

TEMPLATE EXPLANATION



This template must be used by Murraylink to report service performance information for the 2007 calendar year.

Yellow worksheets (**'Inputs- Performance'** and **'Inputs- Exclusions'**) are for inputs, including performance and exclusion information. Murraylink only needs to enter data on these worksheets.

Purple worksheets **'S1' to 'S3'** are the s-factors 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 Murraylink's performance in 'Inputs-Performance' and 'Revenue Calculation' worksheets.

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

MURRAYLINK - SERVICE STANDARDS PERFORMANCE

PERFORMANCE PARAMETERS	S	<i>Performance (Without exclusions)</i>	<i>Performance (With exclusions)</i>
Planned circuit energy availability	S1	97.886448%	99.319606%
Peak forced outage availability	S2	96.186951%	96.422696%
Off- peak forced outage availability	S3	94.668518%	94.685487%

Date prepared:	6 February 2007
Revision date:	6 February 2007

NOTES:

Pink cells- Input performance without exclusions from performance data

Orange cells- Input performance with exclusions from performance data

Green cells- Input date that template data was entered and date of any revisions from original version.

Performance should be measured on a calendar year basis

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	Circuit affected	Reactive plant or transformer	Quantitative impact	Reasons for exclusion request	Further references
Name of any circuit availability measure applying to Murraylink	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 circuit affected	Name of any reactive plant or transformer affected	Number of hours, mins etc interrupted	Full details of the reasons for excluding this event. Should include a reference to the defined exclusions and explain how it meets this exclusion definition (see Exclusion definition tab). Eg. Exclusion 1.2 Third party event.	A TNSP may provide further details of an exclusion event. TNSP to provide reference.
S1	Planned circuit energy availability	Murraylink Red Cliffs: SP AusNet required Murraylink Circuit Breaker open to reclose Bus Circuit Breaker at Red Cliffs Terminal Station.		28/02/07	20:15:00	28/02/07	20:26:00	Murraylink		00:11:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: SP AusNet requested Murraylink Red Cliffs Circuit Breaker open for works at Red Cliffs Terminal Station.		16/03/07	05:35:00	16/03/07	12:42:00	Murraylink		07:07:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: SP AusNet requested Murraylink Red Cliffs Circuit Breaker open to close Circuit Breaker at Red Cliffs Terminal Station.		30/03/07	22:40:00	30/03/07	22:49:00	Murraylink		00:09:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: SP AusNet requested Murraylink Red Cliffs Circuit Breaker open to close Circuit Breaker at Red Cliffs Terminal Station.		13/04/07	13:33:00	13/04/07	13:42:00	Murraylink		00:09:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: SP AusNet requested Murraylink Red Cliffs Circuit Breaker open to close Circuit Breaker at Red Cliffs Terminal Station.		17/04/07	18:10:00	17/04/07	18:14:00	Murraylink		00:04:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: SP AusNet requested Murraylink Red Cliffs Circuit Breaker open to close Circuit Breaker at Red Cliffs Terminal Station.		1/06/07	16:17:00	1/06/07	16:25:00	Murraylink		00:08:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: SP AusNet require Murraylink offline to replace protection equipment at Red Cliffs Terminal Station.		7/08/07	07:30:00	9/08/07	18:00:00	Murraylink		58:30:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs & Murraylink Berri: ElectraNet required Murraylink offline for protection equipment maintenance.		15/10/07	08:02:00	17/10/07	17:50:00	Murraylink		57:48:00	Exclusion 1.2 Third Party Event	
		Murraylink Berr: Runback by SA Runback scheme. Events showing Circuit Breaker open at Monash. ElectraNet advise no problems at Monash. Local 11kV unavailable. Problem with power supply of Murraylink SCADA equipment in Monash substation. Power transfer Vic to Sa so no change to active power.		16/02/07	16:27:00	16/02/07	16:32:00	Murraylink		00:05:00	Exclusion 1.2 Third Party Event	
		Murraylink Berr: Runback caused by Nemcco dispatch error. Murraylink Dispatched 220MW SA to Vic. Runback to 153MW then 142MW.		28/02/07	10:39:00	28/02/07	10:45:00	Murraylink		00:06:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: CB107 faulty at Red Cliffs Terminal Station. Murraylink Under frequency trip. CB115 at Red Cliffs Terminal Station taken out of service earlier on the day.		28/02/07	17:03:00	28/02/07	18:37:00	Murraylink		01:34:00	Exclusion 1.2 Third Party Event	
		Murraylink Berr: Runback caused by loss of local 11kV supply in Berri area. Runback to 0MW from 18MW SA to Vic.		8/03/07	10:41:00	8/03/07	10:54:00	Murraylink		00:13:00	Exclusion 1.2 Third Party Event	
		Murraylink Berr: Runback caused by loss of local 11kV supply in Berri area. Runback to 0MW from 58 MW SA to Vic.		12/03/07	15:19:00	12/03/07	15:21:00	Murraylink		00:02:00	Exclusion 1.2 Third Party Event	
		Murraylink Berr: Runback caused by loss of local 11kV supply in Berri area. Runback to 0MW from 119 MW SA to Vic.		12/03/07	15:33:00	12/03/07	15:35:00	Murraylink		00:02:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: MLRC: 220kV supply disconnected earlier in the day by SP Ausnet for planned work. 22kV auxiliary power supply disconnected by PowerCore causing cooling system trip.		16/03/07	12:43:00	16/03/07	13:58:00	Murraylink		01:15:00	Exclusion 1.2 Third Party Event	

S3	Off-peak forced outage availability	Murraylink Berri: Runback caused by loss of local 11kV supply in Berri area. Runback to OMW from 119 MW SA to Vic.	12/03/07	15:33:00	12/03/07	15:35:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: MLRC: 220kV supply disconnected earlier in the day by SF Ausnet for planned work. 22kV auxiliary power supply disconnected by PowerCore causing cooling system trip.	16/03/07	12:43:00	16/03/07	13:58:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback caused by Victoria Slow Runback Scheme Failure. Power flow 32MW SA to Vic so no change in active power flow.	29/03/07	16:33:00	29/03/07	16:39:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback caused by Victoria Very Fast Runback Scheme Operation. Runback to OMW from 13MW Vic to SA.	20/04/07	18:40:00	20/04/07	18:45:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback caused by Victoria Slow Runback Scheme Failure. Power flow 36MW SA to Vic so no change in active power flow.	27/06/07	12:23:00	27/06/07	19:32:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback caused by Victoria Slow Runback Scheme Failure. Power flow 27MW SA to Vic so no change in active power flow.	10/07/07	09:54:00	10/07/07	10:06:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Berri: Trip by frequency protection. Protection testing at Monash substation caused Murraylink Circuit Breakers at Monash to be opened.	22/07/07	09:24:00	22/07/07	10:42:00	Murraylink		01:18:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback caused by Victoria Very Fast Runback Scheme Failure. Scheme restored 10:39:30:387 on 21/8/07. Power flow SA to Vic so no change in power flow.	17/08/07	08:05:00	17/08/07	14:02:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Caused by Victoria Slow Runback Scheme Failure. Power flow 126MW SA to Vic so no change in active power flow.	5/09/07	12:10:00	5/09/07	15:24:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Berri: Runback caused by loss of local 11kV supply in Berri area. Power Flow 8MW SA to Vic so no change in power transfer.	15/09/07	03:11:00	15/09/07	03:11:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback from Victorian fast Runback. Runback to OMW from 54 MW Vic to SA.	3/11/07	20:42:00	3/11/07	20:52:00	Murraylink		00:10:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback from Victorian fast Runback. Runback to OMW from 44 MW Vic to SA.	13/11/07	15:03:00	13/11/07	15:10:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Red Cliffs: Runback from Victorian fast Runback. Runback to OMW from 18 MW Vic to SA.	14/11/07	13:01:00	14/11/07	13:04:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Berri: Runback caused by loss of local 11kV supply in Berri area. Runback to OMW from 18 MW SA to Vic.	29/11/07	20:17:00	29/11/07	20:18:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
		Murraylink Berri: Runback caused by loss of local 11kV supply in Berri area. Runback to OMW from 18 MW SA to Vic.	3/12/07	04:06:00	3/12/07	04:06:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event	
Murraylink Red Cliffs: Runback from Victorian fast Runback. Runback to OMW from 108 MW Vic to SA.	31/12/07	12:38:00	31/12/07	12:48:00	Murraylink		00:00:00	Exclusion 1.2 Third Party Event			

NOTES:

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

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

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

The TNSP must provide details for all events requested for exclusion in this template. In the event that the TNSP wishes to provide further details of an exclusion, this should be provided with the TNSP's performance report. The source of information should be referenced in this template.

Green cells - input description impact

Orange cells - input reasons for the exclusion request

MURRAYLINK- S1 - Planned circuit energy availability

Performance Target	Graph start	Collar	Target	Cap	Graph end
Planned circuit energy availability	99.00%	99.04%	99.17%	99.38%	99.50%
Weighting	-0.40%	-0.40%	0.00%	0.40%	0.40%

Performance Formulae	Formulae					Conditions	S- Calc 1	S- Calc 2
Performance	=	-0.004000				When: Availability < 99.04%	-0.004000	-0.004000
	=	3.076923	x	Availability	+	-3.051385 99.04% ≤ Availability ≤ 99.17%	-0.039494	0.004603
	=	1.904762	x	Availability	+	-1.888952 99.17% ≤ Availability ≤ 99.38%	-0.024449	0.002850
	=	0.004000				99.38% < Availability	0.004000	0.004000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Planned circuit energy availability	=	97.886448%	99.319606%
S-Factor	=	-0.400000%	0.284964%

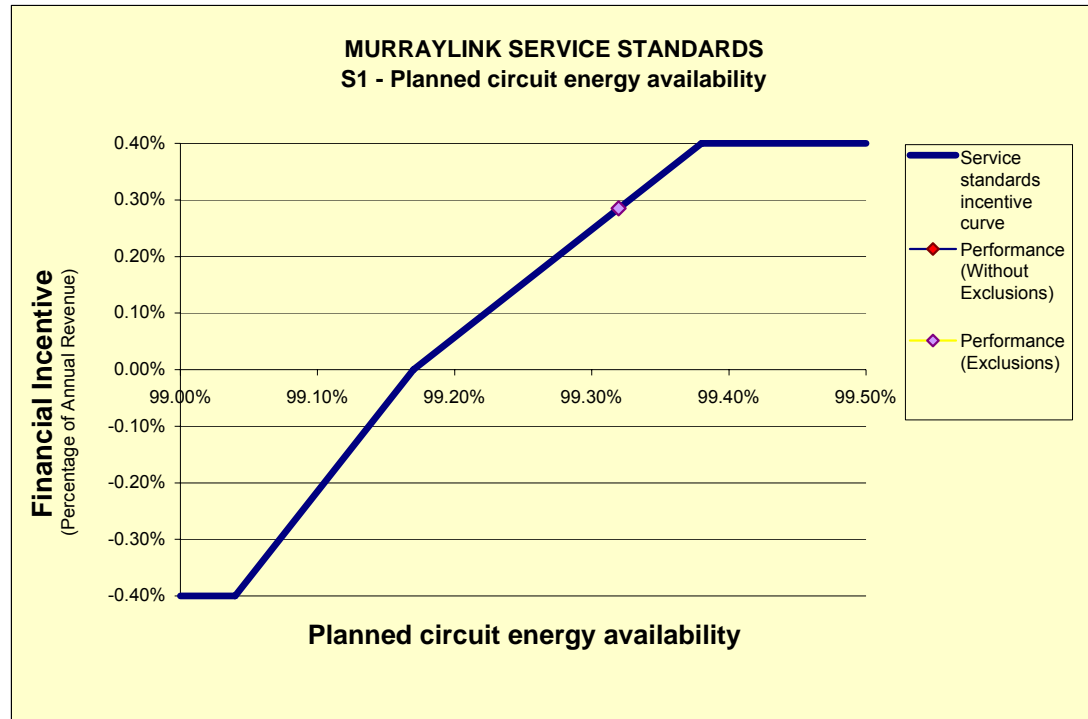
NOTES: This sheet will automatically update based on data in input sheets.

Blue cells show Murraylink's performance targets and weightings.

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

Pink cells show Murraylink performance outcomes without any events excluded from performance data

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



MURRAYLINK- S2 - Peak forced outage availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Peak forced outage availability	98.50%	98.90%	99.48%	100.00%	100.00%
Weighting	-0.40%	-0.40%	0.00%	0.40%	0.40%

Performance Formulae	Formulae				Conditions	S- Calc 1	S- Calc 2
Performance	=	-0.004000			Availability < 98.90%	-0.004000	-0.004000
	=	0.689655	x	Availability	+ 98.90% ≤ Availability ≤ 99.48%	-0.022711	-0.021085
	=	0.769231	x	Availability	+ 99.48% ≤ Availability ≤ 100.00%	-0.025331	-0.023518
	=	0.004000			100.00% < Availability	0.004000	0.004000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Peak forced outage availability	=	96.186951%	96.422696%
S-Factor	=	-0.400000%	-0.400000%

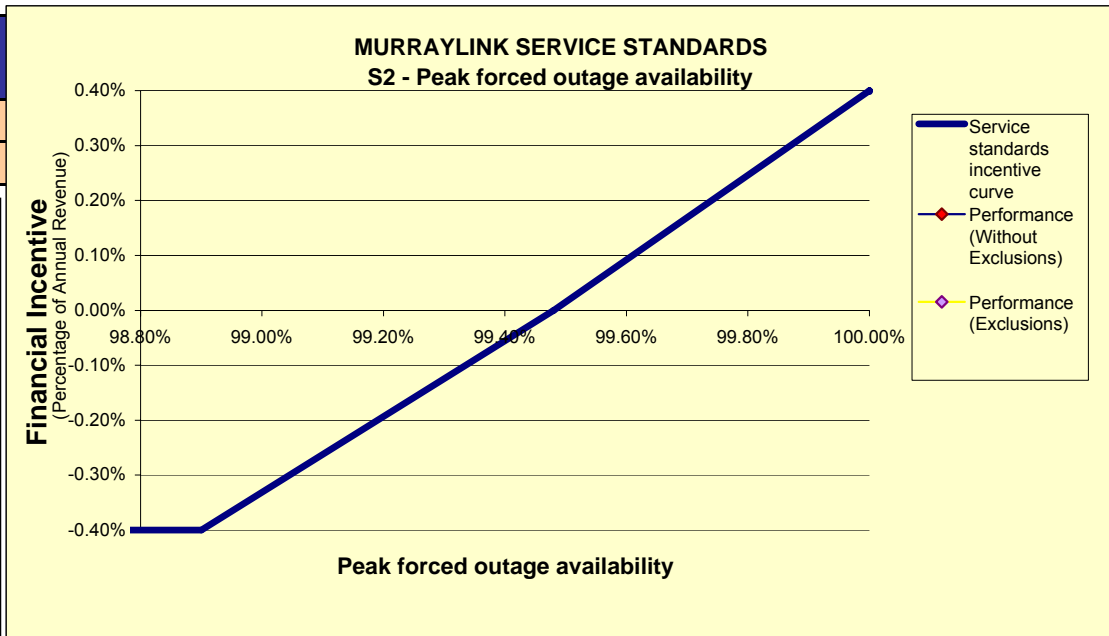
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show Murraylink's performance targets and weightings

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

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

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



MURRAYLINK- S3 - Off-peak forced outage availability

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Off-peak forced outage availability	98.50%	98.84%	99.34%	99.94%	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			When: Availability < 98.84%	-0.002000	-0.002000
	=	0.400000	x	Availability	+ 98.84% ≤ Availability ≤ 99.34%	-0.018686	-0.018618
	=	0.333333	x	Availability	+ 99.34% ≤ Availability ≤ 99.94%	-0.015572	-0.015515
	=	0.002000			99.94% < Availability	0.002000	0.002000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Off-peak forced outage availability	=	94.668518%	94.685487%
S-Factor	=	-0.200000%	-0.200000%

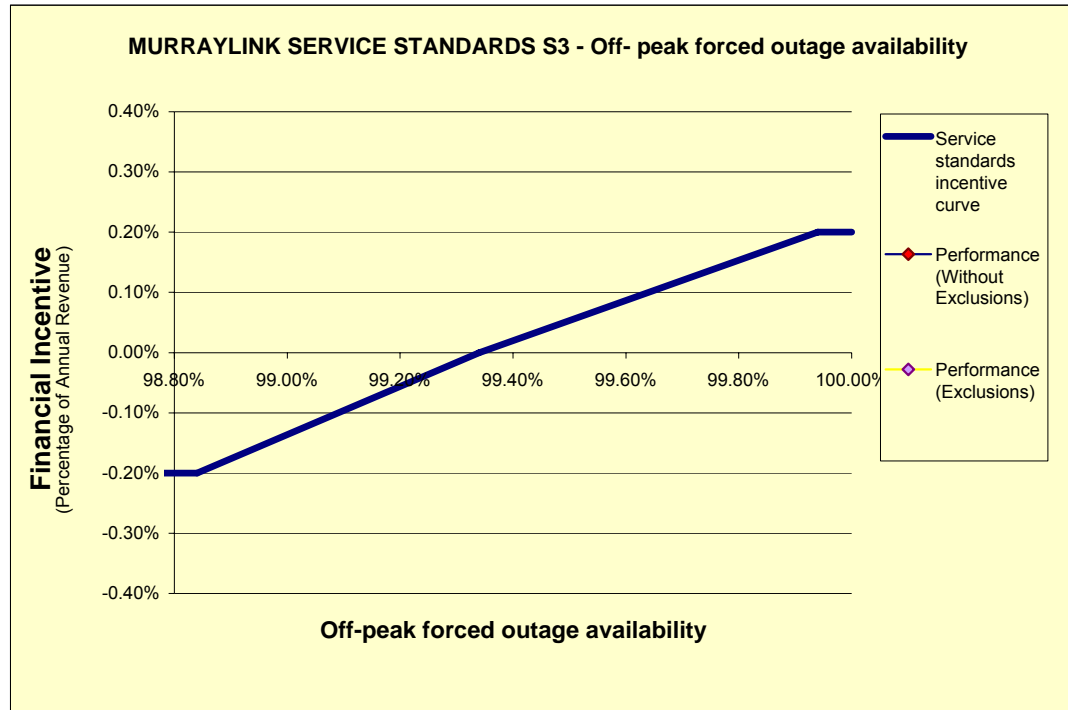
NOTE: This sheet will automatically update based on data in input sheets.

Blue cells show Murraylink's performance targets and weightings

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

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

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



Murraylink - Revenue Calculation

Revenue cap information						
Base revenue (AR) - (1 Oct 2003-30 June 2004)	\$8,900,000					
Base year	2003-04					
Commencement of regulatory period	1-Oct-03					
Commencement of 2004 calendar year	1-Jan-04	Dec-03	Dec-04	Dec-05	Dec-06	Dec-07
Commencement of 2004-05 financial year	1-Jul-04	142.8	146.5	150.6	155.5	160.1
Revenue cap revocation: 2004-05 Revenue (with 03-04 correction)	\$12,803,000	2003-04	2004-05*	2005-06	2006-07	2007-08
Revenue cap revocation: 2004-05 Revenue (without 03-04 correction)	\$12,403,000	\$8,900,000	\$12,403,000	\$12,571,674	\$12,768,427	\$13,025,661
X-factor	1.20%					

Annual revenue adjusted for CPI						
	Mar-03	Mar-04	Mar-05	Mar-06	Mar-07	Mar-08
CPI	141.3	144.1	147.5	151.9	155.6	
	2003-04	2004-05*	2005-06	2006-07	2007-08	2007-08
Annual Revenue	\$8,900,000	\$12,403,000	\$12,543,298	\$12,762,461	\$12,916,451	\$0

Calendar year revenue					
	2003	2004*	2005	2006	2007
Revenue	\$2,243,288	\$10,639,308	\$12,473,149	\$12,652,879	\$12,839,456

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 (\$) **\$12,839,456**

Performance parameter	S	Target	Performance without exclusions			Performance with exclusions			Impact of exclusions
			Performance	S-Factor	Final Incentive	Performance	S-Factor	Final Incentive	
Planned circuit energy availability	S1	99.17%	97.886448%	-0.400000%	-\$51,358	99.32%	0.284964%	\$36,588	0.684964%
Peak forced outage availability	S2	99.48%	96.186951%	-0.400000%	-\$51,358	96.42%	-0.400000%	-\$51,358	0.000000%
Off- peak forced outage availability	S3	99.34%	94.668518%	-0.200000%	-\$25,679	94.69%	-0.200000%	-\$25,679	0.000000%
TOTALS				-1.000000%	-\$128,395		-0.315036%	-\$40,449	0.684964%

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	-0.315036%
Bonus (penalty)	-\$40,449
Financial year to affect revenue	2008-09

MURRAYLINK - Defined exclusions

Measure 1- Planned circuit energy availability			
No.	Defined exclusions	Further description of exclusion	Reference
1.1	Unregulated transmission assets		Schedule 1 AER Service Standards Guidelines
1.2	Third party outage	Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or NEMMCO direction.	Schedule 1 AER Service Standards Guidelines Appendix H of the <i>MTC Application for Conversion and MAR: Decision</i>
1.3	Force majeure		
Measure 2- Peak forced outage availability			
No.	Defined exclusions	Further description of exclusion	Reference
1.1	Unregulated transmission assets		Schedule 1 AER Service Standards Guidelines
1.2	Third party outage	Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or NEMMCO direction.	Schedule 1 AER Service Standards Guidelines Appendix H of the <i>MTC Application for Conversion and MAR: Decision</i>
1.3	Force majeure		
Measure 3- Off- peak forced outage availability			
No.	Defined exclusions	Further description of exclusion	Reference
1.1	Unregulated transmission assets		Schedule 1 AER Service Standards Guidelines
1.2	Third party outage	Any outages caused by a 3rd party such as intertrip signals, generator outage, customer installation, customer request or NEMMCO direction.	Schedule 1 AER Service Standards Guidelines Appendix H of the <i>MTC Application for Conversion and MAR: Decision</i>
1.3	Force majeure		