# 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.

# **Murraylink - SERVICE STANDARDS PERFORMANCE**

Performance Inputs											
s	Performance parameter	Collar	Target	Сар	Revenue at Risk	Performance (Without exclusions)	Performance (With exclusions)	Checksum			
S1	Planned circuit energy availability	99.04%	99.17%	99.38%	0.40%	99.653155%	99.774350%				
S2	Peak forced outage availability	98.90%	99.48%	100.00%	0.40%	99.430103%	99.468360%	0.00			
S3	Off- peak forced outage availability	98.84%	99.34%	99.94%	0.20%	99.796196%	100.072693%				

Revenue Determination Inputs								
TNSP:	Murraylink							
STPIS version:	March, 2011							
Regulatory Determination	2013/14 - 2017/18							
Base Year Allowed Revenue	\$13,170,000							
Base Year	2013-14							
X-factor	1.20%							
Commencement of regulatory year	1-Jul-13							

Other inputs									
Assessment									
Period	2H 2013								
Financial year to									
affect revenue:	2014/15								
Date prepared:									
Revision date:									
Other inputs									
Number of									
circuits 1									

Other Inputs										
Annual revenue adjusted for CPI	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18				
СРІ	102.4									

### NOTES:

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.

#### Murraylink - 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
lame of any circuit availability arameters	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 a event	and time of	End date and tim	e of event		Name of circuits affected	Name of any reactive plant or transformer 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 (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.
i1		Outage requested by SP Ausnet for works at the RCTS		13/10/13	06:12:00	13/10/13	16:49:00	10.6166667			-0.001212	Exclusion 1.2 Third party outage	
31								0			0.000000		
1 Planned circuit								0			0.000000		
1 energy availability								0			0.000000		
<u>1</u> 1								0			0.000000		
1								0			0.000000		
2		Missing status Indications from Monash Substation. Unable to energise Berri converter station		16/09/13	18:54:00	17/09/13	20:09:00	16:15:00			-0.000350	Exclusion 1.2 Third party outage	
2 Peak forced outage		Trip caused by over frequency protection. ML islanded from the SA network at Monash Substation		30/09/13	15:52:00	30/09/13	17:23:00	1:31:00			-0.000033	Exclusion 1.2 Third party outage	
2 availability		notwork at Worldon Cabatation						0:00:00			0.000000		
2 2 2 2								0:00:00			0.000000		
2								0:00:00			0.000000		
2								0:00:00			0.000000		
2		Missing status Indications from		40/00/40	18:54:00	17/09/13	20:09:00	0:00:00			0.000000 -0.002765		
3		Monash Substation. Unable to energise Berri converter station		16/09/13	16.54.00	17/09/13	20.09.00	9.00			-0.002765	Exclusion 1.2 Third party outage	
3 Off- peak forced		Trip caused by over frequency protection. ML islanded from the SA network at Monash Substation		30/09/13	15:52:00	30/09/13	17:23:00	0.00			0.000000	Exclusion 1.2 Third party outage	
3 outage availability		Inclwork at Worlasti GubstatiOff						0.00			0.000000		
3								0.00			0.000000		
3								0.00			0.000000		
3 3 3 3								0.00			0.000000		
3								0.00			0.000000		

Exclusion calcula	tion data			
Peak start	Peak finish		Public holidays 2013	No of weekdays in year (excl public holidays)
	7:00	22:00	1/01/2013	1/07/2013 31/12/2013 129
			26/01/2013	
Off peak finish	Off peak start		28/01/2013	No of weekend days and public holidays
	7:00	22:00	29/03/2013	55
			1/04/2013	
			25/04/2013	
			10/06/2013	
			11/11/2013	
			25/12/2013	
			26/12/2013	

#### NOTES:

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

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

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

## Murraylink - S1 - Planned circuit energy availability

Performance Targets	Graph start	Collar	Target	Сар	Graph end
anned circuit energy availabi		99.04%	99.17%	99.38%	99.60%
Weighting		-0.40%	0.00%	0.40%	0.40%

Performance Formulae			Form	nulae				Conditions			S- Calc 1	S- Calc 2	
Performance	=	-0.004000							Availability	<	99.04%	-0.004000	-0.004000
	=	3.076923	Х	Availability	+	-3.051385	99.04%	≤	Availability	≤	99.17%	0.014866	0.018595
	=	1.904762	Х	Availability	+	-1.888952	99.17%	≤	Availability	≤	99.38%	0.009203	0.011511
	=	0.004000					99.38%	<	Availability			0.004000	0.004000

Performance Outcomes	Performance (Without Exclusions)	Performance (Exclusions)
anned circuit energy availabi =	99.653155%	99.774350%
S-Factor =	0.400000%	0.400000%

### NOTE:

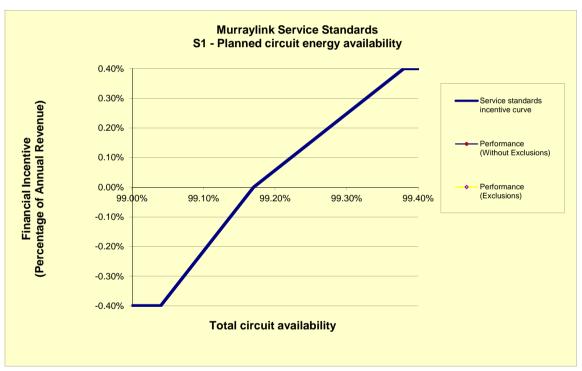
# This sheet will automatically update based on data in input sheets

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



## Murraylink - S2 - Peak forced outage availability

Performance Targets	Graph start	Collar	Target	Сар	Graph end
Peak forced outage availability		98.90%	99.48%	100.00%	100.20%
Weighting		-0.40%	0.00%	0.40%	0.40%

Performance Formulae				Formulae					Conditions			S- Calc 2
Performance	=	-0.004000				When:		Availability	<	98.90%	-0.004000	-0.004000
	=	0.689655	x	Availability	+	-0.686069 98.90%	≤	Availability	≤	99.48%	-0.000344	-0.000080
	=	0.769231	X	Availability	+	-0.765231 99.48%	≤	Availability	≤	100.00%	-0.000384	-0.000090
	=	0.004000				100.00%	<	Availability			0.004000	0.004000

Performance Outcomes	Performance (Without Exclusions)	Performance (Exclusions)	
Peak forced outage = availability	99.430103%	99.468360%	
S-Factor =	-0.034412%	-0.008028%	

### NOTE:

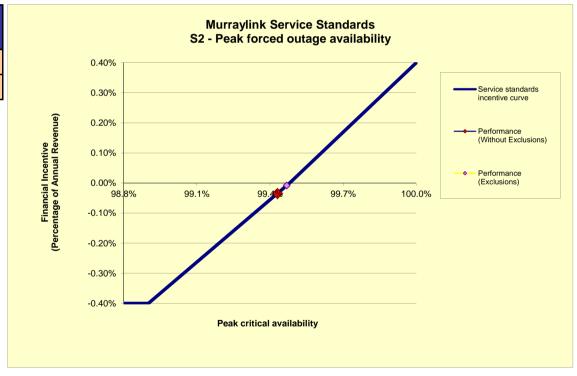
# This sheet will automatically update based on data in input sheets

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



## Murraylink - S3 - Off- peak forced outage availability

Performance Targets	Graph start	Collar	Target	Сар	Graph end
Off- peak forced outage availability		98.84%	99.34%	99.94%	100.10%
Weighting		-0.20%	0.00%	0.20%	0.20%

Performance Formulae			Forn	nulae					Conditions			S- Calc 1	S- Calc 2
Performance	=	-0.002000					When:		Availability	<	98.84%	-0.002000	-0.002000
	=	0.400000	х	Availability	+	-0.397360	98.84%	≤	Availability	≤	99.34%	0.001825	0.002931
	=	0.333333	Х	Availability	+	-0.331133	99.34%	≤	Availability	≤	99.94%	0.001521	0.002442
	=	0.002000					99.94%	<	Availability			0.002000	0.002000

Performance Outcomes	Performance (Without Exclusions)	Performance (Exclusions)		
Off- peak forced outage = availability	99.796196%	100.072693%		
S-Factor =	0.152065%	0.200000%		

### NOTE:

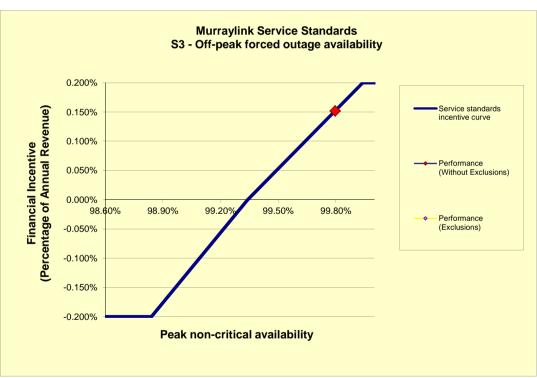
## This sheet will automatically update based on data in input sheets

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



## **Murraylink - Revenue Calculation**

Revenue cap information	
Base year allowed revenue	\$13,170,000
Base year	2013-14
X-factor	1.20%
Commencement of regulatory period	1-Jul-13

Annual revenue adjusted for CPI	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18
СРІ	102.4	-	-	-	-	-
	4	5	6.0	7.0		
Nominal annual revenue	2013-14	2014-15	2015-16	2016-17	2017-18	
Allowed Revenue	\$13,170,000					

Calendar year revenue	2H 2013	2014	2015	2016	2017	2018
Revenue	\$6,585,000					

### NOTE:

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

Murraylink's revenue cap commenced 1 October 2003. Based on a further application by MTC on 2 February 2004, the Australian Competition and Consumer Commission revoked and substituted Murraylink's revenue cap decision on 31 March 2004. This resulted in a revised revenue path from 2004–05 for the remainder of the regulatory period. Revenue calculations for 2004–05 included a one-off correction for the 2003–04 period.

\* The annual revenue for the 2004–05 year does not include the one-off correction for the 2003–04 period. This to enable a simple escalation of annual revenues from 2004–05 onwards. The 2004 calendar year revenue is indicative only.

Grey cells show calendar year revenue

Green cells are for formula

## **Murraylink - Performance outcomes**

Revenue calendar year

\$6,585,000

		_	Performance without exclusions			Perfor	Impact of		
S	Performance parameter	Target	Performance	S-Factor	Final Incentive	Performance	S-Factor	Final Incentive	exclusions
S1	Planned circuit energy availability	99.17%	99.653155%	0.400000%	\$26,340	99.774350%	0.400000%	\$26,340	0.000000%
S2	Peak forced outage availability	99.48%	99.430103%	-0.034412%	-\$2,266	99.468360%	-0.008028%	-\$529	0.026384%
S3	Off- peak forced outage availability	99.34%	99.796196%	0.152065%	\$10,013	100.072693%	0.200000%	\$13,170	0.047935%
	TOTALS			0.517653%	\$34,087		0.591972%	\$38,981	0.074319%

### 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	0.591972%
Financial Incentive	\$38,981
Financial year affected by financial incentive	2014/15

## **Murraylink - Defined exclusions**

Defined exclusions	Further description of exclusion	
		Reference
Unregulated transmission assets		Service Target Performance Incentive Scheme (March 2011), Appendix A, p. 16
Third party outage	Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or AEMO direction.	Service Target Performance Incentive Scheme (March 2011), Appendix A, p. 16
Outages to control voltages	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 2011), Appendix E, p. 16
Force majeure	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2011) p. 54	Service Target Performance Incentive Scheme (March 2011), Appendix E, p. 54
Transformer replacement	Exclude outages to replace transformers where: a) the replacement of the transformer was needed	Service Target Performance Incentive Scheme (March 2011), Appendix E, p. 46
	<ul><li>b) the time taken to replace the transformer was needed</li><li>c) the AER is satisfied that the replacement was the best alternative and all reasonable preventative measures have been</li></ul>	
Measure 2- Peak forced outage availability	taken	
	Further description of exclusion	Reference
Unregulated transmission assets	Turnia description of excitation	Service Target Performance Incentive Scheme (March 2011), Appendix A, p. 16
Third party outage	Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or AEMO direction.	Service Target Performance Incentive Scheme (March 2011), Appendix A, p. 16
Outages to control voltages	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 2011), Appendix E, p. 16
Force majeure	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2011) p. 54	Service Target Performance Incentive Scheme (March 2011), Appendix E, p. 54
Transformer replacement	Exclude outages to replace transformers where: a) the replacement of the transformer was needed	Service Target Performance Incentive Scheme (March 2011), Appendix E, p. 46
	<ul><li>b) the time taken to replace the transformer was needed</li><li>c) the AER is satisfied that the replacement was the best alternative and all reasonable preventative measures have been</li></ul>	
Measure 3- Off- peak forced outage availability	taken	
	Further description of exclusion	Reference
Unregulated transmission assets		Service Target Performance Incentive Scheme (March 2011), Appendix A, p. 16
Third party outage	Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or AEMO direction.	Service Target Performance Incentive Scheme (March 2011), Appendix A, p. 16
Outages to control voltages	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 2011), Appendix E, p. 16
Force majeure	As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2011) p. 54	Service Target Performance Incentive Scheme (March 2011), Appendix E, p. 54
Transformer replacement	Exclude outages to replace transformers where:  a) the replacement of the transformer was needed  b) the time taken to replace the transformer was needed  c) the AER is satisfied that the replacement was the best alternative and all reasonable preventative measures have been	Service Target Performance Incentive Scheme (March 2011), Appendix E, p. 46
	Outages to control voltages  Force majeure  Transformer replacement  Measure 2- Peak forced outage availability  Defined exclusions  Unregulated transmission assets  Third party outage  Outages to control voltages  Force majeure  Transformer replacement  Measure 3- Off- peak forced outage availability  Defined exclusions  Unregulated transmission assets  Third party outage  Outages to control voltages  Force majeure  Outages to control voltages  Force majeure	AEMO direction.  Outages to control voltages  Outages to control voltages  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)  Force majeure  As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2011), 5-54  Transformer replacement  Exclude outages to replace transformers where: a) the replacement of the transformer was needed b) the time taken to replace the transformer was needed c) the AER is satisfied that the replacement was the best alternative and all reasonable preventative measures have been taken  Measure 2- Peak forced outage availability  Defined acclusions  Further description of exclusion  Unregulated transmission assets  Third party outage  Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or AEMO direction.  Outages to control voltages  Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or AEMO direction.  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)  Force majeure  As defined in the Force Majeure definition worksheet and Appendix E of the Service Target Performance Incentive Scheme (March 2011) p. 54  Transformer replacement  Exclude outages to replace transformers where: a) the replacement of the transformer was needed b) the lime taken to replace the transformer was needed c) the AER is satisfied that the replacement was the best alternative and all reasonable preventative measures have been laken.  Measure 3- Off- peak forced outage availability  Defined exclusions  Further description of exclusion  Measure 3- Off- peak forced out