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 - 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.
	101709	Line 96Y is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	4/01/12	06:46:00	4/01/12	0/01/00	96Y		-0.0002227%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	101706	TL M1 isolated for work on direct connected SHL's Murray PS Units 1-2 330kV installation.	Request from Snowy Hydro.	10/01/12	06:31:00	11/01/12	0/01/00	M1		-0.0018779%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	101977	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Verbal request from Snowy Hydro.	10/01/12	11:13:00	10/01/12	0/01/00	97L		-0.0002554%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	Package38460 RFA 2012-200
	102206	SHL advise work being carried out on No.2 Pump at Jindabyne Pumping Station and Intertrip inadvertently initiated on 97L Guthega protection.	Intertrip sent by SHL installation.	19/01/12	08:00:00	19/01/12	0/01/00	97L		-0.0001296%	Exclusion 1.2 - 3rd Party Outage Caused by customer.	Transgrid Forced & Emergency Outage Report 2012-F-0046
	102313	TL M11 isolated for work on direct connected SHL's Murray PS Units 11-12 330kV installation.	Request from Snowy Hydro.	25/01/12	06:28:00	25/01/12	0/01/00	M11		-0.0003245%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	100362	Line 963 is part TransGrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	5/02/12	09:10:00	5/02/12	0/01/00	963		-0.0002112%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	102956	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	8/02/12	06:39:00	8/02/12	0/01/00	97L		-0.0004311%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	102988	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	10/02/12	13:01:00	13/02/12	0/01/00	L3		-0.0039268%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	101708	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	11/02/12	07:27:00	11/02/12	0/01/00	U3		-0.0004445%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	103159	TL 97L isolated for work on direct connected SHL's Jindabyne PS 132kV installation.	Request from Snowy Hydro.	13/02/12	12:09:00	13/02/12	0/01/00	97L		-0.0001123%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	103929	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	25/02/12	05:19:00	26/02/12	0/01/00	U1		-0.0020613%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	103931	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	25/02/12	05:44:00	27/02/12	0/01/00	U3		-0.0034045%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	104477	TL L1 isolated for work on direct connected SHL's Lower Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	2/03/12	12:24:00	3/03/12	0/01/00	L1		-0.0013153%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	105696	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	14/03/12	05:44:00	15/03/12	0/01/00	U1		-0.0018683%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	105777	Line 96Y is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	17/03/12	05:15:00	17/03/12	0/01/00	96Y		-0.0003197%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	105881	Black start test at Murray	Request from Snowy Hydro.	17/03/12	07:47:00	17/03/12	0/01/00	97L		-0.0002727%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	105888	Black start test at Murray	Request from Snowy Hydro.	17/03/12	08:45:00	17/03/12	0/01/00	M1		-0.0001882%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	106748	Black start test at Murray	Request from Snowy Hydro.	17/03/12	08:45:00	17/03/12	0/01/00	96G		-0.0001882%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	105861	Black start test at Murray	Request from Snowy Hydro.	18/03/12	06:41:00	18/03/12	0/01/00	M3		-0.0004071%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	105952	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	21/03/12	05:01:00	22/03/12	0/01/00	U1		-0.0015822%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	106142	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	31/03/12	04:57:00	1/04/12	0/01/00	U1		-0.0020997%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	106143	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5-6 330kV installation.	Request from Snowy Hydro.	1/04/12	09:47:00	5/05/12	0/01/00	U5		-0.0472731%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	106821	Blackstart Test of Colongra & Vales Point	Request from Delta Electricity	13/04/12	10:19:00	13/04/12	0/01/00	23		-0.0005837%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107606	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	21/04/12	06:03:00	21/04/12	0/01/00	U1		-0.0006701%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107681	TransGrid received an intertrip initiated from SHL's Lower Tumut PS Units 5-6 330kV installation. SML then advised it wished the installation be kept isolated to carry out investigation work	Intertrip sent by SHL installation.	24/04/12	03:32:00	26/04/12	0/01/00	L5		-0.0026911%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107855	Black start test at Murray	Request from Snowy Hydro.	28/04/12	07:04:00	28/04/12	0/01/00	M1		-0.0003293%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107884	Black start test at Murray	Request from Snowy Hydro.	28/04/12	07:04:00	28/04/12	0/01/00	M7		-0.0003552%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107260	Black start test at Murray	Request from Snowy Hydro.	28/04/12	07:04:00	28/04/12	0/01/00	M13		-0.0003552%	Exclusion 1.2 - 3rd Party Outage Caused by customer.	Transgrid Forced & Emergency Outage Report 2012-F-0228
	107857	Black start test at Murray	Request from Snowy Hydro.	28/04/12	09:16:00	28/04/12	0/01/00	97L		-0.0002055%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107980	Black start test at Murray	Request from Snowy Hydro.	28/04/12	09:16:00	28/04/12	0/01/00	97G		-0.0002055%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
	107968	TL L1 isolated for work on direct connected SHL's Lower Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	5/05/12	07:32:00	8/05/12	0/01/00	L1		-0.0043982%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	

		108032	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	19/05/12	06:07:00	20/05/12	0/01/00	U1		-0.0017464%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		108036	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	26/05/12	06:23:00	28/05/12	0/01/00	U1		-0.0033901%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		110227	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	2/06/12	07:29:00	3/06/12	0/01/00	U1		-0.0017320%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111106	Guthega substation 132kV Busbars 1 & 2 isolated for CVT synchronising checks by SHL. Transgrid staff required to isolate at Guthega 132kV S/S. This required that TL 979 Guthega - Munyang be isolated.	Request from Snowy Hydro.	12/06/12	15:24:00	12/06/12	0/01/00	979		-0.0001162%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111331	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	16/06/12	06:58:00	17/06/12	0/01/00	U1		-0.0015266%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111622	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	23/06/12	06:41:00	24/06/12	0/01/00	U1		-0.0018155%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111091	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	24/06/12	07:10:00	24/06/12	0/01/00	U3		-0.0004052%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111374	Line 932 is part Transgrid and Endevour Energy owned. Line was isolated & earthed for work by Endevour Energy.	Request from Endevour Energy.	26/06/12	10:03:00	26/06/12	0/01/00	932		-0.0004704%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111598	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5-6 330kV installation.	Request from Snowy Hydro.	27/06/12	07:33:00	27/06/12	0/01/00	U5		-0.0005377%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111056	Line 96F is part Transgrid and Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	30/06/12	06:19:00	30/06/12	0/01/00	96F		-0.0003802%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		112031	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	7/07/12	07:39:00	7/07/12	0/01/00	U1		-0.0003130%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		113035	Advised by SHL that an earth fault caused by a fault in the recorder connected to the 11kV earth fault protection at Jindabyne sent an intertrip signal to TransGrid at Guthega. Recorder disconnected and Line returned to service.	Intertrip sent by SHL installation.	11/07/12	16:21:00	11/07/12	0/01/00	97L		-0.0000509%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		113189	Advised by SHL that an earth fault caused by a fault in the recorder connected to the 11kV earth fault protection at Jindabyne sent an intertrip signal to TransGrid at Guthega. Recorder disconnected and Line returned to service.	Intertrip sent by SHL installation.	11/07/12	17:14:00	11/07/12	0/01/00	97L		-0.0000605%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		112332	Line 96P is part Transgrid and Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	14/07/12	06:39:00	14/07/12	0/01/00	96P		-0.0003264%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		113188	Line 939 is part Transgrid and Endevour Energy owned. Line was isolated & earthed for work by Endevour Energy.	Request from Endevour Energy.	26/07/12	07:55:00	26/07/12	0/01/00	939		-0.0006961%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		112742	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	26/07/12	20:05:00	29/07/12	0/01/00	U1		-0.0039085%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		112333	Line 96F is part Transgrid and Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	28/07/12	06:31:00	28/07/12	0/01/00	96F		-0.0003034%	Exclusion 1.2 - 3rd Party Outage Caused by customer.	Transgrid Forced & Emergency Outage Report 2012-F-0295
		114405	Guthega substation 132kV Busbars 1 & 2 isolated for protection checks by SHL. Transgrid staff required to isolate at Guthega 132kV S/S. This required that TL 979 Guthega - Munyang be isolated.	Request from Snowy Hydro.	31/07/12	08:39:00	31/07/12	0/01/00	979		-0.0006673%	Exclusion 1.2 - 3rd Party Outage Caused by customer.	Transgrid Forced & Emergency Outage Report 2012-F-0303
		114406	Guthega substation 132kV Busbars 1 & 2 isolated for protection checks by SHL. Transgrid staff required to isolate at Guthega 132kV S/S. This required that TL 97L Guthega - Jindabyne be isolated.	Request from Snowy Hydro.	31/07/12	08:39:00	31/07/12	0/01/00	97L		-0.0006673%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		111706	TL M11 isolated for work on direct connected SHL's Murray PS Units 11-12 330kV installation.	Request from Snowy Hydro.	4/08/12	07:14:00	4/08/12	0/01/00	M11		-0.0006404%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
S1	**Transmission line availability**	114335	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	4/08/12	07:45:00	6/08/12	0/01/00	U1		-0.0032826%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		114950	TL M1 isolated for work on direct connected SHL's Murray PS Units 1-2 330kV installation.	Request from Snowy Hydro.	13/08/12	08:00:00	23/08/12	0/01/00	M1		-0.0143438%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	

		116358	TL M7 isolated for work on direct connected SHL's Murray PS Units 7-8 330kV installation.	Request from Snowy Hydro.	25/08/12	07:59:00	26/08/12	0/01/00	M7		-0.0018655%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		116086	Line 2M is Transgrid owned and is adjacent to Ausgrid owned line 957 which was being worked on. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	31/08/12	08:02:00	31/08/12	0/01/00	2M		-0.0004848%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		116087	Line 2M is Transgrid owned and is adjacent to Ausgrid owned line 957 which was being worked on. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	1/09/12	07:58:00	1/09/12	0/01/00	2M		-0.0004455%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		116290	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	3/09/12	07:13:00	3/09/12	0/01/00	96F		-0.0005501%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		117120	Guthega substation 132kV Busbars 1 & 2 isolated for protection checks by SHL. Transgrid staff required to isolate at Guthega 132kV S/S. This required that TL 97L Guthega - Jindabyne be isolated.	Request from Snowy Hydro.	10/09/12	08:30:00	10/09/12	0/01/00	97L		-0.0006404%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		117119	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	14/09/12	07:08:00	18/09/12	0/01/00	L3		-0.0060544%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		118120	Units 7-8 CCP intertrip received by TransGrid, Units 7-8 trip relay operated. SHL advised, cause of trip over temperature on generator transformer.	Intertrip sent by SHL installation. Repair period extended by SHL.	15/09/12	15:54:00	14/11/12	0/01/00	M7		-0.0828494%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		118199	The tee from Line 947 Orange North T Wellington T Burrendong is Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	18/09/12	08:33:00	18/09/12	0/01/00	947		-0.0000336%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		106440	Line 963 is part Transgrid and Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	19/09/12	06:46:00	19/09/12	0/01/00	963		-0.0006164%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		118375	The tee from Line 947 Orange North T Wellington T Burrendong is Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	20/09/12	08:54:00	20/09/12	0/01/00	947		-0.0000442%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		118119	TL L3 isolated for work on direct connected SHL's Lower Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	20/09/12	14:35:00	21/09/12	0/01/00	L3		-0.0015803%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		117830	Line 963 is part Transgrid and Essential Energy owned. Line was isolated & earthed for work by Essential Energy.	Request from Essential Energy.	21/09/12	09:48:00	21/09/12	0/01/00	963		-0.0001517%	Exclusion 1.2 - 3rd Party Outage Caused by customer.	Transgrid Forced & Emergency Outage Report 2012-F-0379
		117365	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	22/09/12	07:06:00	23/09/12	0/01/00	U1		-0.0016744%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		118694	TL L5 isolated for work on direct connected SHL's Lower Tumut PS Units 5-7 330kV installation.	Request from Snowy Hydro.	5/10/12	07:42:00	9/10/12	0/01/00	L5		-0.0059276%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		118326	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	6/10/12	07:19:00	7/10/12	0/01/00	U1		-0.0019384%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		119697	No.1 Transformer failed explosively at Hume Power Station. 995 Hume - Albury 132kV TL taken out of service at Albury to allow Fire Brigade access at Hume Power Station and repair to equipment.	Request from Eraring Energy. Period extended by need for access to repair.	14/10/12	15:13:00	20/12/12	0/01/00	995		-0.0928008%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		119804	TL M5 isolated for work on direct connected SHL's Murray PS Units 5-6 330kV installation.	Request from Snowy Hydro.	20/10/12	06:07:00	21/10/12	0/01/00	M5		-0.0018885%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		119773	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	20/10/12	06:42:00	20/10/12	0/01/00	96F		-0.0005588%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		119979	TL M11 isolated for work on direct connected SHL's Murray PS Units 9-10 330kV installation.	Request from Snowy Hydro.	21/10/12	07:39:00	21/10/12	0/01/00	M5		-0.0002477%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		119980	TL M5 isolated for work on direct connected SHL's Murray PS Units 5-6 330kV installation.	Request from Snowy Hydro.	21/10/12	07:39:00	21/10/12	0/01/00	M9		-0.0002477%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		119462	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	27/10/12	06:04:00	28/10/12	0/01/00	U1		-0.0018415%	Exclusion 1.2 - 3rd Party Outage Caused by customer.	Transgrid Forced & Emergency Outage Report 2012-E-0027
		120377	TL M9 isolated for work on direct connected SHL's Murray PS Units 9-10 330kV installation.	Request from Snowy Hydro.	1/11/12	06:37:00	2/11/12	0/01/00	M9		-0.0018568%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		120978	TL M5 isolated for work on direct connected SHL's Murray PS Units 5-6 330kV installation.	Request from Snowy Hydro.	2/11/12	06:06:00	2/11/12	0/01/00	M5		-0.0003408%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		120979	TL M9 isolated for work on direct connected SHL's Murray PS Units 9-10 330kV installation.	Request from Snowy Hydro.	2/11/12	06:06:00	2/11/12	0/01/00	M9		-0.0003408%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	

		120461	TL M13 isolated for work on direct connected SHL's Murray PS Units 13-14 330kV installation.	Request from Snowy Hydro.	3/11/12	06:24:00	4/11/12	0/01/00	M13		-0.0014881%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121072	TL M13 isolated for work on direct connected SHL's Murray PS Units 13-14 330kV installation.	Request from Snowy Hydro.	4/11/12	06:41:00	4/11/12	0/01/00	M9		-0.0003284%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121073	TL M5 isolated for work on direct connected SHL's Murray PS Units 5-6 330kV installation.	Request from Snowy Hydro.	4/11/12	06:41:00	4/11/12	0/01/00	M5		-0.0003284%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		120202	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	6/11/12	05:12:00	6/11/12	0/01/00	96F		-0.0006596%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		120291	Line 96F is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	7/11/12	05:18:00	7/11/12	0/01/00	96F		-0.0007537%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		120834	TL L1 isolated for work on direct connected SHL's Lower Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	8/11/12	06:36:00	12/11/12	0/01/00	L1		-0.0061062%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		38709	132kV Bus Equipment Jindabyne Pumping Station. Transgrid requested to isolate and earth the 97L JPS 132kV line at Guthega.	Request from Snowy Hydro.	8/11/12	07:09:00	9/11/12	0/01/00	97L		-0.0017330%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		112482	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	17/11/12	06:05:00	18/11/12	0/01/00	U1		-0.0018981%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121542	TL U1 isolated for work on direct connected SHL's Upper Tumut PS Units 1-2 330kV installation.	Request from Snowy Hydro.	23/11/12	06:19:00	26/11/12	0/01/00	U1		-0.0048360%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121547	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	24/11/12	06:34:00	25/11/12	0/01/00	U3		-0.0019135%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121995	TL M1 isolated for work on direct connected SHL's Murray PS Units 1-2 330kV installation.	Request from Snowy Hydro.	24/11/12	10:40:00	26/11/12	0/01/00	M1		-0.0029859%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121801	Line 250 is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	25/11/12	14:43:00	30/11/12	0/01/00	250		-0.0070788%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121622	TL M7 isolated for work on direct connected SHL's Murray PS Units 7-8 330kV installation.	Request from Snowy Hydro.	29/11/12	06:57:00	4/12/12	0/01/00	M7		-0.0073764%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		122775	Line 250 is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	1/12/12	15:57:00	5/12/12	0/01/00	250		-0.0056137%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		122461	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5-6 330kV installation.	Request from Snowy Hydro.	2/12/12	06:27:00	7/12/12	0/01/00	U5		-0.0072823%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		121932	132kV Bus Equipment Jindabyne Pumping Station. Transgrid requested to isolate and earth the 97L JPS 132kV line at Guthega.	Request from Snowy Hydro.	6/12/12	07:52:00	7/12/12	0/01/00	97L		-0.0017224%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		122493	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	8/12/12	07:36:00	9/12/12	0/01/00	U3		-0.0015429%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		122544	Line 250 is part Transgrid and Ausgrid owned. Line was isolated & earthed for work by Ausgrid.	Request from Ausgrid.	9/12/12	13:44:00	21/12/12	0/01/00	250		-0.0166980%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		123297	TL M13 isolated for work on direct connected SHL's Murray PS Units 13-14 330kV installation.	Request from Snowy Hydro.	10/12/12	07:10:00	11/12/12	0/01/00	M13		-0.0018760%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	Verbal follow on from outage 121801
		118532	TL U5 isolated for work on direct connected SHL's Upper Tumut PS Units 5-6 330kV installation.	Request from Snowy Hydro.	14/12/12	08:19:00	16/12/12	0/01/00	U5		-0.0031693%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		123620	TL U3 isolated for work on direct connected SHL's Upper Tumut PS Units 3-4 330kV installation.	Request from Snowy Hydro.	15/12/12	05:32:00	16/12/12	0/01/00	U3		-0.0016859%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		124122	TL M7 isolated for work on direct connected SHL's Murray PS Units 7-8 330kV installation.	Request from Snowy Hydro.	18/12/12	07:02:00	18/12/12	0/01/00	M7		-0.0002631%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
		123803	TL 97G isolated for clearance to allow SHL to work on their optical cable installation. Access to the tower only to attach optical fibre to the tower.	Request from Snowy Hydro.	18/12/12	09:32:00	18/12/12	0/01/00	97G		-0.0003524%	Exclusion 1.2 - 3rd Party Outage Requested by customer.	
S2	**Transformer availability**	106746	Black start test at Murray	Request from Snowy Hydro.	17/03/12	08:45:00	17/03/12	12:01:00		Tx No.1 Murray	-0.0002106%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		106747	Black start test at Murray	Request from Snowy Hydro.	17/03/12	08:45:00	17/03/12	12:01:00		Tx No. 2 Murray	-0.0002106%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		108034	Black start test at Murray	Request from Snowy Hydro.	28/04/12	07:04:00	28/04/12	12:47:00		Tx No. 2 Murray	-0.0003685%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		111670	Tx 2 Liverpool isolated for work on direct connected Endeavor Energy's 132kV TL 93N - West Liverpool.	Request from Endeavour Energy.	25/06/12	06:21:00	25/06/12	07:51:00		Tx No. 2 Liverpool	-0.0000967%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		106824	Blackstart Test of Colongra & Vales Point	Request from Delta Electricity	13/04/12	10:19:00	13/04/12	20:27:00		Tx No. 2 Vales PT	-0.0006532%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		124052	RE-connect Disc 4947 & surge diverters to No4 ST TX cable pot heads.	Request from Delta Electricity	17/12/12	06:16:00	17/12/12	12:01:00		Tx No. 2 Vales PT	-0.0003707%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	
		124205	Apply earths for Delta testing purposes	Request from Delta Electricity	19/12/12	07:50:00	19/12/12	23:10:00		Tx No. 2 Vales PT	-0.0009885%	Exclusion 2.2 - 3rd Party Outage Requested by customer.	

S3	Reactive plant availability												

LOSS OF SUPPLY EVENT FREQUENCY		Event proposed for exclusion	Description of the event and its impact on the network and performance	Cause of the event	Start date	Start time	End date	End time	Circuits affected	Maximum system demand	Demand shed and time	Quantitative impact	Reasons for exclusion request	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	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.
S4	Loss of supply event frequency >0.05 system minutes	110115	At Tuggerah 330/132kV S/S on the 27th May 2012 at 11:27hrs No.1 Transformer tripped due to intermittent AC voltage on the DC supply. No.2 Transformer was out of service due to a previous trip and Ausgrid had opened their feeder No.97E Charmhaven - Munmorah at Charmhaven in spite of TransGrid's advice that they reconsider. Consequentially supply was lost to 110,000 Ausgrid Central Coast customers. Supply to most customers was restored 9 minutes later at 1135hrs when Ausgrid's feeder was closed, then the remaining load was restored 9 minutes later.	Other event on third party system.	27/05/12	11:27:00	27/05/12	15:31:00	Tx No.1 Tuggerah	12,121	4:04	18.13MW for 0.13hrs = 16MWh as shown on load graphs	Exclusion 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	Documents 110115 - AEMO report on Tuggrrah trip and 110115 - Additional notes on Tuggerah trip.
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)	Reasons for exclusion request	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	Full details of the reason 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.
		102206	SHL advise work being carried out on No.2 Pump at Jindabyne Pumping Station and Intertrip inadvertently initiated on 97L Guthega protection.	Intertrip sent by SHL installation.	19/01/12	08:00:00	19/01/12	10:15:00	97L		2:15	Nil	Exclusion 6.4 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2012-F-0046
		107681	TransGrid received an intertrip initiated from SHL's Lower Tumut PS Units 5-6 330kV installation. SML then advised it wished the installation be kept isolated to carry out investigation work	Intertrip sent by SHL installation.	24/04/12	03:32:00	26/04/12	02:15:00	L5		46:43	Nil	Exclusion 6.4 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2012-F-0228
		113035	Advised by SHL that an earth fault caused by a fault in the recorder connected to the 11kV earth fault protection at Jindabyne sent an intertrip signal to TransGrid at Guthega. Recorder disconnected and Line returned to service	Intertrip sent by SHL installation.	11/07/12	16:21:00	11/07/12	17:14:00	97L		0:53	Nil	Exclusion 6.4 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2012-F-0295
		113189	Advised by SHL that an earth fault caused by a fault in the recorder connected to the 11kV earth fault protection at Jindabyne sent an intertrip signal to TransGrid at Guthega. Recorder disconnected and Line returned to service	Intertrip sent by SHL installation.	11/07/12	17:14:00	11/07/12	18:17:00	97L		1:03	Nil	Exclusion 6.4 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2012-F-0303
		118120	Units 7-8 CCP intertrip received by TransGrid, Units 7-8 trip relay operated. SHL advised, cause of trip over temperature on generator transformer.	Intertrip sent by SHL installation. Repair period extended by SHL.	15/09/12	15:54:00	14/11/12	14:07:00	M7		1438:13	Nil	Exclusion 6.4 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2012-F-0379

		119697	No.1 Transformer failed explosively at Hume Power Station. 995 Hume - Albury 132kV TL taken out of service at Albury to allow Fire Brigade access at Hume Power Station and repair to equipment	Request from Eraring Energy. Period extended by need for access to repair.	14/10/12	15:13:00	20/12/12	18:11:00	995		1610:58	Nil	Exclusion 6.4 - 3rd Party Outage Caused by customer equipment.	Transgrid Forced & Emergency Outage Report 2012-E-0027
		106277	No.1 Reactor was taken out of service due to Buchholz alarm. CB 5922 also developed pole discrepency condition when attempting to open. The pole discrepency in CB5922 caused overloading of the Neutral Earthing Reactor and resulted in the buchholz alarm. The red phase pole of CB5922 was replaced.	A time lag developed due to the repair of equipment.	26/03/12	07:17:00	15/04/12	15:21:00	Rx No.2 Armidale		488:04	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-F-0178/2
		106974	Staff at Deniliquin had advised that 99L Coleambally to Deniliquin 132kV transmission line had a trip and reclose on 29/03/12. On investigation loadings on the SCADA indicated that 99L CB at Coleambally substation could still be open . Essential Energy were requested to send staff to check and found 99L CB open at Coleambally. After inspection 99L CB was closed at 10:32hrs. Auto reclose did not occur at Colleambally although set to AUTO. A patrol confirmed the trip was caused by stuble burn off and TG communicated the likely nature of this cause to the relevant property owner.	A time lag developed due to the lack of communications at Caleambally and non operation of control equipment.	29/03/12	17:48:00	12/04/12	10:32:00	99L		328:44	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-F-0204/2
S6	Average outage duration	109541	No.1 Capacitor at Sydney South 330kV Substation tripped on attempt to close. . CB 4712 inspected and found broken rod on No.1 Trip coil. CB not available until repaired.	A time lag developed due to the repair of equipment.	17/05/12	06:09:00	5/06/12	14:48:00	Cap No.1 Sydney South		464:39	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report Not available
		105899	During switching to return to service 330kV B Bus No.1 Section at Sydney West substation, Red Phase of No.7 Capacitor Bus Disconnector 5773 was unable to fully close . Bus Disconnector was left Locked Open to allow repair.	A time lag developed due to the repair of equipment.	17/03/12	16:34:00	25/06/12	16:30:00	Cap No.7 Sydney West		2399:56	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-E-0005/2
		115668	The inspection did not reveal any issues with the bank. On the same day, measurements were taken of the capacitance of each leg of the bank, along with measurements of the capacitance of each individual can. The results calculated from these measurements indicated that the capacitor bank was balanced. A 415V AC injection test was finally carried out to allow a more accurate balance to	A time lag developed due to the repair of equipment.	9/08/12	23:58:00	17/08/12	11:47:00	Cap No.2 Newcastle		179:49	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-F-0320/2
		115978	The inspection did not reveal any issues with the bank. On the same day, measurements were taken of the capacitance of each leg of the bank, along with measurements of the capacitance of each individual can. The results calculated from these measurements indicated that the capacitor bank was balanced. A 415V AC injection test was finally carried out to allow a more accurate balance to be carried out. Capacitor tripped	A time lag developed due to the repair of equipment.	17/08/12	11:47:00	Still Out		Cap No.2 Newcastle		Still Out	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-F-0330/3
		110566	Advised that Bus Disconnector No. 5753 will not close while doing switching HVPRI 37952 (Bus Outage).Bus Disconnector No. 5753 Locked Open until repairs to be done. Capacitor will not be available.	A time lag developed due to the repair of equipment.	3/06/12	14:19:00	25/06/12	08:13:00	Cap No.5 Sydney North		521:54	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-F-0265
		121694	Transformer bushing tested and being replaced.	A time lag developed due to the repair of equipment.	15/11/12	13:12:00	25/11/12	13:43:00	Tx No.3 Wagga 132		240:31	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-E-0031

		115118	No.2 330kV Transformer at Newcastle Substation was removed from service due to the initiation of a buchholz alarm. No.2 330kV Transformer at Newcastle Substation was removed from service due to the initiation of a buchholz alarm. Oil samples were taken from the blue phase tank, and the results indicated that the issue was related to the tapchanger on blue phase. The transformer's oil contains corrosive sulfur, which is believed to react with the silver plated contacts of the tapchanger. As the transformer is no longer required for service, no further action is required to address the tapchanger issue.	A time lag developed due to the time lag in obtaining a decision not to replace the transformer as it is now not required for the network.	4/08/12	22:14:00	28/08/12	17:29:00	Tx No 2 Newcastle		571:15	168.000	Capped in accordance with parameter 3 of definitions	Transgrid Forced & Emergency Outage Report 2012-E-0015/2

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	<	99.05%	-0.002000	-0.002000
	=	0.952381	x	Availability	+	-0.945333	99.05%	≤	Availability	≤	99.26%	-0.005468	-0.001670
	=	2.000000	x	Availability	+	-1.985200	99.26%	≤	Availability	≤	99.36%	-0.011482	-0.003507
	=	0.002000					99.36%	<	Availability			0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission line availability	=	98.685909%	99.084672%
S-Factor	=	-0.200000%	-0.166979%

NOTE:

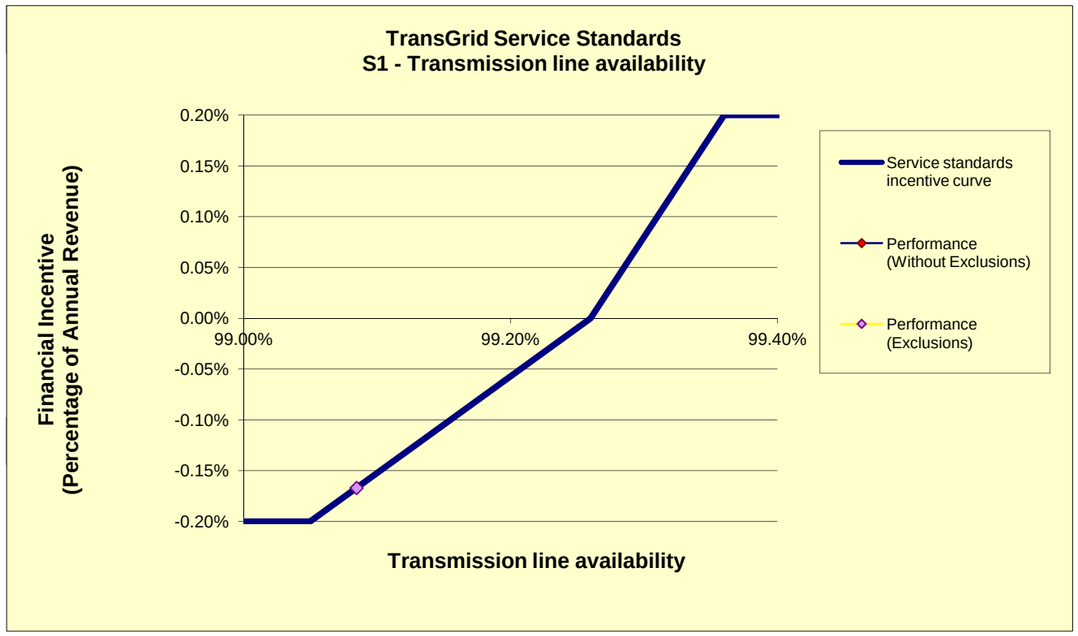
This sheet will automatically update based on data in input sheets

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%	-0.001474	-0.001470
	=	0.535714	x	Availability	+	-0.528268	98.61%	≤	Availability	≤	98.89%	-0.006736	-0.006721
	=	0.001500					98.89%	<	Availability			0.001500	0.001500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transformer availability	=	97.352521%	97.355420%
S-Factor	=	-0.147361%	-0.147021%

NOTE:

This sheet will automatically update based on data in input sheets

Blue cells show the TNSP's performance targets and weightings

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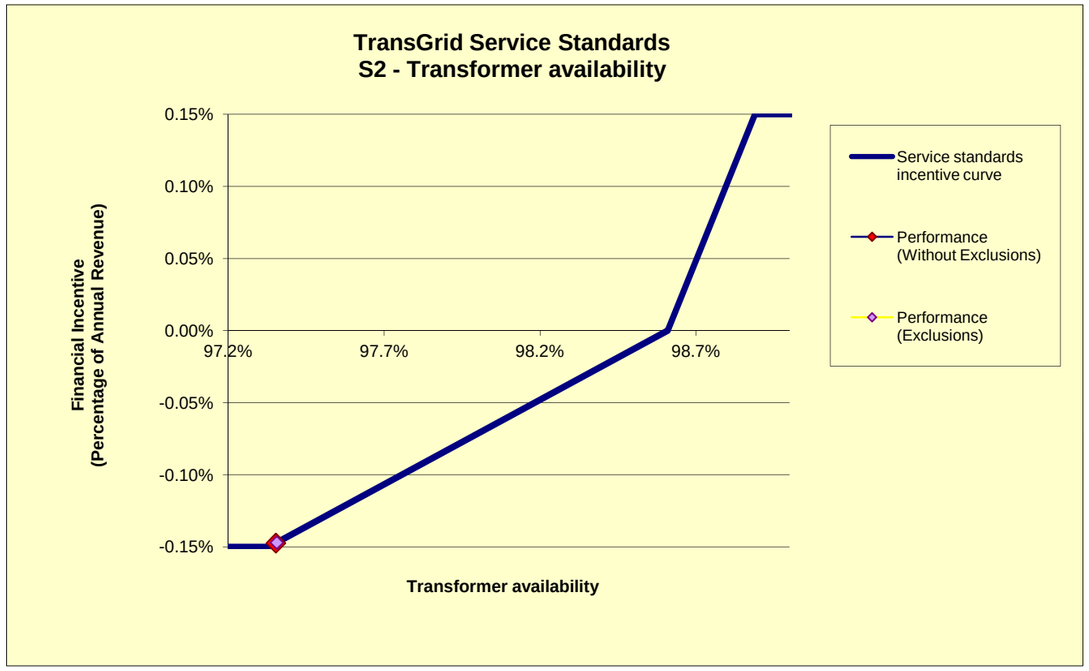
Pink cells show the TNSP's performance outcomes without any events excluded from performance data

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



TransGrid - 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%	-0.008332	-0.008332
	=	0.476190	x	Availability	+	-0.472000	99.12%	≤	Availability	≤	99.33%	-0.018649	-0.018649
	=	0.001000					99.33%	<	Availability			0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reactive plant availability	=	95.203785%	95.203785%
S-Factor	=	-0.100000%	-0.100000%

NOTE:

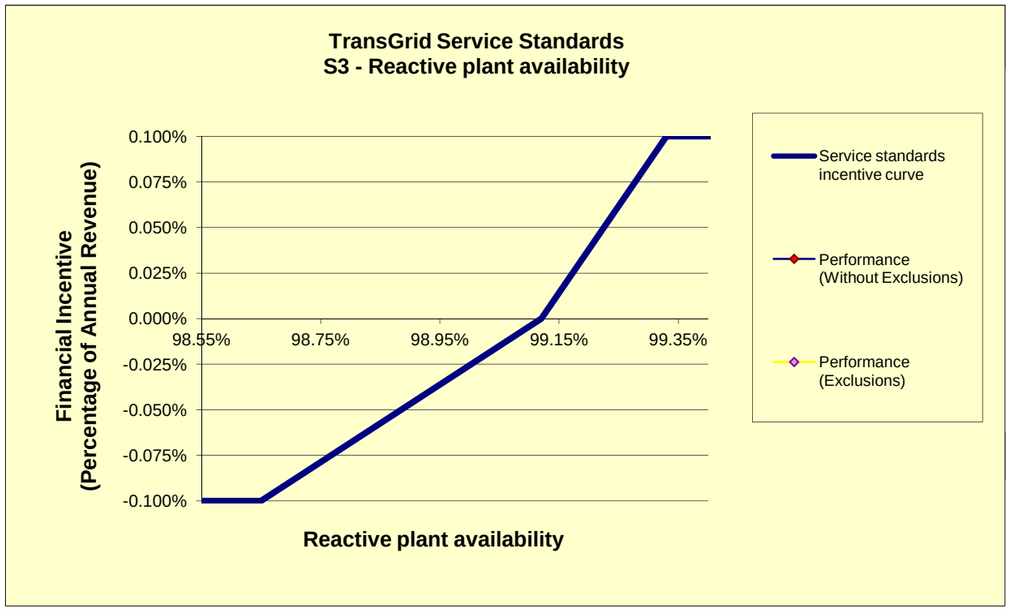
This sheet will automatically update based on data in input sheets

Blue cells show the TNSPt'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 - 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	-0.25%	-0.250%	0.00%	0.250%	0.25%

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	=	3	3
S-Factor		0.125000%	0.125000%

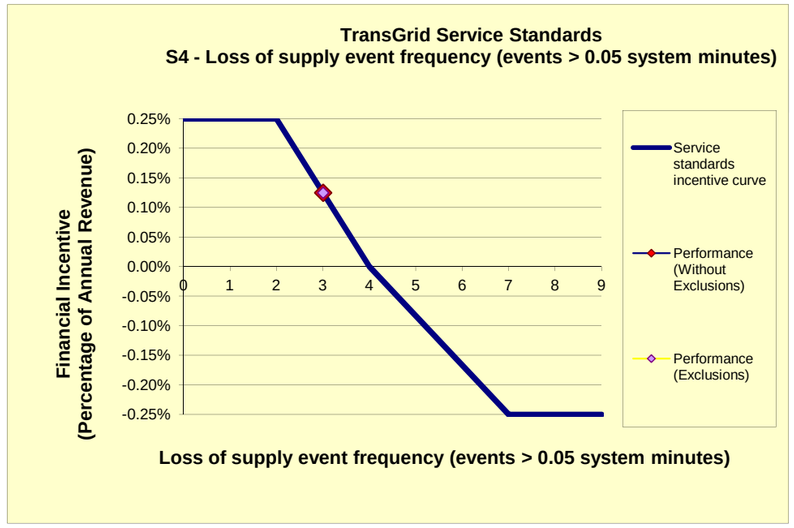
NOTE: This sheet will automatically update based on data in input sheets

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 - 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	*0.000000*	*0.000000*
	=	-0.001000	x	No. of events	+	0.001000	0	≤	No. of events	≤ 1	*0.000000*	*0.000000*
	=	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	=	1	1
S-Factor		0.000000%	0.000000%

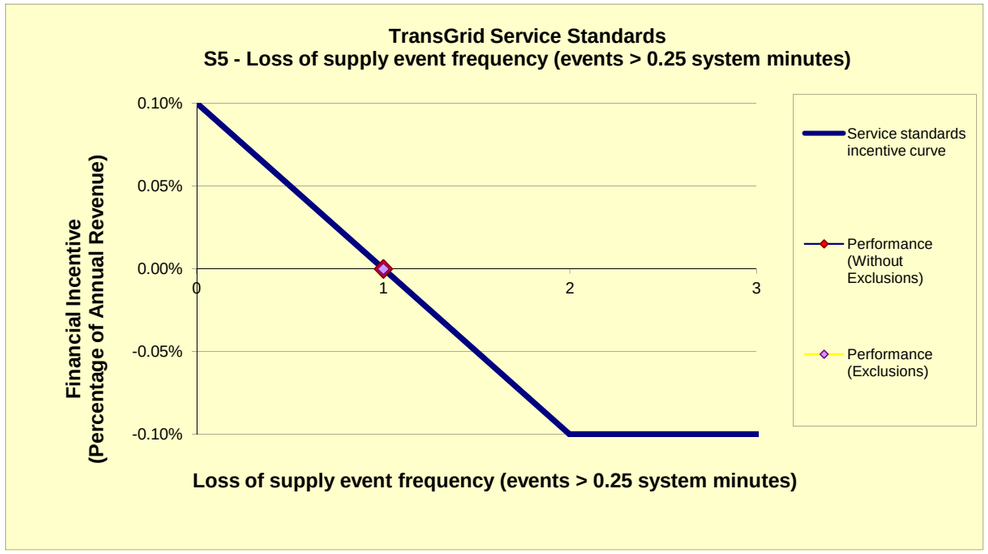
NOTE: This sheet will automatically update based on data in input sheets

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 - 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	-0.012444	-0.010170
	=	-0.000011	x	Duration	+	0.009417	649	≤	Duration	≤	824	-0.012444	-0.010170
	=	0.002000							Duration	<	649	0.002000	0.002000

Average outage duration	=	Performance (Without Exclusions)	Performance (Exclusions)
Average outage duration	=	1912.808411	1713.906542
S-Factor		-0.200000%	-0.200000%

NOTE:

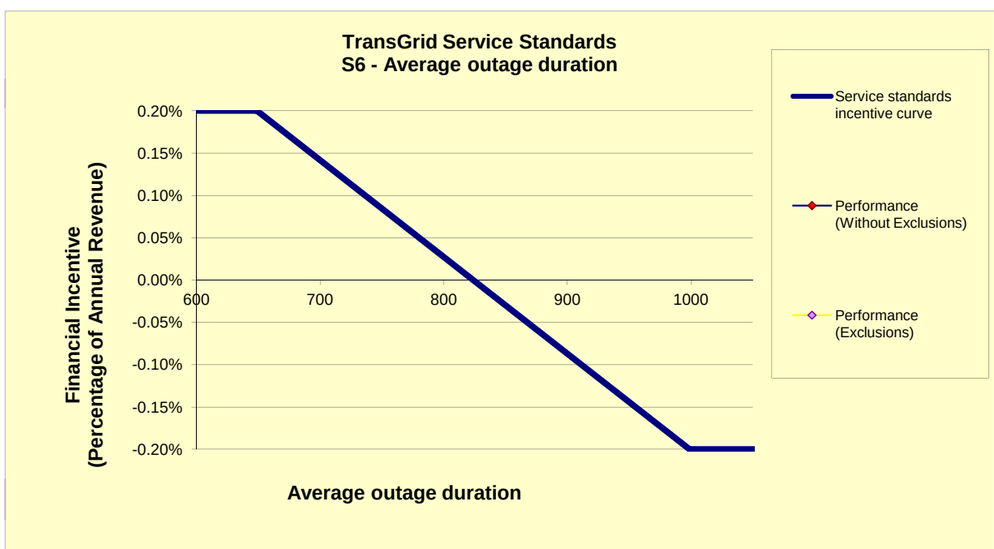
This sheet will automatically update based on data in input sheets

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 - 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	179.5	-	-

Nominal annual revenue	2009-10	2010-11	2011-12	2012-13	2013-14
Allowed Revenue	$678,400,000	$737,150,175	$804,454,443	$863,046,907	

Calendar year revenue	2009	2010	2011	2012	2013	2014
Revenue	$339,200,000	$707,775,087	$770,802,309	$833,750,675		

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	*$833,750,675*

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%	98.685909%	-0.200000%	-$1,667,501	99.084672%	-0.166979%	-$1,392,191	0.033021%
S2	Transformer availability	98.61%	97.352521%	-0.147361%	-$1,228,622	97.355420%	-0.147021%	-$1,225,789	0.000340%
S3	Reactive plant availability	99.12%	95.203785%	-0.100000%	-$833,751	95.203785%	-0.100000%	-$833,751	0.000000%
S4	Loss of supply event frequency >0.05 system minutes	4	3	0.125000%	$1,042,188	3	0.125000%	$1,042,188	0.000000%
S5	Loss of supply event frequency >0.25 system minutes	1	1	0.000000%	$0	1	0.000000%	$0	0.000000%
S6	Average outage duration	824	1913	-0.200000%	-$1,667,501	1714	-0.200000%	-$1,667,501	0.000000%
	TOTALS			-0.522361%	-$4,355,187		-0.489000%	-$4,077,045	0.033360%

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

Aggregate outcome	
S-factor	-0.489000%
Financial Incentive	-$4,077,045
Financial year affected by financial incentive	2013/14

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