



The Effectiveness of Automated Procedures for Identifying Dispatch Intervals Subject to Review

July 2020

2019 Review

Important notice

PURPOSE

This report is provided in accordance with National Electricity Rules (NER) clause 3.9.2B(l). It is based on information available to AEMO at 17 July 2020.

Unless otherwise indicated, terms in this report have the same meanings as those defined in the NER.

All references to time in this report are based on Australian Eastern Standard Time (AEST).

DISCLAIMER

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GLOSSARY

Term	Definition
DI	Dispatch Interval
MII	Manifestly Incorrect Input
NER	National Electricity Rules
OCD	Over-Constrained Dispatch
Price change	The price threshold is breached if either: $\text{Min} (\text{ROPi} , \text{ROPi-1}) > X$ and $\text{Price Change} = \text{ROPi} - \text{ROPi-1} / \text{Min} (\text{ROPi} , \text{ROPi-1}) > Y$ Or, $\text{Min} (\text{ROPi} , \text{ROPi-1}) \leq X$ and $\text{Price Change} = \text{ROPi} - \text{ROPi-1} > X * Y$ Where X and Y are regional specific parameters.
ROP	Regional Original Price

Executive summary

The National Electricity Rules (NER) provide for AEMO to apply automated procedures to identify dispatch intervals (DIs) where manifestly incorrect inputs (MII) may have resulted in material differences in pricing outcomes¹.

Those DIs are subject to review. AEMO must determine whether a DI subject to review in fact contained a MII to the dispatch algorithm.

The NER also require AEMO to review and report on the effectiveness of the automated procedures.

This report analyses the effectiveness of AEMO's automated procedures for identifying DIs subject to review during 2019. It has been published to meet the requirements of rule 3.9.2B(l) of the NER.

There was no evidence in 2019 that the automated procedures were effective in detecting instances where an MII may have resulted in material differences in pricing outcomes. The automated procedures identified 120 DIs that were subject to review. Further investigations indicated that none of the identified DIs contain a manifestly incorrect input.

In 2020, AEMO established the Scheduling Error Working Group (SEWG) to progress its scheduling error work program and facilitate direct engagement with industry². The SEWG recommended a number of changes to the scheduling error framework, and some of these proposals extended to the MII process. The SEWG recommended that AEMO:

- (i) revises the automated procedures for identifying dispatch intervals subject to review³ so that market notices are no longer published when an interval is subject to review, and
- (ii) reviews the price and flow thresholds used in the automated procedures, in accordance with consultation requirements.

AEMO will consider these recommendations.

¹ Process available from https://www.aemo.com.au/-/media/Files/Electricity/NEM/Security_and_Reliability/Dispatch/Policy_and_Process/2017/Automated-Procedures-For-Identifying-Dispatch-Intervals-Subject-to-Review.docx.

² The SEWG was comprised of several industry participants and met on four occasions. All meeting materials are available from <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/scheduling-error-working-group-sewg>.

³ Procedure available from: <https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/system-operations/dispatch-information/policy-and-process-documentation>.

1. Analysis of dispatch intervals subjected to review during 2019

The table below lists the DIs that were automatically identified as subject to review for the year 2019, as well as the associated material differences in prices and interconnector flows. For each of the DIs identified, AEMO followed the review process as outlined in the document “Automated procedures for identifying dispatch intervals subject to MII” to determine whether to accept or reject the prices (Price status (A=accepted, R=rejected)) in real time. Annually, AEMO then reviews all the DIs and lists the reasons (Explanation and Reason) for each of the DIs identified while assessing the effectiveness of the automated procedures.

Incident number	Date time	Region	Price Status (R = rejected) A = accepted,	Price Change (% Absolute)	Previous ROP (\$/MWh)	Current ROP (\$/MWh)	Interconnector	Prev Flow (MW)	Current Flow (MW)	Abs change in flow (MW)	Region flow threshold (MW)	Explanation	Reason
1	07/01/2019 16:55	TAS1	A	11.23	250.73	20.50	T-V-MNSP1	-184	19	203	190	Rebidding to lower price bands	Rebidding
2	15/01/2019 03:50	TAS1	A	5.51	898.30	137.90	T-V-MNSP1	-146	-347	-201	190	Change in interconnector flow due to constraint	Constraint action
3	18/01/2019 17:05	TAS1	A	17.00	49.91	898.32	T-V-MNSP1	422	230	-193	190	Rebidding to higher price bands	Rebidding
4	22/01/2019 16:45	VIC1	A	74.76	302.38	22908.91	VIC1-NSW1	41	-461	-502	500	Change in interconnector flow due to constraint and Energy/FCAS co-optimisation	Constraint action / Co-optimisation
5	22/01/2019 16:50	VIC1	A	7.85	22908.91	2587.97	VIC1-NSW1	-461	366	827	500	Rebidding to lower price bands	Rebidding
6	23/01/2019 12:30	TAS1	A	175.33	27439.88	155.61	T-V-MNSP1	59	273	214	190	Increase in wind generation, constraint swamping and rebidding to lower price bands	Wind generation change / Constraint action / Rebidding
7	24/01/2019 08:05	TAS1	A	4.53	153.06	27.68	T-V-MNSP1	-204	10	213	190	Rebidding to lower price bands	Rebidding

Incident number	Date time	Region	Price Status (R = rejected, A = accepted)	Price Change (% Absolute)	Previous ROP (\$/MWh)	Current ROP (\$/MWh)	Interconnector	Prev Flow (MW)	Current Flow (MW)	Abs change in flow (MW)	Region flow threshold (MW)	Explanation	Reason
8	24/01/2019 19:20	VIC1	A	46.17	46105.42	2175000.00	V-SA	267	110	-157	150	Increase in VIC demand	Demand change
	24/01/2019 19:20	SA1	A	43.58	48790.15	2175000.00	V-SA	267	110	-157	150		
9	25/01/2019 07:10	VIC1	A	3.45	767.18	172.33	V-SA	-494	-266	228	150	Rebidding to lower price bands	Rebidding
	25/01/2019 07:10	SA1	A	3.07	619.68	152.24	V-SA	-494	-266	228	150		
10	25/01/2019 10:15	VIC1	A	30.66	390.16	12351.67	V-SA	-316	-468	-152	150	Decrease in wind generation and increase in demand	Wind generation change / Demand change
	25/01/2019 10:15	SA1	A	28.78	340.48	10139.00	V-SA	-316	-468	-152	150		
11	29/01/2019 15:45	QLD1	A	3.15	240.73	-111.95	NSW1-QLD1	-1106	-295	811	240	Rebidding to lower price bands	Rebidding
	29/01/2019 15:45	NSW1	A	3.68	303.95	-113.37	NSW1-QLD1	-1106	-295	811	450		
12	29/01/2019 15:55	QLD1	A	83.74	16.79	100.53	NSW1-QLD1	-272	-546	-274	240	Generation constrained off due to constraint	Constraint action
13	29/01/2019 16:10	QLD1	A	8.54	147.73	1409.53	N-Q-MNSP1	-65	-145	-80	80	Change in NSW unit ramp down rate	Generator availability change
	29/01/2019 16:10	NSW1	A	10.24	160.78	1807.85	N-Q-MNSP1	-65	-145	-80	80		
	29/01/2019 16:10	QLD1	A	8.54	147.73	1409.53	NSW1-QLD1	-640	-1104	-464	240		
	29/01/2019 16:10	NSW1	A	10.24	160.78	1807.85	NSW1-QLD1	-640	-1104	-464	450		
14	29/01/2019 16:45	VIC1	A	102.88	14194.00	136.64	VIC1-NSW1	-14	-642	-628	500	Rebidding to lower price bands	Rebidding
	29/01/2019 16:45	NSW1	A	111.76	13080.91	116.01	VIC1-NSW1	-14	-642	-628	500		

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15	31/01/2019 05:20	TAS1	A	4.03	133.49	671.90	T-V-MNSP1	-194	0	194	190	Transmission line reclassification due to bushfire in TAS	Constraint action / Line reclassification
16	31/01/2019 16:25	VIC1	A	96.42	0.00	-96.42	V-SA	-306	-153	153	150	Change in interconnector flow due to constraint	Constraint action
	31/01/2019 16:25	VIC1	A	96.42	0.00	-96.42	VIC1-NSW1	192	-426	-619	500		
	31/01/2019 16:25	SA1	A	91.45	0.00	-91.45	V-SA	-306	-153	153	150		
17	31/01/2019 16:30	VIC1	A	96.42	-96.42	0.00	V-S-MNSP1	-165	-61	104	100	Change in interconnector flow due to constraint	Constraint action
	31/01/2019 16:30	SA1	A	91.45	-91.45	0.00	V-S-MNSP1	-165	-61	104	100		
18	31/01/2019 16:35	SA1	A	394.67	0.00	394.67	V-SA	-211	-363	-152	150	Change in interconnector flow due to constraint and rebidding to higher price bands	Constraint action / Rebidding
	31/01/2019 16:35	VIC1	A	452.00	0.00	452.00	V-SA	-211	-363	-152	150		
	31/01/2019 16:35	VIC1	A	452.00	0.00	452.00	VIC1-NSW1	-73	562	634	500		
19	02/02/2019 19:25	VIC1	A	853.61	16.03	-837.58	V-SA	171	561	390	150	Excess cheaper generation and constraint action	Excess generation / Constraint action
	02/02/2019 19:25	SA1	A	1016.71	16.71	-1000.00	V-SA	171	561	390	150		
20	09/02/2019 10:45	VIC1	A	549.59	-533.68	15.91	V-SA	-187	54	241	150	Change in wind generation and demand	Wind generation change / Demand change
	09/02/2019 10:45	SA1	A	37.08	-1000.00	27.72	V-SA	-187	54	241	150		
21	12/02/2019 14:40	SA1	A	3.42	20.87	-50.50	V-SA	-497	-337	160	150	Change in interconnector flow due to constraint	Constraint action
22	14/02/2019 04:35	TAS1	A	85.39	98.55	13.16	T-V-MNSP1	-204	15	219	190	Rebidding to lower price bands	Rebidding

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23	28/02/2019 11:20	TAS1	A	127.65	140.95	13.30	T-V-MNSP1	-86	137	223	190	Rebidding to lower price bands and change in TAS unit ramp up rate	Rebidding / Generator availability change
24	01/03/2019 14:15	VIC1	A	8.78	128.40	-999.18	V-SA	460	6	-455	150	Rebidding to lower price bands	Rebidding
	01/03/2019 14:15	SA1	A	7.63	147.77	-979.88	V-SA	460	6	-455	150		
25	01/03/2019 14:35	VIC1	A	25.32	-1000.00	-38.00	V-SA	-470	148	618	150	Rebidding to higher price bands	Rebidding
	01/03/2019 14:35	SA1	A	19.73	-810.98	-39.13	V-SA	-470	148	618	150		
26	01/03/2019 17:25	VIC1	A	1014.71	14.71	-999.99	V-SA	275	-19	-294	150	Rebidding to lower price bands	Rebidding
	01/03/2019 17:25	SA1	A	973.73	15.66	-958.07	V-SA	275	-19	-294	150		
27	01/03/2019 17:35	VIC1	A	8.12	-1000.00	140.40	V-SA	-147	295	443	150	Rebidding to higher price bands	Rebidding
	01/03/2019 17:35	SA1	A	7.03	-909.09	150.82	V-SA	-147	295	443	150		
28	01/03/2019 18:30	VIC1	A	227.07	10442.61	45.79	V-SA	152	-30	-181	150	Rebidding to lower price bands and decrease in demand	Rebidding / Demand change
	01/03/2019 18:30	SA1	A	242.94	10618.48	43.53	V-SA	152	-30	-181	150		
29	01/03/2019 20:35	TAS1	A	128.43	13.30	141.73	T-V-MNSP1	478	266	-212	190	Rebidding to higher price bands	Rebidding
30	02/03/2019 11:30	VIC1	A	4.33	26.73	142.48	T-V-MNSP1	-338	-124	214	190	Rebidding to higher price bands and increase in demand	Rebidding / Demand change
31	12/03/2019 07:00	TAS1	A	124.91	138.16	13.25	T-V-MNSP1	-431	-232	198	190	Rebidding to lower price bands	Rebidding
32	07/04/2019 06:20	TAS1	A	98.20	111.97	13.77	T-V-MNSP1	-112	115	227	190	Rebidding to lower price bands	Rebidding

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33	08/04/2019 05:45	TAS1	A	98.86	112.14	13.28	T-V-MNSP1	-100	96	196	190	Rebidding to lower price bands	Rebidding
34	11/04/2019 08:30	QLD1	A	3.11	-84.31	40.02	N-Q-MNSP1	-30	-125	-94	80	Change in interconnector flow due to constraint	Constraint action
35	12/04/2019 15:50	TAS1	A	100.21	113.51	13.30	T-V-MNSP1	-160	31	191	190	Rebidding to lower price bands	Rebidding
36	19/04/2019 14:40	TAS1	A	85.86	85.61	-0.26	T-V-MNSP1	-349	-149	200	190	Rebidding to lower price bands	Rebidding
37	20/04/2019 15:20	TAS1	A	107.98	107.20	-0.78	T-V-MNSP1	-314	-114	200	190	Rebidding to lower price bands	Rebidding
38	01/05/2019 16:25	TAS1	A	81.78	95.06	13.28	T-V-MNSP1	-93	129	222	190	Rebidding to lower price bands	Rebidding
39	17/05/2019 15:40	TAS1	A	97.90	97.12	-0.78	T-V-MNSP1	-166	38	204	190	Rebidding to lower price bands	Rebidding
40	18/05/2019 15:35	TAS1	A	84.00	83.32	-0.67	T-V-MNSP1	-193	11	204	190	Rebidding to lower price bands	Rebidding
41	29/05/2019 01:50	SA1	A	3.92	-30.50	-150.00	V-SA	-417	-262	155	150	Constraint action associated with derating of VIC Transformer.	Constraint action
42	29/05/2019 01:55	SA1	A	149.99	-150.00	-0.01	V-SA	-262	-489	-227	150	Constraint action associated with derating of VIC Transformer.	Constraint action
43	29/05/2019 11:15	SA1	A	14.94	-1000.00	71.72	V-SA	-479	-295	184	150	Decrease in wind generation and rebidding to higher price bands	Wind generation change / Rebidding
44	29/05/2019 14:15	SA1	A	10.90	-1000.00	101.00	V-SA	-475	-210	265	150	Decrease in wind generation and rebidding to higher price bands	Wind generation change / Rebidding
45	04/06/2019 10:00	QLD1	A	144.78	131.31	-13.47	N-Q-MNSP1	76	-4	-80	80	Decrease in demand and constraint action	Demand change / Constraint action
46	04/06/2019 10:20	QLD1	A	118.32	110.66	-7.66	N-Q-MNSP1	-20	-102	-81	80	Decrease in demand and constraint action	Demand change / Constraint action
47	04/06/2019 15:50	QLD1	A	16.94	-999.98	62.73	NSW1-QLD1	-482	-230	253	240	Rebidding to higher price bands and increase in demand	Rebidding / Demand change

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48	04/06/2019 17:35	QLD1	A	12.92	5776.25	414.95	NSW1-QLD1	-264	-584	-320	240	Rebidding to lower price bands and change in interconnector flow due to outage constraint	Rebidding / Constraint action
49	05/06/2019 15:05	QLD1	A	3.25	151.29	-67.25	N-Q-MNSP1	97	-34	-131	80	Trip of NSW unit and de-commitment of QLD pump	Supply and demand change
50	10/06/2019 01:00	VIC1	A	179.19	16.15	-163.04	T-V-MNSP1	-80	-280	-200	190	Increase in wind generation in SA	Wind generation change
	10/06/2019 01:00	SA1	A	150.18	15.79	-134.39	V-SA	-63	-494	-431	150		
	10/06/2019 01:00	VIC1	A	179.19	16.15	-163.04	V-SA	-63	-494	-431	150		
51	10/06/2019 01:45	SA1	A	64.42	2.83	67.25	V-SA	-446	-150	296	150	Decrease in wind generation in SA and rebidding to higher price bands	Wind generation change / Rebidding
	10/06/2019 01:45	VIC1	A	67.66	3.36	71.02	V-SA	-446	-150	296	150		
52	12/06/2019 01:40	VIC1	A	70.24	-0.01	70.23	T-V-MNSP1	58	-156	-214	190	Change in interconnector flow with Basslink no longer able to transfer FCAS	Constraint action
53	01/07/2019 02:00	TAS1	A	10.41	401.53	35.21	T-V-MNSP1	51	-142	-193	190	Change in interconnector flow due to outage constraint and Basslink no longer able to transfer FCAS	Constraint action
54	17/07/2019 13:20	SA1	A	102.51	-3.09	99.42	V-SA	-485	-311	174	150	Decrease in wind generation	Wind generation change
55	20/07/2019 14:05	VIC1	A	75.86	9.71	-66.14	T-V-MNSP1	-104	96	200	190	Rebidding to lower price bands by generators in TAS	Rebidding
	20/07/2019 14:05	TAS1	A	999.00	-0.72	-999.72	T-V-MNSP1	-104	96	200	190		
56	23/07/2019 16:40	SA1	A	3.59	77.49	-200.84	V-SA	-317	-500	-183	150	Increase in wind generation	Wind generation change
57	26/07/2019 14:20	QLD1	A	84.17	-72.05	12.12	N-Q-MNSP1	103	22	-81	80	Rebidding to higher price band	Rebidding
58	08/08/2019 06:10	VIC1	A	87.32	2.28	89.60	T-V-MNSP1	-442	-241	202	190	Increase in demand	Demand change

Incident number	Date time	Region	Price Status (R = rejected) A = accepted.	Price Change (% Absolute)	Previous ROP (\$/MWh)	Current ROP (\$/MWh)	Interconnector	Prev Flow (MW)	Current Flow (MW)	Abs change in flow (MW)	Region flow threshold (MW)	Explanation	Reason
59	09/08/2019 04:10	SA1	A	17.20	-1000.00	61.71	V-SA	-250	-85	165	150	Decrease in wind generation and rebidding to higher price bands	Wind generation change / Rebidding
60	09/08/2019 05:40	SA1	A	13.84	-1000.00	77.88	V-SA	-250	-87	163	150	Decrease in wind generation and rebidding to higher price bands and increase in demand.	Wind generation change / Rebidding / Demand change
61	13/08/2019 09:45	VIC1	A	6.04	837.84	119.08	V-S-MNSP1	-140	-30	110	100	Rebidding to lower price band, marginal decrease in demand	Rebidding / Demand change
62	16/08/2019 06:45	TAS1	A	85.09	-0.86	84.23	T-V-MNSP1	-83	124	207	190	Change in interconnector flow with Basslink no longer able to transfer FCAS	Constraint action
63	23/08/2019 08:35	TAS1	A	83.96	18.48	102.44	T-V-MNSP1	465	253	-212	190	Rebidding to higher price band	Rebidding
64	24/08/2019 11:15	TAS1	A	999.91	-0.01	-999.92	T-V-MNSP1	293	0	-293	190	Unplanned outage of Basslink	Unplanned outage
65	26/08/2019 20:55	VIC1	A	169.68	169.68	0.00	V-SA	31	185	154	150	Rebidding to lower price band	Rebidding
	26/08/2019 20:55	SA1	A	170.35	170.35	0.00	V-SA	31	185	154	150		
66	26/08/2019 21:00	VIC1	A	290.00	0.00	290.00	V-SA	185	-33	-218	150	Rebidding to higher price band	Rebidding
	26/08/2019 21:00	SA1	A	286.13	0.00	286.13	V-SA	185	-33	-218	150		
67	28/08/2019 17:00	QLD1	A	62.61	62.61	0.00	NSW1-QLD1	-994	-750	244	240	Constraint action associated with the reclassification of NSW transmission line trip.	Constraint action
68	31/08/2019 11:10	VIC1	A	3.55	39.02	-99.44	V-SA	-50	-280	-230	150	Constraint action associated with the VIC transmission line outage. Generation in SA rebidding to higher price band	Constraint action / Rebidding
	31/08/2019 11:10	SA1	A	9.80	-1000.00	-92.59	V-SA	-50	-280	-230	150		
69	04/09/2019 07:05	QLD1	A	4.65	53.74	-195.91	NSW1-QLD1	-450	-206	244	240	Constraint action associated with planned outage of NSW transmission line. Interconnector flow reduced due to QLD FCAS requirements.	Constraint action

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70	05/09/2019 16:10	SA1	A	11.67	-1000.00	93.69	V-SA	-484	-200	284	150	Increase in demand, decrease in wind generation and rebidding to higher prices.	Demand change / Changes in wind generation / Rebidding
71	08/09/2019 17:10	SA1	A	10.90	-1000.00	101.00	V-SA	-483	-210	273	150	Increase in demand and rebidding to higher price bands	Demand change / Rebidding
72	08/09/2019 17:50	SA1	A	12.55	-1000.00	86.59	V-SA	-495	-334	161	150	Increase in demand and rebidding to higher price bands	Demand change / Rebidding
73	09/09/2019 07:05	VIC1	A	4.61	462.83	82.55	V-SA	-382	-220	162	150	Decrease in demand and rebidding to lower price bands	Rebidding
	09/09/2019 07:05	SA1	A	4.34	413.80	77.50	V-SA	-382	-220	162	150		
74	15/09/2019 16:05	SA1	A	97.17	97.17	0.00	V-S-MNSP1	52	-159	-211	100	Constraint action due to line outage	Constraint action
75	18/09/2019 19:30	SA1	A	104.09	-3.09	101.00	V-SA	-157	-469	-312	150	Change in interconnector flow due to constraint	Constraint equation action
76	19/09/2019 10:15	VIC1	A	88.98	95.92	6.94	V-SA	-84	-250	-166	150	Decrease in demand and change in interconnector flow due to constraint	Demand change / Constraint equation action
	19/09/2019 10:15	SA1	A	16.12	-870.67	-50.85	V-SA	-84	-250	-166	150		
77	22/09/2019 14:55	SA1	A	13.04	-1000.00	83.08	V-SA	-500	-328	172	150	Increase in demand and rebidding to higher price bands	Demand change / Rebidding
78	24/09/2019 10:35	QLD1	A	47.36	-1000.00	-20.68	N-Q-MNSP1	100	16	-84	80	Change in interconnector flow due to constraint	Constraint equation action
	24/09/2019 10:35	QLD1	A	47.36	-1000.00	-20.68	NSW1-QLD1	-756	-1047	-291	240		
79	25/09/2019 09:25	QLD1	A	8.40	135.18	-999.99	N-Q-MNSP1	52	-54	-106	80	Change in interconnector flow due to constraint	Constraint equation action
80	25/09/2019 09:40	QLD1	A	9.69	-999.99	115.05	N-Q-MNSP1	-60	52	113	80	Change in interconnector flow due to constraint and rebidding to higher price bands	Constraint equation action / Rebidding

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81	25/09/2019 10:05	QLD1	A	4.10	53.69	273.92	N-Q-MNSP1	58	-37	-95	80	Generation constrained off due to constraint and change in interconnector flow due to constraint	Constraint equation action
82	02/10/2019 06:05	TAS1	A	83.23	95.08	11.85	T-V-MNSP1	-414	-214	200	190	Rebidding to lower price bands	Rebidding
83	09/10/2019 08:10	QLD1	A	115.70	12.43	128.13	NSW1-QLD1	-244	255	499	240	Generator unplanned outage	Generation change
84	16/10/2019 16:50	TAS1	A	99.50	98.62	-0.88	T-V-MNSP1	-207	1	208	190	Change in interconnector flow due to constraint and rebidding to lower price bands	Constraint equation action / Rebidding
85	19/10/2019 13:05	SA1	A	5.26	22.51	-96.00	V-SA	-333	-500	-167	150	Rebidding to lower price bands	Rebidding
86	22/10/2019 10:25	NSW1	A	68.00	69.05	1.05	N-Q-MNSP1	74	-7	-80	80	Decrease in demand and change in interconnector flow due to constraint	Demand change / Constraint equation action
87	24/10/2019 22:40	SA1	A	13.34	-1000.00	81.02	V-SA	-475	-300	175	150	Rebidding to higher price bands	Rebidding
88	26/10/2019 05:35	TAS1	A	4.69	450.12	79.17	T-V-MNSP1	-93	-293	-200	190	Change in interconnector flow due to constraint	Constraint equation action
89	26/10/2019 17:15	SA1	A	13.07	-1000.00	82.88	V-SA	-500	-263	237	150	Rebidding to higher price bands	Rebidding
90	26/10/2019 17:35	SA1	A	102.26	99.17	-3.09	V-SA	-262	-500	-238	150	Rebidding to lower price bands	Rebidding
91	28/10/2019 13:10	QLD1	A	87.76	87.76	0.00	NSW1-QLD1	-694	-1017	-323	240	Change in interconnector flow due to constraint revocation	Constraint action
92	30/10/2019 22:10	SA1	A	12.77	-1000.00	84.98	V-SA	-475	-309	166	150	Rebidding into higher price band	Rebidding
93	31/10/2019 03:25	VIC1	A	102.69	0.00	102.69	V-SA	-500	-191	309	150	Rebidding into higher price band	Rebidding
	31/10/2019 03:25	SA1	A	10.26	-900.00	97.16	V-SA	-500	-191	309	150		
94	31/10/2019 18:15	TAS1	A	96.02	3.51	99.53	T-V-MNSP1	460	261	-199	190	Rebidding into higher price band	Rebidding

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95	05/11/2019 14:45	SA1	A	28.07	-1000.00	36.95	V-SA	-500	-334	166	150	Rebidding into higher price band	Rebidding
96	08/11/2019 14:35	SA1	A	3.45	-100.00	40.74	V-SA	-37	-307	-270	150	Transmission line reclassification due to lightning	Constraint action / Line reclassification
97	12/11/2019 16:35	VIC1	A	84.85	84.85	0.00	V-S-MNSP1	18	-171	-189	100	Direction Ended - Generator entered bid stack	Direction Ended
	12/11/2019 16:35	SA1	A	78.40	78.40	0.00	V-S-MNSP1	18	-171	-189	100		
98	12/11/2019 17:35	VIC1	A	84.76	84.76	0.00	V-SA	-325	-500	-175	150	Increase in SA wind generation	Wind generation
	12/11/2019 17:35	SA1	A	13.90	77.50	-1000.00	V-SA	-325	-500	-175	150		
99	12/11/2019 17:40	SA1	A	1003.51	-1000.00	3.51	V-SA	-500	-343	157	150	Rebidding into higher price band	Rebidding
100	01/12/2019 02:10	VIC1	A	77.93	-0.01	77.92	T-V-MNSP1	50	-150	-200	190	Rebidding into higher price band and change in interconnector flow due to constraint	Rebidding / Constraint action
101	03/12/2019 02:00	TAS1	A	101.73	-2.93	98.81	T-V-MNSP1	81	-119	-200	190	Rebidding into higher price band	Rebidding
102	03/12/2019 11:00	SA1	A	31.31	-1000.00	33.00	V-SA	-474	-221	252	150	Rebidding into higher price band	Rebidding
103	03/12/2019 11:30	SA1	A	29.87	-1000.00	34.64	V-SA	-478	-236	242	150	Rebidding into higher price band	Rebidding
104	03/12/2019 13:40	SA1	A	1001.15	-1000.00	1.15	V-SA	-470	-251	219	150	Rebidding into higher price band	Rebidding
105	03/12/2019 14:20	VIC1	A	71.23	-70.00	1.23	V-SA	-475	-267	208	150	Rebidding into higher price band	Rebidding
	03/12/2019 14:20	SA1	A	1001.14	-1000.00	1.14	V-SA	-475	-267	208	150		
106	03/12/2019 14:50	SA1	A	1002.99	-1000.00	3.00	V-SA	-475	-256	219	150	Rebidding into higher price band	Rebidding

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107	03/12/2019 17:35	SA1	A	7.51	23.31	-151.85	V-SA	-266	-495	-229	150	Direction Ended - Generator entered bid stack	Direction Ended
108	09/12/2019 14:05	SA1	A	151.09	148.00	-3.09	V-SA	-341	-500	-159	150	Rebidding into lower price band	Rebidding
109	13/12/2019 18:30	QLD1	A	23.51	1478.00	60.31	NSW1-QLD1	381	52	-329	240	Rebidding into lower price band	Rebidding
110	18/12/2019 14:40	VIC1	A	6.93	535.97	67.57	V-SA	89	338	249	150	Rebidding into lower price band	Rebidding
	18/12/2019 14:40	SA1	A	6.37	545.71	74.03	V-SA	89	338	249	150		
111	18/12/2019 16:05	VIC1	A	3.06	248.23	61.09	V-SA	59	278	219	150	Rebidding into lower price band	Rebidding
112	20/12/2019 14:50	VIC1	A	3.89	453.77	92.89	V-SA	-5	150	155	150	Rebidding into lower price band	Rebidding
	20/12/2019 14:50	SA1	A	3.67	446.89	95.64	V-SA	-5	150	155	150		
113	20/12/2019 15:10	VIC1	A	23.90	606.43	24.35	V-SA	-44	155	199	150	Rebidding into lower price band	Rebidding
	20/12/2019 15:10	SA1	A	22.49	590.00	25.12	V-SA	-44	155	199	150		
114	20/12/2019 17:35	VIC1	A	193.76	59.05	11500.80	V-SA	-410	-246	164	150	Rebidding into higher price band	Rebidding
	20/12/2019 17:35	SA1	A	204.14	51.52	10569.82	V-SA	-410	-246	164	150		
115	27/12/2019 21:40	TAS1	A	4.10	402.40	78.97	T-V-MNSP1	81	-131	-211	190	Change in interconnector flow due to constraint	Constraint equation action
116	30/12/2019 15:05	VIC1	A	46.21	320.74	15141.15	VIC1-NSW1	-209	368	577	500	Constraint action due to unplanned outage of a transmission line	Constraint action / Unplanned outage
	30/12/2019 15:05	NSW1	A	63.10	68.89	5.79	VIC1-NSW1	-209	368	577	500		

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117	30/12/2019 15:20	VIC1	A	84.77	9007.99	105.03	V-SA	-478	-292	186	150	Decrease in demand and rebidding to lower price bands	Demand change / Rebidding
	30/12/2019 15:20	SA1	A	79.67	7750.86	96.08	V-SA	-478	-292	186	150		
118	30/12/2019 15:35	VIC1	A	6.01	39.37	275.81	V-SA	-515	-337	178	150	Rebidding into higher price band	Rebidding
	30/12/2019 15:35	SA1	A	6.41	33.59	249.00	V-SA	-515	-337	178	150		
119	30/12/2019 16:30	VIC1	A	4.03	56.13	282.58	V-SA	-186	-390	-205	150	Increase in demand and rebidding to higher price bands	Demand change / Rebidding
	30/12/2019 16:30	SA1	A	3.72	53.00	250.01	V-SA	-186	-390	-205	150		
120	30/12/2019 16:35	VIC1	A	3.60	282.58	61.49	V-SA	-390	-151	239	150	Rebidding into lower price band	Rebidding
	30/12/2019 16:35	SA1	A	3.27	250.01	58.55	V-SA	-390	-151	239	150		