about 15 minutes of the receipt and assessment of information.

National Electricity Rule 4.2.3 A (i) requires AEMO to issue a report at intervals of six months setting out the reasons for all decisions to reclassify *non-credible contingency events* to be *credible contingency events* under clause 4.2.3A (g) during the relevant period.

The report:

1. must include an explanation of how AEMO applied the criteria established in accordance with 4.2.3B for each of those decisions; and
2. may also include AEMO’s analysis of re-classification trends during the relevant period and its appraisal of the appropriateness and effectiveness of the relevant criteria that were applied in the case of each reclassification decision.

This report provides compliance with the above rule requirements.

2 References

National Electricity Rules (NER).

3 Definitions

GPATS: Global Positioning and Tracking System. This is a Lightning Detection System used by AEMO Operations.

INDJI: (Indji Watch): used by AEMO Operations : is an internet based system that monitors live information feeds on hazards such as bushfires and compares them with locations of transmission assets.

4 Development of Criteria for Re-classifying Contingency Events

AEMO has established three categories of criteria required for the assessment of whether a *non-credible contingency event* is reclassified as a *credible contingency event*. They are

1. **Bushfires**
2. **Lightning** and,
3. **Other** - comprises of but not limited to;
 - the threat of disconnection of multiple generating units,
 - the impact of pollution on transmission insulators,
 - the impact of protection or control systems malfunction on plant or
 - extreme weather conditions.

Following consultation with the relevant stakeholders, the criteria for assessing reclassifications is published in the [AEMO Operating Procedure Power System Security Guidelines SO_OP3715](#).¹

5 Analysis of Reclassification Events over the Reporting Period

A total of 175 reclassifications were declared over the reporting period 1 May 2013 to 30 October 2013. These reclassifications are shown in in Table 4.

In the same period there were 28 non-credible contingency events. These non-credible contingency events are shown in Table 5.

Reclassifications highlighted in **red** in Table 4 correspond to a non-credible contingency event in Table 5, also highlighted in **red**, which resulted in a reclassification.

Fourteen non-credible contingency events led to reclassification afterwards, over the reporting period.

5.1 Bushfires

Reclassifications for bushfires during the period were performed on the basis of established criteria as specified in SO_OP3715. There were 10 reclassifications due to bushfires in the reporting period, compared with 13 reclassifications in the previous period. The contingency did not actually occur during any of these 10 reclassifications. Two of the non-credible contingency events in Table 5 were initiated by bushfires without a prior reclassification.

5.2 Lightning

Reclassifications for lightning during the period were performed on the basis of established criteria in SO_OP3715, which lists the vulnerable transmission lines which are eligible to be reclassified as a credible contingency event if lightning activity is detected in the vicinity of the lines.

Information from the AEMO GPATS was utilised in the assessment process.

For lightning a total of 151 reclassification events occurred over this reporting period, compared to 260 events in the previous reporting period. There were less lightning reclassification events in the current period as the current period did not cover the traditional lightning seasons. During two of these 151 lightning reclassifications the contingency actually occurred. Two of the non-credible contingency events in Table 5 were initiated by lightning without a prior reclassification.

¹ The criteria relating to bushfires was reviewed and updated in December 2013. Refer to AEMO Communication 1457 dated 19/12/13.

5.3 Other

Under the “Other” category 14 reclassifications occurred over the reporting period. These contingency events were reclassified on the basis of the event having occurred, with a risk of re-occurrence. During one of these 14 reclassifications the contingency actually occurred. The contingency events are discussed in Table 4.

5.4 Impact of reclassification constraints

A number of reclassification constraints bound over the reporting period. Details of these constraints are provided in Table 1.

Table 1 Reclassification constraints that bound over the reporting period

Start time	End time	Reclassified equipment	Constraint	Number of Dispatch Intervals binding
4/07/2013 3:35	4/07/2013 4:25	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R5	5
			F_T++FARE_N-2_TG_R6	6
5/07/2013 13:10	5/07/2013 14:50	Farrell Sheffield No. 1 and No. 2 220kV lines	T_FASH_MAXGEN_1	6
			T>T_FASH_1_N-2	18
18/07/2013 21:30	18/07/2013 22:40	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_SHGT_N-2	14
18/07/2013 21:40	18/07/2013 22:45	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T+FASH_N-2_RREG	2
18/07/2013 23:25	19/07/2013 0:40	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_SHGT_N-2	15
5/08/2013 21:15	5/08/2013 22:30	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R5	4
			F_T++FARE_N-2_TG_R60	11
9/08/2013 23:40	10/08/2013 0:35	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R60	9
10/08/2013 2:50	10/08/2013 3:20	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R60	2
			F_T++FARE_N-2_TG_R6	1
10/08/2013 2:50	10/08/2013 3:20	Farrell - Sheffield No. 1 and No. 2 220kV lines	T_T_FASH_5_N-2	6
10/08/2013 4:05	10/08/2013 5:20	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R5	13
			F_T++FARE_N-2_TG_R6	15
			F_T++FARE_N-2_TG_R60	15
10/08/2013 4:05	10/08/2013 5:30	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R5	2
11/08/2013 21:00	11/08/2013 22:05	Farrell - Sheffield No. 1 and No. 2 220kV lines	T_FASH_MAXGEN_1	13
12/08/2013 3:20	12/08/2013 5:05	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R5	20

Start time	End time	Reclassified equipment	Constraint	Number of Dispatch Intervals binding
			F_T++FARE_N-2_TG_R6	21
			F_T++FARE_N-2_TG_R60	21
12/08/2013 6:20	12/08/2013 7:30	George Town - Hadspen No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	14
12/08/2013 6:00	12/08/2013 7:00	Hadspen - Palmerston No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	12
12/08/2013 6:05	12/08/2013 6:45	Liapootah - Palmerston No. 1 and No. 2 220kV lines	T>T_NIL_LIPM_N-2_2B	2
13/08/2013 20:35	13/08/2013 21:50	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R5	1
			F_T++FARE_N-2_TG_R6	1
			F_T++FARE_N-2_TG_R60	1
13/08/2013 20:35	13/08/2013 21:50	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R5	2
			F_T++FASH_N-2_TG_R60	1
			F_T+FASH_N-2_RREG	6
			T_FASH_MAXGEN_1	1
13/08/2013 23:00	14/08/2013 1:20	George Town - Hadspen No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	28
			T>T_GT_HA_3A_N-2	2
13/08/2013 20:35	13/08/2013 21:50	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_SHGT_N-2	14
13/08/2013 23:00	14/08/2013 0:35	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_SHGT_N-2	19
13/08/2013 23:25	14/08/2013 1:20	Hadspen - Palmerston No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	23
15/08/2013 17:30	22/08/2013 16:55	Basslink + Pacific Aluminium Potline 4	F_T+BL_CO_N-2_L5	1
			F_T+BL_CO_N-2_L6	168
			F_T+BL_CO_N-2_L60	161
17/08/2013 13:00	17/08/2013 13:55	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R60	11
18/08/2013 21:45	19/08/2013 0:45	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R60	15
18/08/2013 23:00	19/08/2013 0:45	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R5	1
			F_T++FASH_N-2_TG_R60	3
			T_FASH_MAXGEN_1	19
			T>T_FASH_1_N-2	18

Start time	End time	Reclassified equipment	Constraint	Number of Dispatch Intervals binding
18/08/2013 11:50	18/08/2013 12:20	George Town - Hadspen No. 1 and No. 2 220kV lines	T>T_GT_HA_3A_N-2	3
			T>T_HAGT_N-2	6
18/08/2013 20:40	18/08/2013 21:30	George Town - Hadspen No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	10
19/08/2013 2:30	19/08/2013 3:20	George Town - Hadspen No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	9
18/08/2013 11:50	18/08/2013 12:20	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_HAGT_SHGT_N-2	4
			T>T_SHGT_N-2	6
18/08/2013 20:40	18/08/2013 21:30	Hadspen - Palmerston No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	10
25/09/2013 8:55	25/09/2013 9:45	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T+FASH_N-2_RREG	20
			T>T_FASH_1_N-2	20
25/09/2013 2:55	25/09/2013 3:45	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_GTSH_220_1_N-2	6
			T>T_HAGT_SHGT_N-2	10
27/09/2013 19:20	27/09/2013 20:20	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T+FASH_N-2_RREG	22
27/09/2013 20:45	27/09/2013 22:00	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R60	1
			F_T++FASH_N-2_TG_R6	1
			F_T++FASH_N-2_TG_R5	1
			F_T+FASH_N-2_RREG	28
			T>T_FASH_1_N-2	54
27/09/2013 20:45	27/09/2013 22:00	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_GTSH_220_1_N-2	39
			T>T_HAGT_SHGT_N-2	15
			T>T_PMHA_SHGT_N-2	2
28/09/2013 7:45	28/09/2013 9:05	George Town - Hadspen No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	16
28/09/2013 7:35	28/09/2013 9:05	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_GTSH_220_1_N-2	54
			T>T_HAGT_SHGT_N-2	2
			T>T_PMHA_SHGT_N-2	2
28/09/2013 7:45	28/09/2013 9:05	Hadspen - Palmerston No. 1 and No. 2 220kV lines	T>T_HAGT_N-2	16
30/09/2013 21:35	1/10/2013 5:15	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R5	34
			F_T++FASH_N-2_TG_R6	1

Start time	End time	Reclassified equipment	Constraint	Number of Dispatch Intervals binding
			F_T+FASH_N-2_RREG	178
			T_FASH_MAXGEN_1	9
			T>T_FASH_1_N-2	52
30/09/2013 21:30	1/10/2013 4:50	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_GTSH_220_1_N-2	264
			T>T_HAGT_SHGT_N-2	59
2/10/2013 9:35	2/10/2013 10:25	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R5	1
			F_T++FARE_N-2_TG_R60	1
			F_T++FARE_N-2_TG_R6	1
2/10/2013 12:55	2/10/2013 14:40	Farrell Reece No. 1 and No. 2 220kV lines	F_T++FARE_N-2_TG_R60	1
			F_T++FARE_N-2_TG_R6	1
			F_T++FARE_N-2_TG_R5	2
2/10/2013 10:10	2/10/2013 10:25	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R5	2
			F_T++FASH_N-2_TG_R6	3
			F_T++FASH_N-2_TG_R60	2
			F_T+FASH_N-2_RREG	6
2/10/2013 13:00	2/10/2013 14:30	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T+FASH_N-2_RREG	10
			F_T++FASH_N-2_TG_R5	1
1/10/2013 8:45	1/10/2013 9:25	Liapootah - Palmerston No. 1 and No. 2 220kV lines	T>T_NIL_LIPM_N-2_2B	4
17/10/2013 10:10	17/10/2013 12:40	Farrell - Sheffield No. 1 and No. 2 220kV lines	F_T++FASH_N-2_TG_R5	1
			F_T++FASH_N-2_TG_R6	1
			F_T++FASH_N-2_TG_R60	1
			F_T+FASH_N-2_RREG	2
			F_T+FASH_N-2_TG_R5	2
			T_FASH_MAXGEN_1	31
17/10/2013 12:20	17/10/2013 13:50	George Town - Sheffield No. 1 and No. 2 220kV lines	T>T_GTSH_220_1_N-2	54
			T>T_HAGT_SHGT_N-2	7

6 Analysis Summary

AEMO has analysed the re-classification trends during the relevant reporting period and has assessed the appropriateness and effectiveness of the relevant criteria that were applied in the case of each re-classification decisions and has deemed they are appropriate however a number of issues associated with the bushfire reclassification guidelines were identified resulting in an update to the guidelines in December 2013.

Analysis of the reclassifications occurring over the reporting period 1 May 2013 to 1 November 2013 is summarised in the Table 2. Although the actual incidence of the event occurring is very low, generally the incidence of a normal credible contingency is also very low under similar conditions.

For the reporting period there were three occurrences where the reclassification event was actually realised.

Table 2 Statistics for reclassifications over the reporting period 1 May 2013 to 31 October 2013

Category	Number Reclass Events	Actual incidence of contingency occurring during reclassification
Bushfires	10	0
Lightning	151	2
Other	14	1
Total for Period	175	3

Figure 1 shows the number of reclassification events per region over the reporting period 1 May 2013 to 30 October 2013.

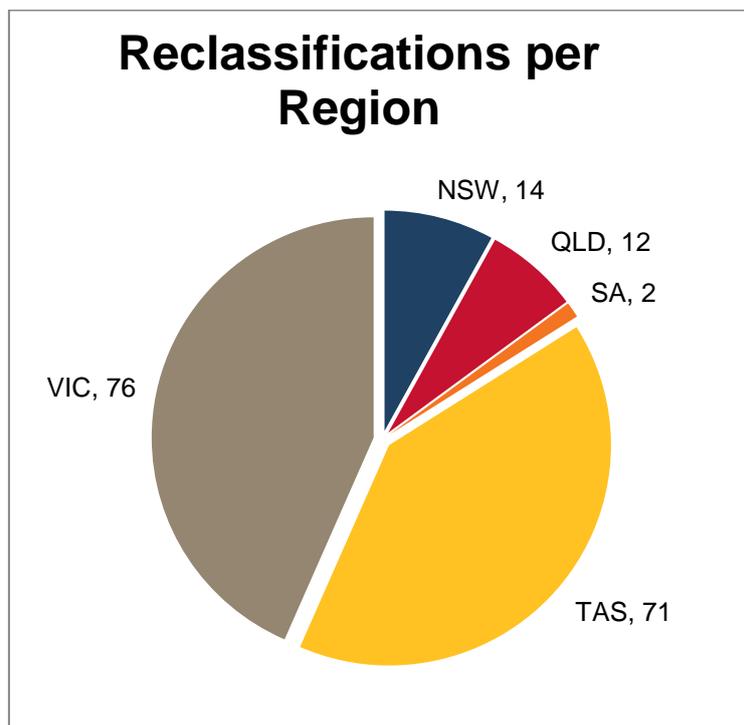


Figure 1 Reclassifications per region

Table 3 shows the historical statistics for reclassification events.

Table 3 Historical statistics for reclassifications

Reporting Period	Bushfires		Lightning		Other								Auxiliary supply outage		Totals for Period				
	Reclass Events	Actual Incidence	Reclass Events	Actual Incidence	Unknown		Protection		Pollution		Weather conditions		Station configuration		Reclass Events	Actual Incidence	Reclass Events	Actual Incidence	
23/10/08 to 23/04/09	6	2	96	1	0	0	1	0	0	0	0	0	0	0	0	0	0	103	3
24/04/09 to 23/10/09	1	0	83	0	0	0	4	0	2	0	0	0	0	0	0	0	0	90	0
24/10/09 to 30/04/10	2	0	256	1	0	0	2	0	0	0	1	0	0	0	0	0	0	261	1
01/05/10 to 30/10/10	0	0	46	1	0	0	1	1	0	0	0	0	1	0	1	0	49	2	
01/11/10 to 30/04/11	0	0	278	8	1	0	6	0	0	0	3	0	0	0	0	0	288	8	
01/05/11 to 31/10/11	2	0	81	0	1	0	2	0	0	0	0	0	0	0	1	0	87	0	
01/11/11 to 30/4/12	0	0	299	2	7	3	0	0	0	0	0	0	0	0	0	0	306	5	
01/05/12 to 31/10/12	3	0	79	0	3	0	1	0	0	0	0	0	3	0	0	0	89	0	
01/11/12 to 30/04/13	13	0	260	0	6	0	3	0	0	0	1	0	0	0	1	0	284	0	
1/5/13 to 31/10/13	10	0	151	2	1	0	5	0	0	0	4	0	3	1	0	0	174	3	
Totals	37	2	1629	15	19	3	25	1	2	0	9	0	7	1	3	0	1557	19	

7 Record of Reclassification Events

Table 4 Reclassification events from 1 May 2013 to 31 October 2013

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
42281	1/05/2013 16:05	1/05/2013 17:30	42284	Hadspen - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42282	1/05/2013 16:05	1/05/2013 17:30	42285	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42349	12/05/2013 21:45	12/05/2013 23:30	42350	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42354	13/05/2013 15:25	13/05/2013 17:40	42355	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
42363	15/05/2013 3:45	15/05/2013 4:40	42364	Burnie Sheffield No. 2 110kV line and Paloona Sheffield 110kV line	TAS	Lightning	GPATS
42373	15/05/2013 16:35	15/05/2013 17:35	42375	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
42376	15/05/2013 19:00	15/05/2013 20:05	42377	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
42383	16/05/2013 12:10	16/05/2013 13:00	42384	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
42394	16/05/2013 16:35	16/05/2013 18:10	42396	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42494	30/05/2013 5:35	30/05/2013 7:25	42496	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42495	30/05/2013 6:05	30/05/2013 7:25	42497	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
42499	30/05/2013 9:40	30/05/2013 10:50	42501	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42517	31/05/2013 22:00	1/06/2013 3:00	42519	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
42588	7/06/2013 11:00	7/06/2013 13:45	42590	Loss of multiple TIPS B units	SA	Other	Event had occurred

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
42621	14/06/2013 5:10	6/12/2013 16:30	44142	Oaklands Hill Windfarm and Mortons Lane Windfarm	VIC	Other	Event had occurred
42801	4/07/2013 3:35	4/07/2013 4:25	42802	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42812	4/07/2013 20:25	7/08/2013 10:00	43015	MLTS-TRTS-HYTS-APD No.1 500 kV line, Macarthur Windfarm and Portland windfarm	VIC	Other	Event had occurred
42814	5/07/2013 13:10	5/07/2013 14:50	42817	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42815	5/07/2013 13:15	5/07/2013 15:40	42818	Farrell - Sheffield No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
42820	5/07/2013 23:25	5/07/2013 23:55	42821	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42826	7/07/2013 22:20	7/07/2013 23:15	42827	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42888	18/07/2013 16:10	18/07/2013 19:35	42894	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
42889	18/07/2013 16:10	18/07/2013 19:35	42893	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
42891	18/07/2013 17:25	19/07/2013 0:45	42909	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
42892	18/07/2013 19:10	19/07/2013 0:45	42910	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42896	18/07/2013 21:30	18/07/2013 22:40	42903	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42898	18/07/2013 21:40	18/07/2013 22:45	42902	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42901	18/07/2013 23:25	19/07/2013 0:40	42908	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42911	19/07/2013 2:30	19/07/2013 8:15	42912	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
42964	28/07/2013 22:00	29/07/2013 0:30	42968	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
42965	28/07/2013 22:00	29/07/2013 0:30	42969	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
42966	28/07/2013 22:00	29/07/2013 0:30	42973	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
42967	28/07/2013 22:15	29/07/2013 2:35	42971	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42975	29/07/2013 20:25	29/07/2013 21:40	42977	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
42976	29/07/2013 21:00	29/07/2013 21:40	42978	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
42992	3/08/2013 17:40	3/08/2013 18:30	42993	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
42999	5/08/2013 21:15	5/08/2013 22:30	43000	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43001	6/08/2013 0:35	6/08/2013 4:35	43003	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43002	6/08/2013 0:35	6/08/2013 4:35	43004	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43028	9/08/2013 23:40	10/08/2013 0:35	43029	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43030	10/08/2013 2:50	10/08/2013 3:20	43032	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43031	10/08/2013 2:50	10/08/2013 3:20	43033	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43034	10/08/2013 4:05	10/08/2013 5:20	43036	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43035	10/08/2013 4:05	10/08/2013 5:30	43037	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43043	11/08/2013 20:50	11/08/2013 22:10	43046	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43044	11/08/2013 21:00	11/08/2013 22:05	43045	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43047	12/08/2013 3:20	12/08/2013 5:05	43048	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43049	12/08/2013 6:00	12/08/2013 7:00	43053	Hadspen - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43050	12/08/2013 6:05	12/08/2013 6:45	43052	Liapootah - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43051	12/08/2013 6:20	12/08/2013 7:30	43054	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43055	12/08/2013 10:15	12/08/2013 12:00	43060	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43056	12/08/2013 10:15	12/08/2013 12:00	43061	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43059	12/08/2013 11:50	12/08/2013 13:15	43063	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43068	13/08/2013 20:35	13/08/2013 21:50	43071	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43069	13/08/2013 20:35	13/08/2013 21:50	43072	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43070	13/08/2013 20:35	13/08/2013 21:50	43073	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43075	13/08/2013 23:00	14/08/2013 0:35	43081	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43076	13/08/2013 23:00	14/08/2013 1:20	43082	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43080	13/08/2013 23:25	14/08/2013 1:20	43083	Hadspen - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43084	14/08/2013 4:20	14/08/2013 4:55	43086	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43094	15/08/2013 17:30	22/08/2013 16:55	43169	Basslink + Pacific Aluminium Potline 4	TAS	Other	Event had occurred

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43105	17/08/2013 13:00	17/08/2013 13:55	43106	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43107	18/08/2013 5:35	18/08/2013 8:00	43109	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43110	18/08/2013 11:50	18/08/2013 12:20	43118	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43112	18/08/2013 11:50	18/08/2013 12:20	43119	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43122	18/08/2013 15:40	18/08/2013 19:30	43124	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43125	18/08/2013 20:40	18/08/2013 21:30	43127	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43126	18/08/2013 20:40	18/08/2013 21:30	43128	Hadspen - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43129	18/08/2013 21:45	19/08/2013 0:45	43131	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43130	18/08/2013 23:00	19/08/2013 0:45	43132	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43133	19/08/2013 2:30	19/08/2013 3:20	43136	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43207	29/08/2013 19:25	29/08/2013 22:45	43209	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43208	29/08/2013 20:20	29/08/2013 22:45	43210	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43257	9/09/2013 14:30	15/09/2013 15:55	43316	MLTS-TRTS-HYTS-APD No.1 500 kV line, Macarthur WF	VIC	Other	Event had occurred
43260	9/09/2013 19:00	9/09/2013 21:00	43263	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43261	9/09/2013 19:00	9/09/2013 21:00	43264	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43262	9/09/2013 20:10	9/09/2013 21:10	43265	Farrell - Sheffield No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43278	10/09/2013 15:25	11/09/2013 3:25	43281	Bayswater - Regentville 330 kV No. 31 line and Bayswater - Sydney West No. 32 330 kV line	NSW	Bushfires	INJI
43279	10/09/2013 16:45	10/09/2013 18:10	43280	Eraring - Kemps Creek 5A1 and 5A2 500 kV lines	NSW	Bushfires	INJI
43321	16/09/2013 6:15	16/09/2013 8:00	43322	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43320	16/09/2013 7:10	16/09/2013 8:30	43323	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43341	18/09/2013 14:35	18/09/2013 17:35	43343	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43342	18/09/2013 14:40	18/09/2013 17:45	43344	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43552	22/09/2013 15:30	22/09/2013 17:35	43353	Collinsville - Mackay Tee Proserpine 7125 and 7126 132 kV lines	QLD	Lightning	GPATS
43360	25/09/2013 2:55	25/09/2013 3:45	43362	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43361	25/09/2013 2:55	25/09/2013 3:45	43363	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43364	25/09/2013 8:55	25/09/2013 9:45	43366	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43365	25/09/2013 8:55	25/09/2013 9:45	43367	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43376	25/09/2013 21:55	25/09/2013 23:55	43377	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43378	26/09/2013 1:00	26/09/2013 3:30	43381	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43379	26/09/2013 1:00	26/09/2013 3:30	43382	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43380	26/09/2013 1:10	26/09/2013 3:30	43383	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43384	26/09/2013 5:45	26/09/2013 7:40	43386	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43385	26/09/2013 6:20	26/09/2013 7:50	43387	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43388	26/09/2013 11:15	26/09/2013 11:50	43393	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43389	26/09/2013 11:15	26/09/2013 11:50	43394	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43392	26/09/2013 11:15	26/09/2013 12:10	43396	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43391	26/09/2013 11:35	26/09/2013 12:10	43395	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43397	26/09/2013 12:20	26/09/2013 14:05	43406	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43398	26/09/2013 12:20	26/09/2013 14:05	43405	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43399	26/09/2013 12:20	26/09/2013 13:05	43401	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43400	26/09/2013 12:20	26/09/2013 13:05	43402	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43403	26/09/2013 13:10	26/09/2013 15:10	43408	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43404	26/09/2013 13:10	26/09/2013 15:10	43407	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43428	27/09/2013 18:15	27/09/2013 19:00	43415	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43416	27/09/2013 19:20	27/09/2013 20:20	43418	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43417	27/09/2013 19:20	27/09/2013 20:20	43420	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43421	27/09/2013 20:45	27/09/2013 22:00	43431	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43423	27/09/2013 20:45	27/09/2013 22:00	43432	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43426	27/09/2013 20:45	27/09/2013 22:00	43430	Burnie Sheffield No. 2 110kV line and Paloona Sheffield 110kV line	TAS	Lightning	GPATS
43427	27/09/2013 21:15	27/09/2013 22:00	43433	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43435	28/09/2013 7:35	28/09/2013 9:05	43441	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43436	28/09/2013 7:45	28/09/2013 9:05	43442	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43439	28/09/2013 7:45	28/09/2013 9:05	43443	Hadspen - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43448	29/09/2013 16:20	29/09/2013 20:30	43452	Collinsville - Mackay tee Proserpine 7125 and 7126 132kV Lines	QLD	Lightning	GPATS
43451	29/09/2013 16:20	29/09/2013 20:30	43453	Moranbah Goonyella 7369 and 7370 132kV lines	QLD	Lightning	GPATS
43450	29/09/2013 19:10	29/09/2013 20:30	43454	Kemmis Moranbah tee Burton Downs 7117 132kV line and Nebo Moranbah tee Coppabella 7118 132kV line	QLD	Lightning	GPATS
43468	30/09/2013 17:30	29/11/2013 16:35	44051	North West Bend - Monash- Berri 132 kV line and Murraylink	SA	Other	Event had occurred
43470	30/09/2013 21:30	1/10/2013 4:50	43479	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43474	30/09/2013 21:35	1/10/2013 5:15	43482	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43473	30/09/2013 22:45	1/10/2013 4:50	43480	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43456	30/09/2013 23:55	6/12/2013 16:30	44142	Ringwood-Rowville 220 kV No.1 Line, Yallourn W Unit 1, Oakland Hill Wind Farm, Macarthur Wind Farm	VIC	Other	Event had occurred
43477	1/10/2013 0:45	4/10/2013 19:30	43543	Farrell - Queenstown - Newton 110 kV and B152 CB at Farrell	TAS	Other	Event had occurred

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43476	1/10/2013 1:25	1/10/2013 6:45	43485	Chapel St - Liapootah No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43478	1/10/2013 1:40	1/10/2013 5:15	43484	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43487	1/10/2013 8:45	1/10/2013 9:25	43488	Liapootah - Palmerston No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43490	1/10/2013 13:50	1/10/2013 15:15	43498	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43491	1/10/2013 14:05	1/10/2013 15:15	43494	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43492	1/10/2013 14:05	1/10/2013 15:15	43495	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43496	1/10/2013 15:40	1/10/2013 16:40	43493	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43504	2/10/2013 9:35	2/10/2013 10:25	43506	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43505	2/10/2013 10:10	2/10/2013 10:25	43507	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43509	2/10/2013 12:55	2/10/2013 14:40	43511	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43510	2/10/2013 13:00	2/10/2013 14:30	43512	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43527	3/10/2013 13:30	3/10/2013 20:55	43535	Kemmis Moranbah tee Burton Downs 7117 132kV line and Nebo Moranbah tee Coppabella 7118 132kV line	QLD	Lightning	GPATS
43528	3/10/2013 13:55	3/10/2013 17:55	43532	Chalumbin Woree 876 and 877 275kV lines	QLD	Lightning	GPATS
43514	3/10/2013 15:00	3/10/2013 16:55	43517	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43513	3/10/2013 15:05	3/10/2013 16:55	43516	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43529	3/10/2013 15:45	3/10/2013 23:15	43536	Collinsville - Mackay tee Proserpine 7125 and 7126 132kV Lines	QLD	Lightning	GPATS
43530	3/10/2013 16:35	3/10/2013 20:35	43534	Moranbah Goonyella 7369 and 7370 132kV lines	QLD	Lightning	GPATS
43520	3/10/2013 18:00	3/10/2013 22:00	43522	Moranbah Goonyella 7369 and 7370 132kV lines	QLD	Lightning	GPATS
43521	3/10/2013 18:00	3/10/2013 22:00	43523	Kemmis Moranbah tee Burton Downs 7117 132kV line and Nebo Moranbah tee Coppabella 7118 132kV line	QLD	Lightning	GPATS
43587	13/10/2013 7:55	30/10/2013 14:00	43754	Bayswater - Mt Piper 5A3 500 kV line and Wallerawang Unit 7	NSW	Other	Event had occurred
43590	13/10/2013 15:15	6/12/2013 16:30	44142	Rowville - Thomastown 220 line, Oakland Hill WF, Mortons Lane WF	VIC	Other	Event had occurred
43593	13/10/2013 19:50	19/10/2013 8:10	43663	Tomago - Taree tee Hawksnest (963) 132 kV line and Tomago 330 - Tomago 132 (98A) 132 kV line	NSW	Other	Event had occurred
43594	13/10/2013 21:30	21/10/2013 16:15	43673	Tomago - Taree tee Hawksnest (963) 132kV line and Tomago 330 - Tomago 132 (9F4) 132kV line	NSW	Other	Event had occurred
43596	14/10/2013 12:25	14/10/2013 13:20	43598	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43597	14/10/2013 12:25	14/10/2013 13:20	43599	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43605	14/10/2013 15:45	14/10/2013 19:40	43606	Chalumbin Woree 876 and 877 275kV lines	QLD	Lightning	GPATS
43616	15/10/2013 15:15	18/10/2013 15:00	43659	No.4 220/110 kV Chapel St transformer and Nyrstar load	TAS	Other	Event had occurred
43627	17/10/2013 10:10	17/10/2013 12:40	43634	Farrell - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43628	17/10/2013 10:10	17/10/2013 12:40	43633	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43631	17/10/2013 12:20	17/10/2013 13:50	43637	George Town - Hadspen No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43632	17/10/2013 12:20	17/10/2013 13:50	43638	George Town - Sheffield No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43635	17/10/2013 13:20	17/10/2013 17:15	43647	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS
43636	17/10/2013 13:20	17/10/2013 17:15	43646	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43639	17/10/2013 14:15	17/10/2013 17:15	43645	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43640	17/10/2013 14:25	17/10/2013 17:15	43648	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43641	17/10/2013 14:30	17/10/2013 17:40	43649	Chalumbin Woree 876 and 877 275kV lines	QLD	Lightning	GPATS
43642	17/10/2013 14:35	18/10/2013 7:30	46355	Bayswater - Regentville 330 kV No. 31 line and Bayswater - Sydney West No. 32 330 kV line	NSW	Bushfires	INJI
43643	17/10/2013 14:55	17/10/2013 20:35	43653	Eraring - Kemps Creek 5A1 and 5A2 500 kV lines	NSW	Bushfires	INJI
43644	17/10/2013 15:00	17/10/2013 20:35	43652	Sydney South - Wallerawang No.76 330 line and Ingleburn - Wallerawang No.77 330 kV line	NSW	Bushfires	INJI
43669	21/10/2013 9:15	21/10/2013 10:15	43670	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43684	22/10/2013 14:10	22/10/2013 20:50	43689	Glenrowan - Dederang No. 1 and No. 3 220kV lines	VIC	Lightning	GPATS
43685	22/10/2013 14:10	22/10/2013 20:50	43690	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43687	22/10/2013 20:50	22/10/2013 23:45	43697	Rowville Yallourn No. 5 and No. 6 220kV lines	VIC	Lightning	GPATS
43688	22/10/2013 20:50	22/10/2013 23:45	43696	Hazelwood PS - Rowville No. 1 and 2 220kV lines	VIC	Lightning	GPATS

Start MN	Start	Actual End Date	End MN	Reclassified Equipment	Region	Reason	Source
43691	22/10/2013 21:40	22/10/2013 23:00	43693	Eildon - Mt Beauty No. 1 and No. 2 220kV lines	VIC	Lightning	GPATS
43703	23/10/2013 11:55	24/10/2013 5:55	43712	Newcastle Tomago No. 95 330 kV line and Liddell Tomago No. 82 330 kV line	NSW	Bushfires	INJI
43707	23/10/2013 19:25	23/10/2013 20:05	43708	Eraring - Kemps Creek 5A1 and 5A2 500 kV lines	NSW	Bushfires	INJI
43709	24/10/2013 0:30	24/10/2013 1:10	43710	Farrell Reece No. 1 and No. 2 220kV lines	TAS	Lightning	GPATS
43713	24/10/2013 7:55	23/10/2013 11:05	43714	Newcastle Tomago No. 95 330 kV line and Liddell Tomago No. 82 330 kV line	NSW	Bushfires	INJI
43715	24/10/2013 12:35	23/10/2013 14:10	43716	Bayswater - Regentville 330 kV No. 31 line and Bayswater - Sydney West No. 32 330 kV line	NSW	Bushfires	INJI
43720	25/10/2013 13:20	28/10/2013 10:35	43742	Bayswater - Regentville 330 kV No. 31 line and Bayswater - Sydney West No. 32 330 kV line	NSW	Bushfires	INJI
43743	28/10/2013 7:35	2/12/2013 13:10	44072	No. 8 Dapto – Marulan 330 kV Line at the Dapto end	NSW	Other	Event had occurred

Table 5 Actual non-credible contingencies from 1 May 2013 from 31 October 2013.

Data of contingency	Description	Region	Reason	Was the contingency then reclassified?	Comments
17/05/2013	Trip of Bouldercombe No.1 275 kV bus	QLD	Other	No	Inadvertent trip during planned substation work. Assessed as unlikely to re-occur.
23/05/2013	Trip of Tomago potlines 1 and 2	NSW	Other	No	Internal 22 kV fault at Tomago. Assessed as unlikely to re-occur.
31/05/2013	Trip of three Torrens Island B generating units	SA	Other	Yes	Initiated by 6.6 kV station auxiliary fault. Units remained out of service until 7 June. The contingency was reclassified as credible on return to service on 7 June, until advice from Generator was received that the contingency was unlikely to re-occur.
1/06/2013	Trip of South Morang No.1 500 kV bus	VIC	Other	No	Damaged secondary cable initiated a false trip of bus protection. Assessed as unlikely to re-occur.
14/06/2013	Trip of Oaklands WF and Mortons Lane WF	VIC	Other	Yes	Reclassified during incident investigation, into WF GPS issues. This contingency re-occurred during reclassification, refer to event 23/10/2013
21/06/2013	Trip of three Yallourn W generating units	VIC	Other	No	Emergency trip of units during fire at Yallourn power station. Assessed as unlikely to re-occur.
4/07/2013	Trip of APD-HYTS-TRTS-MLTS No.1 500 kV line, Macarthur WF and Portland WF	VIC	Other	Yes	Initiated by incorrect protection settings, reclassified pending changes to the protection settings.
15/08/2013	Basslink and Pacific Aluminium potline 4	TAS	Other	Yes	Potline tripped following trip of Basslink on spurious overvoltage protection. Reclassified pending changes to protection setting.
8/09/2013	Trip of APD-HYTS-TRTS-MLTS No.1 500 kV line and Macarthur WF	VIC	Other	Yes	Initiated by incorrect protection settings, and inaccurate dynamic modelling for protection settings following previous incident on 4/7/2013. Reclassified pending changes to the protection settings.
10/09/2013	Trip of Hazelwood Power Station No.4 220 kV bus	VIC	Other	No	Inadvertent trip during planned substation work. Assessed as unlikely to re-occur.
12/09/2013	Trip of Hadspen B 110 kV bus.	TAS	Other	No	Initiated by incorrect protection settings, bus remained out of service until protection settings were changed. No reclassification was needed on return to service.
12/09/2013	Trip of Tamworth No.3 and No.4 132 kV buses	NSW	Other	No	Inadvertent trip during planned substation work. Assessed as unlikely to re-occur.
29/09/2013	Trip of Ringwood - Rowville 220 kV transmission, Yallourn W Unit 1 and Oaklands WF.	VIC	Other	Yes	Reclassified during incident investigation, into WF GPS issues.
30/09/2013	Trip of Northwest Bend - Monash - Berri No.2 132 kV line and Murraylink.	SA	Other, later determined to be lightning	Yes	Reclassified during incident investigation, which determined 132 kV tripped due to lightning and Murraylink tripped due to a coincident telecommunications failure.
1/10/2013	Trip of Farrell - Jbutters 220 kV line and Farrell - Roseberry - Queenstown - Newton 110 kV line	TAS	Lightning	Yes	Reclassified during incident investigation, which determined contingency was due to lightning. Lines have now been declared vulnerable.
3/10/2013	Trip of Dapto - Kangaroo Valley 330 kV line at Dapto end only.	NSW	Other	No	Trip initiated by apparent failure of CVT at Dapto (loose CVT fuse). Assessed as unlikely to re-occur.
13/10/2013	Trip of Bayswater - MT Piper 5A3 500 kV line and Wallerawang Unit 7	NSW	Other	Yes	Reclassified during incident investigation, which found Wallerawang Unit 7 tripped due to loose secondary circuit connection following 500 kV line trip.

Data of contingency	Description	Region	Reason	Was the contingency then reclassified?	Comments
13/10/2013	Trip of Rowville - Thomastown 220 kV line, Oaklands WF, Mortons Lane WF and reduction in generation at Musselroe WF.	VIC	Other	Yes	Reclassified during incident investigation, into WF GPS issues.
13/10/2013	Trip of Tomago - Taree tee Hawksnest (963) 132 kV line and Tomago 330 - Tomago 132 (98A) 132 kV line	NSW	Other, later determined to be Bushfire	Yes	Reclassified pending investigation by TransGrid into trip. Later identified as initiated by smoke from bushfires burning near lines.
13/10/2013	Trip of Tomago - Taree tee Hawksnest (963) 132kV line and Tomago 330 - Tomago 132 (9F4) 132kV line	NSW	Other, later determined to be Bushfire	Yes	Reclassified pending investigation by TransGrid into trip. Later identified as initiated by smoke from bushfires burning near lines.
14/10/2013	Trip of Brinkworth - Davenport 275 kV line at Brinkworth end only.	SA	Other	No	Initiated by faulty protection signalling equipment, line remained out of service until equipment was replaced. No reclassification was needed on return to service.
15/10/2013	On energisation of No.4 220/110 kV transformer at Chapel St, trip of Nyrstar load	TAS	Other	Yes	Reclassified during Transend investigation, specific cause could not be found. Nyrstar has agreed to reduce in load whenever transformer is being returned to service.
17/10/2013	Trip of Wallerawang No.1 132 kV bus	NSW	Other	No	Correctly tripped during earth fault. Assessed as unlikely to re-occur.
21/10/2013	Trip of Boyne Island No.3 132 kV bus trip.	QLD	Other	No	Correctly tripped during internal Boyne Island fault. Assessed as unlikely to re-occur.
21/10/2013	Trip of Callide C Unit 3 and Unit 4	QLD	Other	No	Initiated by loss of station auxiliary water cooling supply. Assessed as unlikely to re-occur.
23/10/2013	Trip of Oaklands WF and Mortons Lane WF.	VIC	Other	Already re-classified	This contingency had already been reclassified after contingency on 14/6/2013.
25/10/2013	Trip of Collinsville 2A and 2B 132 kV buses.	QLD	Other	No	Initiated by incorrect CT polarity, assessed as unlikely to re-occur.
28/10/2013	Trip of Dapto - Marulan 330 kV line at Dapto end only.	NSW	Other	Yes	Reclassified during incident investigation. Initiated by incorrect protection settings,