

TEMPLATE EXPLANATION



This template must be used by TransGrid to report service performance information for the second 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 last 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	97.943256%	98.496781%
Transformer availability	S2	98.280290%	98.281765%
Reactive plant availability	S3	96.534619%	96.575844%
Loss of supply event frequency >0.05 system minutes	S4	2	2
Loss of supply event frequency >0.25 system minutes	S5	1	1
Average outage duration	S6	864	774

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.
		31506	Line de-energised to allow isolation of Country Energy Burrendong substation.	Request from Country Energy.	20/07/09	04:51	20/07/09	04:56	947		0:05	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		31507	Line de-energised to allow isolation of Country Energy Burrendong substation.	Request from Country Energy.	21/07/09	04:51	21/07/09	04:56	947		0:05	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		32282	Work on customer transformer which is directly connected to transmission line 96Y.	Request from One Steel.	14/07/09	07:12	17/07/09	10:39	96Y		75:27	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		32302	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	20/07/09	10:03	26/07/09	15:59	96X		149:55	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		32475	Failed insulator discs in EnergyAustralia portion of the transmission line.	Failed insulator discs as advised by EnergyAustralia.	10/07/09	10:42	10/07/09	10:42	962		0:00	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report
		30300	Snowy Hydro work testing injection from Blowering Substation to TransGrid earth at Tumut substation.	Request from Snowy Hydro.	1/07/09	00:00	14/09/09	08:28	O97B		1808:28	Exclusion 1.2 - 3rd Party Outage Requested by customer.	Continued from first half of 2009.
		34559	Work on customer transformer which is directly connected to transmission line 96Y.	Request from One Steel.	18/08/09	10:13	18/08/09	13:27	96Y		3:14	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		34558	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	18/08/09	07:19	18/08/09	10:11	96X		2:52	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		34225	Line isolated for Integral Energy work at Mamre substation.	Request from Integral Energy.	11/08/09	08:16	11/08/09	18:41	939		10:25	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		34540	Work on Jindabyne Pump.	Request from Snowy Hydro.	24/08/09	09:18	27/08/09	16:00	97L		78:42	Exclusion 1.2 - 3rd Party Outage	
		34748	Line isolated for EnergyAustralia.	Request from EnergyAustralia.	24/08/09	05:35	24/08/09	17:48	962		12:13	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		35152	Work on PS Units 7 & 8.	Request from Snowy Hydro.	27/08/09	09:37	1/09/09	18:12	U7		128:35	Exclusion 1.2 - 3rd Party Outage	
		35102	Work on PS Units 5 & 6.	Request from Snowy Hydro.	1/09/09	06:13	1/09/09	20:02	U5		13:49	Exclusion 1.2 - 3rd Party Outage	
		34914	Work on PS Units 9 & 10.	Request from Snowy Hydro.	2/09/09	09:24	4/09/09	14:52	M9		53:28	Exclusion 1.2 - 3rd Party Outage	
		35347	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	7/09/09	06:02	7/09/09	09:55	96X		3:53	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		36056	Work on PS Units 2&3.	Request from Snowy Hydro.	10/09/09	07:24	25/09/09	15:14	L3		367:50	Exclusion 1.2 - 3rd Party Outage	
		22964	Line isolated for Country Energy.	Request from Country Energy.	3/09/09	07:17	3/09/09	18:16	963		10:59	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		36797	Work on customer transformer which is directly connected to transmission line 96X.	Request from One Steel.	25/09/09	06:10	26/09/09	16:14	96X		34:04	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		37155	At the time of the fault, a grass fire was reported by TG staff and EA staff underneath the line at the Pacific Highway crossing at Mayfield West (on EA section of line) and was suspected to have caused the trip.	Fire beneath EnergyAustralia portion of of transmission line initiated protection.	27/09/09	12:00	27/09/09	14:05	962		2:05	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report
		37156	EA found broken insulator in their section of line.	Damage to EnergyAustralia portion of of transmission line caused by wind.	27/09/09	14:05	27/09/09	18:16	962		4:11	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report
		37063	Work on EnergyAustralia pole on transmission line 96Y.	Request from EnergyAustralia.	30/09/09	06:08	30/09/09	15:46	96Y		9:38	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38722	Routine protection checks.	Request from EnergyAustralia.	12/10/09	16:31	13/10/09	14:42	250		22:11	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		36619	Work on PS Units 5 & 6.	Request from Snowy Hydro.	12/10/09	06:52	13/10/09	14:44	M5		31:52	Exclusion 1.2 - 3rd Party Outage	
		38619	Work on Jindabyne Pump.	Request from Snowy Hydro.	9/10/09	07:34	16/10/09	16:31	97L		176:57	Exclusion 1.2 - 3rd Party Outage	
		38608	Trip occurred during a thunderstorm.	Indications are that lightning strike occurred on EnergyAustralia's portion of the line.	5/10/09	15:44	5/10/09	17:03	250		1:19	Exclusion 1.2 - 3rd Party Outage Lightning strike on EnergyAustralia section of line.	Transgrid Forced & Emergency Outage Report
		37059	Work on EnergyAustralia pole on transmission line 96X.	Request from EnergyAustralia.	2/10/09	06:02	2/10/09	11:05	96X		5:03	Exclusion 1.2 - 3rd Party Outage Requested by customer.	

S1	Transmission line availability	38672	Work on EnergyAustralia pole on transmission line 96X.	Request from EnergyAustralia.	16/10/09	06:04	16/10/09	13:39	96X		7:35	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38673	Work on EnergyAustralia pole on transmission line 96X.	Request from EnergyAustralia.	20/10/09	05:01	20/10/09	07:26	96X		2:25	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38698	Murray system restart test.	Request from Snowy Hydro.	18/10/09	7:45	18/10/09	10:44	96G		3:46	Exclusion 1.2 - 3rd Party Outage	
		38698	Murray system restart test.	Request from Snowy Hydro.	18/10/09	7:46	18/10/09	10:44	M1		3:46	Exclusion 1.2 - 3rd Party Outage	
		38698	Murray system restart test.	Request from Snowy Hydro.	18/10/09	7:01	18/10/09	10:44	M7		3:46	Exclusion 1.2 - 3rd Party Outage	
		38698	Murray system restart test.	Request from Snowy Hydro.	18/10/09	7:01	18/10/09	10:44	M13		3:46	Exclusion 1.2 - 3rd Party Outage	
		39167	Work on Jindabyne Pump.	Request from Snowy Hydro.	23/10/09	13:38	23/10/09	14:42	97L		1:04	Exclusion 1.2 - 3rd Party Outage	
		38842	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	24/10/09	06:34	24/10/09	15:02	250		8:28	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		39168	Work on PS Units 9 & 10.	Request from Snowy Hydro.	24/10/09	06:43	1/11/09	10:01	M9		195:18	Exclusion 1.2 - 3rd Party Outage	
		38865	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	31/10/09	03:49	31/10/09	18:11	962		14:22	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38913	Work on PS Units 7 & 8.	Request from Snowy Hydro.	31/10/09	07:19	12/11/09	11:35	M7		292:16	Exclusion 1.2 - 3rd Party Outage	
		38916	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	31/10/09	04:04	2/11/09	10:26	96X		54:22	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		39187	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	29/10/09	06:05	29/10/09	16:11	96X		10:06	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38866	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	1/11/09	04:15	1/11/09	13:06	962		8:51	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		39616	Work on customer installation PS Units 7 & 8.	Request from Snowy Hydro.	4/11/09	05:36	8/11/09	15:27	U7		105:51	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		40466	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	6/11/09	11:53	9/11/09	11:26	96X		71:33	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		40358	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	10/11/09	05:08	10/11/09	17:11	96Y		12:03	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		40461	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	12/11/09	05:12	12/11/09	15:16	96X		10:04	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38760	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	16/11/09	06:48	28/11/09	09:22	96X		290:34	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		5823	Work on customer PS Units 5 & 6.	Request from Snowy Hydro.	18/11/09	05:02	18/11/09	15:11	U5		10:09	Exclusion 1.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	08:07	28/11/09	10:39	97G		2:32	Exclusion 1.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	07:36	28/11/09	10:34	97L		2:58	Exclusion 1.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	08:08	28/11/09	10:31	M1		2:22	Exclusion 1.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	08:09	28/11/09	10:31	M7		2:22	Exclusion 1.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	08:09	28/11/09	10:31	M13		2:22	Exclusion 1.2 - 3rd Party Outage	
		38761	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	30/11/09	04:06	10/12/09	08:59	96Y		244:53	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		41900	Power Station intertrip caused No.4 Bay to trip and overload relay on 5A1 transmission line caused line to trip.	Fault on Eraring Energy installation initiated intertrip.	3/12/09	12:53	3/12/09	14:09	5A1		1:16	Exclusion 1.2 - 3rd Party Outage Intertrip received from power station.	Transgrid Forced & Emergency Outage Report
		41826	Work on PS Units 2 & 3.	Request from Snowy Hydro.	6/12/09	06:41	6/12/09	17:37	L3		10:56	Exclusion 1.2 - 3rd Party Outage	
		42533	Dead swan found near 33kV Line undercrossing EnergyAustralia's portion of 96X line.	Fault on EnergyAustralia portion of the line initiated protection trip.	16/12/09	19:21	16/12/09	21:15	96X		1:54	Exclusion 1.2 - 3rd Party Outage Caused by bird strike on EnergyAustralia's section of the line.	Transgrid Forced & Emergency Outage Report
		42502	Work on PS Units 2 & 3.	Request from Snowy Hydro.	17/12/09	20:32	18/12/09	05:30	L3		8:58	Exclusion 1.2 - 3rd Party Outage	
		41827	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	19/12/09	04:37	19/12/09	17:24	962		12:47	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		41828	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	20/12/09	05:10	20/12/09	14:28	962		9:18	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		42654	Work on PS Units 2 & 3.	Request from Snowy Hydro.	20/12/09	07:23	20/12/09	19:04	L3		11:41	Exclusion 1.2 - 3rd Party Outage	
		5498	CB 9W82 tripped on temporary protection during commissioning checks at Boambee South with Country Energy No.1 & No.2 Txs energised.	Fault on Country Energy installation.	16/12/2009	13:53	16/12/09	15:26	9W8		1:33	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment	Transgrid Forced & Emergency Outage Report
		35389	Line isolated for work on EnergyAustralia's portion of the line.	Request from EnergyAustralia.	7/09/09	05:56:00	7/09/09	16:43:00	962		10:47	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
S2	Transformer availability	36395	Fault on plant initiated protection operation.	Intertrip from Visy.	10/09/09	6:18	10/09/09	9:47		Gadara No.1 Transformer	3:29	Exclusion 2.2 - 3rd Party Outage Intertrip received from Visy.	Transgrid Forced & Emergency Outage Report
		38698	Murray system restart test.	Request from Snowy Hydro.	18/10/09	7:45	18/10/09	10:43		Murray No.1 Transformer	3:46	Exclusion 2.2 - 3rd Party Outage	

		38698	Murray system restart test.	Request from Snowy Hydro.	18/10/09	7:45	18/10/09	10:43		Murray No.2 Transformer	3:46	Exclusion 2.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	8:07	28/11/09	10:34		Murray No.1 Transformer	2:27	Exclusion 2.2 - 3rd Party Outage	
		40232	Murray system restart test.	Request from Snowy Hydro.	28/11/09	8:07	28/11/09	10:34		Murray No.2 Transformer	2:27	Exclusion 2.2 - 3rd Party Outage	
S3	Reactive plant availability	37041	Third party damage to EnergyAustralia cable. Feeder 9S2 and No.2 Reactor are connected to the same circuit breaker.	Request from EnergyAustralia to work on their line which also has the reactor connected to it.	24/09/09	12:51	2/10/09	15:47		Beaconsfield No.2 Reactor	194:56	Exclusion 3.2 - 3rd Party Outage Requested by customer.	Transgrid Forced & Emergency Outage Report

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	Loss of supply event frequency >0.05 system minutes	31603	At Bayswater CB 5042 Blue phase CT failed explosively causing direct tripping of Lines 31, 32, 33 and 34 and No.s 2, 3 and 4 Generators. Subsequently four additional generators on the NEM tripped due to performance issues and load was shed via underfrequency load shed relays in various locations. The load shed was 565MW in NSW and 1131MW across the NEM.	Load was shed with subsequent tripping of four additional generators, not at the time of failure of the CT and trip of Bayswater units.	2/07/09	10:47	3/07/09	4:58	32 31 33 34	14101 MW	0.768 system minutes	See description for demand shed; duration 45 minutes	Exclusion 4.3 - 3rd Party Outage Trip of additional generators.	Transgrid Forced & Emergency Outage Report
S5	Loss of supply event frequency >0.25 system minutes	31603	At Bayswater CB 5042 Blue phase CT failed explosively causing direct tripping of Lines 31, 32, 33 and 34 and No.s 2, 3 and 4 Generators. Subsequently four additional generators on the NEM tripped due to performance issues and load was shed via underfrequency load shed relays in various locations. The load shed was 565MW in NSW and 1131MW across the NEM.	Load was shed with subsequent tripping of four additional generators, not at the time of failure of the CT and trip of Bayswater units.	2/07/09	10:47	3/07/09	4:58	32 31 33 34	14101 MW	0.768 system minutes	See description for demand shed; duration 45 minutes	Exclusion 4.3 - 3rd Party Outage Trip of additional generators.	Transgrid Forced & Emergency Outage Report

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.
		29530	Control system failure, replacement planned.	Control system failure.	1/07/09	0:00	1/01/10	0:00	Kemps Creek No.2 SVC	4416:00		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.

Average outage duration	37155	At the time of the fault, a grass fire was reported by TG staff and EA staff underneath the line at the Pacific Highway crossing at Mayfield West (on EA section of line) and was suspected to have caused the trip.	Fire beneath EnergyAustralia portion of of transmission line initiated protection.	27/09/09	12:00	27/09/09	14:05	962	2:05		Exclusion 6.4 - 3rd Party Outage Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report
	37156	EA found broken insulator in their section of line.	Damage to EnergyAustralia portion of of transmission line caused by wind.	27/09/09	14:05	27/09/09	18:16	962	4:11		Exclusion 6.4 - 3rd Party Outage Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report
	37041	Third party damage to EnergyAustralia cable. Feeder 9S2 and No.2 Reactor are connected to the same circuit breaker.	Request from EnergyAustralia to work on their line which also has the reactor connected to it.	24/09/09	12:51	2/10/09	15:47	Beaconsfield No.2 Reactor	194:56		Exclusion 6.4 - 3rd Party Outage Request from EnergyAustralia.	Transgrid Forced & Emergency Outage Report
	38608	Trip occurred during a thunderstorm.	Indications are that lightning strike occurred on EnergyAustralia's portion of the line.	5/10/09	15:44	5/10/09	17:03	250	1:19		Exclusion 6.4 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report
	41900	Power Station intertrip caused No.4 Bay to trip and overload relay on 5A1 transmission line caused line to trip.	Fault on Eraring Energy installation initiated intertrip.	3/12/09	12:53	3/12/09	14:09	5A1	1:16		Exclusion 6.4 - 3rd Party Outage Caused by customer equipment failure.	Transgrid Forced & Emergency Outage Report
	42533	Dead swan found near 33kV Line undercrossing EnergyAustralia's portion of 96X line.	Fault on EnergyAustralia portion of the line initiated protection trip.	16/12/09	19:21	16/12/09	21:15	96X	1:54		Exclusion 6.4 - 3rd Party Outage Where TransGrid protection operates correctly due to a fault on a customer's or a third party system.	Transgrid Forced & Emergency Outage Report
	42871	Found dead crow in 16kV area which was removed. SVC tripped when returned to service and is being investigated further.	Under investigation.	21/12/09	15:47	1/01/10	0:00	Kemps Creek No.1 SVC	248:13	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

TRANSGRID - S1 - Transmission line availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transmission line availability	98.90%	99.05%	99.26%	99.36%	99.50%
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 < 99.05%	-0.002000	-0.002000
	=	0.952381	x	Availability	+	-0.945333 99.05% ≤ Availability ≤ 99.26%	-0.012540	-0.007269
	=	2.000000	x	Availability	+	-1.985200 99.26% ≤ Availability ≤ 99.36%	-0.026335	-0.015264
	=	0.002000				99.36% < Availability	0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission line availability	=	97.943256%	98.496781%
S-Factor	=	-0.200000%	-0.200000%

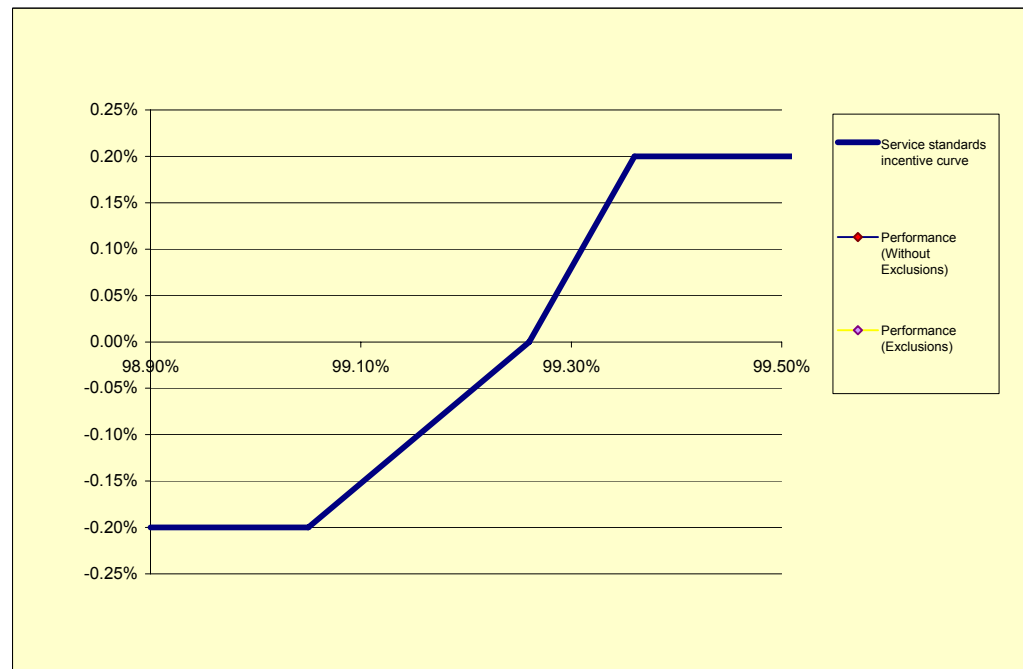
NOTE: This sheet will automatically update based on data in input sheets.

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	97.00%	97.33%	98.61%	98.89%	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 < 97.33%	-0.001500	-0.001500
	=	0.117188	x	Availability	+	-0.115559	97.33% ≤ Availability ≤ 98.61%	-0.000386	-0.000386
	=	0.535714	x	Availability	+	-0.528268	98.61% ≤ Availability ≤ 98.89%	-0.001766	-0.001758
	=	0.001500					98.89% < Availability	0.001500	0.001500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transformer availability	=	98.280290%	98.281765%
S-Factor	=	-0.038638%	-0.038465%

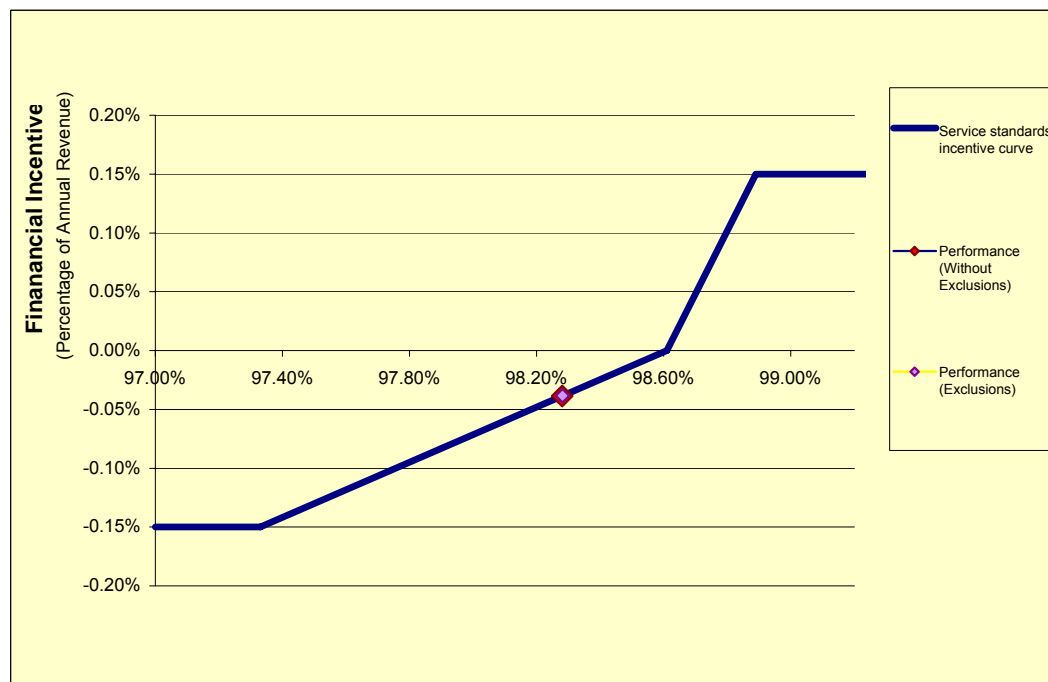
NOTE: This sheet will automatically update based on data in input sheets.

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	98.00%	98.65%	99.12%	99.33%	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 < 98.65%	-0.001000	-0.001000
	=	0.212766	x	Availability	+	98.65% ≤ Availability ≤ 99.12%	-0.005501	-0.005413
	=	0.476190	x	Availability	+	99.12% ≤ Availability ≤ 99.33%	-0.012311	-0.012115
	=	0.001000				99.33% < Availability	0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reactive plant availability	=	96.534619%	96.575844%
S-Factor	=	-0.100000%	-0.100000%

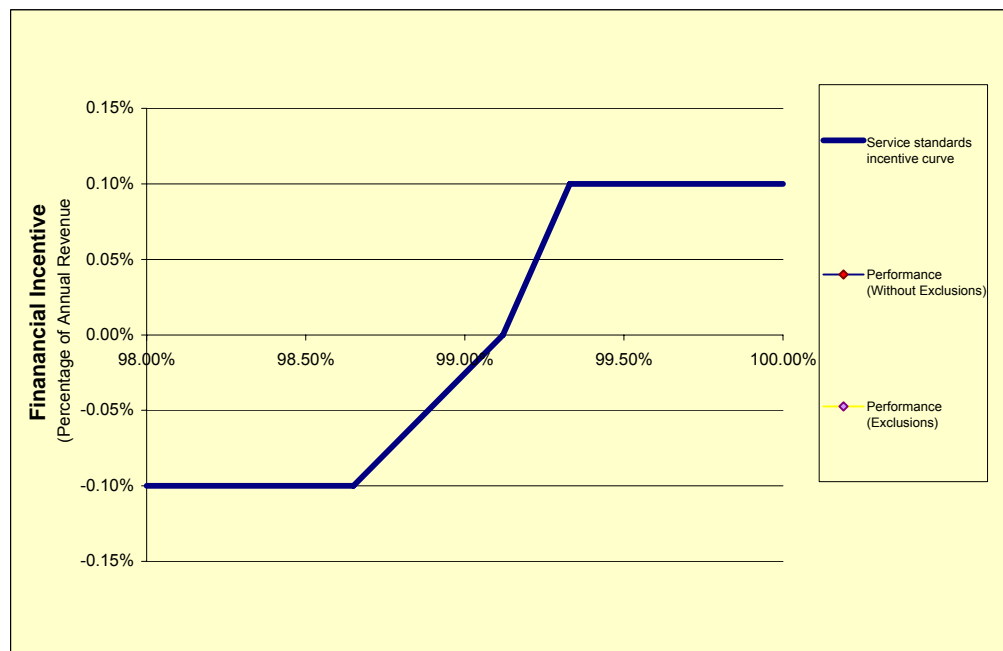
NOTE: This sheet will automatically update based on data in input sheets.

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 - Loss of supply event frequency > 0.05 system minutes

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Loss of Supply event frequency > 0.05 system minutes	0	4	2	1	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				4	<	Reliability	-0.002500	-0.002500
	=	-0.001250	x	Reliability	+	2	≤	Reliability	0.000000	0.000000
	=	-0.002500	x	Reliability	+	1	≤	Reliability	0.000000	0.000000
	=	0.002500						Reliability	0.002500	0.002500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Loss of Supply event frequency > 0.05 system minutes	=	2	2
S-Factor	=	0.000000%	0.000000%

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

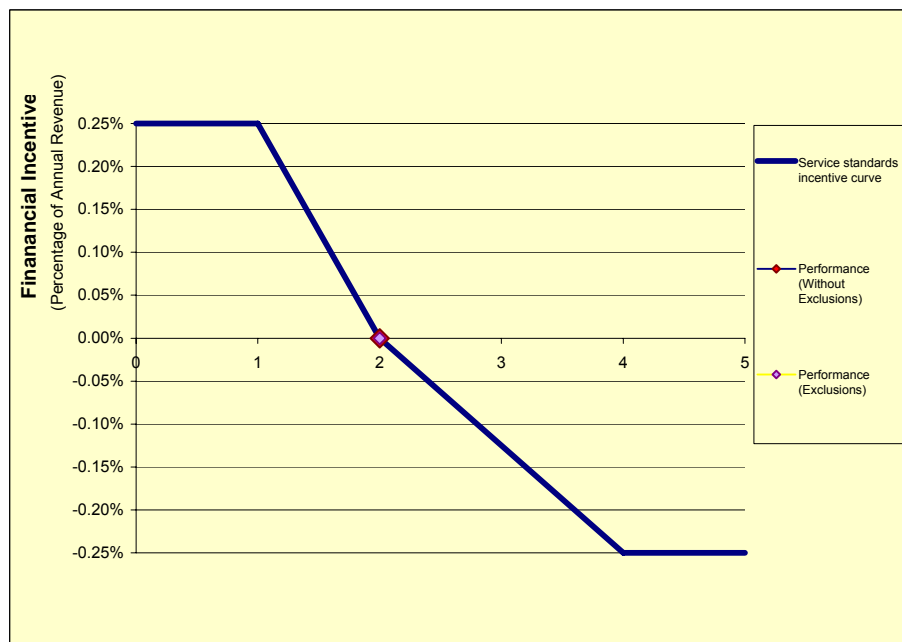
Blue cells show TNSP's performance targets and weightings.

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

(NB: The caps, collars and targets have been scaled as this template only applies to the last six months of the 2009 calendar year)



TRANSGRID - S5 - Loss of supply event frequency > 0.25 system minutes

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Loss of supply event frequency > 0.25 system minutes	3	2	1	0	0
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: Reliability > 2	-0.001000	-0.001000
	=	-0.001000	x	Reliability	+	0.001000	1 ≤ Reliability ≤ 2	0.000000	0.000000
	=	-0.001000	x	Reliability	+	0.001000	0 ≤ Reliability ≤ 1	0.000000	0.000000
	=	0.001000					Reliability < 0	0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Loss of supply event frequency > 0.25 system minutes	=	1	1
S-Factor	=	0.000000%	0.000000%

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

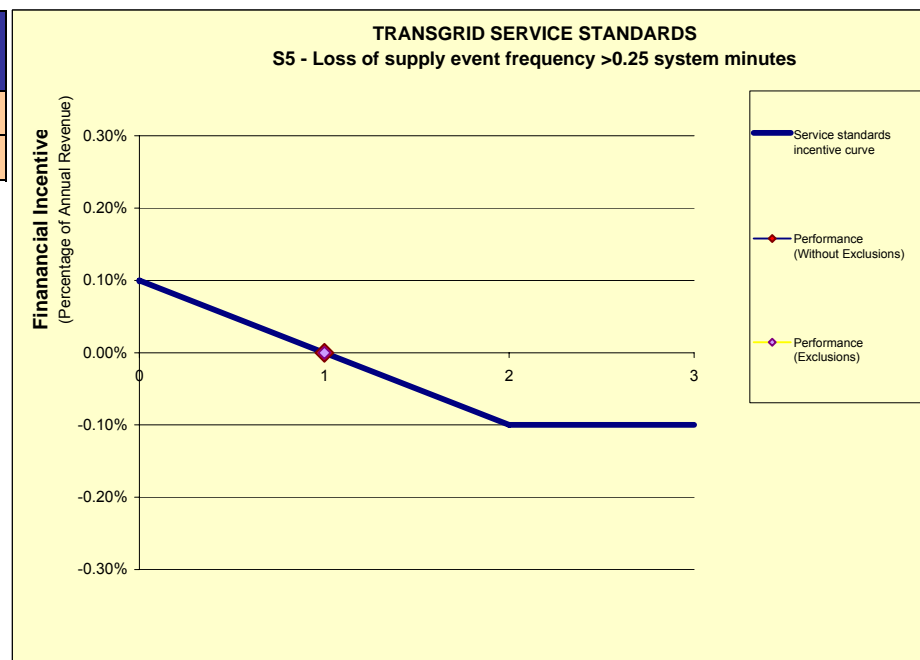
Blue cells show TNSP's performance targets and weightings.

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

(NB: The caps, collars and targets have been scaled as this template only applies to the last six months of the 2009 calendar year)



TRANSGRID - S6 - Average outage duration (minutes)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Average outage duration	1050	999	824	649	600
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: Average time > 999	-0.002000	-0.002000
	=	-0.000011	x	Average time	+	824 ≤ Average time ≤ 999	-0.000460	0.000566
	=	-0.000011	x	Average time	+	649 ≤ Average time ≤ 824	-0.000460	0.000566
	=	0.002000				Average time < 649	0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Average outage duration	=	864	774
S-Factor	=	-0.046030%	0.056596%

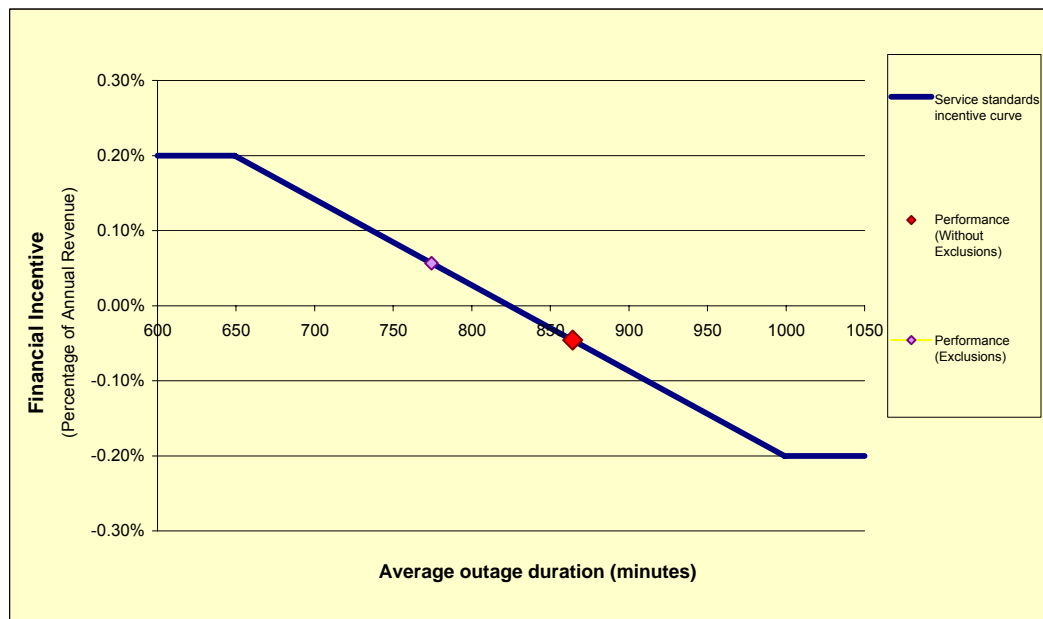
NOTE: This sheet will automatically update based on data in input sheets.

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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	\$678,400,000
Base year	2009-10
X-factor	-5.61%
Revised X-factor	
Decision CPI	2.47%

Annual revenue adjusted for CPI		Mar-09
CPI		166.2
		2009-10
AR		\$678,400,000

Calendar year revenue		2009
Revenue		\$339,200,000

NOTES:

Grey cells show calendar year revenue

Green cells are for formula

.

TRANSGRID- Performance outcomes

Revenue calendar year \$339,200,000

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	99.260000%	97.943256%	-0.200000%	-\$678,400	98.496781%	-0.200000%	-\$678,400	0.000000%
Transformer availability	S2	98.610000%	98.280290%	-0.038638%	-\$131,060	98.281765%	-0.038465%	-\$130,473	0.000173%
Reactive plant availability	S3	99.120000%	96.534619%	-0.100000%	-\$339,200	96.575844%	-0.100000%	-\$339,200	0.000000%
Loss of Supply event frequency > 0.05 system minutes	S4	2	2	0.000000%	\$0	2	0.000000%	\$0	0.000000%
Loss of supply event frequency > 0.25 system minutes	S5	1	1	0.000000%	\$0	1	0.000000%	\$0	0.000000%
Average outage duration	S6	824	864	-0.046030%	-\$156,132	774	0.056596%	\$191,972	0.102625%
TOTALS				-0.384667%	-\$1,304,792		-0.281869%	-\$956,101	0.102798%

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	-0.281869%
Bonus (penalty)	-\$956,101
Financial year to affect revenue	2010-11

TRANSGRID - Defined exclusions

No. Parameter 1- Transmission Line Availability		
Defined exclusions	Further description of exclusion	Reference
1.1 Outages on assets that are not providing prescribed transmission services.	Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list). Outages to control voltages 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)	Service Target Performance Incentive Scheme (March 2008) p. 32
1.2 3rd party outage		Service Target Performance Incentive Scheme (March 2008) p. 32
1.3 Outages to control fault levels		Service Target Performance Incentive Scheme (March 2008) p. 32
1.4 Force majeure events		Service Target Performance Incentive Scheme (March 2008) p. 32
1.5 Transient interruptions less than one (1) minute	As defined in Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 32
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) Outages for remedial repairs to an underground power cable damaged by an external party are capped at 14 days if: - the external party did not enquire with 'dial before you dig' or - the external party enquired, received accurate information and did not follow this information.	Service Target Performance Incentive Scheme (March 2008) p. 32
1.7 Underground cable damaged by an external party		Service Target Performance Incentive Scheme (March 2008) p. 33
Parameter 2- Transformer Availability		
Defined exclusions	Further description of exclusion	Reference
2.1 Outages on assets that are not providing prescribed transmission services.	Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list). Outages to control voltages 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)	Service Target Performance Incentive Scheme (March 2008) p. 32
2.2 3rd party outage		Service Target Performance Incentive Scheme (March 2008) p. 32
2.3 Outages to control fault levels		Service Target Performance Incentive Scheme (March 2008) p. 32
2.4 Force majeure events		Service Target Performance Incentive Scheme (March 2008) p. 32
2.5 Transient interruptions less than one (1) minute	As defined in Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 32
2.6 Auxiliary transformers	The opening of only one or both sides of a transformer for operational purposes, such as to control losses, fault levels, incompatibility of tap changes etc but where the transformer remains available to carry power on immediate manual or automatic return to service	Service Target Performance Incentive Scheme (March 2008) p. 32
2.7 Static VAR compensator transformers (which are counted as part of the SVC)		Service Target Performance Incentive Scheme (March 2008) p. 33
2.8 The opening of one end of a transmission circuit		Service Target Performance Incentive Scheme (March 2008) p. 33
2.9 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		Service Target Performance Incentive Scheme (March 2008) p. 33
Parameter 3- Reactive Plant Availability		
Defined exclusions	Further description of exclusion	Reference
3.1 Outages on assets that are not providing prescribed transmission services.	Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation (TNSP to provide list). Outages to control voltages 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)	Service Target Performance Incentive Scheme (March 2008) p. 32
3.2 3rd party outage		Service Target Performance Incentive Scheme (March 2008) p. 32
3.3 Outages to control fault levels		Service Target Performance Incentive Scheme (March 2008) p. 32
3.4 Force majeure events		Service Target Performance Incentive Scheme (March 2008) p. 32
3.5 Transient interruptions less than one (1) minute	As defined in Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 32
3.6 Capacitor banks and reactors operating less than 66kV		Service Target Performance Incentive Scheme (March 2008) p. 33
3.7 reactive plant switched out by System Operations, or left out after repairs that make it available for service for operational purposes		Service Target Performance Incentive Scheme (March 2008) p. 33
Parameter 4- Loss of supply event frequency > 0.05 system minutes (No.)		
Defined exclusions	Further description of exclusion	Reference
4.1 Outages on assets that are not providing prescribed transmission services (e.g. some connection assets)	Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation	Service Target Performance Incentive Scheme (March 2008) p. 34
4.2 Successful reclose events (less than one minute duration)		Service Target Performance Incentive Scheme (March 2008) p. 34
4.3 Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation		Service Target Performance Incentive Scheme (March 2008) p. 34
4.4 Planned outages		Service Target Performance Incentive Scheme (March 2008) p. 34
4.5 Force majeure events	As defined in Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 34
4.6 Where TransGrid protection operates correctly due to a fault on a customer's or a third party system		Service Target Performance Incentive Scheme (March 2008) p. 34
4.7 Pumping station supply interruption		Service Target Performance Incentive Scheme (March 2008) p. 34
4.8 Outage caused by customer's own control system during a transient voltage fluctuation		Service Target Performance Incentive Scheme (March 2008) p. 34
Parameter 5 - Loss of supply event frequency > 0.25 system minutes (No.)		
Defined exclusions	Further description of exclusion	Reference
5.1 Outages on assets that are not providing prescribed transmission services (e.g. some connection assets)	Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation	Service Target Performance Incentive Scheme (March 2008) p. 34
5.2 Successful reclose events (less than one minute duration)		Service Target Performance Incentive Scheme (March 2008) p. 34
5.3 Any outages shown to be caused by a fault or other event on a 'third party system' e.g. intertrip signal, generator outage, customer installation		Service Target Performance Incentive Scheme (March 2008) p. 34
5.4 Planned outages		Service Target Performance Incentive Scheme (March 2008) p. 34
5.5 Force majeure events	As defined in Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 34
5.6 Where TransGrid protection operates correctly due to a fault on a customer's or a third party system		Service Target Performance Incentive Scheme (March 2008) p. 34
5.7 Pumping station supply interruption		Service Target Performance Incentive Scheme (March 2008) p. 34
5.8 Outage caused by customer's own control system during a transient voltage fluctuation		Service Target Performance Incentive Scheme (March 2008) p. 34
Parameter 6 - Average Outage Duration		
Defined exclusions	Further description of exclusion	Reference
6.1 Planned outages	As defined in Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 35
6.2 Momentary interruptions (less than one minute)		Service Target Performance Incentive Scheme (March 2008) p. 35
6.3 Force majeure		Service Target Performance Incentive Scheme (March 2008) p. 35
6.4 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		Service Target Performance Incentive Scheme (March 2008) p. 35
6.5 Outages for capacitor banks and reactors operating at 66kV		Service Target Performance Incentive Scheme (March 2008) p. 35