

ACCESS ARRANGEMENT - DISTRIBUTION CAPEX PROJECTS

Project	Project Description	Total Cost Over Regulatory Period (\$ 000)	Driver	Project duration and expenditure (\$ 000)					Notes	% Total Cost by Asset Group							TOTAL
				2004/2005	2005/2006	2006/2007	2007/2008	2008/2009		Wood Pole Lines	Underground Cables	Transformers	Switchgear	Streetlighting	Meters and Services	Non Network	
High voltage projects - refer to sheet 'Dist Capacity Demand Capex'	High voltage projects (various) - refer to sheet 'Dist Capacity Demand Capex'	\$ 87,710	Distribution Capacity			\$ 26,400	\$ 28,690	\$ 32,620	IAM	33	53.8		6.3				100
Low Voltage Feeder Upgrades	Low Voltage Feeder Upgrades (various)	\$ 10,690	Distribution Capacity			\$ 1,520	\$ 3,750	\$ 5,420	IAM		95		5				100
Overloaded Distribution Transformer Replacement	Overloaded Distribution Transformer Replacement (various)	\$ 7,220	Distribution Capacity			\$ 3,400	\$ 1,560	\$ 2,260	IAM			100					100
			TOTAL Distribution Capacity			\$ 22,510	\$ 33,330	\$ 40,300	IAM								
New Residential Subdivision Development	New Residential Subdivision Development (various)	\$ 98,842	Customer Driven			\$ 32,947	\$ 32,947	\$ 32,947	IAM	3	72	10	6	9			100
New Industrial/Commercial Subdivision Development	New Industrial/Commercial Subdivision Development (various)	\$ 20,275	Customer Driven			\$ 6,758	\$ 6,758	\$ 6,758	IAM	3	69	12	9	7			100
Connection of New Industrial/Commercial/Individual Customers	Connection of New Industrial/Commercial/Individual Customers (various)	\$ 68,429	Customer Driven			\$ 22,810	\$ 22,810	\$ 22,810	IAM	5	26	46	23				100
Connection of New Rural Customers (SES)	Connection of New Rural Customers (various)	\$ 12,672	Customer Driven			\$ 4,224	\$ 4,224	\$ 4,224	IAM	55	8	28	9				100
Connection of New Small Single Customers	Connection of New Small Single Customers (various)	\$ 38,016	Customer Driven			\$ 12,892	\$ 12,672	\$ 12,072	IAM		98	2					100
Connection of New Streetlights and Relocations	Connection of New Streetlights and Relocations (various)	\$ 15,206	Customer Driven			\$ 5,069	\$ 5,069	\$ 5,069	IAM	45				55			100
TX Enclosures	TX Enclosures	\$ 1,105	Customer Driven - Technical Rules Changes			\$ -	\$ 360	\$ 745	IAM			100					100
Reduced Cust radial Feeds	Reduced Cust radial Feeds	\$ 7,198	Customer Driven - Technical Rules Changes			\$ -	\$ 2,407	\$ 4,791	IAM	45				55			100
Increased ADMDs	Increased ADMDs	\$ 24,731	Customer Driven - Technical Rules Changes			\$ -	\$ 8,186	\$ 16,545	IAM		30	40	30				100
Increased loads Comm/Ind subdivisions	Increased loads Comm/Ind subdivisions	\$ 6,834	Customer Driven - Technical Rules Changes			\$ -	\$ 2,221	\$ 4,613	IAM		30	40	30				100
Pole to Pole Connections	Pole to Pole Connections	\$ 24,727	Customer Driven - Technical Rules Changes			\$ 8,000	\$ 8,240	\$ 8,487	IAM		100						100
Dist Remote Control Monitoring	Dist Remote Control Monitoring	\$ 8,937	Customer Driven - Technical Rules Changes			\$ -	\$ 2,905	\$ 6,032	IAM			60	40				100
Streetlights	Streetlights	\$ 2,366	Customer Driven - Technical Rules Changes			\$ -	\$ 769	\$ 1,597	IAM					100			100
Fire Proof Construction	Fire Proof Construction	\$ 3,422	Customer Driven - Technical Rules Changes			\$ -	\$ 982	\$ 2,440	IAM	100							100
			TOTAL Customer Driven			\$ 103,660	\$ 84,483	\$ 92,700	\$ 110,550	\$ 129,130							
Substation - RMU	Substation - RMU	\$ 6,000	Asset Replacement			\$ 2,000	\$ 2,000	\$ 2,000									100
Distribution Poles Replacement	Distribution Poles Replacement	\$ 48,000	Asset Replacement			\$ 8,400	\$ 21,000	\$ 19,000		100							100
Carriers	Carriers	\$ 5,000	Asset Replacement			\$ 1,000	\$ 1,000	\$ 3,000		100							100
Sectionalisers/Reclosers	Sectionalisers/Reclosers	\$ 19	Asset Replacement			\$ 17	\$ 1	\$ 1									100
Distribution Transformers	Distribution Transformers	\$ 1,664	Asset Replacement			\$ 500	\$ 598	\$ 566				100					100
Compensators	Compensators	\$ 101	Asset Replacement			\$ 49	\$ 26	\$ 26				100					100
LV Frames	LV Frames	\$ 473	Asset Replacement			\$ 154	\$ 158	\$ 162					100				100
PWOD Reinforcement	PWOD Reinforcement	\$ 16,000	Asset Replacement			\$ 4,900	\$ 5,000	\$ 6,100									100
Wildlife proofing (G)	Wildlife proofing (G)	\$ 662	Asset Replacement			\$ 201	\$ 217	\$ 245		100							100
Emergency Response Generation	Emergency Response Generation	\$ 380	Asset Replacement			\$ 380	\$ -	\$ -				100					100
			TOTAL Asset Replacement			\$ 11,040	\$ 10,255	\$ 17,600	\$ 30,000	\$ 31,100							
Distribution Remote Control - Pilot Project Initiatives	Distribution Remote Control - Pilot Project Initiatives	\$ 2,500	Reliability Driven			\$ 500	\$ 1,000	\$ 1,000									100
40 worst feeders Program (20 Metro, 10 NC and 10SC)	40 worst feeders Program (20 Metro, 10 NC and 10SC)	\$ 28,594	Reliability Driven			\$ 5,350	\$ 15,554	\$ 7,690		70	30						100
Fault Indicator Installation (OH/UG)	Fault Indicator Installation (OH/UG)	\$ 3,810	Reliability Driven			\$ -	\$ 1,800	\$ 2,010									100
Targeted Reliability Driven Reclosers	Targeted Reliability Driven Reclosers	\$ 3,523	Reliability Driven			\$ 1,573	\$ 730	\$ 1,220									100
Remote Control RMU/PTS	Remote Control RMU/PTS	\$ 2,170	Reliability Driven			\$ -	\$ 620	\$ 1,550									100
RPIP Stage 2 - SCADA for Remainder of country 3phase reclosers	RPIP Stage 2 - SCADA for Remainder of country 3phase reclosers	\$ 499	Reliability Driven			\$ 269	\$ 100	\$ 130									100
Carry Over Costs & Costs Uplift applicable to Reliability Driven Projects	Carry Over Costs & Costs Uplift applicable to Reliability Driven Projects	\$ 1,805	Reliability Driven			\$ 1,805	\$ -	\$ -									100
			TOTAL Reliability Driven			\$ 50	\$ 7,692	\$ 9,497	\$ 19,804	\$ 13,600							
Overhead Customer Service Connection	Overhead Customer Service Connection	\$ 33,776	Safety, Environmental & Statutory			\$ 8,401	\$ 13,104	\$ 12,271		100							100
Metal SL poles	Metal SL poles	\$ 4,990	Safety, Environmental & Statutory			\$ 1,390	\$ 1,350	\$ 2,250									100
Conductive Poles	Conductive Poles	\$ 2,328	Safety, Environmental & Statutory			\$ 438	\$ 884	\$ 1,006		100							100
SL Switch wires	SL Switch wires	\$ 1,572	Safety, Environmental & Statutory			\$ 438	\$ 450	\$ 684									100
URD pits	URD pits	\$ 1,100	Safety, Environmental & Statutory			\$ 1,100	\$ -	\$ -									100
Hanley Boxes	Hanley Boxes	\$ 6,067	Safety, Environmental & Statutory			\$ 1,400	\$ 1,649	\$ 3,018			100						100
Cattle Care	Cattle Care	\$ 1,421	Safety, Environmental & Statutory			\$ 521	\$ 450	\$ 450		100							100
PTS earth mats	PTS earth mats	\$ 6,739	Safety, Environmental & Statutory			\$ 2,127	\$ 2,267	\$ 2,345									100
LV frame shrouding	LV frame shrouding	\$ 1,748	Safety, Environmental & Statutory			\$ 362	\$ 383	\$ 1,003									100
TX poles	TX poles	\$ 2,573	Safety, Environmental & Statutory			\$ 1,434	\$ 975	\$ 164									100
River Crossings	River Crossings	\$ 670	Safety, Environmental & Statutory			\$ 400	\$ 270	\$ -		100							100
Bushfire Mitigation - wires down	Bushfire Mitigation - wires down	\$ 10,987	Safety, Environmental & Statutory			\$ 876	\$ 4,750	\$ 5,361									100
Bushfire Mitigation - conductor clashing HV	Bushfire Mitigation - conductor clashing HV	\$ 15,219	Safety, Environmental & Statutory			\$ 4,473	\$ 5,035	\$ 5,711		100							100
Bushfire Mitigation - conductor clashing - LV	Bushfire Mitigation - conductor clashing - LV	\$ 3,422	Safety, Environmental & Statutory			\$ 1,300	\$ 1,001	\$ 1,121		100							100
Bushfire Mitigation - fire safe fuses	Bushfire Mitigation - fire safe fuses	\$ 6,564	Safety, Environmental & Statutory			\$ 877	\$ 2,631	\$ 3,046									100
Refurbish Distribution Voltage Regulators	Refurbish Distribution Voltage Regulators	\$ 725	Safety, Environmental & Statutory			\$ 725	\$ -	\$ -									100
Power Quality compliance	Power Quality compliance	\$ 18,400	Safety, Environmental & Statutory			\$ 3,000	\$ 9,000	\$ 6,400			100						100
Padmount Transformer Noise	Padmount Transformer Noise	\$ 4,038	Safety, Environmental & Statutory			\$ 438	\$ 1,800	\$ 1,800		45	50	5	100				100
Carry Over Costs & Costs Uplift applicable to Reg Compliance Projects	Carry Over Costs & Costs Uplift applicable to Reg Compliance Projects	\$ 2,008	Safety, Environmental & Statutory			\$ 2,008	\$ -	\$ -									100
			TOTAL Safety, Environmental & Statutory			\$ 25,100	\$ 23,929	\$ 27,692	\$ 46,000	\$ 46,630							
CBD SCADA CONNECTIONS	Connect CBD SCADA Remote Sites to Perth Fibre Network	\$ 11	SCADA & Communications			\$ 11	\$ -	\$ -									100
DIST. SCADA/COMMS ASSET REPL. INVESTIGATION	Asset Replacement Strategy for CBD and Metro Reclosers SCADA	\$ 69	SCADA & Communications			\$ 69	\$ -	\$ -									100
COUNTRY MOBILE RADIO	Asset Replacement Of Country Mobile Radio Bases/Links	\$ 1,103	SCADA & Communications			\$ 274	\$ 279	\$ 550									100
DIST. AUTOMATION EXPANSION - RECLOSERS	Metro Distribution Recloser SCADA/Comms Bases Expansion	\$ 33	SCADA & Communications			\$ -	\$ -	\$ -									100
DISTRIBUTION AUTOMATION	Rollout of SCADA/Comms Bases for Distribution Automation Projects	\$ 980	SCADA & Communications			\$ 480	\$ 250	\$ 250									100
HARDWARE FOR ENMAC MASTER STATION	ENMAC Distribution Master Station Hardware Upgrades	\$ 150	SCADA & Communications			\$ 50	\$ 50	\$ 50									100
COMMS: ENMAC RTU DIGITAL DATA INTERFACE	Distribution SCADA Master - Install Digital RTU Comms Interface	\$ 92	SCADA & Communications			\$ 92	\$ -	\$ -									100
SCADA: 3 PH RECLOSERS FOR COUNTRY AREA	Provide Remote Control & Monitoring for Various Country 3 PH Reclosers	\$ 783	SCADA & Communications			\$ 192	\$ 461	\$ 130									100
TRUNKED MOBILE RADIO REPLACEMENT	Trunked Mobile Radio Replacement	\$ 920	SCADA & Communications			\$ 40	\$ 440	\$ 440									100
INSTALL GPRS/1XRTT SCADA BASE	Install GPRS/1XRTT Distribution SCADA Base	\$ 34	SCADA & Communications			\$ 34	\$ -	\$ -									100
COMMS TOWER REINFORCEMENT REGULATORY COMPLIANCE	Communications Tower Reinforcement for Regulatory Compliance	\$ 700	SCADA & Communications			\$ 700	\$ -	\$ -									100
METRO RECLOSER SYSTEM RADIO REPLACEMENT	Metro Recloser SCADA System Radio Asset Replacement	\$ 800	SCADA & Communications			\$ 100	\$ 320	\$ 480									100
CBD SCADA EXPANSION	CBD SCADA System Base Capacity Expansion	\$ 126	SCADA & Communications			\$ 126	\$ -	\$ -									100
			TOTAL SCADA & Communications			\$ 2,170	\$ 2,137	\$ 2,201	\$ 1,800	\$ 1,900							
Outage Management System (TCMS)	New IT system to replace current Trouble Call (fault) Management System	\$ 5,465	IT&T			\$ 1,855	\$ 3,000	\$ 610									100
Feeder & Transformer Forecasting Tool	New IT tool for load monitoring & planning of quality of supply initiatives	\$ 351	IT&T			\$ 148	\$ 100	\$ 103									100
Reliability Program	System enhancements for reliability data recording, analysis & reporting	\$ 1,651	IT&T			\$ 375	\$ 638	\$ 638									100
Workforce Management	Establish Work Management System	\$ 4,886	IT&T			\$ 1,238	\$ 3,300	\$ 348									100
System - Data access for others	Establish access to network data by retailers, generators & stakeholders	\$ 210	IT&T			\$ 10	\$ 172	\$ 28									100
GIS Replacement	Replacement of current 'DFIS' geographic information system	\$ 4,483	IT&T			\$ -	\$ 128	\$ 4,335									100
Asset Systems Rationalisation	Enhancement of current asset management systems (various)	\$ 1,520	IT&T			\$ -	\$ 560	\$ 40									100
Disaster Recovery Project	Implementation of IT disaster recovery plan	\$ 1,158	IT&T			\$ 311	\$ 521	\$ 326									100
Customer Information Systems	Establish a Networks Customer																

ACCESS ARRANGEMENT - DISTRIBUTION CAPEX PROJECTS

Lake Grace LEP	Committed SUPP project	\$ 312	SUPP	\$ 312	\$ -	\$ -	IAM	76.9	6.9	6.9	9.3	100	
Gosnells South	Committed SUPP project	\$ 4,054	SUPP	\$ -	\$ -	\$ 4,054	IAM	76.9	6.9	6.9	9.3	100	
Mt Pleasant North	Committed SUPP project	\$ 4,304	SUPP	\$ -	\$ -	\$ 4,204	IAM	76.9	6.9	6.9	9.3	100	
Palm Beach	Committed SUPP project	\$ 2,585	SUPP	\$ -	\$ -	\$ 2,585	IAM	76.9	6.9	6.9	9.3	100	
Wilson West	Committed SUPP project	\$ 1,744	SUPP	\$ -	\$ -	\$ 1,744	IAM	76.9	6.9	6.9	9.3	100	
Withers	Committed SUPP project	\$ 1,584	SUPP	\$ -	\$ -	\$ 1,584	IAM	76.9	6.9	6.9	9.3	100	
Balcatta	Committed SUPP project	\$ 438	SUPP	\$ -	\$ -	\$ 438	IAM	76.9	6.9	6.9	9.3	100	
	TOTAL SUPP			\$ 19,300	\$ 17,092	\$ 17,092	\$ 16,387	\$ 17,105					
Government driven program over a four year term. Projects only agreed a	Project details vet to be committed	\$ 32,856		\$ 10,255	\$ 10,601	\$ 12,000	IAM	80		20		100	
	TOTAL RPIP			\$ 10,430	\$ 10,255	\$ 10,255	\$ 10,601	\$ 12,000					
Tools & Equipment	Tools & equipment for construction & maintenance functions	\$ 17,700	Support	\$ 5,300	\$ 6,100	\$ 6,300						100	
Capital Works Management	Accommodation	\$ 12,900	Support	\$ 4,100	\$ 7,000	\$ 1,800						100	
	Site Facilities	\$ 5,900	Support	\$ 3,200	\$ 1,800	\$ 900						100	
	TOTAL Support			\$ 5,350	\$ 3,213	\$ 12,600	\$ 14,900	\$ 9,000					
	TOTAL Expenditure			\$ 218,360	\$ 212,000	\$ 244,604	\$ 309,213	\$ 326,200					
	TOTAL Vested Assets	\$ 59,810		\$ 16,185	\$ 17,235	\$ 15,930	\$ 19,950	\$ 23,930	73	10.5	6.7	9.8	100
	Cell values amended 17-7-06												
	\$ By Asset Group			2004/2005	2005/2006	2006/2007	2007/2008	2008/2009					
	Wood Pole Lines			\$ 52,914	\$ 68,084	\$ 67,251							
	Underground Cables			\$ 101,404	\$ 111,299	\$ 125,349							
	Transformers			\$ 27,809	\$ 32,699	\$ 38,852							
	Switchgear			\$ 21,731	\$ 30,736	\$ 40,980							
	Streetlighting			\$ 11,205	\$ 12,274	\$ 14,703							
	Meters and Services			\$ 4,400	\$ 8,100	\$ 10,000							
	Non Network			\$ 31,248	\$ 23,740	\$ 21,470							
	Network Related % Split			2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	Aggregate Average				
	Wood Pole Lines			28.0%	28.0%	28.7%	28.14%						
	Underground Cables			49.7%	45.8%	42.7%	45.68%						
	Transformers			13.6%	13.5%	13.6%	13.56%						
	Switchgear			10.7%	12.7%	14.0%	12.63%						
	To the Revenue model			2004/2005	2005/2006	2006/2007	2007/2008	2008/2009					
	Wooden Pole Lines			\$ 52,939	\$ 68,069	\$ 67,258							
	Underground Cables			\$ 101,452	\$ 111,273	\$ 125,358							
	Transformers			\$ 27,822	\$ 32,691	\$ 38,855							
	Switchgear			\$ 21,741	\$ 30,728	\$ 40,983							
	Street lighting			\$ 11,210	\$ 12,271	\$ 14,704							
	Meters and Services			\$ 4,402	\$ 8,098	\$ 10,001							
	IT&T			\$ 25,723	\$ 18,349	\$ 15,630							
	SCADA & Communications			\$ 2,137	\$ 1,767	\$ 1,900							
	Other Distribution Non-Network			\$ 3,213	\$ 3,534	\$ 3,800							
	Distribution Land & Easements			\$ -	\$ -	\$ -							
	TOTAL			\$ 250,639	\$ 286,779	\$ 339,488							
	CHECK			OK	OK	OK							

**DISTRIBUTION CAPACITY DEMAND RELATED CAPITAL EXPENDITURE
(Constrained)
Summary of Capital Expenditure Forecasts from Year 2007 to 2009**

Priority Ranking - 5 to 5

	2006/07	2007/08	2008/09	Total Over Reg Period
Approved Constrained Budget	31,320,000	34,000,000	40,300,000	105,620,000
Constrained Budget Limit HV	26,400,000	28,690,000	32,620,000	87,710,000
Constrained Budget Limit LV	4,920,000	5,310,000	7,680,000	17,910,000

		Total constrained Forecast \$			Total Over Reg Period
		2006/07	2007/08	2008/09	87,707,537
Metropolitan Region	Metro Areas (without Generic Projects)				
	ST&KW				
	Total	9,300,587	7,531,441	6,314,060	23,146,088
	Trans Driven	2,778,500	674,000	0	3,452,500
	HV Reinf	6,522,087	6,857,441	6,314,060	19,693,588
	NT				
	Total	3,418,580	3,092,580	7,565,000	14,076,160
	Trans Driven	2,531,580	1,600,580	6,109,000	10,241,160
	HV Reinf	887,000	1,492,000	1,456,000	3,835,000
	SF				
	Total	4,606,315	3,701,944	1,582,826	9,891,085
	Trans Driven	1,632,770	860,794	0	2,493,564
	HV Reinf	2,973,545	2,841,150	1,582,826	7,397,521
	EP				
	Total	920,000	0	1,594,000	2,514,000
	Trans Driven	0	0	0	0
	HV Reinf	920,000	0	1,594,000	2,514,000
	WT&CT				
	Total	3,518,600	9,859,245	5,750,850	19,128,695
	Trans Driven	2,518,600	4,270,745	5,550,850	12,340,195
	HV Reinf	1,000,000	5,588,500	200,000	6,788,500
	Metro Total (without Generic Projects)	21,764,082	24,185,210	22,806,736	68,756,028
	Trans Driven	9,461,450	7,406,119	11,659,850	28,527,419
	HV Reinf	12,302,632	16,779,091	11,146,886	40,228,609
	Metro Generic Projects				
	Total	46,200	1,592,400	3,092,400	4,731,000
	Trans Driven	0	500,000	1,000,000	1,500,000
	HV Reinf	46,200	1,092,400	2,092,400	3,231,000
	Metro Total (with Generic Projects)	21,810,282	25,777,610	25,899,136	73,487,028
	Trans Driven	9,461,450	7,906,119	12,659,850	30,027,419
	HV Reinf	12,348,832	17,871,491	13,239,286	43,459,609
South Country Region	SC (without Generic Projects)				
	SC				
	Total	\$1,153,000	\$1,148,000	\$4,370,000	6,671,000
	Trans Driven	0	0	400,000	400,000
	HV Reinf	1,153,000	1,148,000	3,970,000	6,271,000
	SC Generic Projects				
	Total	46,200	288,600	388,600	723,400
	SC Total (with Generic Projects)	1,199,200	1,436,600	4,758,600	7,394,400
	Trans Driven	0	0	400,000	400,000
	HV Reinf	1,153,000	1,148,000	3,970,000	6,271,000
North Country Region	NC (without Generic Projects)				
	NC				
	Total	2,006,619	992,036	750,000	3,748,655
	Trans Driven	271,286	0	0	271,286
	HV Reinf	1,735,333	992,036	750,000	3,477,369
	NC Generic Projects				
	Total	46,200	388,600	388,600	823,400
	NC Total (with Generic Projects)	2,052,819	1,380,636	1,138,600	4,572,055
	Trans Driven	271,286	0	0	271,286
	HV Reinf	1,735,333	992,036	750,000	3,477,369
Eastern Goldfields Region	EGF (without Generic Projects)				
	EGF				
	Total	1,361,654	0	650,000	2,011,654
	Trans Driven	0	0	0	0
	HV Reinf	1,361,654	0	650,000	2,011,654
	EGF Generic Projects				
	Total	0	96,200	146,200	242,400
	EGF Total (with Generic Projects)	1,361,654	96,200	796,200	2,254,054
	Trans Driven	0	0	0	0
	HV Reinf	1,361,654	0	650,000	2,011,654
	Total for all Regions	\$ 26,423,955	28,691,046	32,592,536	87,707,537
	Subtotal Trans Driven	\$ 9,732,736	7,906,119	13,059,850	30,698,705