TEMPLATE EXPLANATION

This template must be used by the TNSP to report service performance information for the previous calendar year.

Yellow worksheets (**'Inputs - Performance'** and **'Inputs - Exclusions'**) are for inputs, including performance and exclusion information. The TNSP 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.

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 the TNSP's performance in 'Inputs-Performance' and 'Revenue Calculation' worksheets.

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

TransGrid - SERVICE STANDARDS PERFORMANCE

Performance Inputs							
S	**Performance parameter**	**Collar**	**Target**	**Cap**	**Revenue at Risk**	*Performance (Without exclusions)*	*Performance (With exclusions)*
S1	***Transmission line availability***	99.05%	99.26%	99.36%	0.20%	98.706633%	98.972400%
S2	***Transformer availability***	97.33%	98.61%	98.89%	0.15%	98.442893%	98.451257%
S3	***Reactive plant availability***	98.65%	99.12%	99.33%	0.10%	96.199044%	96.331837%
S4	***Loss of supply event frequency >0.05 system minutes***	7	4	2	0.250%	5	3
S5	***Loss of supply event frequency >0.25 system minutes***	2	1	-	0.100%	0	0
S6	***Average outage duration***	999	824	649	0.200%	863	864

Revenue Determination Inputs	
TNSP:	TransGrid
STPIS version:	March, 2008
Regulatory Determination	2009/10 - 2013/14
Base Year Allowed Revenue	$678,400,000
Base Year	2009-10
X-factor	-5.61%
Commencement of regulatory year	1-Jul-09

Other inputs	
Assessment Period	2011
Financial year to affect revenue:	2012/13
Date prepared:	
Revision date:	

Other Inputs						
Annual revenue adjusted for C	**Mar-09**	**Mar-10**	**Mar-11**	**Mar-12**	**Mar-13**	**Mar-14**
CPI	166.2	171.0	176.7			

NOTE:

Pink cells - Performance without exclusions input cells

Orange cells - Performance with exclusions input cells

Green cells - Other inputs

Blue cells - Inputs sourced from the revenue determination

Performance is based on a calendar year or the proportion of a calendar year that applies in each regulatory period.

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	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	Name of any equipment affected	Impact of exclusion event on availability sub-parameter	Full details of the reason/s 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.
		61969	TL M7 isolated for work on direct connected SHL's Murray PS Units 7-8 330kV installation.	Request from Snowy Hydro.	10/01/11	06:37:00	13/01/11	16:08:00	M7		-0.000048195	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		62149	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	18/01/11	06:09:00	18/01/11	11:12:00	U3		-0.000002986	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		62355	Line 96X is part Transgrid and Ausgrid owned. Ausgrid advised that a pole was down in their 33kV system that under-crosses line 96X. 96X was isolated & earthed for repairs by Ausgrid.	Ausgrid advised that a pole was down in their 33kV system that under-crosses 96X FDR.	22/01/11	23:59:00	23/01/11	02:18:00	96X		-0.000001370	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-F-0044
		62142	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	31/01/11	06:51:00	31/01/11	15:15:00	96F		-0.000004966	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63520	SPI/Ausnet transmission line V3 Wodonga - Dederang tripped. At the same time Transgrid's transmission line 060 Jindera - Wodonga tripped at Jindera only. SCADA indicated T/L 060 closed at Wodonga but T/L not energised. Observed CBs V32A & V32B closing at Dederang, thus restoring Wodonga load and energising T/L 060. Checked with SPI/Ausnet who advised was given clearance to return to service T/L V3 by AEMO. Clearance obtained from NCM to place T/L 060 on load at Jindera. Storms in area at time of incident. Investigation found that a blocking sinnal was not sent from SPI/Ausnet protection system to prevent T/L O60 Zone 2 protection from operating.	Transmission line O60 Zone 2 protection system detected a fault in SPI/Ausnet transmission line V3 Wodonga - Dederang and SPI/Ausnet protection did not send a blocking signal to preventT/L O60 from tripping.	4/02/11	20:30:00	4/02/11	20:34:00	O60		-0.000000039	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-F-0068
		62447	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	6/02/11	06:23:00	7/02/11	15:36:00	U5		-0.000019639	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		62432	TL U7 isolated for work on direct connected SHL's Upper Tumut PS Units 7&8 330kV installation.	Request from Snowy Hydro.	8/02/11	09:34:00	8/02/11	16:42:00	U7		-0.000004217	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		62449	TL L1 isolated for work on direct connected SHL's Lower Tumut PS Units 1&2 330kV installation.	Request from Snowy Hydro.	12/02/11	06:51:00	13/02/11	15:36:00	L1		-0.000019363	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63613	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	18/02/11	04:00:00	18/02/11	17:13:00	96F		-0.000007814	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63614	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	19/02/11	04:47:00	19/02/11	16:10:00	96F		-0.000006730	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63904	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	22/02/11	04:25:00	22/02/11	17:30:00	96F		-0.000007735	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63905	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	23/02/11	04:19:00	23/02/11	18:23:00	96F		-0.000008317	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63906	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	24/02/11	05:01:00	24/02/11	16:59:00	96F		-0.000007075	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63935	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	25/02/11	04:42:00	25/02/11	17:55:00	96F		-0.000007814	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		63936	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	26/02/11	04:27:00	26/02/11	16:01:00	96F		-0.000006839	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		64437	At 14:58hrs 96F Beresfield to Stroud 132 kV T/L tripped and locked out due to a pole collapse during a severe storm in the area. Load was interrupted due to voltage depression in council system (Approximately 19 MW at Port Macquarie and 29Mwatts at Taree). With the loss of this feeder coupled with the prior planned outage 96G Kempsey to Port Macquarie 132kV T/L resulted in the following incidents occurring:- - At 15:10:hrs Essential Energy's 862Taree to Kew 66kV feeder opened due to operation of the Taree LOLS scheme, interrupting 8MW. Load was restored via CE's system at 1519hrs. - At 15:13hrs Essential Energy's No.5 Taree to No.5 Council 33kV feeder and 7G2 Taree to Harrington 33kV feeder opened due to operation of the Taree LOLS scheme. Nil interruption. Returned to service at 15:43hrs. - At 15:20:27hrs Essential Energy's Taree to NO.1 Council and No.3 Council feeders opened due to operation of Taree LOLS scheme, interrupting 7MW. No.1 Council feeder returned to service at 1539hrs. No.3 Council feeder returned to service at 1539hrs. - At 0259hrs 96F Beresfield to Stroud 132 kV T/L was returned to service.	Line 96F is part Transgrid and Ausgrid owned. Ausgrid advised that due to a servere storm, a pole and line were down on their section of the line in the vicinity of Woodbury. This outage caused the Taree Loss Of Load Scheme to be activated which operated as intended.	1/03/11	14:58:00	2/03/11	02:59:00	96F		-0.000007105	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-F-0102 E2011/09795 E2011/09796 E2011/09797 E2011/09798 E2011/09799 D2011/14864
		65658	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	20/03/11	05:59:00	20/03/11	14:57:00	962		-0.000005301	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		65861	TL U7 isolated for work on direct connected SHL's Upper Tumut PS Units 7&8 330kV installation.	Request from Snowy Hydro.	25/03/11	11:16:00	21/04/11	10:32:00	U7		-0.000382685	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		65865	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	26/03/11	08:06:00	28/03/11	16:32:00	L3		-0.000033365	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		65483	SPI - Ausnet required transmission line 060 Jindera - Wodonga isolated to enable work at their Wodonga Substation.	Request from SPI - Ausnet.	29/03/11	05:54:00	29/03/11	17:13:00	O60		-0.000006691	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		66317	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	1/04/11	07:02:00	1/04/11	14:07:00	U5		-0.000004188	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67096	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	11/04/11	08:52:00	11/04/11	17:44:00	L5		-0.000005242	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67326	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	17/04/11	05:57:00	19/04/11	13:04:00	962		-0.000032587	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67423	Line 963 is a Transgrid line but is required out to allow Ausgrid to work on its own portion of line 962. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	17/04/11	06:03:00	17/04/11	16:47:00	963		-0.000006346	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67424	Line 963 is a Transgrid line but is required out to allow Ausgrid to work on its own portion of line 962. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	18/04/11	06:07:00	18/04/11	18:02:00	963		-0.000007046	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67256	Line 96X is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	18/04/11	06:50:00	18/04/11	16:23:00	96X		-0.000005646	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67470	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	19/04/11	13:06:00	20/04/11	12:01:00	U5		-0.000013549	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67601	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	20/04/11	14:02:00	20/04/11	15:36:00	U5		-0.000000926	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		65179	TL M11 isolated for work on direct connected SHL's Murray PS Units 11-12 330kV installation.	Request from Snowy Hydro.	28/04/11	06:56:00	3/05/11	19:36:00	M11		-0.000078437	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67237	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	28/04/11	08:00:00	28/04/11	17:06:00	L5		-0.000005380	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67336	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	3/05/11	07:06:00	3/05/11	17:15:00	96F		-0.000006001	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67849	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	9/05/11	08:09:00	13/05/11	15:21:00	97L		-0.000061015	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		69169	TL 96P isolated for work on Essential Energy's Stroud 132kV substation.	Request from Essential Energy.	16/05/11	09:42:00	16/05/11	15:30:00	96P		-0.000003429	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67858	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	22/05/11	06:58:00	22/05/11	12:18:00	U3		-0.000003153	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67856	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	22/05/11	06:58:00	22/05/11	12:18:00	U5		-0.000003153	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		67855	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	22/05/11	06:58:00	22/05/11	12:18:00	L5		-0.000003153	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
S1	Transmission line availability	67859	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	22/05/11	06:58:00	22/05/11	12:18:00	64		-0.000003153	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		69551	Fault in Ausgrid's portion of the system. Protection advised about 21.7km.	Caused by fault on Austgrid equipment	24/05/11	18:23:00	24/05/11	18:24:00	963		-0.000000010	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-F-0189
		69374	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	25/05/11	07:56:00	25/05/11	17:25:00	97L		-0.000005607	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		68602	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	28/05/11	07:36:00	28/05/11	11:19:00	U5		-0.000002197	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		68601	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	28/05/11	07:36:00	28/05/11	11:19:00	U3		-0.000002197	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		68604	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	28/05/11	07:38:00	28/05/11	11:05:00	L5		-0.000002040	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		68605	Line isolated as an island of TLs 64, U3, U5, L5 for Black Start Test.	Request from Snowy Hydro.	28/05/11	07:38:00	28/05/11	11:05:00	64		-0.000002040	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		90412	Line 947 is Transgrid owned but a Tee connection from it is Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	20/06/11	10:55:00	20/06/11	11:02:00	947		-0.000000069	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		91613	Ausgrid & Transgrid patrols found no faults initially. Feeder tripped on attempted energising. Faulty insulator string eventually found in Ausgrid system.	Caused by fault on Austgrid equipment	28/06/11	17:07:00	29/06/11	17:34:00	963		-0.000014456	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-F-0219
		90449	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	1/07/11	07:06:00	3/07/11	16:18:00	U5		-0.000033819	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		91471	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	2/07/11	05:47:00	2/07/11	16:23:00	962		-0.000006267	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		90451	TL U7 isolated for work on direct connected SHL's Upper Tumut PS Units 7&8 330kV installation.	Request from Snowy Hydro.	2/07/11	06:01:00	3/07/11	14:38:00	U7		-0.000019284	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		92669	Line 96X is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	17/07/11	07:29:00	17/07/11	15:47:00	96X		-0.000004907	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		92234	TL M1 isolated for work on direct connected SHL's Murray PS Units 1-2 330kV installation.	Request from Snowy Hydro.	19/07/11	06:04:00	22/07/11	09:04:00	M1		-0.000044342	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		92236	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	23/07/11	07:40:00	23/07/11	16:15:00	L3		-0.000005075	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		92742	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	7/08/11	10:07:00	7/08/11	15:34:00	96F		-0.000003222	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		92912	Line 963 is a Transgrid line but is required out to allow Ausgrid to work on its own portion of line 962. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	21/08/11	10:04:00	21/08/11	12:33:00	963		-0.000001468	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		94422	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	22/08/11	08:42:00	1/09/11	16:45:00	L5		-0.000146655	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		94746	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	30/08/11	09:16:00	30/08/11	15:22:00	97L		-0.000003607	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		95802	TL M3 isolated for work on direct connected SHL's Murray PS Units 3-4 330kV installation.	Request from Snowy Hydro.	1/09/11	08:29:00	2/09/11	15:03:00	M3		-0.000018072	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		95941	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	5/09/11	08:35:00	6/09/11	18:01:00	97L		-0.000019767	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		95809	Line 932 offloaded by Endeavour at Mt Druitt for Thermovision of adjacent 219 line	Request from Endeavour Energy	6/09/11	07:27:00	6/09/11	14:51:00	932		-0.000004375	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		96474	Line 96X is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	23/09/11	07:15:00	23/09/11	11:51:00	96X		-0.000002720	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		96641	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	25/09/11	06:13:00	25/09/11	09:20:00	962		-0.000001843	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		95857	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1&2 330kV installation.	Request from Snowy Hydro.	26/09/11	07:04:00	30/09/11	18:19:00	U1		-0.000063410	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		96707	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	27/09/11	12:04:00	12/12/11	08:18:00	97L		-0.001076182	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		96600	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	29/09/11	06:55:00	30/09/11	15:46:00	962		-0.000019422	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		97006	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	8/10/11	06:28:00	9/10/11	18:21:00	962		-0.000021215	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		97216	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	14/10/11	06:19:00	16/10/11	18:12:00	962		-0.000035405	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		96483	Line 963 is a Transgrid line but is required out to allow Ausgrid to work on its own portion of line 962. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	15/10/11	06:39:00	15/10/11	15:44:00	963		-0.000005370	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		68617	Line 963 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	18/10/11	05:02:00	18/10/11	15:19:00	963		-0.000006080	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		97796	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1&2 330kV installation.	Request from Snowy Hydro.	19/10/11	07:05:00	21/10/11	15:07:00	U1		-0.000033129	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		97914	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	23/10/11	06:13:00	23/10/11	16:10:00	962		-0.000005883	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		98121	Line 962 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	1/11/11	05:38:00	1/11/11	15:10:00	962		-0.000005636	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		97630	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	2/11/11	07:29:00	2/11/11	17:16:00	L5		-0.000005784	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		98093	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	5/11/11	05:07:00	6/11/11	16:16:00	L3		-0.000020782	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		98809	Operator/Snowy Hydro advises - appears fault on Unit 2 caused trip of U1 T/L	Caused by fault on Snowy Hydro equipment	7/11/11	20:43:00	9/11/11	11:44:00	U1		-0.000023068	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-F-0370
		98928	Off Load for Essential Energy - Real time request - Log entry switching for emergency outage.	Caused by fault on Austgrid equipment	9/11/11	11:36:00	9/11/11	18:33:00	96F		-0.000004109	Exclusion 1.2 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2011-E-0031
		99060	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	12/11/11	07:08:00	12/11/11	16:23:00	L3		-0.000005469	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		99741	TL M11 isolated for work on direct connected SHL's Murray PS Units 11-12 330kV installation.	Request from Snowy Hydro.	15/11/11	12:44:00	15/11/11	15:51:00	M11		-0.000001843	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		99997	TL M11 isolated for work on direct connected SHL's Murray PS Units 11-12 330kV installation.	Request from Snowy Hydro.	21/11/11	06:32:00	21/11/11	15:46:00	M11		-0.000005459	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		99169	Line 963 is part Transgrid and Ausgrid owned. Line was isolated & earthed for pole replacement work by Ausgrid.	Request from Ausgrid.	21/11/11	06:35:00	21/11/11	13:02:00	963		-0.000003813	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		98098	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	21/11/11	06:37:00	24/11/11	14:22:00	U3		-0.000047151	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		99893	TL M5 isolated for work on direct connected SHL's Murray PS Units 5-6 330kV installation.	Request from Snowy Hydro.	21/11/11	06:52:00	22/11/11	14:07:00	M5		-0.000018476	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		98248	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3&4 330kV installation.	Request from Snowy Hydro.	1/12/11	05:01:00	2/12/11	13:06:00	U3		-0.000018969	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		100241	TL M9 isolated for work on direct connected SHL's Murray PS Units 9-10 330kV installation.	Request from Snowy Hydro.	6/12/11	06:53:00	7/12/11	14:34:00	M9		-0.000018732	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		100465	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	6/12/11	07:13:00	7/12/11	12:16:00	L5		-0.000017175	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		100816	TL L1 isolated for work on direct connected SHL's Lower Tumut PS Units 1&2 330kV installation.	Request from Snowy Hydro.	13/12/11	07:00:00	13/12/11	15:41:00	L1		-0.000005134	Exclusion 1.2 - 3rd Party Outage Requested by customer.	

		100823	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5&6 330kV installation.	Request from Snowy Hydro.	14/12/11	07:02:00	15/12/11	08:53:00	L5		-0.000015283	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
S2	Transformer availability	65236	Line 93B is Endeavour Energy owned and is directly connected to Transgrid's Tx1 at Liverpool substation. Line and TX were isolated & earthed for work by Endeavour Energy.	Request from Endeavour Energy.	9/03/11	19:11:00	11/03/11	16:57:00		Tx1 Liverpool	-0.000029769	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		10435	Line 93N is Endeavour Energy owned and is directly connected to Transgrid's Tx2 at Liverpool substation. Line and TX were isolated & earthed for work by Endeavour Energy.	Request from Endeavour Energy.	13/03/11	16:02:00	15/03/11	15:46:00		Tx2 Liverpool	-0.000031048	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		10666	Line 93R is Endeavour Energy owned and is directly connected to Transgrid's Tx3 at Liverpool substation. Line and TX were isolated & earthed for work by Endeavour Energy.	Request from Endeavour Energy.	22/03/11	04:59:00	23/03/11	14:56:00		Tx3 Liverpool	-0.000022083	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		92819	Delta Energy requested that its Station Transformer No.2 connected to the tertiary winding of TransGrid's No. 2 transformer be isolated.	Request from Delta Energy.	20/07/11	05:03:00	20/07/11	05:34:00		Tx2 Wallerawang	-0.000000336	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		92820	Delta Energy requested that its Station Transformer No.2 connected to the tertiary winding of TransGrid's No. 2 transformer be isolated.	Request from Delta Energy.	21/07/11	13:29:00	21/07/11	14:06:00		Tx2 Wallerawang	-0.000000401	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
S3	Reactive plant availability	62331	Rx2 is directly connected to the CB controlling Ausgrid's 9S2 Beaconsfield West - Haymarket UG Fdr which was requested isolated to allow work to be carried out on the feeder.	Request from Ausgrid.	27/01/2011	6:33	31/01/2011	19:09		Rx2 Beaconsfield West	-0.000094333	Exclusion 3.2 - 3rd Party Outage Requested by customer.	
		66281	Rx2 is directly connected to the CB controlling Ausgrid's 9S2 Beaconsfield West - Haymarket UG Fdr which was requested isolated to allow work to be carried out on the feeder.	Request from Ausgrid.	8/04/2011	18:49	8/04/2011	20:50		Rx2 Beaconsfield West	-0.000001752	Exclusion 3.2 - 3rd Party Outage Requested by customer.	
		69653	Rx2 is directly connected to the CB controlling Ausgrid's 9S2 Beaconsfield West - Haymarket UG Fdr which was requested isolated to allow work to be carried out on the feeder.	Request from Ausgrid.	2/06/11	14:33:00	22/07/11	16:45:00		Rx2 Beaconsfield West	-0.001044266	Exclusion 3.2 - 3rd Party Outage Requested by customer.	
		94252	Rx2 is directly connected to the CB controlling Ausgrid's 9S2 Beaconsfield West - Haymarket UG Fdr which was requested isolated to allow work to be carried out on the feeder.	Request from Ausgrid.	25/07/11	06:36:00	29/07/11	17:46:00		Rx2 Beaconsfield West	-0.000093088	Exclusion 3.2 - 3rd Party Outage Requested by customer.	
		95897	Rx2 is directly connected to the CB controlling Ausgrid's 9S2 Beaconsfield West - Haymarket UG Fdr which was requested isolated to allow work to be carried out on the feeder.	Request from Ausgrid.	22/08/11	06:13:00	26/08/11	19:00:00		Rx2 Beaconsfield West	-0.000094492	Exclusion 3.2 - 3rd Party Outage Requested by customer.	

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	Demand shed and time	Quantitative impact	Further references
Name of any loss of supply parameters	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	The (MW) demand shed and the duration it was shed for.	Impact of exclusion event on LOS Parameter	A TNSP may provide further details of an exclusion event. TNSP to provide reference.
S4 Loss of supply event frequency >0.05 system minutes	62355	Line 96X is part Transgrid and Ausgrid owned. Ausgrid advised that a pole was down in their 33kV system that under-crosses line 96X. 96X was isolated & earthed for repairs by Ausgrid.	Ausgrid advised that a pole was down in their 33kV system that under-crosses 96X FDR.	22/01/2011	23:59	23/01/2011	2:18	96X	14595	8MW for 139mins	1	Transgrid Forced & Emergency Outage Report 2011-F-0044
	67887	At 14:58hrs 96F Beresfield to Stroud 132 kV T/L tripped and locked out due to a pole collapse during a severe storm in the area. Load was interrupted due to voltage depression in council system (Approximately 19 MW at Port Macquarie and 29Mwatts at Taree). With the loss of this feeder coupled with the prior planned outage 96G Kempsey to Port Macquarie 132kV T/L resulted in the following incidents occurring:- - At 15:10:hrs Essential Energy's 862Taree to Kew 66kV feeder opened due to operation of the Taree LOLS scheme, interrupting 8MW. Load was restored via CE's system at 1519hrs. - At 15:13hrs Essential Energy's No.5 Taree to No.5 Council 33kV feeder and 7G2 Taree to Harrington 33kV feeder opened due to operation of the Taree LOLS scheme. Nil interruption. Returned to service at 15:43hrs. - At 15:20:27hrs Essential Energy's Taree to NO.1 Council and No.3 Council feeders opened due to operation of Taree LOLS scheme, interrupting 7MW. No.1 Council feeder returned to service at 1539hrs. No.3 Council feeder returned to service at 1539hrs. - At 0259hrs 96F Beresfield to Stroud 132 kV T/L was returned to service.	Line 96F is part Transgrid and Ausgrid owned. Ausgrid advised that due to a servere storm, a pole and line were down on their section of the line in the vicinity of Woodbury. This outage caused the Taree Line Overload Load Shed (LOLS) scheme to be activated which operated as intended.	1/03/2011	14:58	2/03/2011	2:59	96F	14595	19MW at Port Macquarie & 29MW at Taree for 721mins	1	Transgrid Forced & Emergency Outage Report 2011-F-0102 E2011/09795 E2011/09796 E2011/09797 E2011/09798 E2011/09799 D2011/14864
S5 Loss of supply event frequency >0.25 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)	Further references
Name of any average outage duration parameters	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	Impact of exclusion event on AOD Parameter	Impact of capped exclusion event on AOD parameter	A TNSP may provide further details of an exclusion event. TNSP to provide reference.
S6 Average outage duration	62355	Line 96X is part Transgrid and Ausgrid owned. Ausgrid advised that a pole was down in their 33kV system that under-crosses line 96X. 96X was isolated & earthed for repairs by Ausgrid.	Ausgrid advised that a pole was down in their 33kV system that under-crosses 96X FDR.	22/01/2011	23:59	23/01/2011	2:18	96X	2:19	Nil	Transgrid Forced & Emergency Outage Report 2011-F-0044
	63520	SPI/Ausnet transmission line V3 Wodonga - Dederang tripped. At the same time Transgrid's transmission line 060 Jindera - Wodonga tripped at Jindera only. SCADA indicated T/L 060 closed at Wodonga but T/L not energised. Observed CBs V32A & V32B closing at Dederang, thus restoring Wodonga load and energising T/L 060. Checked with SPI/Ausnet who advised was given clearance to return to service T/L V3 by AEMO. Clearance obtained from NCM to place T/L 060 on load at Jindera. Storms in area at time of incident. Investigation found that a blocking signal was not sent from SPI/Ausnet protection system to prevent T/L O60 Zone 2 protection from operating.	Transmission line O60 Zone 2 protection system detected a fault in SPI/Ausnet transmission line V3 Wodonga - Dederang and SPI/Ausnet protection did not send a blocking signal to preventT/L O60 from tripping.	4/02/2011	20:30	4/02/2011	20:34	O60	0:04	Nil	Transgrid Forced & Emergency Outage Report 2011-F-0068
	67887	At 14:58hrs 96F Beresfield to Stroud 132 kV T/L tripped and locked out due to a pole collapse during a severe storm in the area. Load was interrupted due to voltage depression in council system (Approximately 19 MW at Port Macquarie and 29Mwatts at Taree). With the loss of this feeder coupled with the prior planned outage 96G Kempsey to Port Macquarie 132kV T/L resulted in the following incidents occurring:- - At 15:10:hrs Essential Energy's 862Taree to Kew 66kV feeder opened due to operation of the Taree LOLS scheme, interrupting 8MW. Load was restored via CE's system at 1519hrs. - At 15:13hrs Essential Energy's No.5 Taree to No.5 Council 33kV feeder and 7G2 Taree to Harrington 33kV feeder opened due to operation of the Taree LOLS scheme. Nil interruption. Returned to service at 15:43hrs. - At 15:20:27hrs Essential Energy's Taree to NO.1 Council and No.3 Council feeders opened due to operation of Taree LOLS scheme, interrupting 7MW. No.1 Council feeder returned to service at 1539hrs. No.3 Council feeder returned to service at 1539hrs. - At 0259hrs 96F Beresfield to Stroud 132 kV T/L was returned to service.	Line 96F is part Transgrid and Ausgrid owned. Ausgrid advised that due to a servere storm, a pole and line were down on their section of the line in the vicinity of Woodbury. This outage caused the Taree Line Overload Load Shed (LOLS) scheme to be activated which operated as intended.	1/03/2011	14:58	2/03/2011	2:59	96F	12:01	Nil	Transgrid Forced & Emergency Outage Report 2011-F-0102 E2011/09795 E2011/09796 E2011/09797 E2011/09798 E2011/09799 D2011/14864
	69001	Reactor had a major internal failure and will be replaced.	A long time lag is involved in obtaining a replacement.	27/01/2011	6:33	1/01/2012	0:00	RX 2 Armidale	8129:27	168.000	Transgrid Forced & Emergency Outage Report 2011-F-0113 Still out
	91613	Ausgrid & Transgrid patrols found no faults initially. Feeder tripped on attempted energising. Faulty insulator string eventually found in Ausgrid system.	Caused by fault on Ausgrid equipment	28/06/2011	17:07	29/06/2011	17:34	963	24:27	Nil	Transgrid Forced & Emergency Outage Report 2011-F-0219
	69551	Fault in Ausgrid's portion of the system. Protection advised about 21.7km.	Caused by fault on Ausgrid equipment	24/05/2011	18:23	24/05/2011	18:24	963	0:01	Nil	Transgrid Forced & Emergency Outage Report 2011-F-0189
	98809	Operator/Snowy Hydro advises - appears fault on Unit 2 caused trip of U1 T/L	Caused by fault on Snowy Hydro equipment	7/11/2011	20:43	9/11/2011	11:44	U1	39:01	Nil	Transgrid Forced & Emergency Outage Report 2011-F-0370
	98928	Off Load for Essential Energy - Real time request - Log entry switching for emergency outage.	Caused by fault on Essential Energy equipment	9/11/2011	11:36	9/11/2011	18:33	96F	6:57	Nil	Transgrid Forced & Emergency Outage Report 2011-E-0031
	98909 98952	Conductors were not connected to Capacitor No.1 Current Transformers between the CTs and Earth Switch 3810. During a storm the conductors flashed over causing both of Forbe's 66kV busbars to trip.	A time lag developed due to the repair of equipment.	8/11/2011	11:08	2/12/2011	13:41	C 1 Forbes	578:33	168.000	Transgrid Forced & Emergency Outage Report 2011-F-0372/2

NOTE:

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 measure 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.

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%	99.60%
Weighting	-0.20%	-0.20%	0.00%	0.20%	0.20%

Performance Formulae		Formulae					Conditions				S- Calc 1	S- Calc 2
Performance	=	-0.002000							Availability	<	-0.002000	-0.002000
	=	0.952381	x	Availability	+	-0.945333	99.05%	≤	Availability	≤	-0.005270	-0.002739
	=	2.000000	x	Availability	+	-1.985200	99.26%	≤	Availability	≤	-0.011067	-0.005752
	=	0.002000					99.36%	<	Availability		0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission line availability	=	98.706633%	98.972400%
S-Factor	=	-0.200000%	-0.200000%

NOTE:

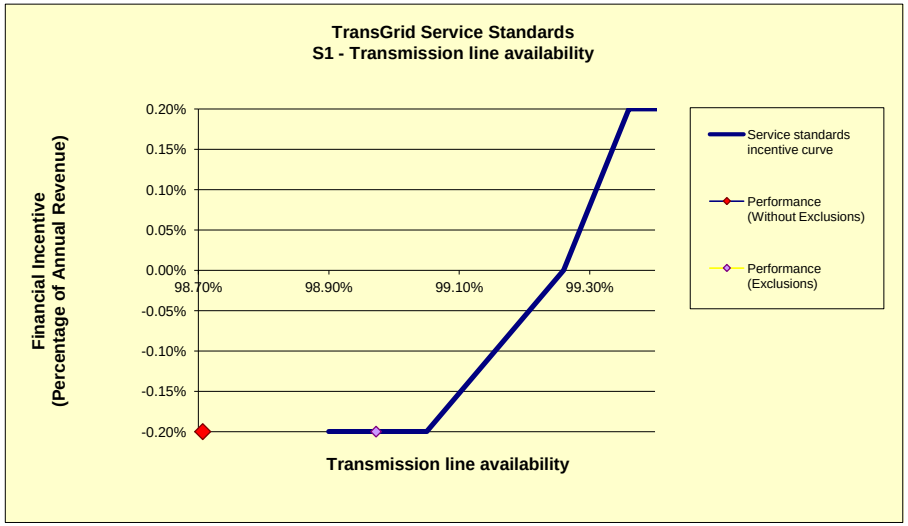
This sheet will automatically update based on data in input sheets

Blue cells show the TNSP's performance targets and weightings

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

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

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



TransGrid - S2 - Transformer availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transformer availability	97.10%	97.33%	98.61%	98.89%	99.10%
Weighting	-0.15%	-0.15%	0.00%	0.15%	0.15%

Performance Formulae		Formulae					Conditions					S- Calc 1	S- Calc 2
Performance	=	-0.001500					When:		Availability	<	97.33%	-0.001500	-0.001500
	=	0.117188	x	Availability	+	-0.115559	97.33%	≤	Availability	≤	98.61%	-0.000196	-0.000186
	=	0.535714	x	Availability	+	-0.528268	98.61%	≤	Availability	≤	98.89%	-0.000895	-0.000850
	=	0.001500					98.89%	<	Availability			0.001500	0.001500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transformer availability	=	98.442893%	98.451257%
S-Factor	=	-0.019583%	-0.018603%

NOTE:

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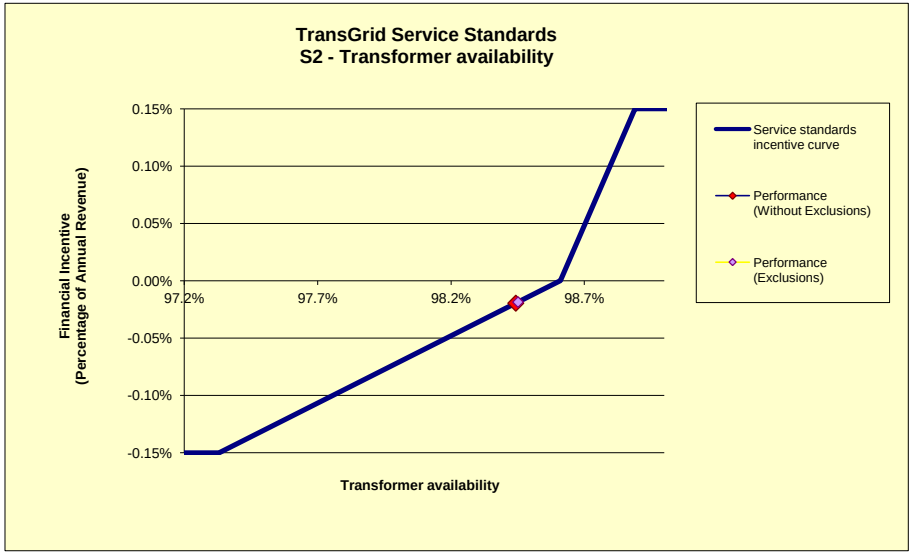

TransGrid - S3 - Reactive plant availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Reactive plant availability	98.50%	98.65%	99.12%	99.33%	99.50%
Weighting	-0.10%	-0.10%	0.00%	0.10%	0.10%

Performance Formulae		Formulae					Conditions					S- Calc 1	S- Calc 2
Performance	=	-0.001000					When:		Availability	<	98.65%	-0.001000	-0.001000
	=	0.212766	x	Availability	+	-0.210894	98.65%	≤	Availability	≤	99.12%	-0.006215	-0.005932
	=	0.476190	x	Availability	+	-0.472000	99.12%	≤	Availability	≤	99.33%	-0.013909	-0.013277
	=	0.001000					99.33%	<	Availability			0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reactive plant availability	=	96.199044%	96.331837%
S-Factor	=	-0.100000%	-0.100000%

NOTE:

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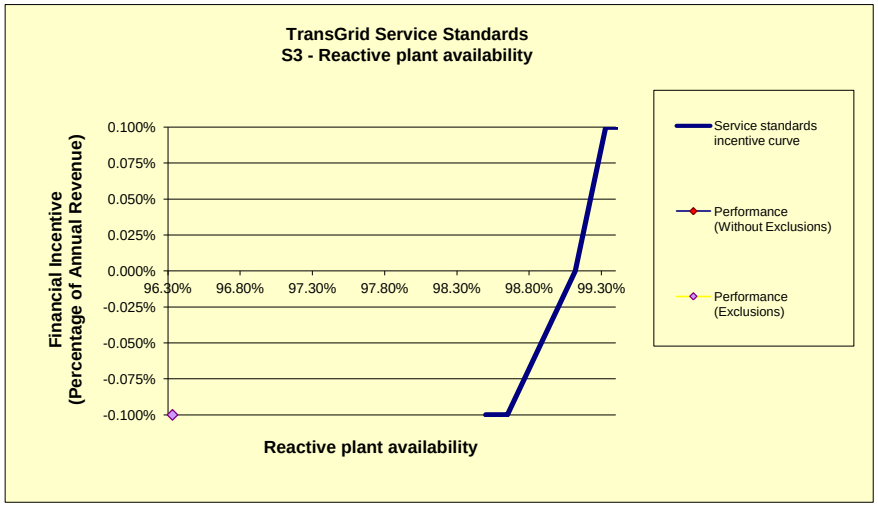
Orange cells show the TNSP's performance outcomes with events excluded from performance data



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	9	7	4	2	-1
Weighting	-0.250%	-0.250%	0.00%	0.250%	0.250%

Performance Formulae		Formulae					Conditions					S- Calc 1	S- Calc 2
Performance	=	-0.002500					7	<	No. of events			-0.002500	-0.002500
	=	-0.000833	x	No. of events	+	0.003333	4	≤	No. of events	≤	7	-0.000833	0.000833
	=	-0.001250	x	No. of events	+	0.005000	2	≤	No. of events	≤	4	-0.001250	0.001250
	=	0.002500							No. of events	<	2	0.002500	0.002500

Loss of supply event frequency >0.05 system minutes	=	Performance (Without Exclusions)	Performance (Exclusions)
Loss of supply event frequency >0.05 system minutes	=	5	3
S-Factor		-0.083333%	0.125000%

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

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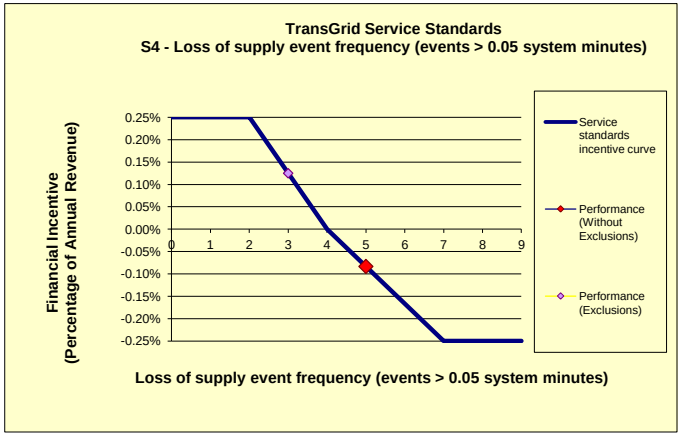
Pink cells show the TNSP's performance outcomes without any events excluded from performance data

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



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	4	2	1	0	0
Weighting	-0.10%	-0.100%	0.00%	0.100%	0.10%

Performance Formulae		Formulae					Conditions					S- Calc 1	S- Calc 2
Performance	=	-0.001000					2	<	No. of events			-0.001000	-0.001000
	=	-0.001000	x	No. of events	+	0.001000	1	≤	No. of events	≤	2	0.001000	0.001000
	=	-0.001000	x	No. of events	+	0.001000	0	≤	No. of events	≤	1	0.001000	0.001000
	=	0.001000							No. of events	=	0	0.001000	0.001000

Loss of supply event frequency >0.25 system minutes	=	Performance (Without Exclusions)	Performance (Exclusions)
Loss of supply event frequency >0.25 system minutes	=	0	0
S-Factor		0.100000%	0.100000%

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

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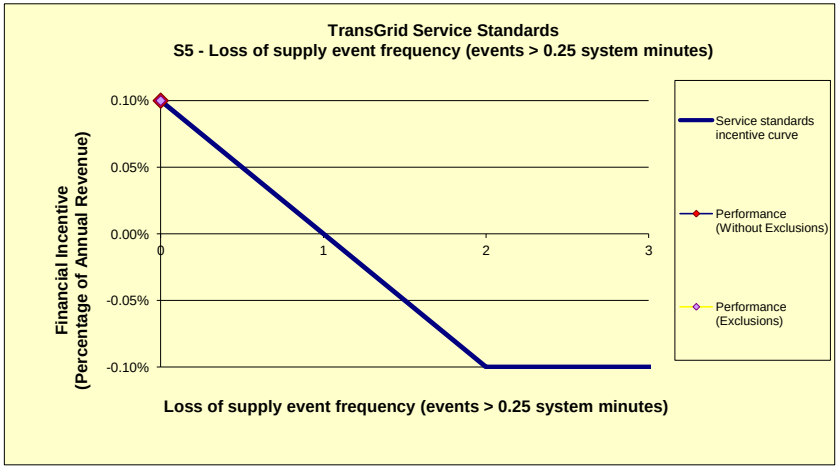
Yellow/Green cells show the TNSP's performance formulae and related formula conditions based on performance targets and weightings

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

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



TransGrid - S6 - Average outage duration

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Average outage duration	1,199	999	824	649	-
Weighting	-0.20%	-0.200%	0.00%	0.200%	0.20%

Performance Formulae		Formulae					Conditions					S- Calc 1	S- Calc 2
Performance	=	-0.002000					999	<	Duration			-0.002000	-0.002000
	=	-0.000011	x	Duration	+	0.009417	824	≤	Duration	≤	999	-0.000443	-0.000455
	=	-0.000011	x	Duration	+	0.009417	649	≤	Duration	≤	824	-0.000443	-0.000455
	=	0.002000							Duration	<	649	0.002000	0.002000

Average outage duration	=	Performance (Without Exclusions)	Performance (Exclusions)
Average outage duration	=	862.723811	863.843591
S-Factor		-0.044256%	-0.045536%

NOTE:

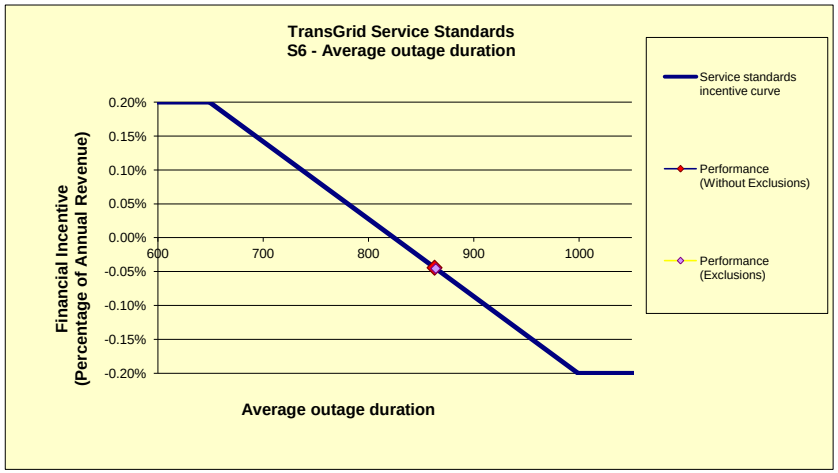
This sheet will automatically update based on data in input sheets

Blue cells show the TNSP's performance targets and weightings

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

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

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



TransGrid - Revenue Calculation

Revenue cap information	
Base year allowed revenue	$678,400,000
Base year	2009-10
X-factor	-5.61%
Commencement of regulatory period	1-Jul-09

Annual revenue adjusted for CPI	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14
CPI	166.2	171.0	176.7	-	-	-

Nominal annual revenue	2009-10	2010-11	2011-12	2012-13	2013-14
Allowed Revenue	$678,400,000	$737,150,175	$804,454,443		

Calendar year revenue	2009	2010	2011	2012	2013	2014
Revenue	$339,200,000	$707,775,087	$770,802,309			

NOTE:

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

Grey cells show calendar year revenue

Green cells are for formula

TransGrid - Performance outcomes

Revenue calendar year	*$770,802,309*

S	*Performance parameter*	Target	Performance without exclusions			Performance with exclusions			Impact of exclusions
			Performance	S-Factor	Final Incentive	Performance	S-Factor	Final Incentive	
S1	Transmission line availability	99.26%	98.706633%	-0.200000%	-$1,541,605	98.972400%	-0.200000%	-$1,541,605	0.000000%
S2	Transformer availability	98.61%	98.442893%	-0.019583%	-$150,945	98.451257%	-0.018603%	-$143,390	0.000980%
S3	Reactive plant availability	99.12%	96.199044%	-0.100000%	-$770,802	96.331837%	-0.100000%	-$770,802	0.000000%
S4	Loss of supply event frequency >0.05 system minutes	4	5	-0.083333%	-$642,335	3	0.125000%	$963,503	0.208333%
S5	Loss of supply event frequency >0.25 system minutes	1	0	0.100000%	$770,802	0	0.100000%	$770,802	0.000000%
S6	Average outage duration	824	863	-0.044256%	-$341,125	864	-0.045536%	-$350,989	-0.001280%
	TOTALS			-0.347172%	-$2,676,010		-0.139138%	-$1,072,481	0.208034%

NOTE:

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

Grey cell shows relevant calendar year revenue

Green cells show performance measure 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	-0.139138%
Financial Incentive	-$1,072,481
Financial year affected by financial incentive	2012/13

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.		Service Target Performance Incentive Scheme (March 2008) p. 32
1.2	3rd party outage	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).	Service Target Performance Incentive Scheme (March 2008) p. 32
1.3	Outages to control fault levels	Outages to control voltages within required limits, both as directed by AEMO and where AEMO 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
1.4	Force majeure events	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 32
1.5	Transient interruptions less than one (1) minute		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)	Service Target Performance Incentive Scheme (March 2008) p. 33
1.7	Underground cable damaged by an external party	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. 33
	Parameter 2- Transformer Availability		
	Defined exclusions	**Further description of exclusion**	**Reference**
2.1	Outages on assets that are not providing prescribed transmission services.		Service Target Performance Incentive Scheme (March 2008) p. 32
2.2	3rd party outage	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).	Service Target Performance Incentive Scheme (March 2008) p. 32
2.3	Outages to control fault levels	Outages to control voltages within required limits, both as directed by AEMO and where AEMO 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
2.4	Force majeure events	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 32
2.5	Transient interruptions less than one (1) minute		Service Target Performance Incentive Scheme (March 2008) p. 32
2.6	Auxiliary transformers		
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	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. 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.		Service Target Performance Incentive Scheme (March 2008) p. 32
3.2	3rd party outage	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).	Service Target Performance Incentive Scheme (March 2008) p. 32
3.3	Outages to control fault levels	Outages to control voltages within required limits, both as directed by AEMO and where AEMO 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
3.4	Force majeure events	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	Service Target Performance Incentive Scheme (March 2008) p. 32
3.5	Transient interruptions less than one (1) minute		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)		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 the Force Majeure definition worksheet and 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)		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 the Force Majeure definition worksheet and 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		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	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2008) p. 51	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 AEMO direction		Service Target Performance Incentive Scheme (March 2008) p. 35
6.5	Outages for capacitor banks and reactors operating at less than 66kV		Service Target Performance Incentive Scheme (March 2008) p. 35

Service Target Perfomance Incentive Scheme - Definition of Forece Majeure

Definition of Force Majeure	Reference
For the purpose of applying the *service target performance incentive scheme* , force majeure events means any event, act or circumstance or combination of events, acts and circumstances which (despite the observance of good electricity industry practice) is beyond the reasonable control of the part affected by any such event, which may include, without limitation, the following: - fire, lightning, explosion, flood, earthquake, storm, cyclone, action of the elements, riots, civil commotion, malicious damage, natural disaster, sabotage, act of a public enemy, act of God, war (declared or undeclared), blockage, revolution, radioactive contamination, toxic or dangerous chemical contamination or fore of nature. - action or inaction by a court, government agency (including denial, refusal or failure to grant any authorisation, despite timely best endeavour to obtain same) - strikes, lockouts, industrial and/or labour disputes and/or difficulties, work bans, blockades, picketing - acts or omissions (other than failure to pay money) of a party other than the TNSP, which party either is connected to or uses the high voltage grid or is directly connected to or uses a system for the supply of electricity that in turn is connected to the high voltage grid - where those acts or omissions affect the ability of the TNSP to perform its obligation under the service standard by virtue of that direct or indirect connection to or use of the high voltage grid In determining what force majeure events should be excluded the AER will consider the following: - was the event unforeseeable and its impact extraordinary, uncontrollable and not manageable? - does the event occur frequently? If so, how did the impact of the particular event differ? - could the TNSP, in practice, have prevented the impact (not necessarily the event itself)? - could the TNSP have effectively reduced the impact of the event by adopting better practices?	Service Target Performance Incentive Scheme (January 2007) p. 31