

Appendix F

Operating cost estimates

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 51,017,414	\$ 52,130,306	\$ 53,243,197	\$ 53,524,992	\$ 53,806,787	\$ 54,088,582	\$ 54,370,378	\$ 54,652,173	\$ 54,933,968	\$ 69,305,523	\$ 55,497,558	\$ 55,497,558	\$ 55,497,558	\$ 55,497,558	\$ 55,497,558

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603	\$ 38,549,603

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633	\$ 1,882,633

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 831,096	\$ 1,662,192	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288	\$ 2,493,288

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 2,817,952	\$ 3,099,747	\$ 3,381,542	\$ 3,663,338	\$ 3,945,133	\$ 4,226,928	\$ 4,508,723	\$ 4,790,518	\$ 5,072,314	\$ 19,443,869	\$ 5,635,904	\$ 5,635,904	\$ 5,635,904	\$ 5,635,904	\$ 5,635,904

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Reactor Station Costs	Annual cost	AUD	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000

* Sustaining capital refers to a CAPEX reserve for emergency use. With capital refresh at 10 year intervals

Figure F.1 Option 1A Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 80,352,351	\$ 82,266,381	\$ 84,180,411	\$ 85,279,470	\$ 86,378,528	\$ 87,477,586	\$ 88,576,644	\$ 89,675,703	\$ 90,774,761	\$ 91,873,819	\$ 92,972,878	\$ 92,972,878	\$ 92,972,878	\$ 92,972,878	\$ 147,925,791

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031	\$ 39,100,031

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638	\$ 1,510,638

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 814,972	\$ 1,629,944	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916	\$ 2,444,916

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 10,990,583	\$ 12,089,641	\$ 13,188,699	\$ 14,287,757	\$ 15,386,816	\$ 16,485,874	\$ 17,584,932	\$ 18,683,990	\$ 19,783,049	\$ 20,882,107	\$ 21,981,165	\$ 21,981,165	\$ 21,981,165	\$ 21,981,165	\$ 76,934,078

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Converter Station Costs	Annual cost	AUD	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998	\$ 26,599,998

* Sustaining capital refers to a CAPEX reserve for emergency use. With Capital refresh at 15 year intervals

Figure F.3 Option 2B-1 Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 109,681,980	\$ 118,637,581	\$ 127,593,181	\$ 129,262,613	\$ 130,932,044	\$ 132,601,475	\$ 134,270,907	\$ 135,940,338	\$ 137,609,769	\$ 139,279,200	\$ 140,948,632	\$ 140,948,632	\$ 140,948,632	\$ 140,948,632	\$ 224,420,198

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080	\$ 5,787,080

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line	Annual cost	AUD	\$ 8,061,423	\$ 15,347,592	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761	\$ 22,633,761

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 16,694,313	\$ 18,363,745	\$ 20,033,176	\$ 21,702,607	\$ 23,372,039	\$ 25,041,470	\$ 26,710,901	\$ 28,380,333	\$ 30,049,764	\$ 31,719,195	\$ 33,388,627	\$ 33,388,627	\$ 33,388,627	\$ 33,388,627	\$ 116,860,193

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Converter Station Costs	Annual cost	AUD	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000

* Sustaining capital refers to a CAPEX reserve for emergency use. With Capital refresh at 15 year intervals

Figure F.4 Option 3A-3 Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 101,737,466	\$ 108,356,429	\$ 114,975,393	\$ 116,106,425	\$ 117,237,457	\$ 118,368,488	\$ 119,499,520	\$ 120,630,552	\$ 121,761,584	\$ 122,892,615	\$ 124,023,647	\$ 124,023,647	\$ 124,023,647	\$ 124,023,647	\$ 180,575,234

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034	\$ 59,603,034

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130	\$ 1,336,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580	\$ 5,089,580

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 6,198,404	\$ 11,686,336	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268	\$ 17,174,268

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 11,310,317	\$ 12,441,349	\$ 13,572,381	\$ 14,703,413	\$ 15,834,444	\$ 16,965,476	\$ 18,096,508	\$ 19,227,540	\$ 20,358,571	\$ 21,489,603	\$ 22,620,635	\$ 22,620,635	\$ 22,620,635	\$ 22,620,635	\$ 79,172,222

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Converter Station Costs	Annual cost	AUD	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000

* Sustaining capital refers to a CAPEX reserve for emergency use. With Capital refresh at 15 year intervals

Figure F.5 Option 3B-3 Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 93,573,563	\$ 98,510,669	\$ 103,447,776	\$ 105,500,568	\$ 107,553,360	\$ 109,606,153	\$ 111,658,945	\$ 113,711,737	\$ 115,764,530	\$ 117,817,322	\$ 119,870,115	\$ 119,870,115	\$ 119,870,115	\$ 119,870,115	\$ 222,509,733

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452	\$ 44,604,452

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 3,086,270	\$ 5,970,584	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898	\$ 8,854,898

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 20,527,924	\$ 22,580,716	\$ 24,633,508	\$ 26,686,301	\$ 28,739,093	\$ 30,791,885	\$ 32,844,678	\$ 34,897,470	\$ 36,950,263	\$ 39,003,055	\$ 41,055,847	\$ 41,055,847	\$ 41,055,847	\$ 41,055,847	\$ 143,695,466

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Converter Station Costs	Annual cost	AUD	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000

* Sustaining capital refers to a CAPEX reserve for emergency use. With Capital refresh at 15 year intervals

Figure F.6 Option 4A-5 Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 88,079,264	\$ 93,307,262	\$ 98,535,260	\$ 99,906,615	\$ 101,277,971	\$ 102,649,326	\$ 104,020,682	\$ 105,392,037	\$ 106,763,393	\$ 108,134,748	\$ 109,506,104	\$ 109,506,104	\$ 109,506,104	\$ 109,506,104	\$ 178,073,879

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181	\$ 45,482,181

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287	\$ 5,106,287

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 4,226,110	\$ 8,082,753	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395	\$ 11,939,395

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 13,713,555	\$ 15,084,911	\$ 16,456,266	\$ 17,827,622	\$ 19,198,977	\$ 20,570,333	\$ 21,941,688	\$ 23,313,044	\$ 24,684,399	\$ 26,055,755	\$ 27,427,110	\$ 27,427,110	\$ 27,427,110	\$ 27,427,110	\$ 95,994,886

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Converter Station Costs	Annual cost	AUD	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000

* Sustaining capital refers to a CAPEX reserve for emergency use. With Capital refresh at 15 year intervals

Figure F.7 Option 4B-5 Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 89,754,246	\$ 95,650,731	\$ 101,547,216	\$ 103,506,620	\$ 105,466,025	\$ 107,425,430	\$ 109,384,835	\$ 111,344,240	\$ 113,303,644	\$ 115,263,049	\$ 117,222,454	\$ 117,222,454	\$ 117,222,454	\$ 117,222,454	\$ 215,192,692

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384	\$ 40,526,384

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130	\$ 1,351,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787	\$ 5,803,787

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 4,278,898	\$ 8,215,978	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058	\$ 12,153,058

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 19,594,048	\$ 21,553,452	\$ 23,512,857	\$ 25,472,262	\$ 27,431,667	\$ 29,391,072	\$ 31,350,476	\$ 33,309,881	\$ 35,269,286	\$ 37,228,691	\$ 39,188,095	\$ 39,188,095	\$ 39,188,095	\$ 39,188,095	\$ 137,158,334

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Converter Station Costs	Annual cost	AUD	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000	\$ 18,200,000

* Sustaining capital refers to a CAPEX reserve for emergency use. With Capital refresh at 15 year intervals

Figure F.8 Option 4C-2 Operating Cost Estimate Breakdown

OPEX OUTPUT

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operating Cost	Annual Operating cost	AUD	\$ 35,383,658	\$ 35,456,702	\$ 35,529,746	\$ 35,566,069	\$ 35,602,393	\$ 35,638,717	\$ 35,675,041	\$ 35,711,364	\$ 35,747,688	\$ 37,600,200	\$ 35,820,336	\$ 35,820,336	\$ 35,820,336	\$ 35,820,336	\$ 35,820,336

CONTRIBUTING OUTPUTS

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Power costs (losses)	Annual Power cost	AUD	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570	\$ 31,828,570

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Operations	Annual cost	AUD	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130	\$ 1,271,130

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Right of Way Management	Annual cost	AUD	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000	\$ 1,884,000

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Transmission Line Maintenance	Annual cost	AUD	\$ 36,720	\$ 73,440	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160	\$ 110,160

Building block	Output description	UOM	Operational Year														
			YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10	YR11	YR12	YR13	YR14	YR15
Sustaining Capital	Annual cost	AUD	\$ 363,238	\$ 399,561	\$ 435,885	\$ 472,209	\$ 508,533	\$ 544,857	\$ 581,180	\$ 617,504	\$ 653,828	\$ 2,506,340	\$ 726,475	\$ 726,475	\$ 726,475	\$ 726,475	\$ 726,475

* Sustaining capital refers to a CAPEX reserve for emergency use. With capital refresh at 10 year intervals

Figure F.9 *Gugaa to Wagga Wagga Operating Cost Estimate Breakdown*