

APPENDIX 3

Submission Guidelines—Cost information

Revenue Reset Information Pro Formas

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1.1 HISTORIC OPEX by expenditure category

\$ million nominal

		Financial Year						Total	Revenue Cap Allowance	Key cost drivers and explanation for material differences over time
		Jan to Jun 2004	2004-05	2005-06	2006-07	2007-08	2008-09			
Direct Operating and Maintenance										
Field Operations and Maintenance										
Substations										
	Labour	1.7	3.4	2.7	3.7	3.3	3.6	18.5		
	Non Labour	0.9	1.9	1.5	2.0	1.8	2.0	9.9		
	Sub-Totals	2.6	5.3	4.2	5.6	5.1	5.6	28.4		
Protection and Control										
	Labour	0.4	0.7	0.8	1.0	0.9	0.8	4.7		
	Non Labour	0.1	0.2	0.3	0.3	0.3	0.3	1.6		
	Sub-Totals	0.6	1.0	1.1	1.3	1.2	1.1	6.2		
Communications										
	Operational Communications	0.9	1.9	2.5	2.5	2.7	3.0	13.6		
	Sub-Totals	0.9	1.9	2.5	2.5	2.7	3.0	13.6		
Transmission Lines										
	Labour	0.8	1.9	1.8	1.8	3.4	2.9	12.6		
	Non Labour	0.4	0.8	0.8	0.8	1.4	1.2	5.4		
	Sub-Totals	1.2	2.7	2.6	2.6	4.8	4.1	18.0		
Easements										
	Labour	0.4	1.1	1.1	1.2	1.1	1.4	6.5		
	Non Labour	0.3	0.8	0.8	0.8	0.8	0.9	4.3		
	Sub-Totals	0.7	1.9	1.9	2.0	1.9	2.3	10.8		
Summary										
	Sub-Total Labour	3.4	7.2	6.5	7.7	8.7	8.7	42.2		
	Sub-Total Non Labour	1.7	3.7	3.3	3.9	4.3	4.4	21.2		
	Sub-Total Operational Communications	0.9	1.9	2.5	2.5	2.7	3.0	13.6		
	Total Field Operations and Maintenance	6.0	12.8	12.3	14.1	15.7	16.1	77.0		
Transmission Services										
	Engineering Services	1.3	3.4	4.5	4.1	4.3	4.5	22.2		
	Works Planning and Coordination	0.5	1.1	1.7	1.9	2.1	2.7	9.9		
	Total Transmission Services	1.8	4.5	6.1	6.0	6.4	7.2	32.1		
Transmission Operations										
	Transmission Operations	0.8	2.4	5.8	4.4	4.6	4.9	22.8		
	Total Transmission Operations	0.8	2.4	5.8	4.4	4.6	4.9	22.8		
	Total Direct Operating and Maintenance	8.7	19.8	24.2	24.4	26.6	28.2	131.9		
Other Controllable										
Asset Management										
	Customer & Asset Management	1.1	2.9	3.1	3.6	3.9	5.5	20.0		
	Regulation & Compliance	0.4	0.8	0.8	1.5	4.0	2.7	10.1		
	Sub-Total Asset Management	1.5	3.6	3.9	5.0	8.0	8.1	30.1		
Corporate										
	Business Services	2.0	3.9	5.2	5.4	5.7	6.4	28.5		
	Corporate Governance and Business Planning	0.4	0.8	1.4	1.4	1.4	2.2	7.7		
	Insurance	0.4	0.9	0.8	0.8	0.8	0.9	4.6		
	Sub-Total Corporate	2.8	5.6	7.5	7.5	7.9	9.4	40.8		
	Total Other Controllable	4.4	9.3	11.4	12.5	15.9	17.5	71.0		
Summary										
	Total Direct Operating and Maintenance	8.7	19.8	24.2	24.4	26.6	28.2	131.9		
	Total Other Controllable	4.4	9.3	11.4	12.5	15.9	17.5	71.0		
	TOTAL CONTROLLABLE OPEX	13.0	29.0	35.6	37.0	42.5	45.7	202.9		
Other Operating Expenditure										
	Network Support	-	0.2	1.2	0.6	2.9	3.6	8.5		
	Equity Raising	-	-	-	-	-	-	-		
	Debt Raising	-	-	-	-	-	-	-		
	Self-insurance	-	-	-	0.1	0.3	1.0	1.4		
	TOTAL OTHER OPERATING EXPENDITURE	-	0.2	1.2	0.7	3.2	4.6	9.9		
	TOTAL OPERATING EXPENDITURE	13.0	29.2	36.9	37.7	45.7	50.3	212.8		
	Revenue Cap Allowance¹	13.4	29.4	34.8	33.9	34.3	35.8	181.6		

Relatively stable, efficiencies delivered through revised asset management practices and implementation of a new asset management information system. Refer to chapters 3 and 4 of the Revenue Proposal

Increase in earlier years due to changes in maintenance strategy, relatively stable in latter years due to efficiencies delivered through revised asset maintenance practices and implementation of a new asset management information system. Refer to chapters 3 and 4 of Revenue Proposal

Increased operational communications costs due to increase in requirements

Efficiencies delivered through revised asset management practices and implementation of a new asset management information system, increase in latter years due to timing of dismantling program, refer chapters 3 and 4 of the Revenue Proposal

Relatively stable, efficiencies delivered through revised asset management practices

Increase in latter years due to general growth factors, asset management practices and to support of the integrated works program. Refer chapters 3 and 6 of the Revenue Proposal
 Increase in latter years due to general growth factors, asset management practices and to support of the integrated works program. Refer chapters 3 and 6 of the Revenue Proposal

Change in transmission operations requirements due to NEM entry and other regulatory obligations

Strengthened strategic and mid-term system planning, and strategic and tactical asset management capacity and capability. Refer to chapters 3, 4 and 6 of the Revenue Proposal
 Includes the cost of preparation of Transend's revenue proposal for the forthcoming regulatory control period.

Delivery of IT strategy and systems to support NEM entry and other business imperatives, skills development and training programs
 Includes one off separation costs in the last year due to organisation restructuring
 Relatively stable, latter years based on actuarial report for insurance premiums

Network support actuals and estimated requirements for latter years. Refer chapter 6 of the Revenue Proposal.

Essential remedial foundation work required on a number of transmission line towers.

1. Revenue cap allowance includes network support

1.2 HISTORIC OPEX by expenditure category

\$ million nominal	Jan to June 2004						
	Field Operations and Maintenance			Network	Non Network	TOTAL	Revenue Cap Allowance
	Planned	Condition Assessment	Corrective				
Direct Operating and Maintenance							
Field Operations and Maintenance							
Substations							
Labour	1.2	0.3	0.2			1.7	
Non Labour	0.6	0.2	0.1			0.9	
Sub-Totals	1.8	0.5	0.3	-	-	2.6	
Protection and Control							
Labour	-	0.2	0.2			0.4	
Non Labour	-	0.1	0.1			0.1	
Sub-Totals	-	0.3	0.3	-	-	0.6	
Communications							
Operational Communications	0.9					0.9	
Sub-Totals	0.9	-	-	-	-	0.9	
Transmission Lines							
Labour	0.6	0.2	0.0			0.8	
Non Labour	0.3	0.1	0.0			0.4	
Sub-Totals	0.9	0.3	0.1	-	-	1.2	
Easements							
Labour	0.4	0.0	-			0.4	
Non Labour	0.3	0.0	-			0.3	
Sub-Totals	0.7	0.1	-	-	-	0.7	
Summary							
Sub-Total Labour	2.2	0.8	0.5	-	-	3.4	
Sub-Total Non Labour	1.2	0.3	0.2	-	-	1.7	
Sub-Total Operational Communications	0.9	-	-	-	-	0.9	
Total Field Operations and Maintenance	4.3	1.1	0.6	-	-	6.0	
Transmission Services							
Engineering Services				1.3		1.3	
Works Planning and Coordination				0.5		0.5	
Total Transmission Services	-	-	-	1.8	-	1.8	
Transmission Operations							
Transmission Operations				0.8		0.8	
Total Transmission Operations	-	-	-	0.8	-	0.8	
Total Direct Operating and Maintenance	4.3	1.1	0.6	2.6	-	8.7	
Other Controllable							
Asset Management							
Customer & Asset Management				1.1		1.1	
Regulation & Compliance				0.4		0.4	
Sub-Total Asset Management	-	-	-	1.5	-	1.5	
Corporate							
Business Services					2.0	2.0	
Corporate Governance and Business Planning					0.4	0.4	
Insurance					0.4	0.4	
Sub-Total Corporate	-	-	-	-	2.8	2.8	
Total Other Controllable	-	-	-	1.5	2.8	4.4	
Summary							
Total Direct Operating and Maintenance	4.3	1.1	0.6	2.6	-	8.7	
Total Other Controllable	-	-	-	1.5	2.8	4.4	
TOTAL CONTROLLABLE OPEX	4.3	1.1	0.6	4.1	2.8	13.0	
Other Operating Expenditure							
Network Support	-	-	-	-	-	-	
Equity Raising	-	-	-	-	-	-	
Debt Raising	-	-	-	-	-	-	
Self-insurance	-	-	-	-	-	-	
TOTAL OTHER OPERATING EXPENDITURE	-	-	-	-	-	-	
TOTAL OPERATING EXPENDITURE	4.3	1.1	0.6	4.1	2.8	13.0	
Revenue Cap Allowance¹						13.4	

1. Revenue cap allowance includes network support

1.3 HISTORIC OPEX by expenditure category

\$ million nominal	2004-05							
	Field Operations and Maintenance				Network	Non Network	TOTAL	Revenue Cap Allowance
	Planned	Condition Assessment	Corrective					
Direct Operating and Maintenance								
Field Operations and Maintenance								
Substations								
Labour	2.4	0.6	0.4	-	-	3.4		
Non Labour	1.3	0.3	0.2	-	-	1.9		
Sub-Totals	3.8	1.0	0.6	-	-	5.3		
Protection and Control								
Labour	-	0.3	0.4	-	-	0.7		
Non Labour	-	0.1	0.1	-	-	0.2		
Sub-Totals	-	0.5	0.5	-	-	1.0		
Communications								
Operational Communications	1.9	-	-	-	-	1.9		
Sub-Totals	1.9	-	-	-	-	1.9		
Transmission Lines								
Labour	1.4	0.5	0.1	-	-	1.9		
Non Labour	0.6	0.2	0.0	-	-	0.8		
Sub-Totals	1.9	0.7	0.1	-	-	2.7		
Easements								
Labour	1.0	0.1	-	-	-	1.1		
Non Labour	0.7	0.1	-	-	-	0.8		
Sub-Totals	1.7	0.2	-	-	-	1.9		
Summary								
Sub-Total Labour	4.8	1.5	0.9	-	-	7.2		
Sub-Total Non Labour	2.6	0.7	0.4	-	-	3.7		
Sub-Total Operational Communications	1.9	-	-	-	-	1.9		
Total Field Operations and Maintenance	9.3	2.3	1.2	-	-	12.8		
Transmission Services								
Engineering Services				3.4	-	3.4		
Works Planning and Coordination				1.1	-	1.1		
Total Transmission Services	-	-	-	4.5	-	4.5		
Transmission Operations								
Transmission Operations				2.4	-	2.4		
Total Transmission Operations	-	-	-	2.4	-	2.4		
Total Direct Operating and Maintenance	9.3	2.3	1.2	7.0	-	19.8		
Other Controllable								
Asset Management								
Customer & Asset Management	-	-	-	2.9	-	2.9		
Regulation & Compliance	-	-	-	0.8	-	0.8		
Sub-Total Asset Management	-	-	-	3.7	-	3.7		
Corporate								
Business Services	-	-	-	-	3.9	3.9		
Corporate Governance and Planning	-	-	-	-	0.8	0.8		
Insurance	-	-	-	-	0.9	0.9		
Sub-Total Corporate	-	-	-	-	5.6	5.6		
Total Other Controllable	-	-	-	3.6	5.6	9.3		
Summary								
Total Direct Operating and Maintenance	9.3	2.3	1.2	7.0	-	19.8		
Total Other Controllable	-	-	-	3.6	5.6	9.3		
TOTAL CONTROLLABLE OPEX	9.3	2.3	1.2	10.6	5.6	29.0		
Other Operating Expenditure								
Network Support	-	-	-	0.2	-	0.2		
Equity Raising	-	-	-	-	-	-		
Debt Raising	-	-	-	-	-	-		
Self-insurance	-	-	-	-	-	-		
TOTAL OTHER OPERATING EXPENDITURE	-	-	-	0.2	-	0.2		
TOTAL OPERATING EXPENDITURE	9.3	2.3	1.2	10.8	5.6	29.2		
Revenue Cap Allowance¹						29.4		

1. Revenue cap allowance includes network support

1.5 HISTORIC OPEX by expenditure category

\$ million nominal

	2006-07						
	Field Operations and Maintenance			Network	Non Network	TOTAL	Revenue Cap Allowance
	Planned	Condition Assessment	Corrective				
Direct Operating and Maintenance							
Field Operations and Maintenance							
Substations							
Labour	2.6		0.7	0.4			3.7
Non Labour	1.4		0.4	0.2			2.0
Sub-Totals	4.0		1.0	0.6	-	-	5.6
Protection and Control							
Labour	-		0.5	0.5			1.0
Non Labour	-		0.2	0.2			0.3
Sub-Totals	-		0.6	0.7	-	-	1.3
Communications							
Operational Communications	2.5						2.5
Sub-Totals	2.5		-	-	-	-	2.5
Transmission Lines							
Labour	1.3		0.4	0.1			1.8
Non Labour	0.6		0.2	0.0			0.8
Sub-Totals	1.9		0.6	0.1	-	-	2.6
Easements							
Labour	1.1		0.1	-			1.2
Non Labour	0.7		0.1	-			0.8
Sub-Totals	1.8		0.2	-	-	-	2.0
Summary							
Sub-Total Labour	5.0		1.7	1.0	-	-	7.7
Sub-Total Non Labour	2.7		0.8	0.4	-	-	3.9
Sub-Total Operational Communications	2.5		-	-	-	-	2.5
Total Field Operations and Maintenance	10.2		2.5	1.4	-	-	14.1
Transmission Services							
Engineering Services				4.1			4.1
Works Planning and Coordination				1.9			1.9
Total Transmission Services	-		-	6.0	-	-	6.0
Transmission Operations							
Transmission Operations				4.4			4.4
Total Transmission Operations	-		-	4.4	-	-	4.4
Total Direct Operating and Maintenance	10.2		2.5	1.4	10.4	-	24.4
Other Controllable							
Asset Management							
Customer & Asset Management				3.6			3.6
Regulation & Compliance				1.5			1.5
Sub-Total Asset Management	-		-	5.0	-	-	5.0
Corporate							
Business Services					5.4		5.4
Corporate Governance and Planning					1.4		1.4
Insurance					0.8		0.8
Sub-Total Corporate	-		-	-	7.5		7.5
Total Other Controllable	-		-	-	5.0	7.5	12.5
Summary							
Total Direct Operating and Maintenance	10.2		2.5	1.4	10.4	-	24.4
Total Other Controllable	-		-	-	5.0	7.5	12.5
TOTAL CONTROLLABLE OPEX	10.2		2.5	1.4	15.4	7.5	37.0
Other Operating Expenditure							
Network Support	-		-	-	0.6	-	0.6
Equity Raising	-		-	-	-	-	-
Debt Raising	-		-	-	-	-	-
Self-insurance	-		-	-	-	0.1	0.1
TOTAL OTHER OPERATING EXPENDITURE	-		-	-	0.6	0.1	0.7
TOTAL OPERATING EXPENDITURE	10.2		2.5	1.4	16.0	7.6	37.7
Revenue Cap Allowance¹							33.9

1. Revenue cap allowance includes network support

1.6 HISTORIC OPEX by expenditure category

\$ million nominal

Direct Operating and Maintenance	
Field Operations and Maintenance	
Substations	
Labour	2.3
Non Labour	1.3
Sub-Totals	3.6
Protection and Control	
Labour	-
Non Labour	-
Sub-Totals	-
Communications	
Operational Communications	2.7
Sub-Totals	2.7
Transmission Lines	
Labour	2.4
Non Labour	1.0
Sub-Totals	3.4
Easements	
Labour	1.0
Non Labour	0.7
Sub-Totals	1.7
Summary	
Sub-Total Labour	5.8
Sub-Total Non Labour	3.0
Sub-Total Operational Communications	2.7
Total Field Operations and Maintenance	11.5
Transmission Services	
Engineering Services	
Works Planning and Coordination	
Total Transmission Services	-
Transmission Operations	
Transmission Operations	
Total Transmission Operations	-
Total Direct Operating and Maintenance	11.5
Other Controllable	
Asset Management	
Customer & Asset Management	
Regulation & Compliance	
Sub-Total Asset Management	-
Corporate	
Business Services	
Corporate Governance and Planning	
Insurance	
Sub-Total Corporate	-
Total Other Controllable	-
Summary	
Total Direct Operating and Maintenance	11.5
Total Other Controllable	-
TOTAL CONTROLLABLE OPEX	11.5
Other Operating Expenditure	
Network Support	-
Equity Raising	-
Debt Raising	-
Self-insurance	-
TOTAL OTHER OPERATING EXPENDITURE	-
TOTAL OPERATING EXPENDITURE	11.5
Revenue Cap Allowance¹	

2007-08						
Field Operations and Maintenance			Network	Non Network	TOTAL	Revenue Cap Allowance
Planned	Condition Assessment	Corrective				
					3.3	
					1.8	
					5.1	
					0.9	
					0.3	
					1.2	
					2.7	
					2.7	
					3.4	
					1.4	
					4.8	
					1.1	
					0.8	
					1.9	
					8.7	
					4.3	
					2.7	
					15.7	
					4.3	
					2.1	
					6.4	
					4.6	
					4.6	
					26.6	
					3.9	
					4.0	
					8.0	
					5.7	
					1.4	
					0.8	
					7.9	
					7.9	
					15.9	
					11.0	
					26.6	
					8.0	
					7.9	
					15.9	
					42.5	
					2.9	
					-	
					-	
					0.3	
					3.2	
					21.8	
					8.3	
					45.7	
					34.3	

1. Revenue cap allowance includes network support

2.1 FORECAST OPEX by expenditure category
\$ million 2008-09

	Financial Year					Total	Revenue Cap Allowance	Key cost drivers and explanation for material differences over time
	2009-10	2010-11	2011-12	2012-13	2013-14			
Direct Operating and Maintenance								
Field Operations and Maintenance								
Substations								
Labour	3.6	4.0	4.2	4.2	4.3	20.3		Relatively stable, general growth associated with labour cost escalation
Non Labour	2.0	2.2	2.3	2.2	2.3	10.9		
Sub-Totals	5.6	6.2	6.5	6.4	6.6	31.3		
Protection and Control								
Labour	0.8	0.8	0.9	0.9	1.0	4.4		Relatively stable, general growth associated with labour cost escalation
Non Labour	0.3	0.3	0.3	0.3	0.3	1.5		
Sub-Totals	1.1	1.0	1.2	1.2	1.3	5.9		
Communications								
Operational Communications	3.2	3.4	3.5	3.7	3.7	17.4		General increase associated with new requirements ¹ .
Sub-Totals	3.2	3.4	3.5	3.7	3.7	17.4		
Transmission Lines								
Labour	3.0	3.2	3.1	3.2	3.7	16.2		Cost of transmission line dismantling and general growth associated with labour cost escalation.
Non Labour	1.3	1.4	1.3	1.4	1.6	7.0		
Sub-Totals	4.3	4.6	4.4	4.6	5.3	23.2		
Easements								
Labour	1.4	1.4	1.4	1.4	1.5	7.0		General growth increase associated with labour cost escalation. Refer chapter 6 of the Revenue Proposal
Non Labour	0.9	0.9	0.9	1.0	1.0	4.7		
Sub-Totals	2.3	2.3	2.3	2.4	2.5	11.7		
Summary								
Sub-Total Labour	8.8	9.4	9.6	9.8	10.5	48.0		Relatively stable, general growth associated with labour cost escalation
Sub-Total Non Labour	4.4	4.7	4.8	4.9	5.2	24.1		
Sub-Total Operational Communications	3.2	3.4	3.5	3.7	3.7	17.4		
Total Field Operations and Maintenance	16.4	17.5	17.9	18.3	19.3	89.5		Refer chapter 6 of the Revenue Proposal
Transmission Services								
Engineering Services	4.9	5.2	5.3	5.5	5.7	26.7		Increased cost associated with wage, asset growth and scope changes as discussed in chapter 6 of the Revenue Proposal
Works Planning and Coordination	2.8	3.0	3.0	3.2	3.3	15.3		Increased cost associated with wage, asset growth and scope changes as discussed in chapter 6 of the Revenue Proposal
Total Transmission Services	7.8	8.1	8.4	8.7	9.0	42.0		
Transmission Operations								
Transmission Operations	5.1	5.3	5.5	5.7	5.9	27.5		Relatively stable, general growth associated with labour cost escalation
Total Transmission Operations	5.1	5.3	5.5	5.7	5.9	27.5		
Total Direct Operating and Maintenance	29.2	31.0	31.7	32.7	34.2	158.9		
Other Controllable								
Asset Management								
Customer & Asset Management	5.8	6.0	6.2	6.3	6.5	30.8		Increased cost associated with wage, asset growth and scope changes as discussed in chapter 6 of the Revenue Proposal
Regulation & Compliance	0.8	0.8	2.4	4.2	3.1	11.4		Increased cost associated with wage, asset growth and scope changes as discussed in chapter 6 of the Revenue Proposal
Sub-Total Asset Management	6.6	6.9	8.5	10.5	9.7	42.2		
Corporate								
Business Services	7.3	7.4	7.3	7.5	7.7	37.2		Increased cost associated with wage, asset growth and scope changes as discussed in chapter 6 of the Revenue Proposal
Corporate Governance and Planning	1.6	1.6	1.7	1.7	1.8	8.4		Increased cost associated with wage, asset growth and scope changes as discussed in chapter 6 of the Revenue Proposal
Insurance	0.9	1.0	1.1	1.2	1.3	5.7		Forecast insurance premiums based on actuarial advice. Refer chapter 6 of the Revenue Proposal
Sub-Total Corporate	9.9	10.0	10.1	10.5	10.9	51.3		
Total Other Controllable	16.5	16.9	18.6	21.0	20.5	93.4		
Summary								
Total Direct Operating and Maintenance	29.2	31.0	31.7	32.7	34.2	158.9		
Total Other Controllable	16.5	16.9	18.6	21.0	20.5	93.4		
TOTAL CONTROLLABLE OPEX	45.7	47.9	50.3	53.7	54.8	252.3		
Other Operating Expenditure								
Network Support	3.9	2.6	-	-	-	6.6		Estimated network support needs. Refer chapter 6 of the Revenue Proposal
Equity Raising	2.4	2.4	2.4	2.4	2.4	12.0		Benchmarked cost. Refer chapter 6 of the Revenue Proposal.
Debt Raising	0.9	1.0	1.1	1.2	1.2	5.4		Benchmarked cost. Refer chapter 6 of the Revenue Proposal.
Self-insurance	0.8	0.8	0.8	0.8	0.8	3.9		Forecast self-insurance allowance based on actuarial advice. Refer chapter 6 of the Revenue Proposal
TOTAL OTHER OPERATING EXPENDITURE	8.0	6.8	4.3	4.3	4.4	27.9		
TOTAL OPERATING EXPENDITURE	53.7	54.7	54.6	58.0	59.2	280.2		
Revenue Cap Allowance								

1. Transend is presently in commercial negotiations with its operational telecommunications service provider and will provide revised costs for this function if these negotiations result in materially different costs for the forthcoming regulatory control period.

2.2 FORECAST OPEX by expenditure category

\$ million 2008-09

Direct Operating and Maintenance	
Field Operations and Maintenance	
Substations	
Labour	2.6
Non Labour	1.4
Sub-Totals	4.0
Protection and Control	
Labour	-
Non Labour	-
Sub-Totals	-
Communications	
Operational Communications	3.2
Sub-Totals	3.2
Transmission Lines	
Labour	2.1
Non Labour	0.9
Sub-Totals	3.0
Easements	
Labour	1.2
Non Labour	0.8
Sub-Totals	2.0
Summary	
Sub-Total Labour	5.9
Sub-Total Non Labour	3.1
Sub-Total Operational Communications	3.2
Total Field Operations and Maintenance	12.2
Transmission Services	
Engineering Services	
Works Planning and Coordination	
Total Transmission Services	-
Transmission Operations	
Transmission Operations	
Total Transmission Operations	-
Total Direct Operating and Maintenance	12.2
Other Controllable	
Asset Management	
Customer & Asset Management	
Regulation & Compliance	
Sub-Total Asset Management	-
Corporate	
Business Services	
Corporate Governance and Planning	
Insurance	
Sub-Total Corporate	-
Total Other Controllable	-
Summary	
Total Direct Operating and Maintenance	12.2
Total Other Controllable	-
TOTAL CONTROLLABLE OPEX	12.2
Other Operating Expenditure	
Network Support	-
Equity Raising	-
Debt Raising	-
Self-insurance	-
TOTAL OTHER OPERATING EXPENDITURE	-
TOTAL OPERATING EXPENDITURE	12.2
Revenue Cap Allowance	

2009-10						
Field Operations and Maintenance			Network	Non Network	TOTAL	Revenue Cap Allowance
Planned	Condition Assessment	Corrective				
					3.6	
					2.0	
					5.6	
					0.8	
					0.3	
					1.1	
					3.2	
					3.2	
					3.0	
					1.3	
					4.3	
					1.4	
					0.9	
					2.3	
					8.8	
					4.4	
					3.2	
					16.4	
					4.9	
					2.8	
					7.8	
					5.1	
					5.1	
					29.2	
					5.8	
					0.8	
					6.6	
					7.3	
					1.6	
					0.9	
					9.9	
					9.9	
					16.5	
					29.2	
					16.5	
					45.7	
					3.9	
					2.4	
					0.9	
					0.8	
					8.0	
					53.7	

2.3 FORECAST OPEX by expenditure category

\$ million 2008-09	2010-11						Revenue Cap Allowance
	Field Operations and Maintenance			Network	Non Network	TOTAL	
	Planned	Condition Assessment	Corrective				
Direct Operating and Maintenance							
Field Operations and Maintenance							
Substations							
Labour	2.9	0.7	0.4			4.0	
Non Labour	1.5	0.4	0.2			2.2	
Sub-Totals	4.4	1.1	0.7	-	-	6.193	
Protection and Control							
Labour	-	0.4	0.4			0.8	
Non Labour	-	0.1	0.1			0.3	
Sub-Totals	-	0.5	0.5	-	-	1.0	
Communications							
Operational Communications	3.4					3.4	
Sub-Totals	3.4	-	-	-	-	3.4	
Transmission Lines							
Labour	2.3	0.8	0.2			3.2	
Non Labour	1.0	0.3	0.1			1.4	
Sub-Totals	3.3	1.1	0.2	-	-	4.6	
Easements							
Labour	1.2	0.1	-			1.4	
Non Labour	0.8	0.1	-			0.9	
Sub-Totals	2.1	0.2	-	-	-	2.3	
Summary							
Sub-Total Labour	6.4	2.0	1.0	-	-	9.4	
Sub-Total Non Labour	3.4	0.9	0.4	-	-	4.7	
Sub-Total Operational Communications	3.4	-	-	-	-	3.4	
Total Field Operations and Maintenance	13.1	2.9	1.5	-	-	17.5	
Transmission Services							
Engineering Services				5.2		5.2	
Works Planning and Coordination				3.0		3.0	
Total Transmission Services	-	-	-	8.1	-	8.1	
Transmission Operations							
Transmission Operations				5.3		5.3	
Total Transmission Operations	-	-	-	5.3	-	5.3	
Total Direct Operating and Maintenance	13.1	2.9	1.5	13.4	-	31.0	
Other Controllable							
Asset Management							
Customer & Asset Management				6.0		6.0	
Regulation & Compliance				0.8		0.8	
Sub-Total Asset Management	-	-	-	6.9	-	6.9	
Corporate							
Business Services				-	7.4	7.4	
Corporate Governance and Planning				-	1.6	1.6	
Insurance				-	1.0	1.0	
Sub-Total Corporate	-	-	-	-	10.0	10.0	
Total Other Controllable	-	-	-	6.9	10.0	16.9	
Summary							
Total Direct Operating and Maintenance	13.1	2.9	1.5	13.4	-	31.0	
Total Other Controllable	-	-	-	6.9	10.0	16.9	
TOTAL CONTROLLABLE OPEX	13.1	2.9	1.5	20.3	10.0	47.9	
Other Operating Expenditure							
Network Support	-	-	-	2.6	-	2.6	
Equity Raising	-	-	-	-	2.4	2.4	
Debt Raising	-	-	-	-	1.0	1.0	
Self-insurance	-	-	-	-	0.8	0.8	
TOTAL OTHER OPERATING EXPENDITURE	-	-	-	2.6	4.2	6.8	
TOTAL OPERATING EXPENDITURE	13.1	2.9	1.5	23.0	14.2	54.7	
Revenue Cap Allowance							

3.1 HISTORIC CAPEX by project category

\$ million nominal

Project Category		Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	TOTAL
NETWORK								
DEVELOPMENT	Augmentation	0.2	3.5	14.7	36.8	0.0	22.5	77.7
	Connection	1.0	0.8	11.4	4.9	0.0	6.3	24.6
	Land and Easements	0.0	0.2	0.0	3.6			3.8
RENEWAL	Asset Renewal	19.7	24.9	29.8	45.9	61.6	35.5	217.3
	Physical Security / Compliance	6.6	9.9	7.7	2.4	7.8	24.5	58.9
	Inventory / Spares	0.0	0.0	0.0	0.1	0.0	3.0	3.0
	Operational Support Systems	1.3	2.9	0.9	1.9	1.8	0.1	8.9
NON NETWORK								
BUSINESS IT	Information Technology	0.7	1.5	1.8	0.4	2.7	4.1	11.3
SUPPORT THE BUSINESS	Business Support	0.5	8.5	1.3	0.9	2.8	0.6	14.4
TOTAL FDC		2.0	2.8	4.0	5.8	4.9	6.2	25.7
TOTAL HISTORIC CAPEX		29.9	52.3	67.6	96.8	76.7	96.5	419.8

3.2 HISTORIC CAPEX by asset class

\$ million nominal

	Jan to June 2004		2004-05		2005-06		2006-07		2007-08		2008-09		TOTAL	
	Cost	FDC	Cost	FDC	Cost	FDC	Cost	FDC	Cost	FDC	Cost	FDC	Cost	FDC
Transmission Lines & Cables	11.8	0.9	0.8	0.1	6.5	0.5	37.0	2.8	24.2	1.8	5.5	0.4	85.8	6.5
Transmission Substations	2.9	0.2	19.4	1.5	28.8	2.2	29.2	2.2	34.8	2.6	67.6	5.1	182.7	13.8
Protection & Control	0.1	0.0	11.6	0.9	5.2	0.4	8.7	0.7	5.5	0.4	9.5	0.7	40.7	3.1
Refurbishment	11.6	0.9	5.2	0.4	12.0	0.9	2.3	0.2					31.1	2.3
Other - IT	0.5		3.3		5.3		4.3		7.3		4.7		25.4	0.0
Other - General	0.7		2.0		1.2		1.0			0.0			4.9	0.0
Other - Building	0.4		7.1		4.7		4.9		0.0		3.0		20.1	0.0
Land and Easements							3.6		0.0		0.0		3.6	
Subtotal	27.9	2.0	49.5	2.8	63.7	4.0	91.0	5.8	71.8	4.9	90.3	6.2	394.2	25.7
TOTAL CAPEX	29.9		52.3		67.6		96.8		76.7		96.5		419.8	

3.3 HISTORIC CAPEX - NETWORK - by Project

\$ million nominal

Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project (inclusive of FDC)						TOTAL
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	
ND0035	Trevellyn Substation redevelopment	Jul-04	Asset Renewal		0.0		0.0			0.0
ND0036	Mowbray Substation construction	May-06	Augmentation			8.0	2.2			10.3
ND0037	Transmission lines	Jul-04	Asset Renewal		0.0					0.0
ND0073	Access Track Trans line South	Jul-04	Asset Renewal		0.0					0.0
ND0080	Fire Hydrant Upgrades	Jul-04	Operational Support		0.0					0.0
ND0089	Substation Operational Earthing system Upgrade	Jul-04	System Asset Renewal	0.1	0.0					0.1
ND0134	DC Supply assessment and installation	Jul-04	Asset Renewal		0.0					0.0
ND0144	Riston Major Industrial	Mar-06	Connection			0.8				0.8
ND0165	DC System Standard Documents & Drawings	Apr-05	Operational Support		0.0					0.0
ND0170	Power System Protection program	Jul-04	Asset Renewal		0.0					0.0
ND0186	Chapel Street Substation replacements	Jul-04	Asset Renewal		0.1					0.1
ND0217	George Town Substation replace B452 and C452 circuit breakers	Jul-04	Asset Renewal		0.0					0.0
ND0230	Ulvestons Substation - Oil containment	Jul-04	Physical Security / Compliance		0.0					0.0
ND0240	George Town Substation CT Replacement A196	Jul-04	Asset Renewal		0.0					0.0
ND0241	Creek Road Substation- Voltage transformer	Jul-04	Asset Renewal		0.1					0.1
ND0252	George Town Substation Post Insulator Replacement	Jul-04	Asset Renewal		0.0					0.0
ND0266	George Town Substation: circuit breaker	Jul-04	Asset Renewal		0.0					0.0
ND0273	George Town Substation: Indoor Switchgear / Protection / Control & Metering	Jul-04	Asset Renewal	0.5	0.0					0.5
ND0289	Chapel Street Substation Voltage transformer Replacements C79 and D797	Jul-04	Asset Renewal	0.3	0.0					0.3
ND0303 - NOCS	NOCS hard drives	Aug-05	Operational Support			0.0				0.0
ND0306	Substandard Clearances program		Asset Renewal	3.7	0.4	0.4				4.5
ND0310	Creek Road Substation: 33 kV Connection Supply	Jul-04	Connection		0.0					0.0
ND0313	Chapel Street Substation replacements and protection upgrade	Jul-04	Asset Renewal		0.0					0.0
ND0314	Sheffield Substation: B152 circuit breaker replacement	Jul-04	Asset Renewal		0.0					0.0
ND0315	Sheffield Substation: A152 circuit breaker replacement	Sep-03	Asset Renewal		0.0					0.0
ND0321	Lindisframe Substation: transformer refurbishment (T2 and T3)	Jul-04	Asset Renewal		0.0					0.0
ND0325	Linwood Substation: Oil Containment for transformers T1 and T2	Jul-04	Physical Security / Compliance		0.0					0.0
ND0326	Burnie Substation - 22 kV switchgear replacement	Mar-04	Asset Renewal	3.3	0.0					3.3
ND0327	Hyman Substation: 22 kV switchgear and protection	Nov-04	Asset Renewal	4.4	0.0		0.1			4.6
ND0328	Queenstown Substation: T2 transformer replacement	Jul-04	Asset Renewal		0.0					0.0
ND0329	Smitton Substation	Nov-04	Asset Renewal	1.5	0.0					1.6
ND0330	Sheffield 220 kV Substation: S752 circuit breaker Replacement S752	Jul-04	Asset Renewal	0.1	0.0					0.1

REASON FOR PROJECT	Reg Test / Business Case (Y/N)	Reg Test / Business Case Cost Estimate	Reason for Variance from Cost Estimate / Expected Commissioning Date
Reliability and asset condition	Y		2.7 Project commissioned prior to current revenue period.
Connection application, reliability, security	Y		11.1 land acquired prior to current regulatory control period
Asset condition, compliance and access to transmission lines	N		0.0 Project commissioned prior to current revenue period.
Asset condition	Y		0.4 Project commissioned prior to current revenue period - post commissioning spend
Facilities infrastructure	N		0.0 Project commissioned prior to current revenue period - some ongoing spend in current revenue period
Asset condition	Y		0.8 Project commissioned in prior revenue period - post commissioning
Asset condition	N		0.0 Project commissioning in prior revenue period
Safety, compliance & secure service delivery	Y		18.4 Project commenced and commissioned prior to the current revenue period
Operational support	Y		0.1 Ongoing
Compliance and reliability	Y		3.0 Commissioning in prior revenue period
Asset condition	Y		2.0 Commissioning in prior revenue period
Asset condition	N		0.0 Commissioning in prior revenue period
Environmental compliance	Y		0.2 Commissioning in prior revenue period
Asset condition	Y		0.1 Commissioning in prior revenue period
Asset condition	Y		0.3 Commissioning in prior revenue period
Asset condition	Y		0.2 Commissioning in prior revenue period
Asset condition	N		0.0 Commissioning in prior revenue period
Asset condition	Y		0.5
Asset condition	Y		0.3
Upgrade of NOCS hardware	Y		0.0 Commissioning in prior revenue period
program of work to ensure compliant and safe network	Y		26.8 Ongoing program of work that commenced prior to the current revenue period. Approved amount \$25m of which \$20m has been commissioned prior to the current regulatory period
Connection application	Y		8.9 Project commenced and commissioned prior to the current revenue period
Asset condition	Y		1.1 Commissioning in prior revenue period
Asset condition	Y		0.4 Commissioning in prior revenue period
Asset condition	Y		0.5 Commissioning in prior revenue period
Asset condition	Y		0.5 Commissioning in prior revenue period
Environmental compliance	Y		0.3 Commissioning in prior revenue period
Safety / compliance and asset condition	Y		3.6
Safety / compliance and asset condition	Y		4.7
Asset condition	Y		1.0 Commissioning in prior revenue period
Asset condition and connection application	Y		11.1 Commissioning in prior revenue period
asset condition, compliance	Y		0.4 Commissioning in prior revenue period

Yearly expenditure by project (inclusive of FDC)														
Project ID	Project Description	Commissioning Date	Category*	Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	TOTAL	REASON FOR PROJECT	Reg Test / Business Case (Y/N)	Reg Test / Business Case Cost Estimate	Variance from Cost Estimate / Expected Commissioning Date
ND0351	Sheffield Substation: C152 circuit breaker replacement	Jul-04	Asset Renewal	0.5	0.1					0.5	asset condition, compliance	y		0.9 Commissioning in prior revenue period
ND0332	Sheffield 220 KV Substation: D152 circuit breaker replacement	Jul-04	Asset Renewal		0.0					0.0	asset condition, compliance	y		0.4 Commissioning in prior revenue period
ND0333	Sheffield 220 KV Substation: E152 circuit breaker replacement	Jul-04	Asset Renewal		0.1					0.1	asset condition, compliance	y		0.4 Commissioning in prior revenue period
ND0334	Lipootah Substation: Post Insulator Replacement	Jul-04	Asset Renewal		-0.1					-0.1	Asset condition	y		0.2 Commissioning in prior revenue period, negative commissioning dollars in period due to adjustment for accruals
ND0335	Chapel St Substation: Replacement of post Insulator	Jul-04	Asset Renewal		0.0					0.0	Asset condition	y		0.1 Commissioning in prior revenue period
ND0338	Kingston and Ralton Substations: Inter Company Metering	Jul-04	Asset Renewal		0.1					0.1	NEM Entry, Compliance	y		0.2 Commissioning in prior revenue period
ND0339	Norwood Substation: transformer metering Refurbishment (T4 & T5)	Jul-04	Asset Renewal		0.0					0.0	Asset condition	y		0.3 Commissioning in prior revenue period
ND0341	Burnie Substation: C797 and D797 voltage transformer	Jul-04	Asset Renewal		0.1					0.1	Asset condition	y		0.2 Commissioning in prior revenue period
ND0346	Geelong Town SCADA Upgrade	Jul-03	Operational Support System							0.0	Operational Support System	y		0.1 Commissioning in prior revenue period
ND0352	Waddamana - Lindlame Protection Upgrade	Dec-05	Asset Renewal			0.2				0.2	Asset condition compliance, system security	y		0.3 Commissioning in prior revenue period
ND0353	Gordon Substation: Special Protection Upgrade	Jul-04	Asset Renewal		0.0					0.0	compliance, system security	y		0.5 Commissioning in prior revenue period
ND0354	Disconnectors and earth switch	Dec-04	Asset Renewal		0.1					0.1	Purchase of transmission equipment - disconnectors and earth switches	y		0.1 Commissioning in prior revenue period
ND0354	Documentation & updating substation drawings into AutoCad	Jul-04	Operational Support System		0.0					0.0	documentation and updating substation drawings into AutoCad - Transmission management	y		0.0 Commissioning in prior revenue period
ND0356	Geelong Town, Farrell, Lipootah and Creek Road Substations	Jul-04	Asset Renewal		0.0					0.0	Remote monitoring and control	y		0.5 Commissioning in prior revenue period
ND0358	Tranline General program	2008-09	Asset Renewal	3.8	1.8	1.2	1.7			8.4	asset condition - replacement program	y		7.8 Exp prior revenue period and ongoing expenditure in current period.
ND0361	Burnie Substation: upgrade of protection and control systems on the Erldredge - Risdon transmission circuit	Feb-04	Asset Renewal	0.3						0.3	Compliance	y		0.3 Commissioning in prior revenue period
ND0362	Chapel Street Substation: upgrade of protection and control systems on the Chapel street - Risdon transmission circuit	Mar-04	Asset Renewal	0.2						0.2	Compliance	y		0.3 Commissioning in prior revenue period
ND0366	Norwood Substation: Special Protection replacement on Transformers (T1, T2, T3, T5)	Jul-04	Asset Renewal		0.0					0.0	Asset condition	y		0.2 Commissioning in prior revenue period
ND0375	A network operation and control system (NCCS)	Jul-04	Operational Support System		0.0					0.0	NEM entry, compliance	y		8.3 Commissioning in prior revenue period
ND0381	Operational Support System (PROMS) project: Phase 1, Phase 2, Phase 3	Apr-05	Operational Support System		0.2					0.2	Compliance - NEM entry, Outage management system	y		0.4 Commissioning in prior revenue period
ND0386	Redevelopment of Waddamana Substation	Jun-04, Jun-05, Jun-06	Asset Renewal	4.7	0.5	0.1	0.1			5.4	Safety, compliance	y		5.2 Commissioning in prior revenue period
ND0389	Information System (AMIS) Program	2008-09	Operational Support System		1.2	0.1				1.3	Manage assets efficiently and effectively	y		1.1 Commissioning in prior revenue period
ND0390	Installation of supervisor control and data acquisition (SCADA) at Boyer Substation	Jul-04	Operational Support System	0.8	0.1					0.9	Remote monitoring and control	y		1.0 Commissioning in prior revenue period
ND0391	Geelong Town Substation T5 transformer replacement	Jul-04	Asset Renewal		0.1					0.1	Connection point modification, asset condition	y		2.2 Commissioning in prior revenue period
ND0392	Chapel Street Substation: replacement of protection & control systems on 110KV Bus Coupler B752	Jul-04	Asset Renewal	0.2	0.0					0.2	Asset condition	y		0.2 Commissioning in prior revenue period
ND0395	Geelong Town & TEMCO Substations: replace protection & Control	Jun-05	Asset Renewal		2.8					2.8	Compliance and reliability	y		2.8 Commissioning in prior revenue period
ND0396	Bridgewater Substation: Replacement of Security Fence	Jul-04	Physical Security / Compliance		0.0					0.0	Security & compliance	y		0.3 Commissioning in prior revenue period

\$ million nominal

Yearly expenditure by project (inclusive of FDC)												
Project ID	Project Description	Commissioning Date	Category*	Jan to June 2004							TOTAL	Reason for Variance from Cost Estimate / Expected Commissioning Date
				2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11		
ND0397	Replacement of Security Fence	Jun-04	Physical Security / Compliance	0.0							0.0	0.2 Commissioning in prior revenue period
ND0398	Ulverstone Substation: replacement of Security Fence	Jul-04	Physical Security / Compliance	0.0							0.0	0.0 Commissioning in prior revenue period
ND0400	Sheffield Substation: replacement of Security Fence	Jul-04	Physical Security / Compliance	0.5							0.5	0.5 Commissioning in prior revenue period
ND0401	Derby Substation: replacement of Security Fence	Mar-05	Physical Security / Compliance	0.3							0.3	0.3 Commissioning in prior revenue period
ND0412	Tungamah 110 kV Substation: Voltage Transformer replacements	Jul-03	Asset Renewal								0.0	0.4 Commissioning in prior revenue period
ND0414	Tungamah Substation: replacement of B752, D752, F752 circuit	Jul-04	Asset Renewal	0.0							0.0	0.5 Project commissioned prior to current revenue period.
ND0415	Chapel Street Substation: replacement of Security Fence	Sep-03	Physical Security / Compliance	0.1							0.1	0.5 Project commissioned prior to current revenue period.
ND0416	Miscellaneous Protection & Control Upgrades at Substations	Jun-04	Asset Renewal	0.0							0.0	0.1 Project commissioned prior to current revenue period.
ND0418	George Town Substation: replacement of Security Fence	Jul-04	Physical Security / Compliance	0.4							0.4	0.4
ND0419	Palmerston Substation: replacement of Security Fence	Jan-04	Physical Security / Compliance	0.7							0.7	0.7
ND0420	Operational Diagrams for all Substation Sites	Jul-04	Operational Support System	0.0							0.0	0.1 Project commissioned prior to current revenue period.
ND0422	Tungamah Substation: replacement of D797	Jul-04	Asset Renewal	0.0							0.0	0.1 Project commissioned prior to current revenue period.
ND0424	Installation of Safety Flashes on Earth Switches at Transend Substations	Jul-04	Physical Security / Compliance	0.0							0.0	0.0 Project commissioned prior to current revenue period.
ND0426	Devonport Oil Containment & Blast wall	Jul-03	Physical Security / Compliance	0.0							0.0	0.4 Project commissioned prior to current revenue period.
ND0427	Wesley Vale Substation: Oil Containment & Blast Wall System	Jul-03	Physical Security / Compliance	0.0							0.0	0.3 Project commissioned prior to current revenue period.
ND0428	Smithton 2nd Protection circuit and OPGW	Jun-03, Apr-04	Augmentation	0.1		0.1					0.2	6.8 Project commissioned prior to current revenue period.
ND0429	Lipootah-Palmerston and Waddamana-Palmerston transmission lines upgrade	Jun-04	Physical Security / Compliance	4.3							4.7	6.0 Project commissioned prior to current revenue period.
ND0430	Chapel Street Substation Reactive Support	Jan-04	Augmentation	0.0							0.0	3.4 Project commissioned prior to current revenue period.
ND0431	National Electricity Market (NEM) Entry with Aurora	Apr-05	Connection	0.8		0.4					1.6	2.2 Project commenced prior to the current revenue period
ND0432	Aurora-Biddawata 110 kV transmission line upgrade	Aug-06	Physical Security / Compliance		4.8	0.3					5.1	5.1
ND0433	Tungamah - Lake Echo-Waddamana 110 kV transmission lines	May-06	Physical Security / Compliance		3.0	0.1					3.1	5.3
ND0435	George Town Substation: Circuit breaker replacement and other works	Dec-03	Asset Renewal								0.0	1.8 Project commissioned prior to revenue period
ND0436	Sheffield Substation 220 kV entry upgrade	Jun-09	Augmentation					10.7			10.7	11.3
ND0437	Substation security upgrade	Jun-10	Physical Security / Compliance					22.5			22.5	29.0
ND0438	Burnie Substation: Capacitor bank installation	Jun-05	Augmentation	1.6			7.8				9.4	1.7
ND0440	Current transformer and capacitor bank replacement and associated works for C Bay at Lipootah	Jul-03	Asset Renewal								0.0	0.4 Project commissioned prior to revenue period
ND0441	Lipootah Switchyard: replacement of current transformers and disconnectors and associated works for F Bay	Jul-04	Asset Renewal	0.0							0.0	0.3 Project commissioned prior to revenue period

Yearly expenditure by project (inclusive of FDC)											
Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project (inclusive of FDC)							TOTAL
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09		
ND0443	Replacement of current transformers and associated works for G Bay Substations. Replace Oil Pumps	Jul-04	Asset Renewal		0.0						0.0
ND0447	Replacement of current transformers and associated works for G Bay Substations. Replace Oil Pumps	Nov-03	Physical Security / Compliance								
ND0449	Gordon - Chapel ST T/L protection Upgrade	Oct-03	Asset Renewal								0.0
ND0450	Gordon Substation: Oil Containment T6	Jan-05	Physical Security / Compliance		0.3						0.3
ND0473	Wesley Vale Substation: provision of oil containment and blast wall facilities	Jul-04	Physical Security / Compliance	0.6	-0.2						0.4
ND0452	Creek Rd Substation: 33 kV Feeder Cutovers	Apr-04	Connection	0.2	0.0						0.3
ND0459	Sub Bay / 10kV Substation replacement post insulators	Jul-04	Asset Renewal		0.0						0.0
ND0460	Burnie 110kv Substation: replacement post insulators	Jul-04	Asset Renewal		0.0						0.0
ND0461	Wesley Vale 110kV String Insulators	Dec-04	Asset Renewal		0.2						0.2
ND0463	Wesley Vale Substation: Voltage transformer A797 & B797	Sep-03	Asset Renewal								0.0
ND0466	Wesley Vale Substation: replace 44 kV Surge Diverters	Aug-03	Asset Renewal								0.0
ND0470	Emergency Lighting Substations Statewide	Jul-03	Physical Security / Compliance								0.0
ND0471	Queenstown 110kV Substation: Insulator replacement	Feb-05	Asset Renewal		0.2						0.2
ND0475	Derby Substation: redevelopment	May-06	Asset Renewal				1.8				1.8
ND0476	Devonport Substation: voltage transformer replacement	Jul-04	Asset Renewal		0.0						0.0
ND0477	Geelong 110kV Substation: Voltage transformer replacement	Jul-04	Asset Renewal	0.2	0.0						0.2
ND0479	Derwent Bridge Substation: A486 current transformer replacement	Jul-04	Asset Renewal		0.0						0.0
ND0481	Scottsdale Substation Upgrade	May-06	Asset Renewal				4.8				4.8
ND0483	Southern Substations climate control	Jul-05	Asset Renewal		0.0						0.0
ND0484	Derwent Bridge Substation: Replacement of T1 bushings	Jul-04	Asset Renewal		0.0						0.0
ND0485	Replacement of 125 volt DC supply Trevallyn Substation	Jul-04	Asset Renewal		0.1						0.1
ND0486	Farewell Bend Substation: replace Mitsubishi Compressors	Jul-04	Asset Renewal	0.1	-0.0						0.1
ND0492	Northern Substations: Install Climate Control	Jul-04	Asset Renewal		0.0						0.0
ND0493	Statewide: installation of hand driers	Jul-04	Asset Renewal		0.0						0.0
ND0494	Provision of trailing earth brushes on overhead substations	Jul-04	Asset Renewal		0.1						0.1
ND0495	George Town, Palmerston and Sheffield Substations: Modifications to 220 kV	Jul-04	Asset Renewal		0.1						0.1
ND0496	Palmerston, Devonport, Rosebery Substation:	Nov-04	Asset Renewal		0.1						0.1
ND0497	Gantry Crane Upgrade	Sep-03	Asset Renewal								0.0
ND0498	Sorell Substation: Millife overhaul of transformers	Sep-03	Asset Renewal								0.0
ND0499	Erin and Jura Substation: 125 Volt DC distribution panel replacement	Sep-03	Asset Renewal								0.0
ND0499	Palmerston Substation: replacement of the Palmerston 110 kV transmission lines	Aug-04	Asset Renewal		0.6						0.6

REASON FOR PROJECT	Reg Test / Business Case (Y/N)	Reg Test / Business Case / Cost Estimate	Reason for Variance from Cost Estimate / Expected Commissioning Date
Asset condition	y		0.3 Project commissioned prior to revenue period
Safety and security, compliance	y	0.1	Project commissioned prior to revenue period
Asset condition, compliance	y	0.0	Project commissioned prior to revenue period
Safety, security and environmental compliance	y	0.4	
Safety, security and environmental compliance	y	0.4	
Connection	y	0.3	Project commissioned prior to revenue period
Asset condition	y	0.4	Project commissioned prior to revenue period
Asset condition	y	0.3	Project commissioned prior to revenue period
Asset condition	y	0.1	Project commissioned prior to revenue period, accrual adjustment
Asset condition	y	0.2	Project commissioned prior to revenue period
Asset condition	y	0.0	Project commissioned prior to revenue period
Asset condition	y	0.0	Project commissioned prior to revenue period
Part of the North East line program, asset condition	y	2.0	
Asset condition	y	0.2	Project commissioned prior to current Revenue period
Asset condition	y	0.2	
Asset condition	y	0.1	Project commissioned prior to current Revenue period
Part of the North East line program, asset condition	y	5.1	
Building maintenance	y	0.1	Project commissioned prior to the current revenue period
Asset condition	y	0.0	Project commissioned prior to the current revenue period
Asset condition	y	0.1	Project commissioned prior to the current revenue period
Asset condition	y	0.0	Cost of equipment underestimated. Also accrual adjustment in 2004-05
Asset condition	y	0.1	Project commissioned prior to the current revenue period
Facilities infrastructure	y	0.0	Project commissioned prior to the current revenue period
Asset condition	y	0.1	
Asset condition	y	0.1	Project commissioning in prior revenue period
Asset condition	y	0.1	
Compliance	y	0.5	Project commissioning in prior revenue period
Asset condition	y	0.2	Project commissioning in prior revenue period
Compliance	y	0.6	

Yearly expenditure by project (inclusive of FDC)															
Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project (inclusive of FDC)											
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	TOTAL	Reason for Variance from Cost Estimate / Expected Commissioning Date	Reg Test / Business Case / Reg Cost Estimate	Test / Business Case / Cost Estimate		
ND0499	Prattia - Palmerton No 6 220 kV transmission line protection and control system replacement	Jul-03	Asset Renewal			0.4						0.4	Compliance		
ND0501	Prattia - Palmerton No 6 220 kV transmission line protection and control system replacement	Dec-04	Asset Renewal		0.3								Asset condition	0.5	Project commissioning in prior revenue period
ND0502	Sheffield 110 kV Substation: replacement of B752 circuit breaker	Oct-04	Asset Renewal		0.3								Asset condition	0.5	Project commenced prior to the current revenue period, ongoing program of replacement
ND0503	Que Substation: A152 Circuit breaker replacement	Dec-04	Asset Renewal		0.3								Asset condition	0.3	
ND0505	Norwood Substation: replacement of 415 Volt busbar in switchboard and control room distribution board	May-06	Asset Renewal				2.3						Part of the North East line program, asset condition	2.6	
ND0506	Lindisfarne Substation: replacement of 110kV A129 feeder	Mar-04	Asset Renewal	0.2									Asset condition	0.2	Project commenced prior to current revenue period
ND0507	Lindisfarne Substation: control building extension	Nov-03	Asset Renewal										Extension of control building at Lindisfarne	0.1	Project commissioning in prior revenue period
ND0508	Triabuna Substation: replacement of earthing switches A429 & B429	Oct-06	Asset Renewal		0.0								Asset condition, compliance	0.0	
ND0509	Que Substation: replace of 110kV A129 feeder	Dec-04	Asset Renewal		0.0								Asset condition	0.1	Project commissioning in prior revenue period
ND0511	Establishment of 33 kV connection point at Risdon Substation	Jan-07	Connection			3.9	2.9					6.8	Connection application (load growth) - Fourth stage of Hask	9.5	Project implementation delayed by 15 months, due to Aurora rearranging their distribution schedule which resulted in connection point not being required until Jan 06. Project commenced prior to current RP.
ND0512	Lindisfarne DC system replacement	Sep-03	Asset Renewal										Asset condition	0.0	
ND0514	Substation: 33kV switchgear replacement	May-06	Asset Renewal			3.0	0.4						Safety / compliance and asset condition	3.4	
ND0515	Anode Installation	Jun-04	Asset Renewal	0.2									Asset condition, transmission maintenance	0.2	
ND0516	Provision of operator	May-05	Physical Security / Compliance	0.2									Safety, security and compliance	0.4	
ND0517	WASP 3.5 upgrade	Jul-03	Operational Support										Compliance Operational Support System	0.0	
ND0518	Chapel Street Substation AC upgrade	Jun-04	Asset Renewal	0.2	0.0								Asset condition	0.2	Project commissioning in prior revenue period
ND0519	North East Transmission Line - Norwood-Scottdale 110 kV transmission line	Jun-07	Augmentation				30.5						Connection agreement, security & reliability	33.5	
ND0519	Norwood-Scottdale-derby 110 kV transmission line - Land	Jun-07	Land & Easements				3.6						Easement acquisition for the North East Transmission line	3.6	
ND0520	Georgetown Substation: 415V main switchboard and control room distribution board replacement	Jul-04	Asset Renewal	0.2	0.0								Asset condition	0.2	Project commissioning in prior revenue period
ND0521	Georgetown Substation: 415V main switchboard replacement	Jul-04	Asset Renewal	0.1	0.1								Asset condition	0.2	
ND0522	Tasmanian Wholesale Electricity Market (TSEM) Capital Project	Jun-05	Operational Support		1.2								NEM Entry, Compliance, Basslink	3.6	Project commissioning in prior revenue period
ND0522	Monitoring ongoing	Nov-04	Operational Support		0.1								Compliance NEMMCO	0.3	Additional expenditure incurred in equipment
ND0523	Wholesale Metering	Mar-05	Asset Renewal		1.9								NEM entry, compliance	3.8	Savings on equipment costs, commissioning in previous revenue period
ND0524	Palmerton Substation: 125 Volt DC Distribution System	Apr-04	Asset Renewal	0.2									Asset condition	0.3	Project commenced prior to current revenue period
ND0525	Modification of 220kV busbar circuit automatic reclose schemes	Dec-05	Asset Renewal			0.3							Operational performance	0.3	
ND0526	Georgetown Substation: upgrade MicroSCADA	Jul-04	Operational Support		0.0								Remote monitoring and control	0.1	
ND0530	Substation Drawing	Jul-04	Operational Support	0.1									System Support - Substation management systems	0.2	
ND0532	Lindisfarne Substation: DC Distribution System Upgrade	Jul-04	Asset Renewal	0.0	0.0								Asset condition	0.1	Project commissioning in prior revenue period,
ND0533	Georgetown Substation transformer gantry	Dec-03	Asset Renewal										Asset condition	0.1	Project commissioning in prior revenue period
ND0534	Chapel Street Substation 110 kV disconnectors replacements	Apr-04	Asset Renewal	0.3									Asset condition	0.4	Project commenced prior to current revenue period

Yearly expenditure by project (inclusive of FDC)													
Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project (inclusive of FDC)							TOTAL		
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10			
ND0552	Control and DC rearrangement	Jul-04	Asset Renewal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Asset condition	0.0 Project commenced prior to current revenue period
ND0536	Standard for Signal frames to NOCS and	Oct-04	Operational Support System		0.0		0.0				0.1	System support, compliance	0.1 Project commenced prior to current revenue period
ND0539	Chapel Street Substation Upgrade of Remote Terminal Unit (RTU)	Jul-04	Operational Support System		0.0						0.0		
ND0543	Lindifarne 110 kV Substation	Apr-06	Asset Renewal			6.3	0.3				6.7	Business risk, security & reliability	8.1 Completed under existing contract using experienced contractors. - Part of Pack B
ND0545	Sheffield 220 kV Substation: Disconnector & Post Insulator replacements	Mar-07	Asset Renewal		0.0		0.3				0.4	Asset condition	0.4 Project commenced prior to current revenue period
ND0547	Sheffield Substation: Sheff 110kV Gate 110kV Transmission circuit	Mar-05	Asset Renewal		0.2						0.2	Compliance	0.4 Project commenced prior to current revenue period
ND0548	George Town Substation Voltage transformer installation on independent 110kV transmission line	Feb-05	Asset Renewal		0.1						0.1	Asset condition	0.5 Project commenced prior to current revenue period
ND0550	Statewide UFLS installation	Oct-04, Jun-05	Augmentation		1.7		0.9				2.6	Compliance and condition of existing schemes	3.2 Project commenced prior to current revenue period
ND0551	Liposdon Substation: Changing Jumper	Apr-05	Asset Renewal		3.1		0.2				3.3	Safety, reliability & security of supply	4.1 Project commenced prior to current revenue period
ND0552	Chapel Street Substation replacement of network transformers	Mar-06	Asset Renewal			3.3					3.3	Compliance and asset condition	10.2 Part of ongoing program of work for George Town substation Part commissioned, project approved prior to current revenue period
ND0553	Wesley Vale Savage River & Port Latta 11kV switchboard replacement	Jun-06	Asset Renewal			9.0	1.4				10.4	Safety, compliance, asset age & condition	10.8
ND0554	New Norfolk - South transmission line redevelopment	Jun-05	Physical Security / Compliance		7.1						7.1	Safety/compliance & security and reliability	2.5 Part of ongoing compliance program
ND0555	Electrona Substation: 415 volt AC replacement	Jun-04	Asset Renewal	0.0	0.1						0.2	Asset condition	0.2
ND0558	Electrona Substation: 125 Volt DC replacement	Jul-04	Asset Renewal	0.1	0.1						0.2	Asset condition	0.2
ND0559	Chapel Street Substation 125 volt DC supply	Jun-04	Asset Renewal	0.1	0.1						0.2	Asset condition	0.2
ND0561	Kings Road Substation Oil Containment & Blast Wall systems for transformers T1 and T2	Jul-04	Physical Security / Compliance		0.5						0.5	Safety and environmental compliance	0.5
ND0562	Kernandee Substation: HV handgear replacement	May-06	Asset Renewal			3.4	0.1				3.5	Safety/compliance and asset condition	3.4
ND0563	Triabunna Substation HV switchgear and 110/22 kV transformer replacement	May-06	Asset Renewal				4.3				4.3	Safety/compliance and asset condition	4.5
ND0564	Palmerston Substation HV switchgear and transformer replacement	Oct-06	Asset Renewal				4.0				4.0	Safety/compliance and asset condition	4.5
ND0565	Palmerston Substation: 5 tonne auxiliary crane	Nov-04	Asset Renewal		0.1						0.1	Purchase of crane for Palmerston Substation	0.1
ND0569	Sheffield Substation: Q152 Circuit Breaker	Feb-05	Asset Renewal		0.4						0.4	Asset condition	0.4
ND0571	Creek Rd Substation - security fencing & earthing upgrade	Apr-07	Physical Security / Compliance		0.0		0.2				0.2	Asset condition / safety	0.2
ND0572	Devonport 110 kV Substation	May-06	Asset Renewal				13.2				13.2	Safety compliance, asset condition	13.5
ND0573	Palmerston Substation Upgrade of the 110kV	Jul-04	Augmentation		0.1						0.3	Asset condition, lead driver	0.3 Project commenced prior to current revenue period
ND0576	Creek Road Substation: Additional 33 kV feeder panel	Jan-05	Augmentation	0.2	0.4						0.4	Additional connection at Creek Road	0.4
ND0578	Chapel Street Substation replacement of 196 current transformer	Jul-04	Asset Renewal		0.1						0.1	Asset condition	0.1
ND0579	New Norfolk 110 kV Substation: capacitor bank replacement	Nov-05	Augmentation			1.6	0.1				1.6	Regulatory compliance and business risk	1.9 Savings found, used same contractor to complete the works as Bume
ND0581	New Norfolk - New Norfolk transmission line upgrade to 75 degrees	Jun-05	Physical Security / Compliance		1.0		0.2				1.2	Safety / compliance and network flexibility	1.5

\$ million nominal

Yearly expenditure by project (inclusive of FDC)											
Project ID	Project Description	Commissioning Date	Category*	2004-05							TOTAL
				2004-05	2005-06	2006-07	2007-08	2008-09	2009-10		
ND0582	Line voltage transformer installation, protection and control system replacement	Jun-05	Asset Renewal	0.3	0.1					0.4	
ND0583	Chapel Street Substation upgrade - transformer installation, protection and control system replacement	Feb-06	Asset Renewal		0.4					0.4	
ND0585	Weather station installations for Farrell and Sheffield substations	Dec-04	Asset Renewal	0.2						0.2	
ND0586	Waddamana Ancillary works	Apr-07	Asset Renewal			0.0				0.0	
ND0588	Hiddopen substation: 22kV connection	Apr-07	Connection		6.9	0.9				7.8	
ND0589	Chapel Street - Radon: Upgrade of 10 kV bus	Jun-06	Augmentation		5.1	0.9				6.0	
ND0590	George Town Substation B bus replacement	May-05	Asset Renewal	2.6			2.4	1.2		6.2	
ND0591	New Norlok Substation: earthing system upgrade	Jun-06	Asset Renewal			0.1				0.1	
ND0592	West Coast and Mensey Forth ORGM project		Asset Renewal		0.1	6.8				6.9	
ND0593	Queenstown Substation: 110 kV protection and control system upgrade	Nov-06	Asset Renewal			0.9				0.9	
ND0594	Chapel Street Substation Line Voltage transformer installation	Apr-06	Asset Renewal	0.1	0.3					0.4	
ND0597	Upgrade of security systems for Bus zone protection	Dec-04	Asset Renewal	0.1						0.1	
ND0600	Queenstown Substation Voltage transformer replacement	Nov-05	Asset Renewal		0.4					0.4	
ND0602	110kV Town - EMCO circuit repositioning and future development	Dec-04	Asset Renewal	0.4						0.4	
ND0603 / ND0631	George Town Substation Network Transformers T1, T2 and T3	Jun-09	Asset Renewal				10.4	9.2		19.6	
ND0604	Blume-Port Latta 110 kV transmission line re-conductor	Apr-08	Asset Renewal				20.0			20.0	
ND0606	Palmerston 110kV Switchyard: Conduit installation and Sheffield Substation: Switching Gate Automation	Oct-05	Asset Renewal		0.2					0.2	
ND0607	Physical Security / Compliance	Feb-05	Physical Security / Compliance	0.2						0.2	
ND0609	Scottsdale 110kV Substation: Transformer replacement	Oct-05	Asset Renewal			0.1				0.1	
ND0611	Land & Easements Purchase of Land from Kemo & Denning Ltd at Maria St	Dec-04	Land & Easements	0.2						0.2	
ND0614	Asset Management Information Phase 2	2008-09	Operational Support System				1.8			1.8	
ND0616	Avoca, North Hobart, Substation: Protection & Control Upgrades	Apr-05	Asset Renewal	0.1	0.8	0.4				3.0	
ND0619	George Town Substation: System Contingency protection on A/52 220kV Bus coupler	Apr-05	Asset Renewal	0.0						0.0	
ND0620	Operator Training simulator (OTS)	Jul-06	Operational Support System			0.1				0.1	
ND0621	Sheffield Substation 110 kV redevelopment	Jun-09	Asset Renewal				5.7	1.2		6.9	
ND0625	Gordon Substation: Transformer replacements	Oct-05	Asset Renewal		0.6					0.6	
ND0627	Combined Voltage and Current Transformers	Mar-07	Operational Support System			0.0				0.0	
ND0629	Sheffield Substation: 110 kV redevelopment including installation of conductors in 110kV switchyard	Feb-07	Augmentation			2.0				2.0	
ND0630	HV capacitor Bank Installations-Statewide	Jun-09	Augmentation					11.6		11.6	

Project ID	Project Description	Commissioning Date	Category*	2004-05							TOTAL
				2004-05	2005-06	2006-07	2007-08	2008-09	2009-10		
ND0630	HV capacitor Bank Installations-Statewide	Jun-09	Augmentation					11.6		11.6	

Project ID	Project Description	Commissioning Date	Category*	2004-05							TOTAL
				2004-05	2005-06	2006-07	2007-08	2008-09	2009-10		
ND0630	HV capacitor Bank Installations-Statewide	Jun-09	Augmentation					11.6		11.6	

Yearly expenditure by project (inclusive of FDC)											
Project ID	Project Description	Commissioning Date	Category*	2004-05 to 2008-09							TOTAL
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09		
ND0633	Weather station replacement	Jun-06	Asset Renewal		0.1						0.1
ND0634	Weather station replacement	Sep-06	Operational Support System		0.6						0.6
ND0635	Operational Support System	Jun-05	Operational Support System			0.0					0.0
ND0640	Asset Renewal	Jun-08	Asset Renewal			5.7					5.7
ND0644	Operational Support System	Jun-06	Operational Support System		0.5						0.5
ND0653	Operational Support System	Sep-06	Operational Support System		1.5						1.5
ND0655	Asset Renewal	May-07	Asset Renewal		1.1						1.1
ND0656	Operational Support System	Jun-06	Operational Support System		0.2						0.2
ND0683	Operational Support System	Feb-07	Operational Support System		0.1						0.1
ND0687	Connection	Dec-06	Connection		0.5						0.5
ND0670	Inventory / Spares	Dec-06	Inventory / Spares		0.1						0.1
ND0679 / ND0680	Asset Renewal	Jun-09	Asset Renewal			11.2					11.2
ND0681	Connection	Jun-09	Connection			6.3					6.3
ND0687	Asset Renewal	Nov-06	Asset Renewal		0.4						0.4
ND0690	Asset Renewal	Sep-06	Asset Renewal		0.2						0.2
ND0700	Asset Renewal	Jun-09	Asset Renewal			3.4					3.4
ND0702	Asset Renewal	Jun-06	Asset Renewal		0.1						0.1
ND0705	Connection	Nov-06	Connection		0.2						0.2
ND0708	Asset Renewal	Jan-07	Asset Renewal		0.3						0.3
ND0715	Physical Security / Compliance	Jun-09	Physical Security / Compliance			0.6					0.6
ND0717	Asset Renewal	Jan-07	Asset Renewal		0.5						0.5
ND0743	Operational Support System	Aug-07	Operational Support System		0.0						0.0
ND0764	Asset Renewal	Jun-09	Asset Renewal			1.4					1.4
ND0765	Inventory / Spares	Jun-09	Inventory / Spares			3.0					3.0
ND0791	Asset Renewal	Jun-08	Asset Renewal			2.0					2.0
ND0822	Physical Security / Compliance	Jun-10	Physical Security / Compliance			0.5					0.5
ND0829	Operational Support System	Jun-11	Operational Support System	0.2	0.1						0.3
ND0822	Asset Renewal	Jun-11	Asset Renewal			0.1					0.1
ND0824	Asset Renewal	Jun-14	Asset Renewal			2.4					2.4
ND0825	Asset Renewal	Jun-15	Asset Renewal			0.5					0.5
ND0826	Asset Renewal	Jun-15	Asset Renewal			0.2					0.2

Project ID	Project Description	Commissioning Date	Category*	Reason for Variance from Cost Estimate / Expected Commissioning Date	Reg Test / Business Case (Y/N)	Reg Test / Business Case Cost Estimate
ND0633	Weather station replacement	Jun-06	Asset Renewal	Asset condition	y	0.1
ND0634	Weather station replacement	Sep-06	Operational Support System	Remote monitoring and control	y	0.6
ND0635	Operational Support System	Jun-05	Operational Support System	System support	y	0.1
ND0640	Asset Renewal	Jun-08	Asset Renewal	upgrade of primary equipment, security and compliance	y	8.4
ND0644	Operational Support System	Jun-06	Operational Support System	Network control	y	0.7
ND0653	Operational Support System	Sep-06	Operational Support System	Safety/compliance and asset condition	y	2.3
ND0655	Asset Renewal	May-07	Asset Renewal	Reduce risk of power system collapse	y	1.6
ND0656	Operational Support System	Jun-06	Operational Support System	Management of network load	y	0.4
ND0683	Operational Support System	Feb-07	Operational Support System	Part of AMIS program of development of asset management information system	y	0.1
ND0687	Connection	Dec-06	Connection	Asset condition	y	0.6
ND0670	Inventory / Spares	Dec-06	Inventory / Spares	Asset condition - spare	y	0.1
ND0679 / ND0680	Asset Renewal	Jun-09	Asset Renewal	Asset condition	y	11.4
ND0681	Connection	Jun-09	Connection	Connection	y	6.6
ND0687	Asset Renewal	Nov-06	Asset Renewal	Asset condition	y	0.7
ND0690	Asset Renewal	Sep-06	Asset Renewal	Asset condition	y	0.2
ND0700	Asset Renewal	Jun-09	Asset Renewal	replacement of network transformers at MI	y	3.4
ND0702	Asset Renewal	Jun-06	Asset Renewal	Asset condition	y	0.1
ND0705	Connection	Nov-06	Connection	Connection application	y	0.3
ND0708	Asset Renewal	Jan-07	Asset Renewal	asset condition, compliance, Remote monitoring and control	y	0.3
ND0715	Physical Security / Compliance	Jun-09	Physical Security / Compliance	asset condition, security and compliance	y	0.6
ND0717	Asset Renewal	Jan-07	Asset Renewal	Remote monitoring and control	y	0.5
ND0743	Operational Support System	Aug-07	Operational Support System	System support	y	0.1
ND0764	Asset Renewal	Jun-09	Asset Renewal	asset condition	y	1.2
ND0765	Inventory / Spares	Jun-09	Inventory / Spares	facility to house spare equipment	y	2.6
ND0791	Asset Renewal	Jun-08	Asset Renewal	asset condition	y	1.9
ND0822	Physical Security / Compliance	Jun-10	Physical Security / Compliance	Safety, security and compliance	y	1.0
ND0829	Operational Support System	Jun-11	Operational Support System	business processes and procedures	n	0.3
ND0822	Asset Renewal	Jun-11	Asset Renewal	asset condition	y	0.5
ND0824	Asset Renewal	Jun-14	Asset Renewal	asset condition	y	13.1
ND0825	Asset Renewal	Jun-15	Asset Renewal	program to upgrade access tracks	y	2.6
ND0826	Asset Renewal	Jun-15	Asset Renewal	program to upgrade support assembly	y	1.5

\$ million nominal

Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project (inclusive of FDC)							TOTAL
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	
ND0927	Refurbishment Program	Jun-15	Asset Renewal					0.2			0.4
ND0928	Conductor Assembly Refurbishment Program	Jun-14	Asset Renewal					0.5			0.5
ND0929	Transmission Lines Tower Foundations	Jun-15	Asset Renewal					0.5		1.0	1.5
ND0966	Transmission Lines Blump/Watrah 110kV Transmission Line wood pole replacements	Jun-13	Asset Renewal						1.1		1.1
ND0979	Substation transformer Bushing Replacement	Jun-14	Asset Renewal						0.2		0.2
ND0980	Control of Voltage 220 kV Automates	Jun-09	Augmentation						0.2		0.2
ND0981	Substation DC Supply Replacement Program	Jun-15	Asset Renewal						0.5		0.5
ND0984	Substation Peer Insulator Replacement Program	Jun-15	Asset Renewal						0.1		0.1
ND0989	Substation AC Supply Replacement Program	Jun-15	Asset Renewal						0.6		0.6
ND0990	Substation VESDA & Fire Suppression	Jun-15	Asset Renewal						1.0		1.0
ND0991	Substation Remote Engineering Access Program	Jun-14	Operational Support System						0.1		0.1
ND1002	Substation Asset Condition Monitoring	Jun-14	Physical Security / Compliance						0.9		0.9
SUBS	Substation Program replacements		Asset Renewal					9.3			9.3
TRANS	Transmission Line General Works		Asset Renewal					4.6			4.6
Subtotal				28.8	42.3	64.8	95.5	71.2	91.8	384.1	384.1

*refers to Categories set out in table 3.1 (e.g Augmentation etc)

*Note that values in these columns are estimates only

REASON FOR PROJECT	Reg Test / Business Case (Y/N)	Reg Test / Business Case Cost Estimate	Reason for Variance from Cost Estimate / Expected Commissioning Date
maintenance of weather stations	y		1.3 Part of asset management plan for weather stations - ongoing program
Conductor assembly replacement program	y		5.7 Part of asset management plans for Translines - ongoing program
Foundation replacement program	y		5.6 Part of asset management plans for Translines - ongoing program
asset condition	y		6.0 Commissioning 2013-14
asset condition	y		0.6 Commissioning 2013-14
asset condition, compliance	y		0.2
asset condition	y		2.7 Commissioning 2014-15
asset condition	y		0.6 Commissioning 2013-14
asset condition	y		2.5 Commissioning 2013-14
Safety, security and compliance	y		4.5 Commissioning 2013-14
Substation security and compliance	y		0.3 Commissioning 2013-14
asset condition	y		3.8 Commissioning 2013-14
Substation replacement program	n		1.6 Part of asset management plan for Substations
Transmission line general replacement and refurbishments	n		3.6 Part of asset management plans for Translines - ongoing program

3.4 HISTORIC CAPEX - Non-Network - by project

\$ million nominal

Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project (inclusive of FDC)							TOTAL									
				Jan to June 2004	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10										
ND0303	Strategic Accommodation South	May-05	Business Support		6.4						6.4	Business operating efficiencies and corporate presence								
ND0303 - ND0789	Purchase of Motor Vehicles Business Applications	Jun-08	Business Support Information technology	0.3	0.9	0.8	0.6	0.7	0.5		3.8	Fleet management	Y	6.7						
ND1008	Corporate IT - Data Communications	Jun-14	Information technology							2.5	2.5	Data communications	Y	4.1	Commissioning 2013-14					
ND0718	Emergency Power	Jun-08	Business Support					1.4			1.4	Safety, security and compliance	Y	1.3						
ND0813	IT Disaster Recovery	May-08	Information technology			0.7					0.7	Mitigate business disruption	Y	0.7						
ND0303 - PC	Minor Assets - Personal Computers	Jun-08	Business Support	0.2	0.2	0.3	0.1	0.7			0.7	Information Systems	Y	0.7						
ND0875	IT Infrastructure Capacity Upgrade	Feb-07	Information technology		0.2	0.4	0.3				0.7	Minor asset purchases	Y	0.7						
ND0587	IT Security - Internet Security Appliance	Dec-04, Nov-05	Information technology		0.3	0.3					0.6	Business systems	Y	0.6						
ND0303 - OFF	Minor Assets - Office Furniture	Jun-08	Business Support	0.1	0.2	0.1	0.0				0.5	Facilities infrastructure	Y	0.5						
ND0616	Additional landscaping new building	Feb-07	Business Support	0.1	0.1	0.2	0.1				0.4	Facilities infrastructure	Y	0.4						
ND0544	Standard transmission equipment for new building	Dec-04	Information technology		0.2	0.1	0.1				0.4	Business operating efficiencies and corporate presence	Y	0.4						
ND0984	Corporate IT - Security Systems	Jun-14	Information technology		0.4					0.4	0.4	Asset condition - spare IT System security	Y	0.4	Commissioning 2013-14					
ND0303 - ITS	Corporate IT - Document Systems & Management Program	Jun-14	Information technology	0.2	0.1	0.0	0.0				0.3	Information Systems	Y	0.3						
ND1024	Corporate IT - Service Plant & Equipment	Jun-14	Business Support						0.3		0.3	Development of document system	Y	2.4	Commissioning 2013-14					
ND1006	Corporate IT - Service Management Program	Jun-14	Information technology		0.1	0.1	0.1				0.3	Develop service management program	Y	0.7	Commissioning 2013-14					
ND0303 - PTE	Transend Archive	Jul-04	Business Support		0.2						0.2	Minor purchases	Y	0.2						
ND0478	Additional Civil works Maria street	Dec-04	Business Support		0.2						0.2	Archival storage requirement	Y	0.4	Project commenced prior to the current revenue period					
ND0688	Accommodation Building LAN Infrastructure	Dec-04	Information technology		0.2						0.2	Business operating efficiencies and corporate presence	Y	0.2						
ND0595	Corporate IT - Data Communications installation and infrastructure at Creek Road and Bowen road	Jun-14	Information technology		0.1					0.2	0.2	Development of data storage system	Y	2.8	Commissioning 2013-14					
ND0537	Implementation of Intranet Redevelopment	Jul-04	Information technology	0.1							0.1	Business systems infrastructure	Y	0.2						
ND0577	Corporate IT - Systems Commission High speed data network	Jul-04	Business Support		0.1						0.1	Business systems	Y	0.2						
ND1010	Corporate IT - Package Systems Building renovations	Jun-14	Information technology		0.0	0.0	0.0				0.1	IT infrastructure	Y	0.1						
ND0527	Corporate IT - Information Management Systems Commission High speed data network	Dec-04	Business Support		0.1						0.1	Management of information systems	Y	1.7	Commissioning 2013-14					
ND0303 - ND1011	Corporate IT - Package Systems Building renovations	Jun-14	Information technology		0.0	0.0	0.0				0.1	Business systems	Y	0.2	Project commenced prior to current revenue period					
ND0617	Document and Standard Management System Enhancements	Feb-05	Business Support		0.1						0.1	Corporate infrastructure	Y	4.0	Commissioning 2013-14					
ND0528	Installation & storage area network	Jul-05	Information technology							0.1	0.1	Development of compliance system	Y	0.1						
ND0649	Network Outages Voice Recording and IP Telephony Buildings	Oct-08	Information technology					0.1			0.1	Facilities infrastructure	Y	0.4	Ongoing					
ND0303 - ND1003	Corporate IT - Outage Management Systems	Jun-14	Business Support			0.0	0.0				0.0	Business systems	Y	0.5	Project commenced prior to current revenue period					
ND0303 - CCN	Corporate Computer Network	Mar-05	Information technology	0.0		0.0					0.0	Operational systems	Y	0.1	Savings found					
ND0566	Installation and commission of Internet Separation Links	Jul-04	Information technology								0.0	Facilities infrastructure	Y	0.0						
ND0574	Corporate IT - Power Analysis Systems	Jun-14	Information technology							0.0	0.0	Development of power analysis systems	Y	0.3	Commissioning 2013-14					
ND1009	Corporate IT - Power Analysis Systems	Jun-14	Information technology							0.0	0.0	Development of power analysis systems	Y	0.3	Commissioning 2013-14					

ND0570	relocate the WAN infrastructure (Wide area network)	Jul-04	Information technology	0.0							0.0	Business Systems						
ND1038	Upgrade IT - NEM Metering System	Jun-14	Information technology		0.0						0.0	Development of NEM metering					0.4	Commissioning 2013-14
ND0598	Trevallyn offices & Substation landscaping	Sep-04	Business Support		0.0						0.0	Facilities infrastructure					0.0	
ND0900	Substation landscaping	Jun-14	Information technology								0.0	Upgrade server systems					1.4	Commissioning 2013-14
ND1004	Corporate IT - Server	Jun-14	Information technology								0.0	Development contract management system					4.6	Commissioning 2013-14
ND0596	Expansion of Trevallyn office	Jul-05	Business Support		0.0						0.0	Facilities infrastructure					0.0	Savings found?
ND0439	Creek Rd Building Mods for Hydro	Jul-04	Business Support		0.0						0.0	Facilities infrastructure					0.0	Project commissioned prior to revenue period
ND0303 - ECS	Air conditioning upgrade Hydro Tasmania ECS	Apr-06	Business Support			0.0					0.0	Facilities infrastructure					0.0	
ND0303 - TOL	Tools & Equip (minor)		Business Support								0.0	Minor purchases					0.0	
ND0510	Construction of IT data Centre	Oct-03	Business Support								0.0	Development of IT data centre					0.2	Project commissioning in prior revenue period
ND0529	Server rationalisation & implementation of E-Mail	Nov-03	Information technology								0.0	Business systems					0.2	Project commissioning in prior revenue period
ND0538	Archive Management System	Sep-03	Information Technology								0.0	Business systems					0.1	Project commenced prior to current revenue period
ND0557	Restructure of Sun Financial system		Information Technology								0.0	Financial system					0.0	Project commissioning in prior revenue period
Subtotal				10.0	3.1	1.3	5.5	4.7	26.7									

*refers to Categories in table 3.1 (e.g Information Technology etc)

4.1 FORECAST CAPEX by project category

\$ million 2008-09

Project Category		2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
NETWORK							
DEVELOPMENT	Augmentation	70.8	82.7	29.4	16.1	28.6	227.6
	Connection	31.5	35.0	37.0	16.5	1.7	121.8
	Land and Easements	-	0.0	0.0	10.5	10.3	20.9
RENEWAL	Asset Renewal	29.8	39.4	25.7	62.4	69.3	226.6
	Physical Security / Compliance	5.1	2.0	2.4	0.8	0.4	10.7
	Inventory / Spares	9.6	0.4	0.5	0.2	1.0	11.7
	Operational Support Systems	4.6	4.8	3.2	3.6	6.1	22.3
NON NETWORK							
BUSINESS IT	Information Technology	2.7	5.1	3.6	4.0	5.9	21.3
SUPPORT THE BUSINESS	Business Support	3.9	4.1	4.5	4.3	1.0	17.8

TOTAL FORECAST CAPEX

158.0

173.4

106.5

118.5

124.3

680.7

4.2 FORECAST CAPEX by asset class

\$ million 2008-09

	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
Transmission line assets - long life (60)	52.0	47.6	11.1	6.7	11.8	129.2
Transmission line assets - medium life (45)	7.1	19.1	17.0	11.9	4.4	59.5
Transmission line assets - short life (10)	5.1	5.4	1.9	0.8	0.7	13.9
Substation assets - long life (60)	13.7	16.6	14.2	15.2	17.2	76.9
Substation assets - medium life (45)	39.1	40.6	34.6	39.4	37.9	191.5
Substation assets - short life (15)	5.7	4.0	4.5	5.6	4.2	24.0
Protection and control - short life (15)	18.9	24.1	10.2	15.6	21.6	90.3
Protection and control - short life (3)	0.3	0.1	-	-	-	0.4
Transmission operations - short life (10)	3.5	3.8	2.7	2.6	5.8	18.3
Transmission operations - short life (3)	0.2	0.0	0.1	0.0	0.0	0.4
Other - medium life (40)	7.2	2.8	3.2	2.9	-	16.1
Other - short life (5)	2.8	1.9	2.4	4.7	4.6	16.3
Other - short life (3)	1.7	4.6	2.7	1.7	2.6	13.4
Land	0.8	2.5	2.0	11.3	13.6	30.3
TOTAL CAPEX	158.0	173.4	106.5	118.5	124.3	680.7

ND0975	Sorel Substation 110kV	2012 Augmentation	0.657	2.963	1.327	-	-	4.947	Reliability and security of supply
ND0947	Sorel Substation transfer	2012 Connection	0.075	3.252	1.951	-	-	5.278	Capacity Issues
ND0729-7	St Marys HV protection u	2013 Connection	0.997	-	-	-	-	0.997	Customer Requirements, Reliability
ND0933	St Marys Substation 22kV	2013 Augmentation	-	0.085	3.835	0.042	0.519	0.562	Compliance (voltage control), reliability of supply
ND0941	St Marys Substation Tran	2013 Connection	-	-	-	1.810	-	5.730	Capacity issues, reliability of supply
ND01001	Strategic Esameint Aqz	2014 Land and Easements	-	0.024	0.013	10.542	10.307	20.887	Land purchases to address augmentation,
ND0989	Substation AC Supply R4	2014 Asset Renewal	0.656	0.750	0.249	0.764	0.521	2.940	development and connection requirements
ND1002	Substation Asset Condit	2014 Physical security/compliance	0.736	1.360	1.189	0.831	0.360	4.476	Asset Condition and reliability
ND0982	Substation HV Protection	2014 Physical security/compliance	0.235	0.099	0.207	0.625	0.040	0.984	Asset Condition and reliability
ND0984	Substation Post Insulator	2011 Asset Renewal	0.054	0.036	0.066	0.219	0.314	0.710	Asset Condition and reliability
ND0991	Substation Remote Engrt	2011 Operational Support Systems	0.020	0.390	-	-	-	0.410	Operational efficiency, Compliance, reliability of supply
ND0927	Substation security upgr	2010 Physical security/compliance	2.020	-	-	-	-	2.020	Security of critical infrastructure
ND0437	Substation Security Upgr	2010 Physical security/compliance	1.780	-	-	-	-	1.780	Security of critical infrastructure
ND0979	Substation Transformer F	2014 Asset Renewal	0.119	0.090	0.245	-	0.256	0.710	Asset condition, reliability and security of supply
ND0980	Substation VESDA & Fik	2014 Asset Renewal	0.899	0.571	1.228	1.681	0.616	4.985	Asset condition, reliability and security of supply
ND0942	Tenco Substation 110kV	2016 Asset Renewal	-	-	-	0.385	0.489	0.489	Asset condition, reliability and security of supply
ND0977	Togo - Market Support S	2013 Operational Support Systems	0.053	-	-	0.053	-	0.106	Operational Requirements, compliance
ND1021	TOG - Market System	2013 Operational Support Systems	-	-	-	1.059	4.235	5.294	Operational Requirements, compliance
ND1022	TOG - NOCS replacem	2014 Operational Support Systems	-	-	-	0.318	0.318	2.329	Asset Condition, functionality, reliability
ND0940	TOG - NOCS yearly com	2014 Operational Support Systems	0.318	0.318	0.318	0.488	0.500	2.389	Asset Condition, reliability, obsolescence
ND0925	Transmission Line Acces	2014 Asset Renewal	0.454	0.468	0.477	0.488	0.500	2.389	Asset condition, safety, security of supply
ND0822	Transmission Line Dang	2014 Physical security/compliance	0.544	0.468	0.500	0.488	0.500	2.389	Asset condition, safety, security of supply
ND0924	Transmission Line Insul	2014 Asset Renewal	1.140	2.72	3.410	4.65	2.084	14.495	Asset condition, safety, security of supply
ND0926	Transmission Line Insul	2014 Asset Renewal	0.336	0.187	0.304	0.304	0.187	1.495	Asset condition, safety, security of supply
ND0929	Transmission Line Tow	2014 Asset Renewal	0.595	0.804	1.019	1.460	1.710	5.588	Asset condition, safety and reliability, operational efficiency
ND0709	Tungatah Substation 11	2015 Asset Renewal	2.473	5.795	-	3.329	16.594	19.913	Asset Condition and reliability
ND0986	Tungatah Substation 22	2011 Asset Renewal	0.786	-	-	-	-	0.288	Asset Condition and reliability
ND0729-8	Ulverstone HV protectio	2010 Connection	6.038	54.843	-	-	-	7.786	Customer Requirements, Reliability
ND0983	Waddamana Substation	2010 Augmentation	0.432	-	-	-	-	11.458	Operational Requirements, Reliability and security of supply
ND0959	Waddamana Substation	2010 Augmentation	-	-	-	-	0.032	0.032	Reliability and security of supply
ND0951	Wayliah Substation 22	2016 Asset Renewal	-	-	-	-	0.032	0.032	Asset Condition and reliability
ND0927	Weather station replac	2015 Asset Renewal	0.348	0.352	0.060	0.244	0.125	0.083	Asset Condition and reliability
ND0730	Wesley Vale Substation	2014 Asset Renewal	-	1.039	10.213	5.675	-	16.927	Customer requirements, demand growth and reliability of supply
ND0749	Wynyard Substation new	2013 Connection	-	0.836	13.221	9.050	-	23.107	Customer requirements, demand growth and reliability of supply

64,580

117,467

110,217

98,258

164,228

151,410

Subtotal

*refers to Categories set out in table 5.1 (e.g Augmentation, Renewal etc)

4.4 FORECAST CAPEX - Non-Network - by project

\$ million 2008-09

Project ID	Project Description	Commissioning Date	Category*	Yearly expenditure by project					TOTAL	Business Case (Y/N)
				2009-10	2010-11	2011-12	2012-13	2013-14		
ND1040	Chapel Street Control Centre Backup	2012	Business Support	0.364	2.831	3.054	-	-	6.248	Business Needs
ND1024	Corporate IT - Document Systems & V	2014	Information Technology	0.486	0.404	0.367	0.502	0.503	2.263	Reliability, functionality, process improvement
ND0904	Corporate IT - Security Systems	2014	Information Technology	0.077	0.048	0.119	0.300	0.231	0.774	Reliability, functionality, process improvement
ND1004	Corporate IT - Custom Applications	2014	Information Technology	0.066	0.066	0.235	1.701	2.813	4.827	Reliability, functionality, process improvement
ND1010	Corporate IT - Information Management	2014	Information Technology	0.183	0.183	0.488	0.334	0.228	1.679	Reliability, functionality, process improvement
ND1038	Corporate IT - NEM Metering System	2014	Information Technology	0.194	0.048	0.080	0.034	0.033	0.368	Compliance, Market obligations
ND1003	Corporate IT - Outage Management Sy	2014	Information Technology	0.036	0.040	0.041	0.112	0.051	0.281	Compliance, Network Planning
ND1011	Corporate IT - Package Systems	2014	Information Technology	0.111	3.494	0.111	0.312	0.122	4.151	Reliability, functionality, process improvement
ND1009	Corporate IT - Power Analysis Systems	2014	Information Technology	0.109	0.028	0.022	0.030	0.088	0.276	Reliability, functionality, process improvement
ND0900	Corporate IT - Server Systems	2014	Information Technology	0.427	0.018	0.660	0.127	0.280	1.511	Reliability, functionality, process improvement
ND1006	Corporate IT - Service Management Pr	2014	Information Technology	0.163	0.060	0.060	0.060	0.060	0.404	Reliability, functionality, process improvement
ND1008	Corporate IT - Data Communications	2014	Information Technology	0.419	0.055	0.150	0.188	1.218	2.031	Reliability, functionality, process improvement
ND1023	Corporate IT - Data Storage Systems	2014	Information Technology	0.213	0.623	1.332	0.317	0.233	2.717	Reliability, Compliance
ND0763	Maria Street campus - Administration b	2011	Business Support	2.623	0.300	-	-	-	2.923	Business Needs, Staff Accommodation
ND0723	Maria Street Control Centre Modernisa	2013	Business Support	-	0.247	0.247	0.925	-	1.172	Business Needs
ND0789	Motor Vehicles	2014	Business Support	0.900	0.953	1.006	1.006	1.006	4.871	Business Needs, Staff Accommodation
ND0704	Northern Facility Development	2013	Business Support	-	-	0.219	1.968	-	2.187	Business Needs, Staff Accommodation
ND0901	Voice Communications	2013	Business Support	-	-	0.021	0.408	-	0.430	Business Optimisation
Subtotal				6.582	9.150	8.194	8.323	6.864	39.113	

*refers to the categories used in table 4.1 (eg Information Technology etc)

5.1 Historic and Forecast Opex Commentary proforma: key cost drivers

<p>This pro forma is designed to allow the TNSP to provide context and background for the quantitative opex templates.</p> <p>The historic opex tables (1.1 - 1.7) provide a column where the key cost drivers for historic opex should be briefly listed. This commentary pro forma provides opportunity for more detailed explanations regarding material changes in particular expenses over the relevant regulatory period.</p> <p>The forecast opex tables (2.1 - 2.7) provide a similar column where the key cost drivers for forecast opex should be briefly listed. This commentary pro forma provides the opportunity for more detailed explanations regarding material changes in particular forecast expenses</p> <p>The commentary should address the following:</p> <ul style="list-style-type: none"> >The main cost drivers for the particular opex item (eg changes in CPI, legislative and regulatory requirements, environmental factors). >Were these increases foreseeable? If not, why not? >Details of management induced opex efficiencies achieved. >Major opex risks and mitigation strategies. >Key Performance Indicators – are these benchmarked against other transmission companies? <p>In addition, the TNSP is requested to provide:</p> <ul style="list-style-type: none"> >Definitions of 'opex' and 'capex' used by the business. Further, the TNSP should provide definitions for the categories and activities used in the opex templates. These definitions should be >A discussion on the relationship between opex and capex. >Details of changes in accounting policies over the past regulatory period and how they may have impacted on opex in general or specific opex items.
<p>Commentary on cost drivers and material changes over the current regulatory period</p> <p>Expense item eg. salaries</p> <p>Expense item</p> <p>Expense item</p>
<p>Supporting information</p> <p>Please list documentation substantiating the reason for change (eg. asset management plan/strategy.)</p>
<p>Commentary on cost drivers and material changes affecting the upcoming regulatory period</p> <p>Expense item eg. salaries</p> <p>Expense item</p> <p>Expense item</p>
<p>Supporting information</p> <p>Please list documentation substantiating the reason for change</p>

5.2 Historic Capex Commentary Proforma: reasons for variance

<p>This pro forma is designed to allow TNSP's to provide context and background for the quantitative historic capex templates.</p> <p>Tables 3.3 & 3.4 provide a column where reasons for capex cost variances may be briefly listed. This pro forma provides the opportunity for more detailed reasons to be given for material differences between actual project costs and amounts included in the regulatory test/business case assessment.</p> <p>The commentary should address the following:</p> <ul style="list-style-type: none">>The main reasons for the project being undertaken (eg. demand growth)>The main reasons for material cost variances for the particular project (eg changes in material costs, legislative and regulatory requirements, environmental factors, technology changes) and whether they were foreseeable.>The main reason for any material variance in commissioning date (e.g delays in supply of materials, environmental approvals etc) and whether they were foreseeable.>How does the project align with the TNSP's asset management strategy/plan?>Reference to the project's assessment in the TNSP's Annual Planning Reports.>Details of management induced capex efficiencies which have reduced costs.>Major project risks and strategies undertaken to mitigate them.
Commentary on reasons for variance
Project (unique identifying number or name)
Project
Project
Supporting information
Please list documentation in support of reasons

5.3 Forecast Capex Commentary Proforma: reasons for project

<p>This pro forma is designed to provide context and background for the quantitative forecast capex templates, by specifying matters that the AER will take into account in assessing the TNSP's proposed expenditure.</p> <p>Table 4.3 provides a column where reasons for the project can be provided. This pro forma provides the opportunity for more detailed reasons to be given for factors influencing the proposed spend, including load growth, planned generation and the range of foreseeable scenarios and their probabilities of occurring.</p> <p>The commentary should address the following:</p> <ul style="list-style-type: none">> The theme sets upon which the proposed capex spend is based> The scenarios derived from the above theme sets and their relevant probabilities.> Project specific information in addition to the cost information provided in the forward capex templates. <p>In addition, the TNSP is requested to provide:</p> <ul style="list-style-type: none">> Details of its capital expenditure and approvals processes.> Details of its overall asset management strategy/plan.> Relevant Annual Planning Reports.> Consultants reports on the probabilistic methodology adopted, its assumptions, inputs and detailed information on the outcomes.
Theme sets and Scenarios modelled
Scenario
Scenario
Scenario
Scenario
Scenario
Supporting information
Please list documentation in support of reasons

6.1 OPEX - Instructions and definitions

Note: These definitions are a guide only. TNSPs can adapt the definition section as necessary, given consultation with the AER.

PURPOSE OF INFORMATION AND USE BY THE AER:	<p>The historic worksheets (1.1 to 1.7) are a key input into the AER's assessment of a TNSP's historic opex performance to assist it in establishing a starting point from which to set efficient opex for the next regulatory period.</p> <p>The forecast worksheets (2.1 to 2.6) are a key input into the AER's assessment of a TNSP's proposed forecast opex.</p> <p>Key cost drivers for expenditure are important to the AER's understanding of what has happened in the current regulatory period and any step changes in opex claimed for the next regulatory period.</p>
INSTRUCTIONS	<p>Data to be input on the basis of the definitions provided.</p> <p>All expenditure must relate to the provision of prescribed transmission services.</p> <p>Key cost drivers for expenditure: reasons for material changes in costs should be expanded upon in the relevant opex commentary proforma.</p> <p>Templates must be completed in accordance with the instructions contained in the AER's Submission Guidelines and Cost Allocation Guidelines.</p> <p>Values for years 2007-08 and 2008-09 are estimated values only</p> <p>All cells must be filled out where possible, especially in relation to any commentary on variances.</p>
DEFINITIONS	<p>Asset management: Includes the functions of operational activities that support the development and ongoing management of transmission system assets. This includes asset strategy, customer management, grid planning, project initiation, regulation and compliance, and system modelling and planning.</p> <p>The asset management category includes the following sub-categories – customer and asset management and regulation and compliance.</p> <p>Condition Assessment: Includes field inspection and testing of transmission system assets to ascertain their condition.</p> <p>Corporate: Includes the functions of accounting, administration, audit, business planning, corporate governance, corporate IT, facilities management, finance, human resources, insurance, legal, office of managing director and company secretary, and public relations.</p> <p>The corporate category includes the following sub-categories – business services, corporate governance and business planning and insurance.</p> <p>Corrective: Includes field activities to restore a failed transmission system asset, or component, to a satisfactory operating state.</p> <p>Debt raising: Benchmark debt raising allowance.</p> <p>Equity raising: Benchmark equity raising allowance.</p> <p>Field operations and maintenance: Includes all field-based operations and maintenance functions (planned, condition assessment and corrective). The field maintenance category includes the following sub-categories – substations, protection and control, operational communications, transmission lines and easements.</p> <p>Labour: Labour costs in respect of an employee includes each of the following that applies to the employee: (a) salary or wages, (b) allowances, bonuses, overtime and penalty rate payments, (c) leave payments for annual leave, sick leave and long service leave, (d) superannuation fund contributions, payroll tax and workers' compensation insurance premiums, and (e) cost of providing any vehicle or other benefits included in the employee's remuneration package. Labour costs in respect of a external provider would be the cost for the employment of labour.</p> <p>Network: Includes all activities directly related to the operation and maintenance of the transmission system. This includes transmission services, transmission operations, asset management and network support as defined.</p> <p>Network support: Payment for cost-effective alternatives to transmission system augmentation.</p>

Non-Labour: Non-labour costs include costs that are not classified as labour costs (includes materials, fuel, stationary and parts).

Non-Network: Includes all activities not directly related to the operation and maintenance of the transmission system.

Planned: Scheduled field operations and maintenance activities that are completed to a predetermined scope to sustain the satisfactory operation of transmission system performance.

Transmission operations: Includes the functions of managing the real time operation of the Tasmanian power system. This includes planned outage analysis, power system incident analysis, assessment of power system technical envelope, formation of limit equations for NEMMCO, preparation of switching sheets, coordination of field switching activities and technical support for the Network Operations Control System (NOCS).

Transmission services: Includes the functions associated with providing engineering and asset services, management of field operating and maintenance contracts, environment and safety management, asset condition monitoring and analysis, works planning and coordination. The transmission services category includes the following sub-categories – engineering services and works planning and coordination.

6.2 HISTORIC CAPEX - Instructions and definitions

Note: These definitions are a guide only. TNSPs can adapt the definition section as necessary, given consultation with the AER.

PURPOSE OF INFORMATION AND USE BY THE AER:	<p>The templates are key inputs into the AER's assessment of historic capex and will assist in the analysis of the TNSP's forecast capex claim.</p> <p>Specifying expenditure by project enables the AER to select projects on which to undertake more detailed analysis.</p> <p>The capex categories are essentially divided between Network and Non-network. Network includes augmentation capex which is subject to the Regulatory Test.</p>
INSTRUCTIONS:	<p>Data to be input on the basis of the definitions provided.</p> <p>All expenditure must relate to the provision of prescribed transmission services.</p> <p>Categorisation of capex should be performed according to the primary reason for expenditure.</p> <p>Capex amounts should be entered exclusive of customer contributions.</p> <p>Reasons for variance: if actual expenditure materially varies from the amount determined under the Regulatory Test/Business case, or the date of commissioning was later than planned, then reasons should be given on the Historic Capex Commentary pro forma with a brief reference in the 'Reasons for variance' column of Table 3.3 and 3.4.</p> <p>Templates must be completed according to the instructions contained in the AER's Submission Guidelines.</p> <p>Values for years 4 and 5 are estimated values only.</p> <p>All cells must be filled out where possible, especially in relation to any commentary on variances.</p>
DEFINITIONS:	<p>Asset Renewal: Works to replace or refurbish prescribed transmission system assets to maintain reliability and quality of supply.</p> <p>Augmentation: Works to enlarge the transmission system or to increase the capability of the transmission system to transmit or distribute active energy, as defined in the NER.</p> <p>Business support: Works to procure, replace or upgrade non-transmission system assets including land, buildings, vehicles and minor assets in line with business needs.</p> <p>Connection: Works to either establish new prescribed connections or to modify existing prescribed connections.</p> <p>Information technology: Works to develop and maintain corporate IT capacity and to improve the functionality of IT systems to support business needs in line with good electricity industry practice.</p> <p>Inventory/spares: Transmission system assets acquired to enable timely response to asset failures in accordance with the network performance criteria and good electricity industry practice.</p> <p>Land and Easements: Land and easement acquisitions for future prescribed transmission system augmentations or connections.</p> <p>Operational support systems: Works required to create or replace operational IT support systems, required for efficient operation of the transmission system.</p> <p>Physical security/compliance: Works to improve the physical security of transmission system assets and/or compliance with technical, safety, environmental and other relevant obligations.</p>

6.3 FORECAST CAPEX - Instructions and definitions

Note: These definitions are a guide only. TNSPs can adapt the definition section as necessary, given consultation with the AER.

PURPOSE OF INFORMATION AND USE BY THE AER:	<p>The templates are key inputs into the AER's assessment of forecast capex and will enable an analysis of the proposed expenditure.</p> <p>Specifying expenditure by project enables the AER to select projects on which to undertake more detailed analysis.</p>
INSTRUCTIONS:	<p>Data to be input on the basis of the definitions provided.</p> <p>All expenditure must relate to the provision of prescribed transmission services.</p> <p>Categorisation of capex should be performed according to the primary reason for expenditure.</p> <p>Capex amounts should be entered on an as-incurred basis, excluding customer contributions.</p> <p>Customer contributions are to be noted separately.</p> <p>Templates must be completed according to the instructions contained in the AER's Submission Guidelines.</p> <p>The TNSP is also requested to provide consultants' reports on the probabilistic methodology adopted, including information on theme sets and scenarios upon which the proposed capex spend is based. Further, details on the consultants assumptions, inputs and detailed information on the outcomes are requested.</p>
DEFINITIONS:	<p>Asset Renewal: Works to replace or refurbish prescribed transmission system assets to maintain reliability and quality of supply.</p> <p>Augmentation: Works to enlarge the transmission system or to increase the capability of the transmission system to transmit or distribute active energy, as defined in the NER.</p> <p>Business support: Works to procure, replace or upgrade non-transmission system assets including land, buildings, vehicles and minor assets in line with business needs.</p> <p>Connection: Works to either establish new prescribed connections or to modify existing prescribed connections.</p> <p>Information technology: Works to develop and maintain corporate IT capacity and to improve the functionality of IT systems to support business needs in line with good electricity industry practice.</p> <p>Inventory/spares: Transmission system assets acquired to enable timely response to asset failures in accordance with the network performance criteria and good electricity industry practice.</p> <p>Labour: Labour costs in respect of an employee includes each of the following that applies to the employee: (a) salary or wages, (b) allowances, bonuses, overtime and penalty rate payments, (c) leave payments for annual leave, sick leave and long service leave, (d) superannuation fund contributions, payroll tax and workers' compensation insurance premiums, and (e) cost of providing any vehicle or other benefits included in the employee's remuneration package. Labour costs in respect of a external provider would be the cost for the employment of labour</p> <p>Land and Easements: Land and easement acquisitions for future prescribed transmission system augmentations or connections.</p> <p>Materials: Costs of construction components, equipment, tools, signs and supplies required for carrying out Transend business activities.</p> <p>Operational support systems: Works required to create or replace operational IT support systems, required for efficient operation of the transmission system.</p> <p>Physical security/compliance: Works to improve the physical security of transmission system assets and/or compliance with technical, safety, environmental and other relevant obligations.</p>