# 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.

# **Powerlink - SERVICE STANDARDS PERFORMANCE**

	Performance Inputs												
s	Performance parameter	Collar	Target	Сар	Revenue at Risk	Performance (Without exclusions)	Performance (With exclusions)						
S1	Peak transmission circuit availability	98.31%	98.76%	99.20%	0.100%	99.469888%	98.708100%						
S2	Transmission line availability	97.60%	98.76%	99.92%	0.100%	98.241951%	98.460722%						
S3	Transformer availability	98.27%	98.76%	99.24%	0.100%	98.756767%	98.767074%						
S4	Reactive plant availability	94.45%	97.15%	99.84%	0.150%	98.009135%	98.009135%						
S5	Loss of supply event frequency (No of events > 0.1 system minutes)	3	2	1	0.150%	2	1						
S6	Loss of supply event frequency (No of events > 0.75 system minutes)	2	1	0	0.30%	1	0						
S7	Average outage duration	1,306	859	412	0.10%	984	900						

Revenue Determination Inputs								
TNSP:	Powerlink							
STPIS version:	Mar-2011							
Regulatory Determination	2012-13 to 2016-17							
Base Year Allowed Revenue	\$835,000,000							
Base Year	2012-13							
X-factor	-3.02%							
Commencement of regulatory year	1-Jul-12							

Other inputs								
Assessment								
Period	2H/2012							
Financial year to								
affect revenue:	2013/14							
Date prepared:	30 January 2013							
Revision date:								

Other Inputs										
Annual revenue adjusted for C	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17				
СРІ	99.9									

# 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.

### **Powerlink - 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 a	nd time of	Name of circuits 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.
	20120167	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	1/11/12	00:00:00	1/01/13	00:00:00	Feeder 823		615.000	Third party event	
	20120217	Feeder 7339: H011 Nebo to T175 Bolingbroke de-loaded. Event initiated by customer. Powerlink plant and equipment operated as expected.	Customer issue	12/11/12	16:39:24	12/11/12	16:43:41	Feeder 7339		0.071	Third party event	
S1 Peak transmission circuit availability	20120242	T056 Townsville South: 1 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	26/11/12	11:13:44	26/11/12	12:27:02		T056 Townsville South 1 Transformer	1.222	Third party event	
	20120285	Feeder 7192: T049 Kareeya to H032 Chalumbin tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	31/12/12	08:04:28	31/12/12	13:56:37	Feeder 7192		5.869	Third party event	
	20120285	T049 Kareeya: 2 Transformer tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	31/12/12	08:04:28	31/12/12	13:56:37		T049 Kareeya 2 Transformer	5.869	Third party event	
	20120132	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	27/07/12	11:08:58	27/07/12	11:16:54	Feeder 852		0.132	Third party event	
	20120146	Feeder 864: H029 Stanwell to H033 Stanwell Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	28/08/12	16:31:59	3/09/12	16:23:49	Feeder 864		143.864	Third party event	
	20120147	Feeder 7226: H039 Woree to T051 Cairns de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	31/08/12	07:44:52	31/08/12	07:53:51	Feeder 7226		0.150	Third party event	
	20120148	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	1/09/12	18:13:04	2/09/12	01:15:43	Feeder 852		7.044	Third party event	
	20120149	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	2/09/12	03:03:48	3/09/12	04:43:08	Feeder 852		25.656	Third party event	
	20120162	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	14/09/12	11:52:57	14/09/12	12:07:21	Feeder 823		0.240	Third party event	
	20120165	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	18/09/12	09:48:31	18/09/12	10:39:32	Feeder 823		0.850	Third party event	
S2 Transmission line availability	20120167	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	18/09/12	23:30:45	1/01/13	00:00:00	Feeder 823		2496.488	Third party event	
	20120177	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	26/09/12	11:00:34	26/09/12	11:39:50	Feeder 852		0.654	Third party event	
	20120178	Feeder 861: H029 Stanwell to H033 Stanwell Power tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	26/09/12	10:30:43	26/09/12	12:38:08	Feeder 861		2.124	Third party event	
	20120199	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	21/10/12	14:44:38	21/10/12	20:21:58	Feeder 852		5.622	Third party event	
	20120206	Feeder 7227/1: H039 Woree – tee tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/10/12	14:06:41	30/10/12	15:38:51	Feeder 7227/1		1.536	Third party event	
	20120206	Feeder 7227/3: T051 Cairns - tee tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/10/12	14:06:41	30/10/12	15:38:51	Feeder 7227/3		1.536	Third party event	
	20120217	Feeder 7339: H011 Nebo to T175 Bolingbroke de-loaded. Event initiated by customer. Powerlink plant and equipment operated as expected.	Customer issue	12/11/12	16:39:24	12/11/12	16:43:41	Feeder 7339		0.071	Third party event	
	20120285	Feeder 7192: T049 Kareeya to H032 Chalumbin tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	31/12/12	08:04:28	31/12/12	13:56:37	Feeder 7192		5.869	Third party event	

		20120128	T032 Blackwater: 7 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	23/07/12	11:29:59	24/07/12	19:18:36	TO	032 Blackwater 7 Transformer	31.810	Third party event	
		20120133	T055 Turkinje: 2 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	28/07/12	07:30:14	28/07/12	09:31:55	-	T055 Turkinje 2 Transformer	2.028	Third party event	
		20120147	T051 Cairns: 3 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	31/08/12	07:44:52	31/08/12	07:53:51		T051 Cairns 3 Transformer	0.150	Third party event	
		20120206	T051 Cairns: 4 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/10/12	14:06:41	30/10/12	15:38:51		T051 Cairns 4 Transformer	1.536	Third party event	
		20120221	T065 Alligator Creek: 3 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	17/11/12	04:57:09	17/11/12	18:50:04		065 Alligator Creek 3 Transformer	13.882	Third party event	
		20120242	T056 Townsville South: 1 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	26/11/12	11:13:44	26/11/12	12:27:02		T056 Townsville outh 1 Transformer	1.222	Third party event	
S3	Transformer availability	20120244	H003 Belmont: 9 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	2/12/12	07:30:23	2/12/12	07:52:03	ŀ	H003 Belmont 9 Transformer	0.361	Third party event	
		20120244	H003 Belmont: 8 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	2/12/12	07:30:23	2/12/12	08:06:36	ŀ	H003 Belmont 8 Transformer	0.604	Third party event	
		20120251	T048 Tully: 2 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	7/12/12	22:46:41	8/12/12	11:56:20		T048 Tully 2 Transformer	13.161	Third party event	
		20120284	T032 Blackwater: 2 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/12/12	20:19:24	30/12/12	22:22:17	TO	032 Blackwater 2 Transformer	2.048	Third party event	
		20120284	T032 Blackwater: 1 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/12/12	20:19:24	30/12/12	22:26:29	TO	032 Blackwater 1 Transformer	2.118	Third party event	
		20120284	T032 Blackwater: 7 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/12/12	20:19:24	30/12/12	22:26:35	TO	032 Blackwater 7 Transformer	2.120	Third party event	
		20120285	T049 Kareeya: 2 Transformer tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	31/12/12	08:04:28	31/12/12	13:56:37		T049 Kareeya 2 Transformer	5.869	Third party event	
S4	Reactive plant												
<b>5</b> 4	availability												

L	OSS 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
	me of any loss of supply cameters		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 t	ime of event	End date and event	time of	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.
S	Loss of supply event frequency (No of events > 0.1 system minutes)	20120284	T032 Blackwater: Transformers 1, 2 and 7 de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution Issue	30/12/2012	20:19:24	30/12/2012	22:22:12	T032 Blackwater 1, 2 and 7 Transformers		80 MW, 9824 mins	1.1049 system minutes	Third party event	
S	Loss of supply event frequency (No of events > 0.75 system minutes)	20120284	T032 Blackwater: Transformers 1, 2 and 7 de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution Issue	30/12/2012	20:19:24	30/12/2012	22:22:12	T032 Blackwater 1, 2 and 7 Transformers		80 MW, 9824 mins	1.1049 system minutes	Third party event	

4	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	Circui	ts affected	Quantitative impact	Capped impact (if applicable)	Reasons for exclusion request	Further references
	e of any average outage ion 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 t	ime of event	End date and event	time of	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.
			T032 Blackwater: 7 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	23/07/2012	11:29:59	24/07/2012	19:18:36		T032 Blackwater 7 Transformer	1908.617		Third party event	
		20120132	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	27/07/2012	11:08:58	27/07/2012	11:16:54	Feeder 852		7.933		Third party event	
		20120133	T055 Turkinje: 2 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	28/07/2012	07:30:14	28/07/2012	09:31:55		T055 Turkinje 2 Transformer	121.683		Third party event	
		20120146	Feeder 864: H029 Stanwell to H033 Stanwell Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	28/08/2012	16:31:59	3/09/2012	16:23:49	Feeder 864		8631.833		Third party event	
			Feeder 7226: H039 Woree to T051 Cairns de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	31/08/2012	07:44:52	31/08/2012	07:53:51	Feeder 7226		8.983		Third party event	
		20120147	T051 Cairns: 3 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	31/08/2012	07:44:52	31/08/2012	07:53:51		T051 Cairns 3 Transformer	8.983		Third party event	
		20120148	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped.  Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	1/09/2012	18:13:04	2/09/2012	01:15:43	Feeder 852		422.650		Third party event	
		20120149	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	2/09/2012	03:03:48	3/09/2012	04:43:08	Feeder 852		1539.333		Third party event	
		20120162	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	14/09/2012	11:52:57	14/09/2012	12:07:21	Feeder 823		14.400		Third party event	
		20120165	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	18/09/2012	09:48:31	18/09/2012	10:39:32	Feeder 823		51.017		Third party event	
		20120167	Feeder 823: H012 Mount England to H028 Wivenhoe tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.  Feeder 852: H024 Calvale to H030 Callide B Power Station tripped.	Generation issue	18/09/2012	23:30:45	1/01/2013	00:00:00	Feeder 823		149789.250	10080.000	Third party event	
		20120177	Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	26/09/2012	11:00:34	26/09/2012	11:39:50	Feeder 852		39.267		Third party event	
		20120178	Feeder 861: H029 Stanwell to H033 Stanwell Power tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	26/09/2012	10:30:43	26/09/2012	12:38:08	Feeder 861		127.417		Third party event	
<b>S7</b>	Average outage	20120199	Feeder 852: H024 Calvale to H030 Callide B Power Station tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	21/10/2012	14:44:38	21/10/2012	20:21:58	Feeder 852		337.333		Third party event	
	duration		Feeder 7227/1: H039 Woree – tee tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/10/2012	14:06:41	30/10/2012	15:38:51	Feeder 7227/1		92.167		Third party event	
			Feeder 7227/3: T051 Cairns - tee tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/10/2012	14:06:41	30/10/2012	15:38:51	Feeder 7227/3		92.167		Third party event	
		20120206	T051 Cairns: 4 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/10/2012	14:06:41	30/10/2012	15:38:51		T051 Cairns 4 Transformer	92.167		Third party event	
		20120217	Feeder 7339: H011 Nebo to T175 Bolingbroke de-loaded. Event initiated by customer. Powerlink plant and equipment operated as expected.	Customer issue	12/11/2012	16:39:24	12/11/2012	16:43:41	Feeder 7339		4.283		Third party event	
		20120221	T065 Alligator Creek: 3 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	17/11/2012	04:57:09	17/11/2012	18:50:04		T065 Alligator Creek 3 Transformer	832.917		Third party event	
		20120242	T056 Townsville South: 1 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	26/11/2012	11:13:44	26/11/2012	12:27:02		T056 Townsville South 1 Transformer	73.300		Third party event	
		20120244	H003 Belmont: 9 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	2/12/2012	07:30:23	2/12/2012	07:52:03		H003 Belmont 9 Transformer	21.667		Third party event	

20120244	H003 Belmont: 8 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	2/12/2012	07:30:23	2/12/2012	08:06:36		H003 Belmont 8 Transformer	36.217	Third party event	
20120251	T048 Tully: 2 Transformer tripped. Trip initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	7/12/2012	22:46:41	8/12/2012	11:56:20		T048 Tully 2 Transformer	789.650	Third party event	
20120284	T032 Blackwater: 2 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/12/2012	20:19:24	30/12/2012	22:22:17		T032 Blackwater 2 Transformer	122.883	Third party event	
20120284	T032 Blackwater: 1 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/12/2012	20:19:24	30/12/2012	22:26:29		T032 Blackwater 1 Transformer	127.083	Third party event	
20120284	T032 Blackwater: 7 Transformer de-loaded. Event initiated by distribution network. Powerlink plant and equipment operated as expected.	Distribution issue	30/12/2012	20:19:24	30/12/2012	22:26:35		T032 Blackwater 7 Transformer	127.183	Third party event	
20120285	Feeder 7192: T049 Kareeya to H032 Chalumbin tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	31/12/2012	08:04:28	31/12/2012	13:56:37	Feeder 7192		352.150	Third party event	
20120285	T049 Kareeya: 2 Transformer tripped. Trip initiated by generator. Powerlink plant and equipment operated as expected.	Generation issue	31/12/2012	08:04:28	31/12/2012	13:56:37		T049 Kareeya 2 Transformer	352.150	Third party event	

### 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.

# Powerlink - S1 - Peak transmission circuit availability

Performance Targets	Graph start	Collar	Target	Сар	Graph end
Peak transmission circuit availability		98.31%	98.76%	99.20%	99.40%
Weighting	-0.10%	-0.100%	0.00%	0.100%	0.10%

Performance Formulae			Forn	mulae					Conditions			S- Calc 1	S- Calc 2
Performance	=	-0.001000							Availability	<	98.31%	-0.001000	-0.001000
	=	0.22222	Х	Availability	+	-0.219467	98.31%	≤	Availability	≤	98.76%	0.001578	-0.000115
	=	0.227273	Х	Availability	+	-0.224455	98.76%	≤	Availability	≤	99.20%	0.001613	-0.000118
	=	0.001000					99.20%	<	Availability			0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Peak transmission circuit availability	=	99.469888%	98.708100%
S-Factor	=	0.100000%	-0.011533%

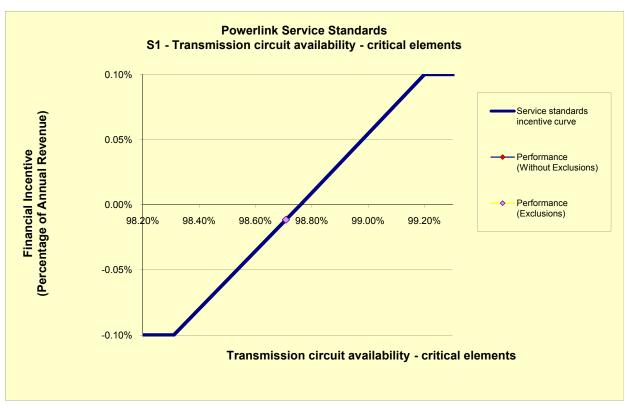
### NOTE:

# 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



# **Powerlink - S2 - Transmission line availability**

Performance Targets	Graph start	Collar	Target	Сар	Graph end
Transmission line availability		97.60%	98.76%	99.92%	100.10%
Weighting		-0.10%	0.00%	0.10%	0.10%

Performance Formulae			For	mulae					Conditions			S- Calc 1	S- Calc 2
Performance	=	-0.001000					When:		Availability	<	97.60%	-0.001000	-0.001000
	=	0.086207	Х	Availability	+	-0.085138	97.60%	≤	Availability	≤	98.76%	-0.000447	-0.000258
	=	0.086207	Х	Availability	+	-0.085138	98.76%	≤	Availability	≤	99.92%	-0.000447	-0.000258
	=	0.001000					99.92%	<	Availability			0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transmission line availability	=	98.241951%	98.460722%
S-Factor	=	-0.044659%	-0.025800%

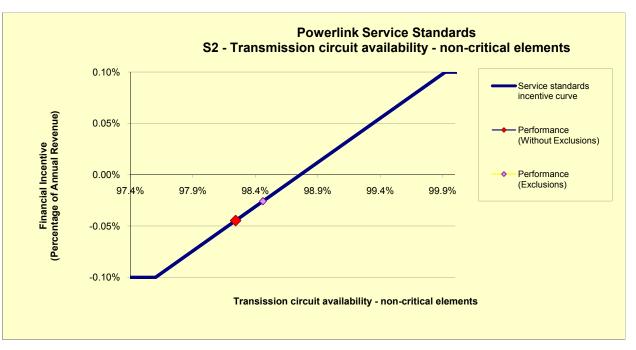
#### NOTE:

### 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



### **Powerlink - S3 - Transformer availability**

Performance Targets	Graph start	Collar	Target	Сар	Graph end
Transformer availability		98.27%	98.76%	99.24%	99.40%
Weighting		-0.10%	0.00%	0.10%	0.10%

Performance Formulae			Forn	nulae					Conditions			S- Calc 1	S- Calc 2
Performance	=	-0.001000					When:		Availability	<	98.27%	-0.001000	-0.001000
	=	0.204082	X	Availability	+	-0.201551	98.27%	≤	Availability	≤	98.76%	-0.000007	0.000014
	=	0.208333	X	Availability	+	-0.205750	98.76%	≤	Availability	≤	99.24%	-0.000007	0.000015
	=	0.001000					99.24%	<	Availability			0.001000	0.001000

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Transformer availability	=	98.756767%	98.767074%
S-Factor	=	-0.000660%	0.001474%

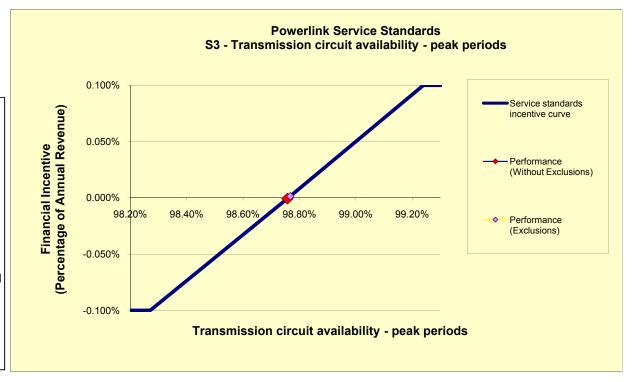
#### NOTE:

# 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



# **Powerlink - S4 - Reactive plant availability**

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Reactive plant availability		94.45%	97.15%	99.84%	100.00%
Weighting		-0.15%	0.00%	0.15%	0.15%

Performance Formulae			Forr	nulae					Conditions			S- Calc 1	S- Calc 2
Performance	=	-0.001500					When:		Availability	<	94.45%	-0.001500	-0.001500
	=	0.055556	х	Availability	+	-0.053972	94.45%	≤	Availability	≤	97.15%	0.000477	0.000477
	=	0.055762	х	Availability	+	-0.054173	97.15%	≤	Availability	≤	99.84%	0.000479	0.000479
	=	0.001500					99.84%	<	Availability			0.001500	0.001500

Performance Outcomes		Performance (Without Exclusions)	Performance (Exclusions)
Reactive plant availability	=	98.009135%	98.009135%
S-Factor	=	0.047907%	0.047907%

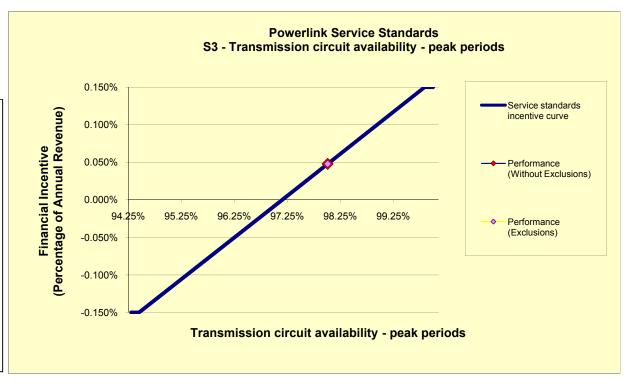
#### NOTE:

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# Powerlink - S5 - Loss of supply event frequency (No of events > 0.1 system minutes)

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Loss of supply event frequency (No of events > 0.1 system minutes)		3	2	1	-
Weighting		-0.150%	0.00%	0.150%	0.15%

Performance Formulae			For	rmulae			Conditions			S- Calc 1	S- Calc 2
Performance	=	-0.001500					3 < No. of events			-0.001500	-0.001500
	=	-0.001500	X	No. of events	+	0.003000	2 ≤ No. of events	≤	3	0.000000	0.001500
	=	-0.001500	Х	No. of events	+	0.003000	1 ≤ No. of events	≤	2	0.000000	0.001500
	=	0.001500					No. of events	<	1	0.001500	0.001500

Loss of supply event frequency (No of events > 0.1 system minutes)	=	Performance (Without Exclusions)	Performance (Exclusions)
Loss of supply event frequency (No of events > 0.1 system minutes)	II	2	1
S-Factor		0.000000%	0.150000%

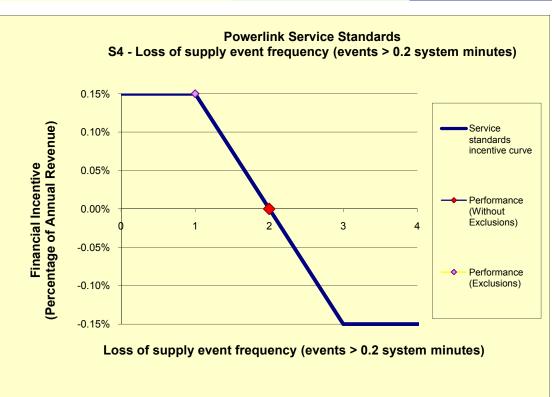
### NOTE:

### 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



# **Powerlink - S6 - Loss of supply event frequency (No of events > 0.75 system minutes)**

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Loss of supply event frequency (No of events > 0.75 system minutes)		2	1	(	0
Weighting		-0.300%	0.00%	0.300%	0.30%

Performance Formulae		Formulae				Conditions			S- Calc 1	S- Calc 2	
Performance	=	-0.003000					2	< No. of events		-0.003000	-0.003000
	=	-0.003000	Х	No. of events	+	0.003000	1	≤ No. of events ≤	2	0.000000	0.003000
	=	-0.003000	Х	No. of events	+	0.003000	0	≤ No. of events ≤	1	0.000000	0.003000
	=	0.003000						No. of events =	0	0.003000	0.003000

Loss of supply event frequency (No of events > 0.75 system minutes)	=	Performance (Without Exclusions)	Performance (Exclusions)
Loss of supply event frequency (No of events > 0.75 system minutes)	=	1	0
S-Factor		0.000000%	0.300000%

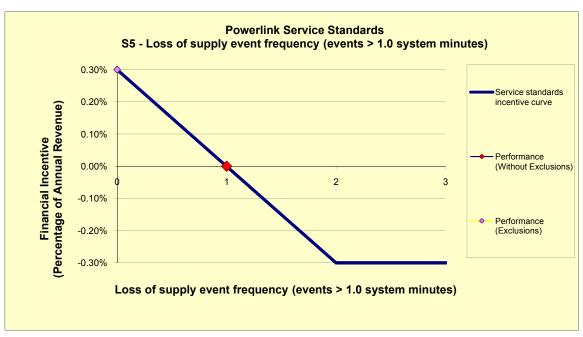
### NOTE:

### 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



# **Powerlink - S7 - Average outage duration**

Performance Targets	Graph start	Collar	Target	Cap	Graph end
Average outage duration		1,306	859	412	_
Weighting		-0.100%	0.00%	0.100%	0.10%

Performance Formulae		Formulae					Conditions				S- Calc 1	S- Calc 2
Performance	=	-0.001000					1306	< Duration	1		-0.001000	-0.001000
	=	-0.000002	Х	Duration	+	0.001922	859	≤ Duratio	າ ≤	1,306	-0.000279	-0.000092
	=	-0.000002	Х	Duration	+	0.001922	412	≤ Duratio	า ≤	859	-0.000279	-0.000092
	=	0.001000						Duratio	n <	412	0.001000	0.001000

Average outage duration	=	Performance (Without Exclusions)	Performance (Exclusions)
Average outage duration	=	983.885001	900.211300
S-Factor		-0.027938%	-0.009220%

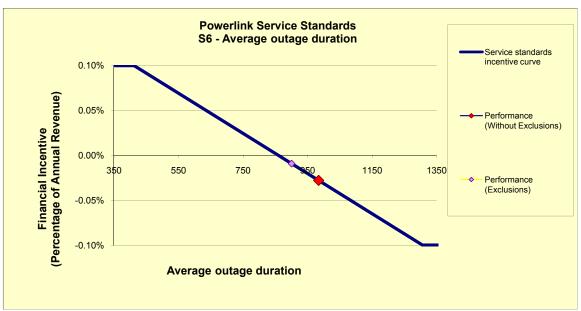
#### NOTE:

#### 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



# **Powerlink - Revenue Calculation**

Revenue cap information	
Base year allowed revenue	\$835,000,000
Base year	2012-13
X-factor	-3.02%
Commencement of regulatory	
period	1-Jul-12

Annual revenue adjusted for						
CPI	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17
СРІ	99.9	1	-	1	-	-

Nominal annual revenue	2012-13	2013-14	2014-15	2015-16	2016-17
Allowed Revenue	\$835,000,000				

Calendar year revenue	2H/2012	2013	2014	2015	2016
Revenue	\$417,500,000				

# NOTE:

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

Grey cells show calendar year revenue

Green cells are for formula

### **Powerlink - Performance outcomes**

Revenue calendar year

\$417,500,000

s	Performance parameter	Target	Perform	nance without	exclusions	Perfor	mance with ex	clusions	Impact of
	•	raiget	Performance	S-Factor	Final Incentive	Performance	S-Factor	Final Incentive	exclusions
S1	Peak transmission circuit availability	98.76%	99.469888%	0.100000%	\$417,500	98.708100%	-0.011533%	-\$48,151	-0.111533%
S2	Transmission line availability	98.76%	98.241951%	-0.044659%	-\$186,453	98.460722%	-0.025800%	-\$107,714	0.018860%
S3	Transformer availability	98.76%	98.756767%	-0.000660%	-\$2,755	98.767074%	0.001474%	\$6,153	0.002134%
S4	Reactive plant availability	97.15%	98.009135%	0.047907%	\$200,012	98.009135%	0.047907%	\$200,012	0.000000%
S5	Loss of supply event frequency (No of events > 0.1 system minutes)	2	2	0.000000%	\$0	1	0.150000%	\$626,250	0.150000%
S6	Loss of supply event frequency (No of events > 0.75 system minutes)	1	1	0.000000%	\$0	0	0.300000%	\$1,252,500	0.300000%
S7	Average outage duration	859	984	-0.027938%	-\$116,643	900	-0.009220%	-\$38,492	0.018719%
	TOTALS			0.074649%	\$311,661		0.452828%	\$1,890,559	0.378179%

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	0.452828%
Financial Incentive	\$1,890,559
Financial year affected by financial incentive	2013/14

#### **Powerlink - Defined exclusions**

Powerlink - Defined exclusions		
Parameter 1 - Peak transmission circuit availability		
Defined exclusions	Further description of exclusion	Reference
Unregulated transmission assets		Service Target Performance Incentive Scheme (March 2011) pp. 25-26.
3rd party outage	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	
Force majeure		
Any outage not affecting Powerlink's primary transmission equipment		
Faults originating from Powerlink owned equipment that affect primary plant or equipment		
owned by a distributor, connected customer or a generator.		
Capacitor banks in the winter off peak period.	Winter off peak is 1 April to 31 October	
Parameter 2 - Transmission line availability		
Defined exclusions	Further description of exclusion	Reference
Unregulated transmission assets		Service Target Performance Incentive Scheme (March 2011) pp. 25-26.
3rd party outage	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	
Force majeure		
Any outage not affecting Powerlink's primary transmission equipment		
Faults originating from Powerlink owned equipment that affect primary plant or equipment		
owned by a distributor, connected customer or a generator.		
Capacitor banks in the winter off peak period.	Winter off peak is 1 April to 31 October	
Parameter 3 - Transformer availability		
Defined exclusions	Further description of exclusion	Reference
Unregulated transmission assets		Service Target Performance Incentive Scheme (March 2011) pp. 25-26.
3rd party outage	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	
Force majeure		
Any outage not affecting Powerlink's primary transmission equipment		
Faults originating from Powerlink owned equipment that affect primary plant or equipment		
owned by a distributor, connected customer or a generator.	Michael off and big 4 April to 04 Oatobar	
Capacitor banks in the winter off peak period.	Winter off peak is 1 April to 31 October	
Parameter 4 - Reactive plant availability		
Defined exclusions	Further description of exclusion	Reference
Unregulated transmission assets		Service Target Performance Incentive Scheme (March 2011) pp. 25-26.
3rd party outage	Any outages shown to be caused by a fault or other event on a '3rd	
	party system' e.g. intertrip signal, generator outage, customer	
Force majeure	installation	
Any outage not affecting Powerlink's primary transmission equipment		
Faults originating from Powerlink owned equipment that affect primary plant or equipment owned by a distributor, connected customer or a generator.		
Capacitor banks in the winter off peak period.	Winter off peak is 1 April to 31 October	
Capacitor Darino III and William pour portion.	Transition on pount to 1 7 April to 01 October	
Parameter 5 - Loss of supply event frequency (No. of events > 0.1 system mins)		

Parameter 5 - Loss of supply event frequency (No. of events > 0.1 system mins)		
Defined exclusions	Further description of exclusion	Reference
Unregulated transmission assets (eg some connection assets)		Service target performance incentive scheme (March 2011) p. 27
3rd party outage	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	
Planned outages		
Force majeure		
Parameter 6 - Loss of supply event frequency (No. of events > 0.75 system mins)		
Defined exclusions	Further description of exclusion	Reference
Unregulated transmission assets		Service target performance incentive scheme (March 2011) p. 27
3rd party outage	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	
Planned outages		
Force maleure		

Parameter 7 - Average outage duration		
Defined exclusions	Further description of exclusion	Reference
Momentary interruptions (less than one minute)		Service target performance incentive scheme (March 2011) p. 28
Planned outages		
Force majeure		
Capacitor banks in the winter off peak period	Winter off peak is 1 April to 31 October.	
3rd party outages	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.	

# **Service Target Perfomance Incentive Scheme - Definition of Force Majeure**

Definition of Force Majeure	Reference
For the purpose of applying the <i>service target performance incentive scheme</i> , 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:	Service Target Performance Incentive Scheme (March 2011) p. 54
- 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?	