

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 'S7'** 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.

TasNetworks - SERVICE STANDARDS PERFORMANCE

Performance Inputs							
S	Performance parameter	Collar	Target	Cap	Revenue at Risk	Performance (Without exclusions)	Performance (With exclusions)
S1	Transmission circuit availability (critical)	97.90%	99.13%	99.75%	0.20%	99.477700%	99.554100%
S2	Transmission circuit availability (non-critical)	98.48%	98.97%	99.47%	0.10%	99.618800%	99.738600%
S3	Transformer availability	98.67%	99.28%	99.90%	0.15%	99.065100%	99.087400%
S4	Frequency of loss of supply events (Events > 0.1 system minutes)	11	8	5	0.20%	3	3
S5	Frequency of loss of supply events (Events > 1.0 system minutes)	2	1	0	0.35%	0	0
S6	Average outage duration - transmission lines (no revenue attached)	529	326	124	0.00%	155	170
S7	Average outage duration - transformers (no revenue attached)	1428	712	354	0.00%	401	401

Revenue Determination Inputs	
TNSP:	TasNetworks
STPIS version:	March, 2008
Regulatory Determination	2009/10 - 2013/14
Transitional year	2014-15
Base Year Allowed Revenue	\$177,210,840
Base Year	2009-10
X-factor	-5.53%
Commencement of regulatory year	1-Jul-09

Other inputs	
Assessment Period	1H 2015
Financial year to affect revenue:	2016/17
Date prepared:	28 January 2016
Revision date:	
Circuit information	
Number of critical circuits	30.3
Number of non-critical circuits	76.5
Number of transformers	109

Average outage duration info (without exclusions)	
No. outages - lines	18
Total outage duration - lines (mins)	2783
No. outages - transformers	12
Total outage duration - transformers (mins)	4808

Average outage duration info (with exclusions)	
No. excluded outages - lines	2
Total no. outages - lines	16
Total outage duration - lines (mins)	2715
No. excluded outages - transformers	0
Total no. outages - transformers	12
Total outage duration - transformers (mins)	4808

Other Inputs						
Annual revenue adjusted for	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14
CPI (old base)	166.2	171.0	176.7	179.5		
CPI (new base)	92.5	95.2	98.3	99.9	102.4	105.4

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.

TasNetworks - 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	Total hours unavailable	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.	
S1	Transmission circuit availability (critical)	Generator requested outages	Various, see OMQ 2015 (1H 2015) Spreadsheet	Multiple circuit outages, see OMQ 2015 (1H 2015) Spreadsheet for details.				76.1	Various	see OMQ 2015 (1H 2015) Spreadsheet	-0.000578	Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support document E001.	
S1		Generator shared outages	Various, see OMQ 2015 (1H 2015) Spreadsheet	Multiple circuit outages, see OMQ 2015 (1H 2015) Spreadsheet for details.				5.4	Various	see OMQ 2015 (1H 2015) Spreadsheet	-0.000041	Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support document E001.	
S1								0						
S1								0						
S1								0						
S1								0						
S2	Transmission circuit availability (non-critical)	Generator requested outages	Various, see OMQ 2015 (1H 2015) Spreadsheet	Multiple circuit outages, see OMQ 2015 (1H 2015) Spreadsheet for details.				379.6	Various	see OMQ 2015 (1H 2015) Spreadsheet	-0.001142	Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support documents E001, E005 and E008.	
S2		Generator shared outages	Various, see OMQ 2015 (1H 2015) Spreadsheet	Multiple circuit outages, see OMQ 2015 (1H 2015) Spreadsheet for details.				9.9	Various	see OMQ 2015 (1H 2015) Spreadsheet	-0.000030	Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support document E001.	
S2								0						
S2								0						
S2								0						
S2								0						
S3	Transformer availability	Generator requested outages	Various, see OMQ 2015 (1H 2015) Spreadsheet	Multiple circuit outages, see OMQ 2015 (1H 2015) Spreadsheet for details.				89.8	Various	see OMQ 2015 (1H 2015) Spreadsheet	-0.000190	Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support document E001.	
S3		Boyer 22/6.6 kV T7 outage	WorkPlanned: Customer Norske Skog shut down of C352 and G552	Customer request	17/03/15	06:04:00	17/03/15	14:50:00	8.8	Boyer 22/6.6 kV T7	Transformer	-0.000019	Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support document E002.
S3								0						
S3								0						
S3								0						
S3								0						

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.

TasNetworks - Proposed exclusions

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	Frequency of loss of supply events (Events > 0.1 system minutes)													
S5	Frequency of loss of supply events (Events > 1.0 system minutes)													

NOTE:

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TasNetworks - Proposed exclusions

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.
S6	Average outage duration - transmission lines (no revenue attached)	WY-CA 220 kV transmission circuit trip	WY-CA 220 kV transmission circuit tripped due to intertrip from Hydro.	Protection testing error by Hydro Tasmania.	13/01/2015	10:25	13/01/2015	10:36	WY-CA 220 kV transmission circuit			Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support documents E005.
		FA-RC 2 220 kV transmission circuit trip	FA-RC 2 220 kV transmission circuit tripped due to intertrip from Hydro	Protection testing error by Hydro Tasmania.	13/03/2015	9:31	13/03/2015	10:28	FA-RC 2 220 kV transmission circuit			Defined Exclusion 1.3 Third Party Outage	For details see OMQ 2015 (1H 2015) spreadsheet, and exclusion support documents E008.
S7	Average outage duration - transformers (no revenue attached)												

NOTE:

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TasNetworks - S1 - Transmission circuit availability (critical)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transmission circuit availability (critical)	97.70%	97.90%	99.13%	99.75%	100.00%
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	<	97.90%	-0.002000	-0.002000			
	=	0.162602	x	Availability	+	-0.161187	97.90%	≤	Availability	≤	99.13%	0.000565	0.000690
	=	0.322581	x	Availability	+	-0.319774	99.13%	≤	Availability	≤	99.75%	0.001122	0.001368
	=	0.002000					99.75%	<	Availability			0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission circuit availability (critical)	=	99.477700%	99.554100%
S-Factor	=	0.112161%	0.136806%

NOTE:

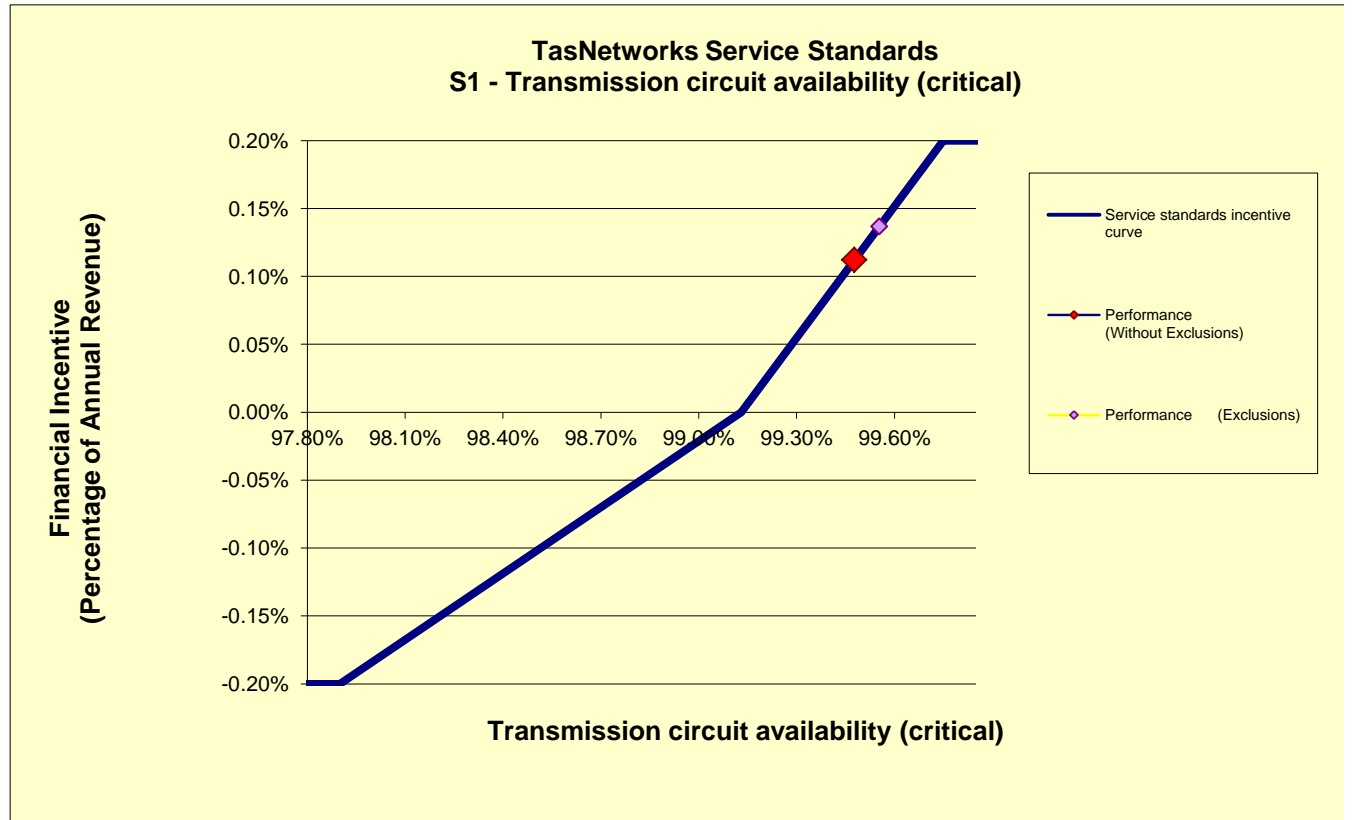
This sheet will automatically update based on data in input sheets

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



TasNetworks - S2 - Transmission circuit availability (non-critical)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transmission circuit availability (non-critical)	98.30%	98.48%	98.97%	99.47%	99.70%
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	<	98.48%	-0.001000	-0.001000			
	=	0.204082	x	Availability	+	-0.201980	98.48%	≤	Availability	≤	98.97%	0.001324	0.001569
	=	0.200000	x	Availability	+	-0.197940	98.97%	≤	Availability	≤	99.47%	0.001298	0.001537
	=	0.001000					99.47%	<	Availability			0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission circuit availability (non-critical)	=	99.618800%	99.738600%
S-Factor	=	0.100000%	0.100000%

NOTE:

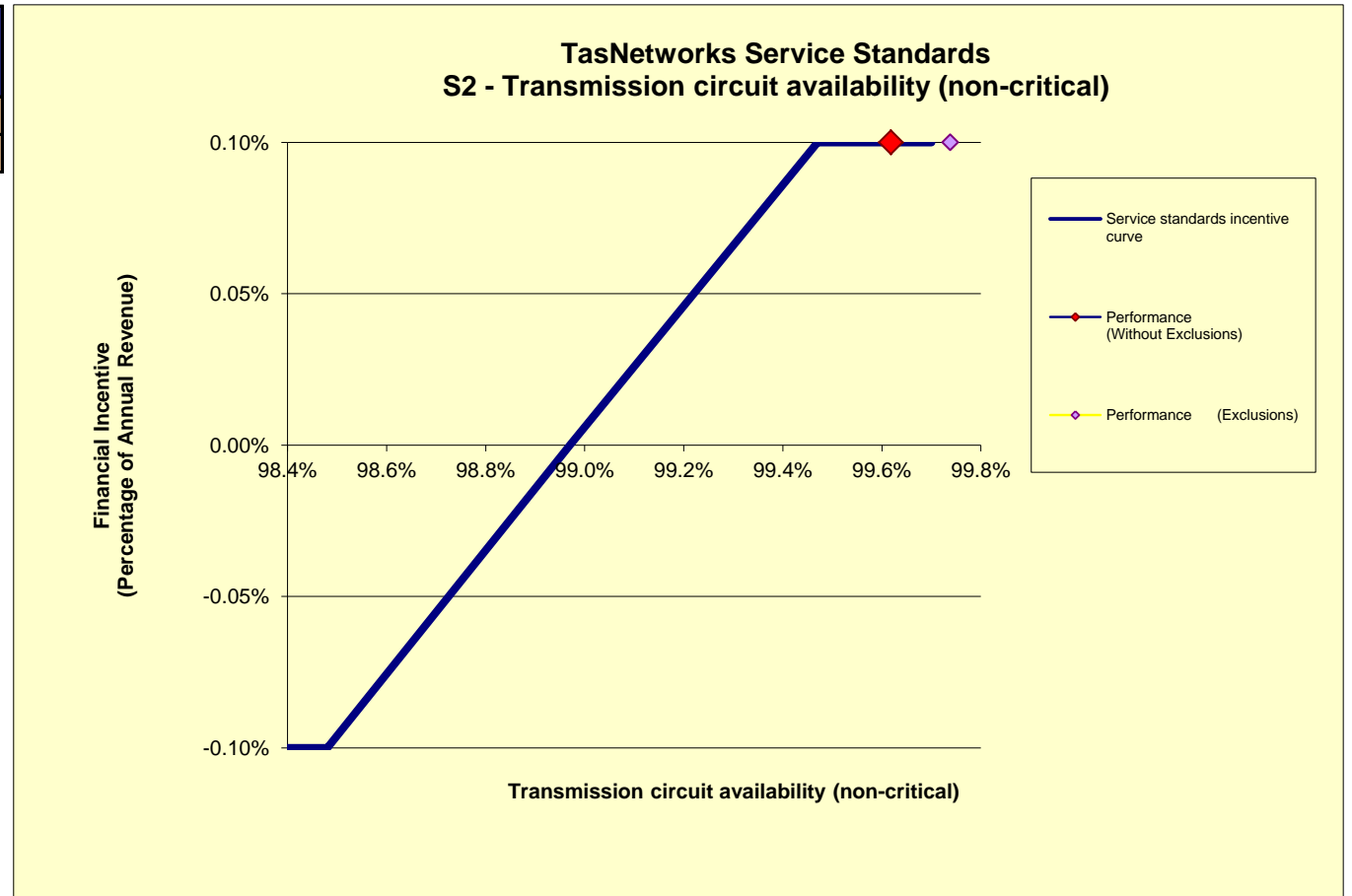
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TasNetworks - S3 - Transformer availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Transformer availability	98.50%	98.67%	99.28%	99.90%	100.10%
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	<	98.67%	-0.001500	-0.001500		
	=	0.245902	x	Availability	+	-0.244131	98.67%	≤	Availability	≤	99.28%	-0.000528	-0.000474
	=	0.241935	x	Availability	+	-0.240194	99.28%	≤	Availability	≤	99.90%	-0.000520	-0.000466
	=	0.001500					99.90%	<	Availability			0.001500	0.001500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transformer availability	=	99.065100%	99.087400%
S-Factor	=	-0.052844%	-0.047361%

NOTE:

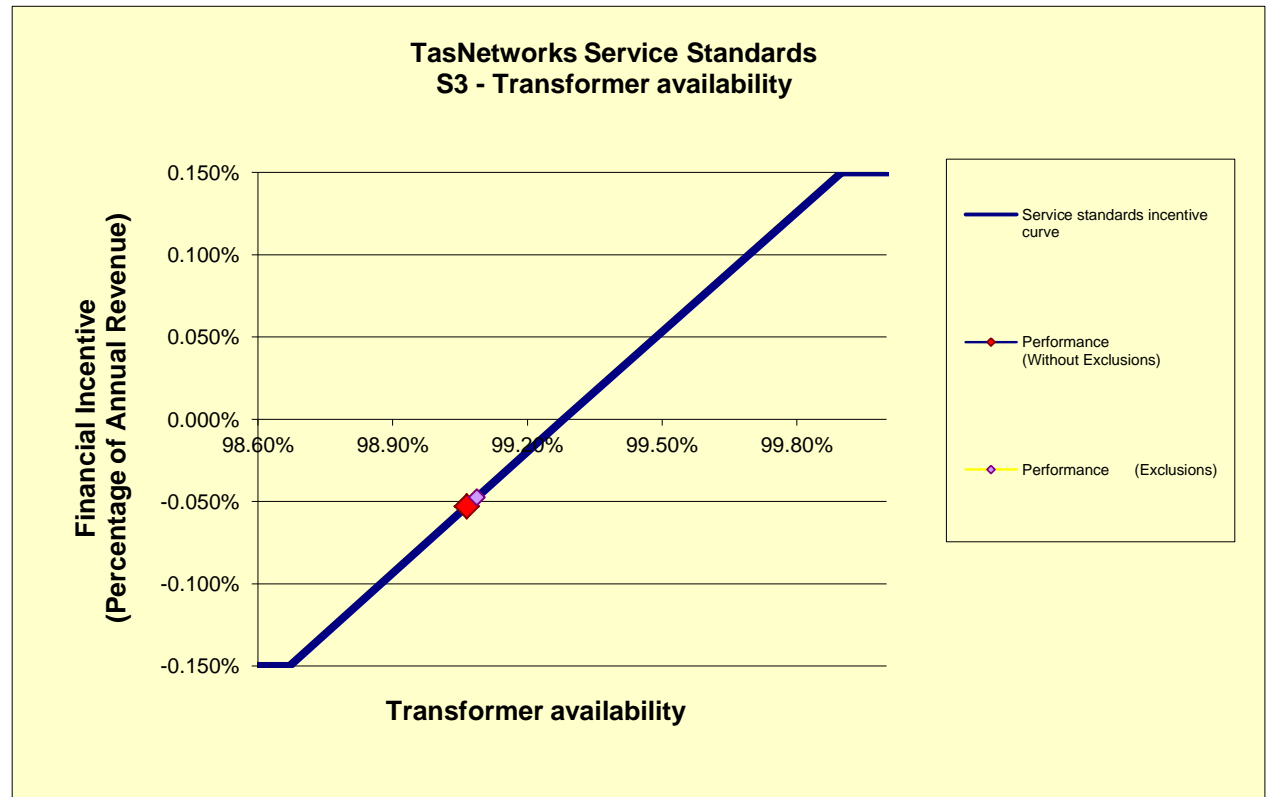
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TasNetworks - S4 - Frequency of loss of supply events (Events > 0.1 system minutes)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Frequency of loss of supply events (Events > 0.1 system minutes)	13	11	8	5	-
Weighting	-0.20%	-0.200%	0.00%	0.200%	0.20%

Performance Formulae	Formulae	Conditions	S- Calc 1	S- Calc 2
Performance	= -0.002000	11 < No. of events	-0.002000	-0.002000
	= -0.000667	8 ≤ No. of events ≤ 11	0.003333	0.003333
	= -0.000667	5 ≤ No. of events ≤ 8	0.003333	0.003333
	= 0.002000	No. of events < 5	0.002000	0.002000

Frequency of loss of supply events (Events > 0.1 system minutes)	=	Performance (Without Exclusions)	Performance (Exclusions)
Frequency of loss of supply events (Events > 0.1 system minutes)	=	3	3
S-Factor	=	0.200000%	0.200000%

NOTE:

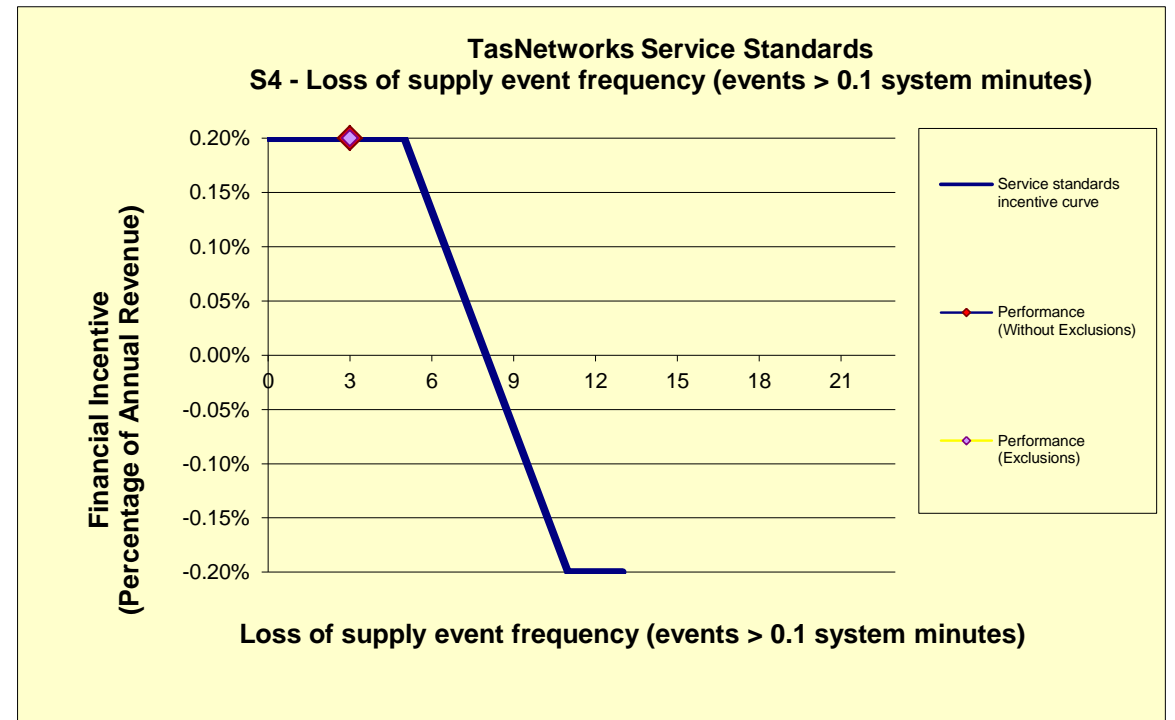
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TasNetworks - S5 - Frequency of loss of supply events (Events > 1.0 system minutes)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Frequency of loss of supply events (Events > 1.0 system minutes)	4	2	1	0	0
Weighting	-0.35%	-0.350%	0.00%	0.350%	0.35%

Performance Formulae	Formulae						Conditions		S- Calc 1	S- Calc 2
Performance	=	-0.003500				2	<	No. of events	-0.003500	-0.003500
	=	-0.003500	x	No. of events	+	1	≤	No. of events ≤ 2	0.003500	0.003500
	=	-0.003500	x	No. of events	+	0	≤	No. of events ≤ 1	0.003500	0.003500
	=	0.003500						No. of events = 0	0.003500	0.003500

Frequency of loss of supply events (Events > 1.0 system minutes)	=	Performance (Without Exclusions)	Performance (Exclusions)
Frequency of loss of supply events (Events > 1.0 system minutes)	=	0	0
S-Factor		0.350000%	0.350000%

NOTE:

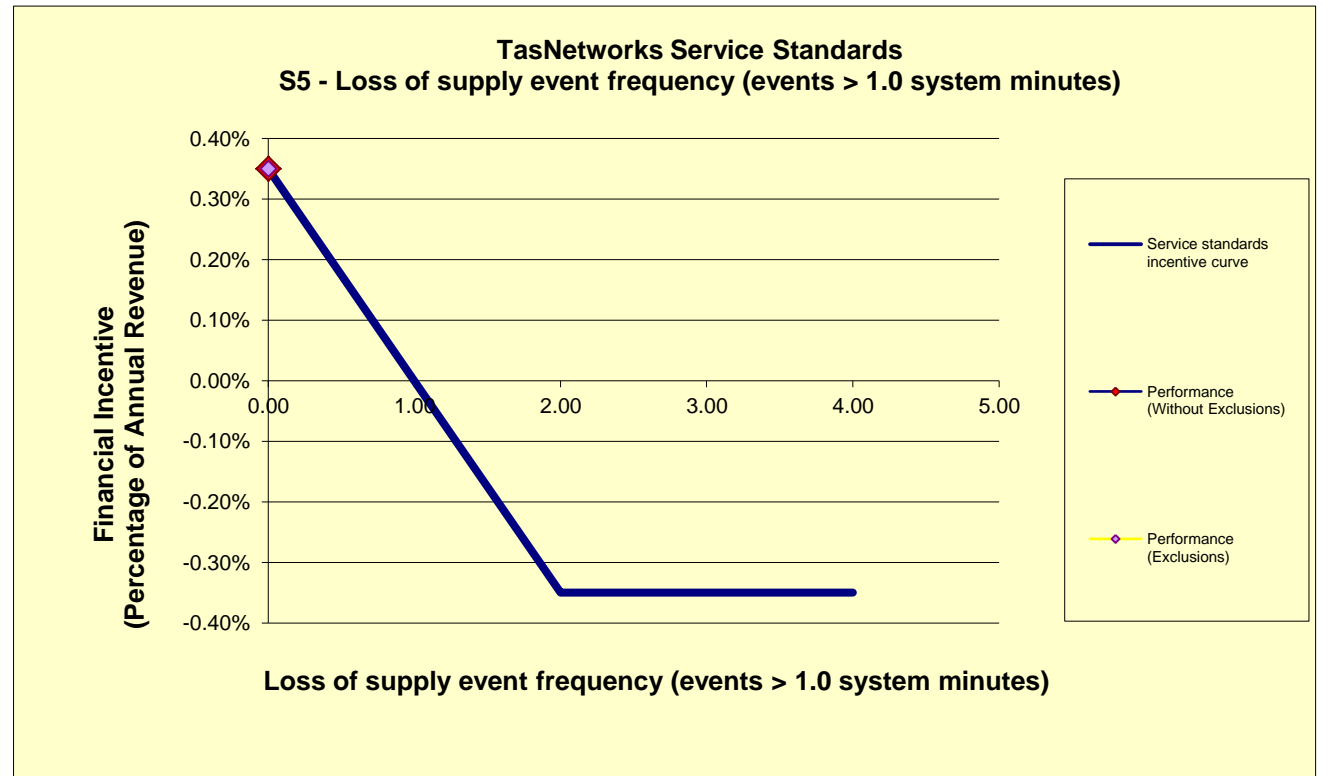
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Orange cells show the TNSP's performance outcomes with events excluded from performance data



TasNetworks - S6 - Average outage duration - transmission lines (no revenue attached)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Outage duration - transmission lines (no revenue attached)	729	529	326	124	-
Weighting	0.00%	0.00%	0.00%	0.00%	0.00%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2
Performance	=	0.000000				529 < Duration	0.000000	0.000000
	=	0.000000	x	Duration	+	0.000000	326 ≤ Duration ≤ 529	0.000000
	=	0.000000	x	Duration	+	0.000000	124 ≤ Duration ≤ 326	0.000000
	=	0.000000				Duration < 124	0.000000	0.000000

Average outage duration - transmission lines (no revenue attached)	=	Performance (Without Exclusions)	Performance (Exclusions)
Outage duration - transmission lines (no revenue attached)	=	154.611111	169.687500
S-Factor	=	0.000000%	0.000000%

NOTE:

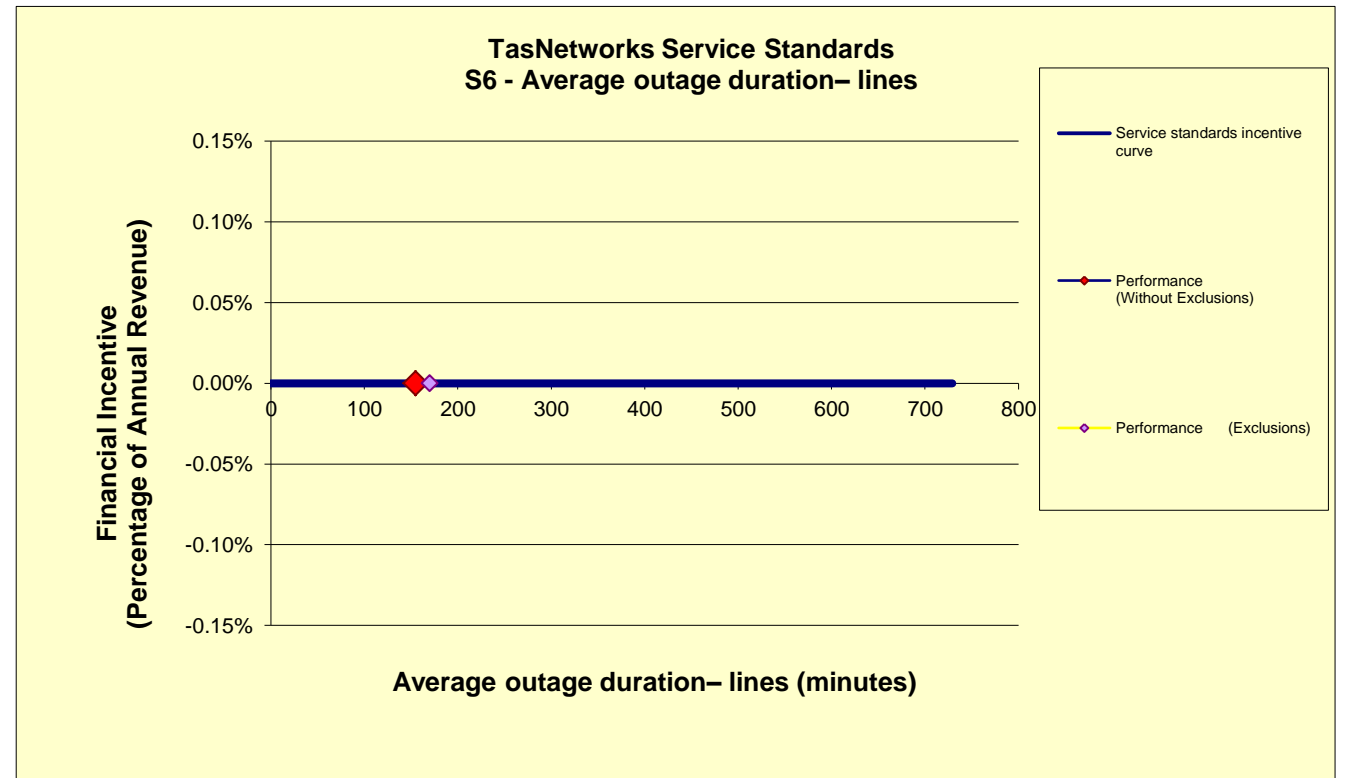
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Orange cells show the TNSP's performance outcomes with events excluded from performance data



TasNetworks - S7 - Average outage duration - transformers (no revenue attached)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Average outage duration - transformers (no revenue attached)	1,628	1,428	712	354	-
Weighting	0.00%	0.000%	0.00%	0.000%	0.00%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2
Performance	=	0.000000				1428.00 < Duration	0.000000	0.000000
	=	0.000000	x	Duration	+	0.000000	712.00 ≤ Duration ≤ 1428.00	0.000000
	=	0.000000	x	Duration	+	0.000000	354.00 ≤ Duration ≤ 712.00	0.000000
	=	0.000000					Duration < 354.00	0.000000

Average outage duration - transformers (no revenue attached)	=	Performance (Without Exclusions)	Performance (Exclusions)
Average outage duration - transformers (no revenue attached)	=	400.666667	400.666667
S-Factor	=	0.000000%	0.000000%

NOTE:

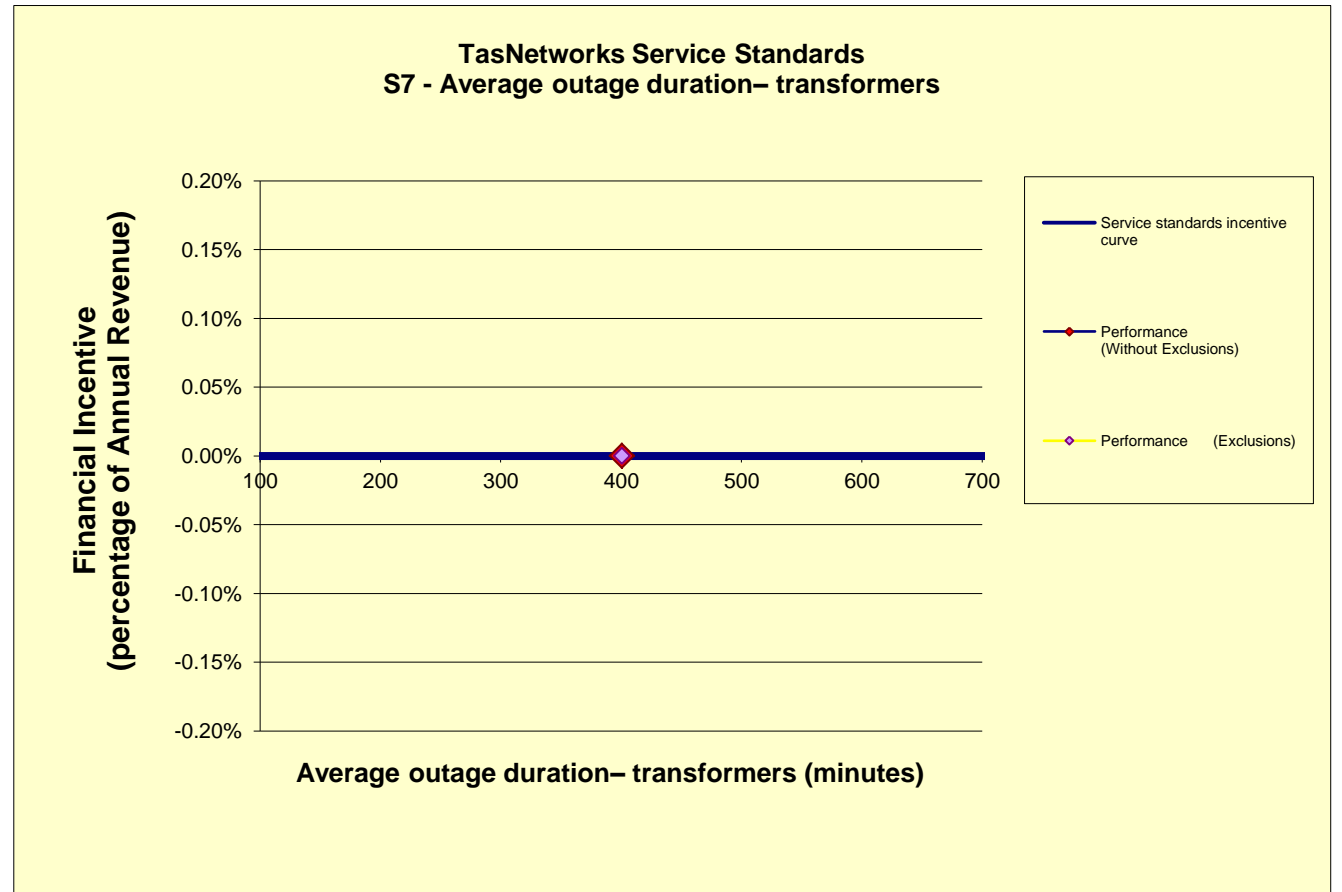
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Orange cells show the TNSP's performance outcomes with events excluded from performance data



TasNetworks - Revenue Calculation

<i>Revenue cap information</i>	
Base year allowed revenue	\$177,210,840
Base year	2009-10
X-factor	-5.53%
Commencement of regulatory period	1-Jul-09

<i>Annual revenue adjusted for CPI</i>	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14
CPI (old base)	166.2	171.0	176.7	179.5	-	-
CPI (new base)	92.5	95.2	98.3	99.9	102.4	105.4

Transitional year

<i>Nominal annual revenue</i>	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Allowed Revenue	\$177,210,840	\$192,402,817	\$209,801,175	\$224,901,250	\$243,266,546	\$186,931,284

<i>Calendar year revenue</i>	2009	2010	2011	2012	2013	2014
Revenue	\$88,605,420	\$184,806,828	\$201,101,996	\$217,351,212	\$234,083,898	\$215,098,915

NOTE:

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

Grey cells show calendar year revenue

Green cells are for formula

TasNetworks - Performance outcomes

Revenue calendar year

\$93,465,642

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 circuit availability (critical)	99.13%	99.477700%	0.112161%	\$104,832	99.554100%	0.136806%	\$127,867	0.024645%
S2	Transmission circuit availability (non-critical)	98.97%	99.618800%	0.100000%	\$93,466	99.738600%	0.100000%	\$93,466	0.000000%
S3	Transformer availability	99.28%	99.065100%	-0.052844%	-\$49,391	99.087400%	-0.047361%	-\$44,266	0.005484%
S4	Frequency of loss of supply events (Events > 0.1 system minutes)	8	3	0.200000%	\$186,931	3	0.200000%	\$186,931	0.000000%
S5	Frequency of loss of supply events (Events > 1.0 system minutes)	1	0	0.350000%	\$327,130	0	0.350000%	\$327,130	0.000000%
S6	Average outage duration - transmission lines (no revenue attached)	326	155	0.000000%	\$0	170	0.000000%	\$0	0.000000%
S7	Average outage duration - transformers (no revenue attached)	712	401	0.000000%	\$0	401	0.000000%	\$0	0.000000%
TOTALS				0.709317%	\$662,968		0.739446%	\$691,128	0.030129%

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	0.739446%
Financial Incentive	\$691,128
Financial year affected by financial incentive	2016/17