

TEMPLATE EXPLANATION



This template must be used by TransGrid to report service performance information for the first half of the 2009 calendar year.

Yellow worksheets (**'Inputs - Performance'** and **'Inputs - Exclusions'**) are for inputs, including performance and exclusion information. TransGrid only needs to enter data on these worksheets.

Purple worksheets **'S1' to 'S6'** are the s-factor results based on the performance inputs from the 'Inputs - Performance' worksheet. (NB: The caps, collars and targets for s-factor worksheets 'S4' and 'S5' have been scaled as this template only applies to the first six months of the 2009 calendar year)

Blue worksheet **'Revenue Calculation'** quantifies the appropriate revenue to be applied to the s-factor results adjusted for CPI.

Red worksheet **'Outcomes'** shows the total performance, s-factor and financial incentive results based on TransGrid's performance in 'Inputs-Performance' and 'Revenue Calculation' worksheets.

Orange worksheet **'Exclusion Definitions'** are the defined exclusions for TransGrid which should form the basis of exclusion requests under 'Inputs-Exclusions' worksheet.

TRANSGRID - SERVICE STANDARDS PERFORMANCE

PERFORMANCE PARAMETERS	S	<i>Performance (Without exclusions)</i>	<i>Performance (With exclusions)</i>
Transmission line availability	S1	97.745681%	98.028050%
Transformer availability	S2	98.180100%	98.256073%
Reactive plant availability	S3	98.735566%	98.735566%
Reliability (Events > 0.05 and <=0.4 system minutes)	S4	1	1
Reliability (Events > 0.4 system minutes)	S5	0	0
Average outage restoration time	S6	936	909

Date prepared:	
Revision date:	

NOTES:

Pink cells - Input performance without exclusions from performance data

Orange cells - Input performance with exclusions from performance data

Green cells - Input date that template data was entered and date of any revisions from original version.

Performance should be measured on a calendar year basis

TRANSGRID - Proposed exclusions

CIRCUIT AVAILABILITY	Event proposed for exclusion	Description of the event and its impact on the network and performance	Cause of the event	Start date	Start time	End date	End time	Circuits affected	Reactive plant or transformer	Quantitative impact	Reasons for exclusion request	Further references
Name of any circuit availability parameters applying to TransGrid	Name of the event	Detail of the event. Such as: the action of any third parties, the actions of the TNSP, assets damaged or interrupted.	A description of the cause of the event	Start date and time of event	End date and time of event	Name of circuits affected	Name of any reactive plant or transformer affected	Number of hours, mins etc interrupted	Full details of the reasons for excluding this event. Should include a reference to the defined exclusions and explain how it meets this exclusion definition (see Exclusion definition tab). Eg. Exclusion 1.2 Third party event	A TNSP may provide further details of an exclusion event. TNSP to provide reference.		
S1	Transmission line availability	18447	Line isolated for work on Upper Tumut PS Unit 5&6 Group 330kV Transformer.	Request from Snowy Hydro.	5/01/09	06:33	9/01/09	15:24	U5	104:50	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		20652	Line isolated for work on Jindabyne Pump.	Request from Snowy Hydro.	6/01/09	07:03	6/01/09	11:01	97L	3:58	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		20356	Bus disconnecter M13 required to be open and point of control selected to local for dead bus sync test of SHL's new auto synchroniser.	Request from Snowy Hydro.	9/01/09	12:36	9/01/09	13:37	M1	1:01	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		21756	Trip occurred during a thunderstorm.	Indications are that lightning strike occurred on EnergyAustralia's portion of the line.	21/01/09	16:58	21/01/09	16:58	92Z	0:00	Exclusion 1.2 - 3rd Party Outage Lightning strike on EnergyAustralia section of line.	Transgrid Forced & Emergency Outage Report
		12733	Testing work on Snowy Hydro PS Units 1&2.	Request from Snowy Hydro.	28/01/09	08:25	28/01/09	13:22	L1	4:57	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		20648	Work on Murray 2 PS Units 13-14 330kV transformer.	Request from Snowy Hydro.	20/02/09	13:33	22/02/09	15:11	M13	49:38	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		22668	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	24/02/09	06:18	24/02/09	16:10	96X	9:51	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		24348	The 947 Mt Piper 132 - Wellington tee Orange 132kV - tee Burrendong TL (part TransGrid and Country Energy) tripped. No load interrupted..	Blown lightning arrester at Burrendong (not TransGrid site). No protector or CB trips from Orange or Mt Piper 132kV substations.	3/03/09	12:25	3/03/09	12:25	947	0:00	Exclusion 1.2 - 3rd Party Outage Caused by other network equipment failure.	Transgrid Forced & Emergency Outage Report
		23581	Work on Murray 1 PS Units 1-2 330kV transformer.	Request from Snowy Hydro.	24/02/09	09:05	24/02/09	16:00	M1	6:55	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		23583	Work on Murray 1 PS Units 1&2 330kV transformer.	Request from Snowy Hydro.	25/02/09	06:24	26/02/09	14:53	M1	32:28	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		23397	Work on T3 PS Units 1&2 330kV Tx.	Request from Snowy Hydro.	27/02/09	05:16	2/03/09	16:04	L1	82:47	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		22670	Work on customer transformer which is directly connected to transmission line 96Y.	Request from One Steel.	25/02/09	06:14	25/02/09	14:08	96Y	7:54	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		25111	Separation of NSW-VIC system occurred in Victoria.	Separation caused by Victorian Bushfires.	8/02/09	00:16	8/02/09	01:56	X5/3	1:40	Exclusion 5.6 - TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report NEMMCO Incident Report
		20654	Work on Jindabyne Pump.	Request from Snowy Hydro.	13/01/09	06:41	13/01/09	18:39	97K	11:58	Exclusion 1.2 - 3rd Party Outage	
		21995	Work on Murray 2 PS Units 13-14.	Request from Snowy Hydro.	29/01/09	23:34	30/01/09	05:14	M13	5:40	Exclusion 1.2 - 3rd Party Outage	
		22840	Work on PS Units 1&2.	Request from Snowy Hydro.	6/03/09	06:18	6/03/09	15:42	M1	9:23	Exclusion 1.2 - 3rd Party Outage	
		24770	Work on customer installation PS Units 3&4.	Request from Snowy Hydro.	10/03/09	06:16	11/03/09	15:19	M3	33:02	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		24829	Work on customer transformer which is directly connected to transmission line 96X.	Request from Snowy Hydro.	11/03/09	05:19	12/03/09	14:49	96X	33:30	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		24775	Work on Murray 2 PS Units 13-14.	Request from Snowy Hydro.	13/03/09	12:19	19/03/09	14:20	M13	146:01	Exclusion 1.2 - 3rd Party Outage	
		24851	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	19/03/09	05:32	19/03/09	16:12	962	10:40	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		23333	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	13/03/09	06:21	13/03/09	10:37	963	4:16	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		25354	Work on Murray 2 PS Units 11&12 Transformer.	Request from Snowy Hydro.	22/03/09	07:38	30/03/09	14:32	M11	198:54	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
25159	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	23/03/09	06:24	27/03/09	14:46	96X	104:22	Exclusion 1.2 - 3rd Party Outage Requested by customer.			
24852	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	20/03/09	05:30	20/03/09	15:07	962	0:00	Exclusion 1.2 - 3rd Party Outage Requested by customer.			
24954	Work on T3 PS Units 3&4 Transformers.	Request from Snowy Hydro.	23/03/09	07:00	23/03/09	15:28	L3	8:28	Exclusion 1.2 - 3rd Party Outage Requested by customer.			
25514	Line isolated for work on pipeline drain at Jindabyne pump, verbal request.	Request from Snowy Hydro.	25/03/09	06:01	25/03/09	18:37	97L	12:36	Exclusion 1.2 - 3rd Party Outage Requested by customer.			

S1		25351	Work on U3 PS Units 3&4 Transformers.	Request from Snowy Hydro.	27/03/09	05:01	5/04/09	14:13	U3		225:11	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		25175	Work on customer transformer which is directly connected to transmission line 96Y.	Request from One Steel.	30/03/09	06:53	3/04/09	14:13	96Y		103:20	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		25453	Work on PS Units 1&2.	Request from Snowy Hydro.	3/04/09	13:06	9/04/09	10:31	U1		141:24	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		25345	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	4/04/09	06:22	4/04/09	13:34	963		7:12	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		25455	Work on PS Units 7 & 8.	Request from Snowy Hydro.	14/04/09	10:02	20/04/09	14:11	U7		148:09	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		25460	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	18/04/09	06:35	18/04/09	16:59	96F		10:23	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		26780	Work on PS Units 3 &4.	Request from Snowy Hydro.	26/04/09	07:22	26/04/09	17:43	L3		10:21	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		25458	Work on PS Units 5&6.	Request from Snowy Hydro.	17/04/09	13:03	27/04/09	10:21	U5		237:17	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		2657	SP Ausnet required line earthed.	Request from SP Ausnet.	15/05/09	07:06	15/05/09	17:14	O60		10:08	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		27107	Country Energy working on undercrossings of TransGrid line.	Request from Country Energy.	12/05/09	09:53	12/05/09	16:02	973		6:09	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		28241	Work on Jindabyne Pump.	Request from Snowy Hydro.	11/05/09	10:39	11/05/09	16:08	97L		5:29	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		28125	Work on PS Units 7 & 8.	Request from Snowy Hydro.	11/05/09	07:30	12/05/09	17:54	M7		34:24	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		27137	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	5/05/09	07:12	5/05/09	13:09	962		5:57	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		27270	SP Ausnet required line earthed.	Request from SP Ausnet.	14/05/09	07:09	14/05/09	16:32	O60		9:22	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		29253	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	3/06/09	06:33	3/06/09	17:48	962		11:15	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
		29885	Pole replacements on EnergyAustralia section of the line.	Request from EnergyAustralia.	14/06/09	06:12	14/06/09	15:53	96F		9:40	Exclusion 1.2 - 3rd Party Outage Requested by customer.		
29891	On energisation of Country Energy CB 7K1, 9W7 tripped due to operated differential protection at Raleigh Substation.	Contaminated SF6 gas in Country Energy CB 7K1	29/05/09	08:54	2/06/09	07:53	9W7		94:59	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report			
30867	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	25/06/09	07:25	25/06/09	15:16	96X		7:51	Exclusion 1.2 - 3rd Party Outage Requested by customer.				
30960	Work on customer transformer which is directly connected to transmission line 96Y.	Request from One Steel.	26/06/09	07:10	26/06/09	16:19	96Y		9:08	Exclusion 1.2 - 3rd Party Outage Requested by customer.				
30300	Snowy Hydro work testing injection from Blowering Substation to TransGrid earth at Tumut substation.	Request from Snowy Hydro.	22/06/09	07:13	1/07/09	00:00	O97B		208:46	Exclusion 1.2 - 3rd Party Outage Requested by customer.	Continued in second half of 2009.			
S2	Transformer availability	17847	Isolated for clearance for work on No.7 Generator.	Request from Delta Electricity.	1/01/09	00:00	6/01/09	12:47		Wallerawang 330 No.1A Tx	132:47	Exclusion 2.2 - 3rd Party Outage Requested by customer.		
		17847	Reconnection of No.1A Transformer following work.	Request from Delta Electricity.	6/01/09	07:45	6/01/09	12:47		Wallerawang 330 No.1 Tx	5:02	Exclusion 2.2 - 3rd Party Outage Requested by customer.		
		26418	Fault on Delta power station supplies tripped TransGrid's transformer.	Fault on Delta Electricity supplies.	2/04/09	15:22	2/04/09	19:17		Wallerawang 330 No.2 Tx	3:55	Exclusion 2.2 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report	
		28319	Transformer isolated to allow feeder 93N to be isolated for Integral Energy work as it is tail end connected.	Request from Integral Energy.	11/05/09	15:48	28/05/09	10:29		Liverpool No.2 Tx	402:41	Exclusion 2.2 - 3rd Party Outage Requested by customer.		
		29201	Transformer tripped when 66kV parallel between Orange 132 and Molong 132 was closed by other network service provider in preparation for a planned outage.	Fault on Country Energy Molong No.3 Transformer.	12/05/09	09:37	12/05/09	10:26		Molong No.1 Tx	0:49	Exclusion 2.2 - 3rd Party Outage Caused by customer switching.	Transgrid Forced & Emergency Outage Report	
		31005	Fault on VISY 11kV Bus, caused by melting of terminations on 11kV C.B. supplying No.2 Fibre Line at VISY, initiated protection operation.	Fault on Visy 11kV Installation.	23/06/09	07:07	23/06/09	09:40		Gadara No.1 Tx	2:33	Exclusion 2.2 - 3rd Party Outage Intertrip received from Visy.	Transgrid Forced & Emergency Outage Report	
S3	Reactive plant availability													

LOSS OF SUPPLY EVENT FREQUENCY	Event proposed for exclusion	Description of the event and its impact on the network and performance	Cause of the event	Start date	Start time	End date	End time	Circuits affected	Maximum system demand	Quantitative impact	Demand shed and time	Reasons for exclusion request	Further references
Name of any loss of supply parameters applying to TransGrid	Name of the event	Detail of the event. Such as: the action of any third parties, the actions of the TNSP, assets damaged or interrupted.	A description of the cause of the event	Start date and time of event		End date and time of event		Name of circuits or plant affected	The max system demand that occurred up until the time of the event	Number of hours, mins etc interrupted	The (MW) demand shed and the duration it was shed for.	Full details of the reasons for excluding this event. Should include a reference to the defined exclusions and explain how it meets the exclusion definition (see Exclusion definition tab). Eg. Exclusion 1.2 Third party event	A TNSP may provide further details of an exclusion event. TNSP to provide reference.

S4	Reliability (events > 0.05 and <=0.4 system minutes)													
S5	Reliability (events > 0.4 system minutes)													

AVERAGE OUTAGE DURATION	Event proposed for exclusion	Description of the event and its impact on the network and performance	Cause of the event	Start date	Start time	End date	End time	Circuits affected	Quantitative impact	Capped impact (if applicable)	Reasons for exclusion request	Further references	
Name of any average outage duration parameters applying to TransGrid	Name of the event	Detail of the event. Such as: the action of any third parties, the actions of the TNSP, assets damaged or interrupted.	A description of the cause of the event	Start date and time of event		End date and time of event		Name of circuits or plant affected	Number of hours, mins etc interrupted	Impact following any applicable cap	Full details of the reasons for excluding this event. Should include a reference to the defined exclusions and explain how it meets the exclusion definition (see Exclusion definition tab). Eg. Exclusion 1.2	A TNSP may provide further details of an exclusion event. TNSP to provide reference.	
S6	Average outage restoration time	25111	Separation of NSW-VIC system occurred in Victoria.	Separation caused by Victorian Bushfires.	8/02/09	00:16	8/02/09	01:56	X5/3	1:40		Exclusion 6.6 - Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report NEMMCO Incident Report
		26418	Fault on Delta power station supplies tripped TransGrid's transformer.	Fault on Delta Electricity supplies.	2/04/09	15:22	2/04/09	19:17	Wallerawang 330 No.2 Tx	3:55		Exclusion 6.6 - Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report
		29201	Transformer tripped when 66kV parallel between Orange 132 and Molong 132 was closed by other network service provider in preparation for a planned outage.	Fault on Country Energy Molong No.3 Transformer.	12/05/09	09:37	12/05/09	10:26	Molong No.1 Tx	0:49		Exclusion 6.6 - Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report
		31005	Fault on VISY 11kV Bus, caused by melting of terminations on 11kV C.B. supplying No.2 Fibre Line at VISY, initiated protection operation.	Fault on Visy 11kV Installation.	23/06/09	07:07	23/06/09	09:40	Gadara No.1 Tx	2:33		Exclusion 6.6 - 3rd Party Outage Intertrip received from Visy.	Transgrid Forced & Emergency Outage Report
		29891	On energisation of Country Energy CB 7K1, 9W7 tripped due to operated differential protection at Raleigh Substation.	Contaminated SF6 gas in Country Energy CB 7K1	29/05/09	08:54	2/06/09	07:53	9W7	94:59		Exclusion 6.6 - Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report
		29530	Control system failure, replacement planned.	Control system failure.	20/05/09	9:43	1/07/09	0:00	Kemps Creek No.2 SVC	998:17	168:00	Exclusion 6.3 - Outage Duration Longer Than 7 Days	Transgrid Forced & Emergency Outage Report Cap of 168 hours applied in first half of 2009 only.
		21388	No.1 Capacitor had neutral unbalance.	Failed capacitor cans.	14/01/09	18:22	15/03/09	8:01	Sydney North No.1 Capacitor	1429:39	168:00	Exclusion 6.3 - Outage Duration Longer Than 7 Days	Transgrid Forced & Emergency Outage Report
		21911	Transformer catastrophic failure.	Bushing failure.	23/01/09	21:12	10/06/09	14:52	Tuggerah No.1 Transformer	3305:40	168:00	Exclusion 6.3 - Outage Duration Longer Than 7 Days	Transgrid Forced & Emergency Outage Report
		29893	Transformer tapchanger internal failure.	Mechanical failure of tapchanger mechanism.	31/05/09	4:26	14/07/09	13:43	Cooma No.3 Transformer	1065:17	168:00	Exclusion 6.3 - Outage Duration Longer Than 7 Days	Transgrid Forced & Emergency Outage Report

NOTES:

This worksheet should include a list all events that are proposed for exclusion.

Each proposed exclusion should include a description of the event, a description of the impact and quantification of the impact on the network and performance. The descriptive elements should also include reasons for the exclusion request making reference to the "Exclusion Definitions" worksheet.

Each exclusion should be entered onto one row for each parameter. Where one exclusion event applies to more than one parameter, the relevant details of the event should be entered under each of the parameter headings.

The TNSP must provide details for all events requested for exclusion in this template. In the event that the TNSP wishes to provide further details of an exclusion, this should be provided with the TNSP's performance report. The source of information should be referenced in this template.

Green cells - input description impact

Orange cells - input reasons for the exclusion request

Orange cells - input reasons for the exclusion request

TRANSGRID - S1 - Transmission line availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transmission line availability	98.90%	99.00%	99.50%	99.70%	99.90%
Weighting	-0.20%	-0.20%	0.00%	0.20%	0.20%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2
Performance	=	-0.002000				Where: Availability < 99.00%	-0.002000	-0.002000
	=	0.400000	x	Availability	+	-0.398000 99.00% ≤ Availability ≤ 99.50%	-0.007017	-0.005888
	=	1.000000	x	Availability	+	-0.995000 99.50% ≤ Availability ≤ 99.70%	-0.017543	-0.014720
	=	0.002000				99.70% < Availability	0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission line availability	=	97.745681%	98.028050%
S-Factor	=	-0.200000%	-0.200000%

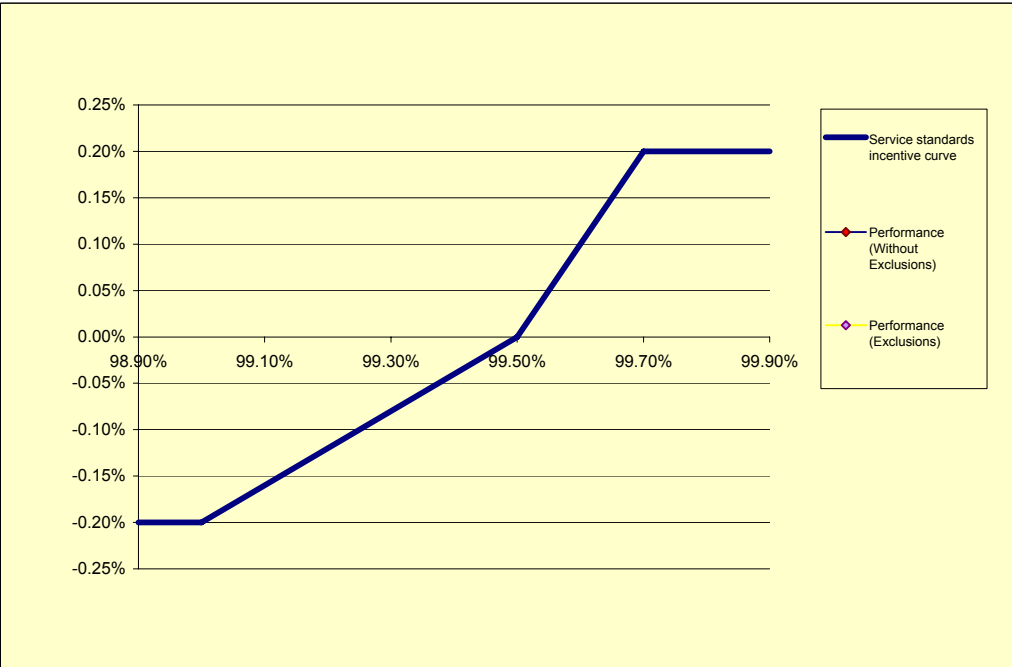
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show TNSP's performance targets and weightings.

Yellow/Green cells show TNSP's performance formulae and related formula conditions based on performance targets and weightings

Pink cells show TNSP performance outcomes without any events excluded from performance data

Orange cells show TNSP's performance outcomes with events excluded from performance data



TRANSGRID - S2 - Tranformer availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transformer availability	98.00%	98.20%	99.00%	99.50%	100.00%
Weighting	-0.15%	-0.15%	0.00%	0.15%	0.15%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2
Performance	=	-0.001500				Where: Availability < 98.20%	-0.001500	-0.001500
	=	0.187500	x	Availability	+ -0.185625	98.20% ≤ Availability ≤ 99.00%	-0.001537	-0.001395
	=	0.300000	x	Availability	+ -0.297000	99.00% ≤ Availability ≤ 99.50%	-0.002460	-0.002232
	=	0.001500				99.50% < Availability	0.001500	0.001500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transformer availability	=	98.180100%	98.256073%
S-Factor	=	-0.150000%	-0.139486%

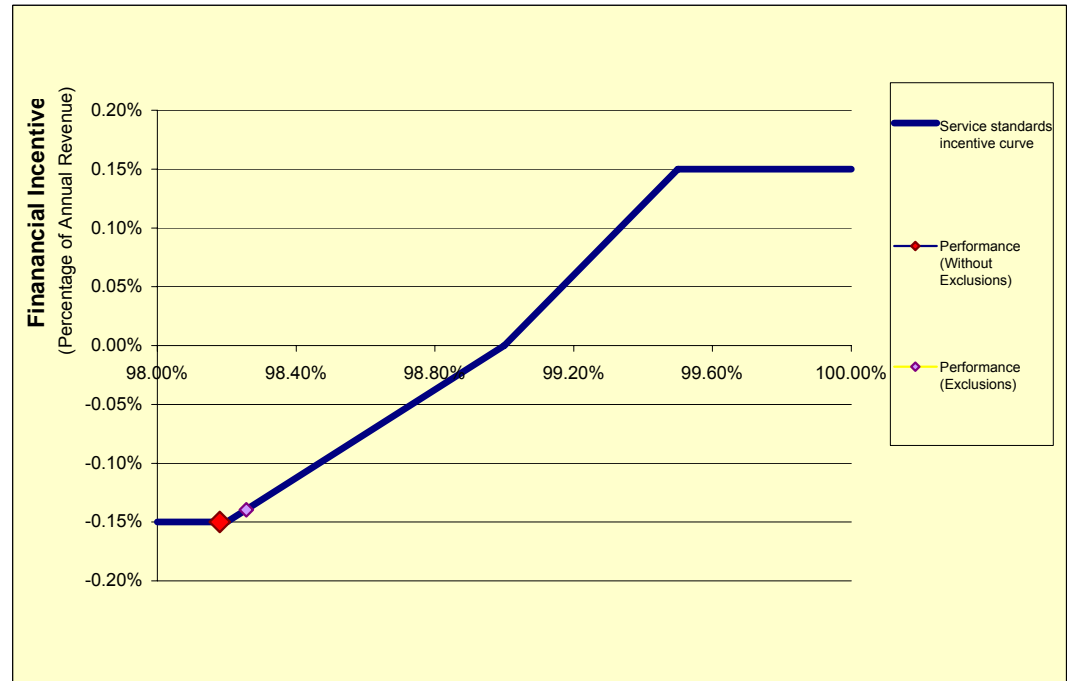
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show TNSP's performance targets and weightings.

Yellow/Green cells show TNSP's performance formulae and related formula conditions based on performance targets and weightings

Pink cells show TNSP performance outcomes without any events excluded from performance data

Orange cells show TNSP's performance outcomes with events excluded from performance data



TRANSGRID - S3 - Reactive plant availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Reactive plant availability	96.50%	97.00%	98.60%	99.30%	100.00%
Weighting	-0.10%	-0.10%	0.00%	0.10%	0.10%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2
Performance	=	-0.001000				Where: Availability < 97.00%	-0.001000	-0.001000
	=	0.062500	x	Availability	+	-0.061625 97.00% ≤ Availability ≤ 98.60%	0.000085	0.000085
	=	0.142857	x	Availability	+	-0.140857 98.60% ≤ Availability ≤ 99.30%	0.000194	0.000194
	=	0.001000				99.30% < Availability	0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reactive plant availability	=	98.735566%	98.735566%
S-Factor	=	0.019367%	0.019367%

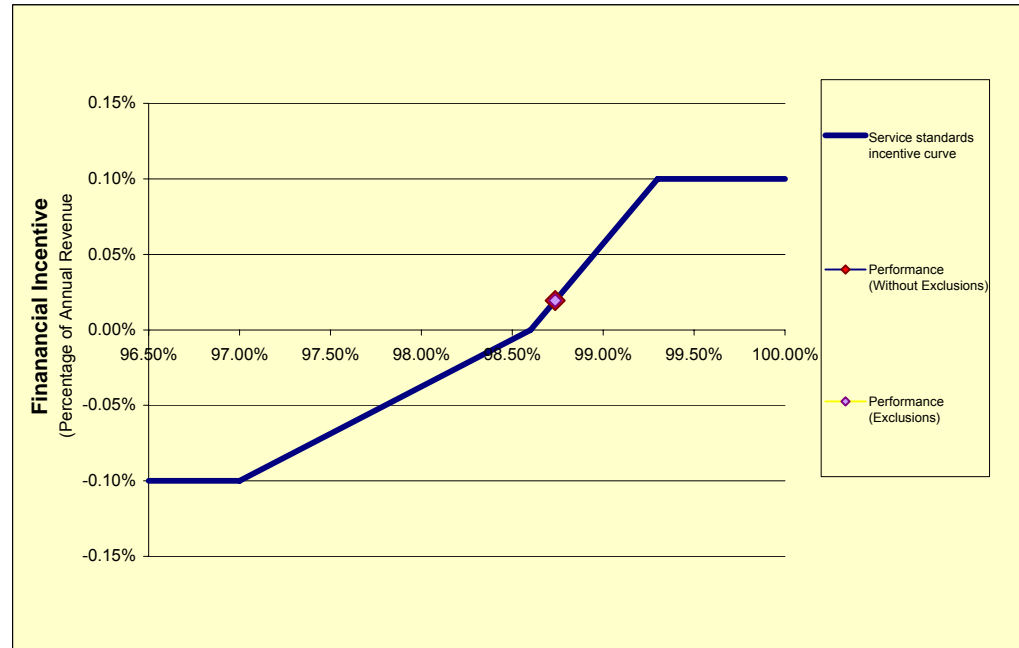
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show TNSP's performance targets and weightings.

Yellow/Green cells show TNSP's performance formulae and related formula conditions based on performance targets and weightings

Pink cells show TNSP performance outcomes without any events excluded from performance data

Orange cells show TNSP's performance outcomes with events excluded from performance data



TRANSGRID - S4 - Reliability (Events > 0.05 and <=0.4 system minutes)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Reliability (Events > 0.05 and <=0.4 system minutes)	10	4	3	2	0
Weighting	-0.25%	-0.25%	0.00%	0.25%	0.25%

Performance Formulae	Formulae					Conditions			S- Calc 1	S- Calc 2	
Performance	=	-0.002500				8	<	Reliability		-0.002500	-0.002500
	=	-0.000833	x	Reliability	+	0.004167	5	≤	Reliability ≤ 8	0.003333	0.003333
	=	-0.001250	x	Reliability	+	0.006250	3	≤	Reliability ≤ 5	0.005000	0.005000
	=	0.002500							Reliability < 3	0.002500	0.002500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reliability (Events > 0.05 and <=0.4 system minutes)	=	1	1
S-Factor	=	0.250000%	0.250000%

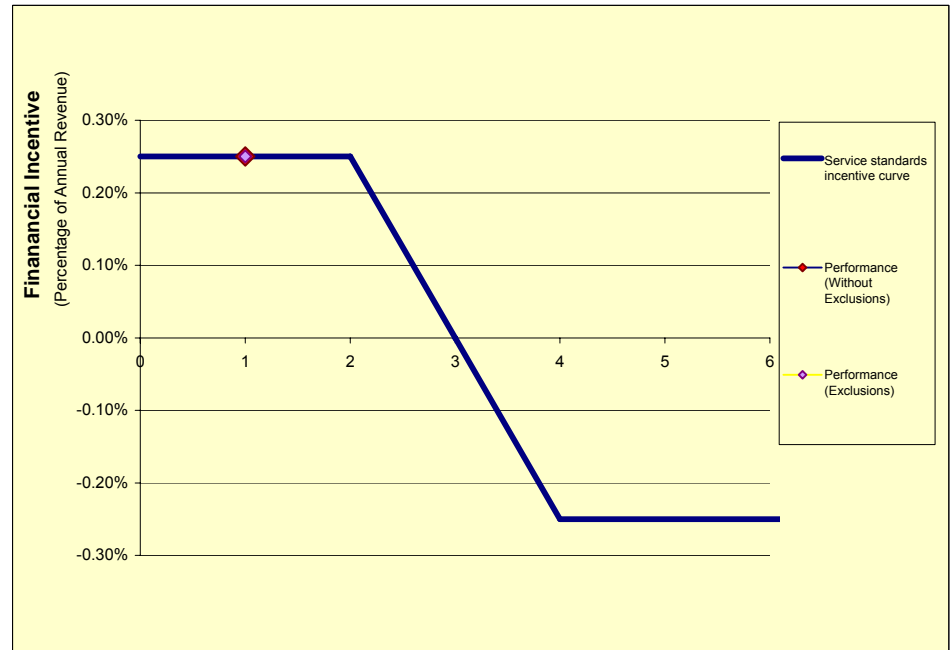
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show TNSP's performance targets and weightings.

Yellow/Green cells show TNSP's performance formulae and related formula conditions based on performance targets and weightings

Pink cells show TNSP performance outcomes without any events excluded from performance data

Orange cells show TNSP's performance outcomes with events excluded from performance data



TRANSGRID - S5 - Reliability (Events > 0.4 system minutes)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Reliability (Events > 0.4 system minutes)	3	2	1	0	0
Weighting	-0.20%	-0.20%	0.00%	0.20%	0.20%

Performance Formulae	Formulae					Conditions			S- Calc 1	S- Calc 2			
Performance	=	-0.002000				Where:	Reliability	>	2	-0.002000	-0.002000		
	=	-0.002000	x	Reliability	+	0.002000	1	≤	Reliability	≤	2	0.002000	0.002000
	=	-0.002000	x	Reliability	+	0.002000	0	≤	Reliability	≤	1	0.002000	0.002000
	=	0.002000							Reliability	<	0	0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reliability (Events > 0.4 system minutes)	=	0	0
S-Factor	=	0.200000%	0.200000%

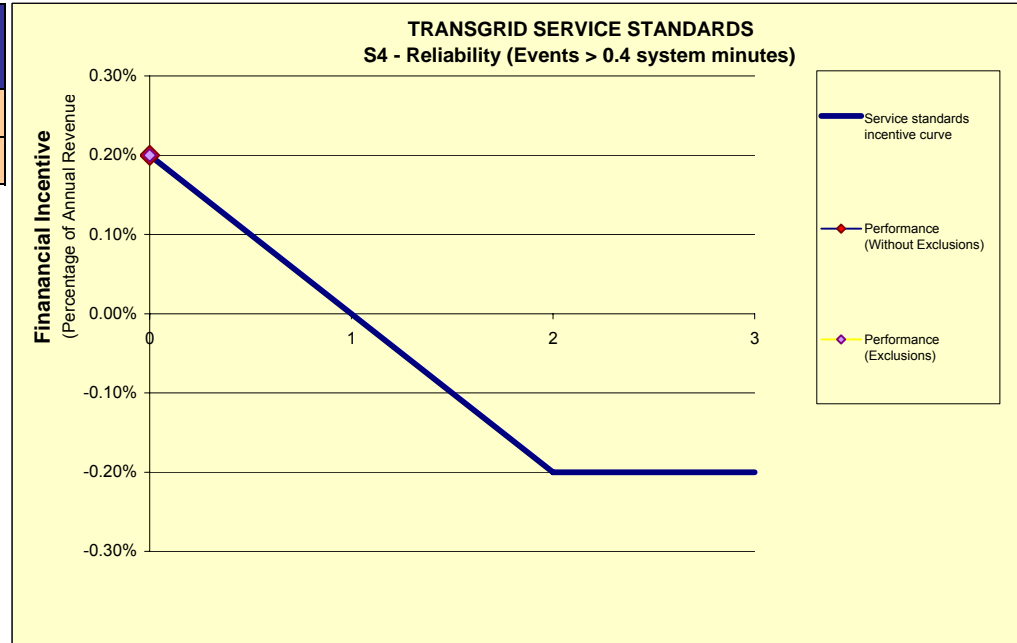
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show TNSP's performance targets and weightings.

Yellow/Green cells show TNSP's performance formulae and related formula conditions based on performance targets and weightings

Pink cells show TNSP performance outcomes without any events excluded from performance data

Orange cells show TNSP's performance outcomes with events excluded from performance data



TRANSGRID - S6 - Average outage restoration time

Performance Targets	Graph start	Collar	Knee Bend	Target	Knee Bend	Cap	Graph end
Average outage restoration time	1900	1800	1600	1500	1400	800	700
Weighting	0.10%	-0.10%	-0.05%	0.00%	0.05%	0.10%	0.10%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2	
Performance	=	-0.001000				Where: Average time > 1800	-0.001000	-0.001000	
	=	-0.000003	x	Average Time	+	0.003500	1600 ≤ Average time ≤ 1800	0.001159	0.001228
	=	-0.000005	x	Average Time	+	0.007500	1400 ≤ Average time ≤ 1600	0.002819	0.002955
	=	-0.000001	x	Average Time	+	0.001667	800 ≤ Average time ≤ 1400	0.000886	0.000909
	=	0.001000					Average time < 800	0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Average outage restoration time	=	936	909
S-Factor	=	0.088645%	0.090918%

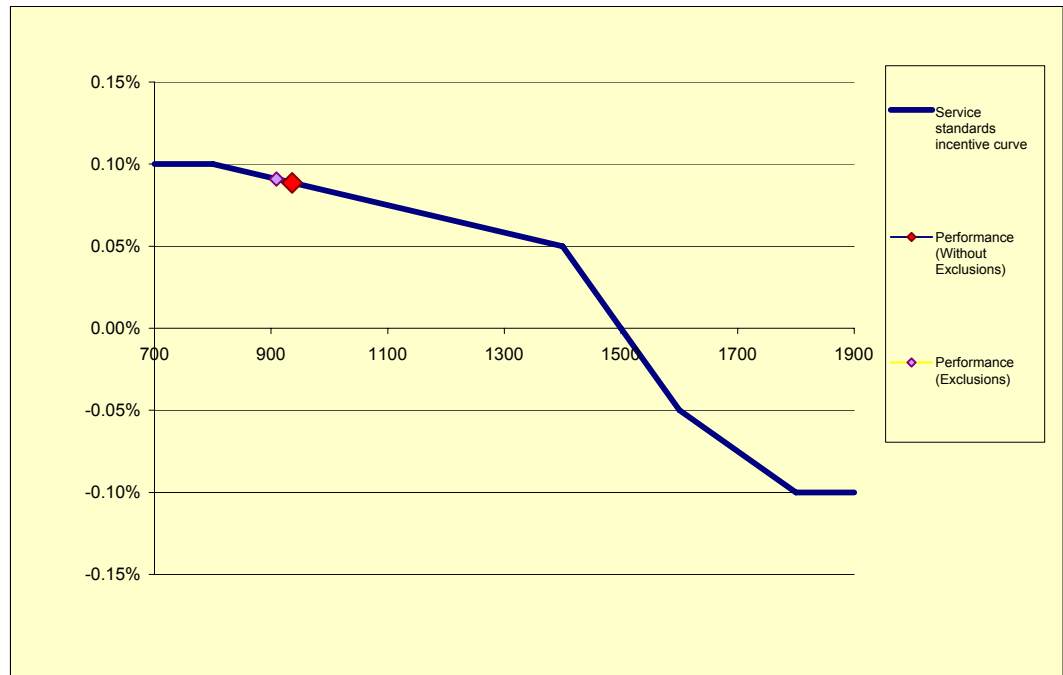
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show TNSP's performance targets and weightings.

Yellow/Green cells show TNSP's performance formulae and related formula conditions based on performance targets and weightings

Pink cells show TNSP performance outcomes without any events excluded from performance data

Orange cells show TNSP's performance outcomes with events excluded from performance data



TRANSGRID - Revenue calculation

Revenue cap information	
Base revenue	\$432,750,000
Base year	2004-05
X-factor	-2.93%
Revised X-factor	-4.99%
Decision CPI	2.49%

Annual revenue adjusted for CPI	Mar-04	Mar-05	Mar-06	Mar-07	Mar-08
CPI	144.1	147.5	151.9	155.6	162.2
	2004-05	2005-06	2006-07	2007-08	2008-09
AR	\$432,750,000	\$455,939,364	\$483,297,797	\$519,774,022	\$568,857,859

Calendar year revenue	2004	2005	2006	2007	2008	2009
Revenue	\$216,375,000	\$444,344,682	\$469,618,580	\$501,535,909	\$544,315,940	\$284,428,930

NOTES:

Grey cells show calendar year revenue

Green cells are for formula

Note: As a result of the revocation and substitution of TransGrid's revenue cap, the revised X-factor of -4.99% applies for the last two years.

TRANSGRID- Performance outcomes

Revenue calendar year **\$284,428,930**

Performance parameter	S	Target	Performance without exclusions			Performance with exclusions			Impact of exclusions
			Performance	S-Factor	Final Incentive	Performance	S-Factor	Final Incentive	
Transmission line availability	S1	99.500000%	97.745681%	-0.200000%	-\$568,858	98.028050%	-0.200000%	-\$568,858	0.000000%
Transformer availability	S2	99.000000%	98.180100%	-0.150000%	-\$426,643	98.256073%	-0.139486%	-\$396,740	0.010514%
Reactive plant availability	S3	98.600000%	98.735566%	0.019367%	\$55,084	98.735566%	0.019367%	\$55,084	0.000000%
Reliability (Events > 0.05 and <=0.4 system minutes)	S4	3	1	0.250000%	\$711,072	1	0.250000%	\$711,072	0.000000%
Reliability (Events > 0.4 system minutes)	S5	1	0	0.200000%	\$568,858	0	0.200000%	\$568,858	0.000000%
Average outage restoration time	S6	1500	936	0.088645%	\$252,131	909	0.090918%	\$258,598	0.002274%
TOTALS				0.208011%	\$591,644		0.220799%	\$628,015	0.012787%

NOTE:

This sheet will automatically update based on data in input sheets.

Grey cell shows relevant calendar year revenue

Green cells show performance targets

Pink cells show performance, s-factor results and financial incentive without exclusions

Orange cells show performance, s-factor results and financial incentive with exclusions

Blue cells show the impact of exclusions on revenue

Aggregate outcome	
S-factor	0.220799%
Bonus (penalty)	\$628,015
Financial year to affect revenue	2010-11

TRANSGRID - Defined exclusions

Parameter 1- Transmission Circuit Availability		
No.	Defined exclusions	Further description of exclusion
1.1	Unregulated transmission assets	
1.2	3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list)
1.3	Force majeure	
1.4	Transient interruptions less than one (1) minute	
1.5	Switching to control voltages and fault levels	Switching to control voltages and fault levels within required limits, both as directed by NEMMCO and where NEMMCO does not have direct oversight of the network (in both cases only where the element is available for immediate energisation if required)
1.6	The opening of one end of a transmission circuit	The opening of only one end of a transmission circuit (eg where the transmission circuit remains energised and available to carry power with immediate manual or automatic return to service).
Parameter 2- Transformer Availability		
No.	Defined exclusions	Further description of exclusion
2.1	Unregulated transmission assets	
2.2	3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list)
2.3	Force majeure	
2.4	Transient interruptions less than one (1) minute	
2.5	Auxiliary transformers	
2.6	Static Var Compensator transformers	Static Var Compensator Transformers (which are counted as part of the SVC)
2.7	Switching to control voltages and fault levels	Switching to control voltages and fault levels within required limits, both as directed by NEMMCO and where NEMMCO does not have direct oversight of the network (in both cases only where the element is available for immediate energisation if required)
2.8	The opening of only one or both sides of a transformer for operational purposes	The opening of only one or both sides of a transformer for operational purposes, such as to control losses, fault levels, incompatibility of tap charges etc but where the transformer remains available to carry power on immediate manual or automatic return to service.
2.9	Transformer not switched in but available for service	The period where a transformer is made available for service, but not switched in, at the end of each day of a multi-day planned outage.
Parameter 3- Reactive Plant Availability		
No.	Defined exclusions	Further description of exclusion
3.1	Unregulated transmission assets	
3.2	3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list)
3.3	Force majeure	
3.4	Transient interruptions less than one (1) minute	
3.5	Capacitor banks and reactors operating less than 66 kV	
3.6	Reactive plant switched out by System Operations	Reactive plant switched out by System Operations, or left out after repairs that make it available for service for operational purposes
Parameter 4- Events > 0.05 system mins (No.)		
No.	Defined exclusions	Further description of exclusion
4.1	Unregulated transmission assets	
4.2	3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list)
4.3	Planned outages	
4.4	Force majeure	
4.5	Transient interruptions less than one (1) minute	
4.6	Where TransGrid protection operates correctly due to a fault on a customer's or a third party system	
4.7	Pumping station supply interruption	Pumping station supply interruptions (such as Barnard River, Burrawang, Bendeela, Kangaroo Valley and Jindabyne). These interruptions were excluded from historical data used for target setting as there being no effective loss of supply due to their ability to obtain the pumping load at a later time after restoration of supply
4.8	Outage caused by customer's own control system during a transient voltage fluctuation	Where a customer's own control/protection system trips their plant during a transient voltage fluctuation or other quality of supply event, whether caused by TransGrid or otherwise
Parameter 5 - Events > 0.40 system mins (No.)		
No.	Defined exclusions	Further description of exclusion
5.1	Unregulated transmission assets	
5.2	3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list)
5.3	Planned outages	
5.4	Force majeure	
5.5	Transient interruptions less than one (1) minute	
5.6	Where TransGrid protection operates correctly due to a fault on a customer's or a third party system	
5.7	Pumping station supply interruption	Pumping station supply interruptions (such as Barnard River, Burrawang, Bendeela, Kangaroo Valley and Jindabyne). These interruptions were excluded from historical data used for target setting as there being no effective loss of supply due to their ability to obtain the pumping load at a later time after restoration of supply
5.8	Outage caused by customer's own control system during a transient voltage fluctuation	Where a customer's own control/protection system trips their plant during a transient voltage fluctuation or other quality of supply event, whether caused by TransGrid or otherwise
Parameter 6 - Average Outage Restoration Time		
No.	Defined exclusions	Further description of exclusion
6.1	Transient interruptions less than one (1) minute	
6.2	Planned outages	
6.3	Outage duration longer than 7 days	The portion of outage duration longer than 7 days (168 hours.) That is, each individual outage is capped at 7 days.
6.4	Force majeure	
6.5	Unregulated transmission assets	
6.6	3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation, customer request or NEMMCO direction
6.7	Outages for capacitor banks and reactors operating at <66kV	