

NPV @ 3.5% p.a.																																	
APPRaisal DATE		Jun-10																															
OPTION NUMBER & TITLE		Option 2a NPC: Do Minimum - Heavy Maintenance																															
YEAR	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 27	Year 28	Year 29	Year 30	TOTAL		
CAPITAL COSTS (£ 000s):																																	
	Add Row																																
Option 2a Costs (excluding sunk costs, risk and O&M (at 30.5%))	2,392,534	6,220,587	36,605,765	2,088,241									37,917,180																		- 15,166,872.00	70057434	
	729,723	1,897,279	11,164,758	636,913									11,564,740																		- 4,625,895.96	21367517	
A. Total Capital Costs (Annual)	3,122,256	8,117,867	47,770,523	2,725,154	-	-	-	-	-	-	-	-	49,481,920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,792,768		
B. Total Capital Costs (Cumulative)	3,122,256	11,240,123	59,010,646	61,735,800	61,735,800	61,735,800	61,735,800	61,735,800	61,735,800	61,735,800	61,735,800	61,735,800	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	111,217,720	91,424,952	2722339128
REVENUE COSTS (£ 000s):																																	
	Add Row																																
Signalling and Maintenance		50180		65630																												115810	
Annual Revenue Cost		776468	776468	776468	776468	776468	776468	776468	776468	776468	776468	776468	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	473267	17059954
C. Total Revenue Costs (Annual)	-	826,648	776,468	842,098	776,468	776,468	776,468	776,468	776,468	776,468	776,468	776,468	-	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
D. Total Revenue Costs (Cumulative)	-	826,648	1,603,116	2,445,214	3,221,682	3,998,150	4,774,618	5,551,086	6,327,554	7,104,022	7,880,490	8,656,958	8,656,958	9,130,225	9,603,492	10,076,759	10,550,026	11,023,293	11,496,560	11,969,827	12,443,094	12,916,361	13,389,628	13,862,895	14,336,162	14,809,429	15,282,696	15,755,963	16,229,230	16,702,497	17,175,764	297,800,389	
E. Total Costs (Annual) (=A+C)	3,122,256	8,944,514	48,546,991	3,567,252	776,468	776,468	776,468	776,468	776,468	776,468	776,468	776,468	49,481,920	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267		
F. Total Costs (Cumulative) (=B+D)	3,122,256	12,066,771	60,613,761	64,181,013	64,957,481	65,733,949	66,510,417	67,286,885	68,063,353	68,839,821	69,616,289	70,392,757	119,874,677	120,347,944	120,821,211	121,294,478	121,767,745	122,241,012	122,714,279	123,187,546	123,660,813	124,134,080	124,607,347	125,080,614	125,553,881	126,027,148	126,494,415	126,961,682	127,428,949	127,896,216	128,363,483		
BENEFITS (£ 000s):																																	
Economic Dis-benefits																																	
Additional Time Cost		- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 328,134	- 9,844,020
Additional Vehicle Operating Cost		- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 13,621	- 408,630
G. Total Benefits (Annual)	-	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 341,755	- 10,252,650	
H. Total Benefits (Cumulative)	-	- 341,755	- 683,510	- 1,025,265	- 1,367,020	- 1,708,775	- 2,050,530	- 2,392,285	- 2,734,040	- 3,075,795	- 3,417,550	- 3,759,305	- 4,101,060	- 4,442,815	- 4,784,570	- 5,126,325	- 5,468,080	- 5,809,835	- 6,151,590	- 6,493,345	- 6,835,100	- 7,176,855	- 7,518,610	- 7,860,365	- 8,202,120	- 8,543,875	- 8,885,630	- 9,227,385	- 9,569,140	- 9,910,895	- 10,252,650	- 10,252,650	
NET UNDISCOUNTED COST* (=E-G)	3,122,256	9,286,269	48,888,746	3,909,007	1,118,223	1,118,223	1,118,223	1,118,223	1,118,223	1,118,223	1,118,223	1,118,223	48,823,676	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	815,022	118,853,365	
DISCOUNT FACTOR @ 3.5% p.a.	1.00000	0.98813	0.93351	0.90194	0.87144	0.84197	0.81350	0.78599	0.75941	0.73373	0.70892	0.68495	0.66178	0.63940	0.61778	0.59689	0.57671	0.55720	0.53836	0.52016	0.50257	0.48557	0.46915	0.45329	0.43796	0.42315	0.39801	0.38165	0.36575	0.35028			
NET PRESENT COST* (Annual)	3,122,256	8,972,241	45,638,167	3,525,701	974,467	941,514	909,675	878,913	848,191	820,475	792,729	765,922	32,972,476	521,128	503,506	486,478	470,028	454,133	438,776	423,938	409,602	395,751	382,368	369,438	356,945	344,874	321,944	311,057	300,538	289,981	279,386		
NET PRESENT COST* (Cumulative)	3,122,256	12,094,497	57,732,664	61,258,365	62,232,832	63,174,345	64,084,021	64,962,934	65,812,125	66,632,600	67,425,329	68,191,251	101,163,727	101,684,856	102,188,362	102,674,841	103,144,869	103,599,002	104,037,778	104,461,716	104,871,319	105,267,070	105,649,438	106,018,875	106,375,820	106,720,694	107,057,850	107,386,906	107,709,444	108,026,083			
TOTAL NET PRESENT COST*	101,226,083																																

* A minus sign in these rows denotes a Net Present Value rather than a Net Present Cost.

NPV @ 3.5% p.a.		APPRaisal DATE: Jun-10																													
OPTION NUMBER & TITLE: Option 3a NPC: Full Renewal (Baseline)																															
YEAR:	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 27	Year 28	Year 29	Year 30	TOTAL
CAPITAL COSTS (£ 000s):																															
Option 3a Costs (excluding sunk costs, risk and OB)																															
OB (at 20%)	3,150,549	8,821,537	47,258,236	3,182,017																											
	636,411	1,781,951	9,546,164	842,767																											
A. Total Capital Costs (Annual)	3,786,960	10,603,488	56,804,399	3,824,784	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B. Total Capital Costs (Cumulative)	3,786,960	14,390,448	71,194,847	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	75,019,632	2189921942
REVENUE COSTS (£ 000s):																															
Annual Revenue Cost		473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267
C. Total Revenue Costs (Annual)	-	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267
D. Total Revenue Costs (Cumulative)	-	473,267	946,535	1,419,802	1,893,070	2,366,337	2,839,605	3,312,872	3,786,139	4,259,407	4,732,674	5,205,942	5,679,209	6,152,477	6,625,744	7,099,011	7,572,279	8,045,546	8,518,814	8,992,081	9,465,349	9,938,616	10,411,883	10,885,151	11,358,418	11,831,686	12,304,954	12,778,222	13,251,489	13,724,757	14,198,023
E. Total Costs (Annual) (=A+C)	3,786,960	11,076,755	57,277,667	4,298,052	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267
F. Total Costs (Cumulative) (=B+D)	3,786,960	14,863,715	72,141,382	76,439,434	76,912,701	77,385,968	77,859,236	78,332,504	78,805,771	79,279,038	79,752,306	80,225,573	80,698,841	81,172,108	81,645,376	82,118,643	82,591,910	83,065,178	83,538,445	84,011,713	84,484,980	84,958,248	85,431,515	85,904,782	86,378,050	86,851,317	87,324,584	87,797,852	88,271,120	88,744,387	89,217,654
BENEFITS (£ 000s):																															
G. Total Benefits (Annual)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H. Total Benefits (Cumulative)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NET UNDISCOUNTED COST* (=E-G)	3,786,960	11,076,755	57,277,667	4,298,052	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267
DISCOUNT FACTOR @ 3.5% p.a.	1.00000	0.96618	0.93351	0.90194	0.87144	0.84197	0.81350	0.78599	0.75941	0.73373	0.70892	0.68495	0.66178	0.63940	0.61778	0.59689	0.57671	0.55720	0.53836	0.52016	0.50257	0.48557	0.46915	0.45329	0.43796	0.42315	0.39501	0.38165	0.36875	0.35628	
NET PRESENT COST* (Annual)	3,786,960	10,702,179	53,469,315	3,876,597	412,425	398,478	385,003	371,984	359,405	347,251	335,508	324,162	313,200	302,609	292,376	282,489	272,936	263,706	254,789	246,173	237,848	229,805	222,034	214,525	207,271	200,262	186,946	180,625	174,516	168,615	
NET PRESENT COST* (Cumulative)	3,786,960	14,489,139	67,958,454	71,835,050	72,247,476	72,645,954	73,030,957	73,402,941	73,762,346	74,109,597	74,445,105	74,769,268	75,082,468	75,385,077	75,677,453	75,959,942	76,232,878	76,496,585	76,751,374	76,997,546	77,235,394	77,465,199	77,687,233	77,901,758	78,109,029	78,309,291	78,689,727	78,870,351	79,044,868	79,213,483	
TOTAL NET PRESENT COST* =																															

* A minus sign in these rows denotes a Net Present Value rather than a Net Present Cost.

NPV @ 3.5% p.a.		APPRaisal DATE: Jun-10																													
OPTION NUMBER & TITLE: Option 3b NPC: Full Renewal (Baseline)																															
YEAR:	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 27	Year 28	Year 29	Year 30	TOTAL
CAPITAL COSTS (£ 000s):																															
Option 3b Costs (excluding sunk costs, risk and OB)																															
OB (at 20%)	3,031,975	8,489,528	45,479,617	3,039,862	4,370,984																										
	612,499	1,714,889	9,186,883	614,062	862,939																										
A. Total Capital Costs (Annual)	3,644,434	10,204,413	54,666,500	3,653,914	5,253,923																										
B. Total Capital Costs (Cumulative)	3,644,434	13,848,846	68,515,346	72,169,260	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	77,423,183	224,349,908	
REVENUE COSTS (£ 000s):																															
Annual Revenue Cost		473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
C. Total Revenue Costs (Annual)	-	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
D. Total Revenue Costs (Cumulative)	-	473,267	946,535	1,419,802	1,893,070	2,366,337	2,839,605	3,312,872	3,786,139	4,259,407	4,732,674	5,205,942	5,679,209	6,152,477	6,625,744	7,099,011	7,572,279	8,045,546	8,518,814	8,992,081	9,465,349	9,938,616	10,411,883	10,885,151	11,358,418	11,831,686	12,304,954	12,778,221	13,251,489	13,724,756	14,198,023
E. Total Costs (Annual) (=A+C)	3,644,434	10,677,680	55,139,767	4,127,182	473,267	5,727,190	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
F. Total Costs (Cumulative) (=B+D)	3,644,434	14,322,114	69,461,881	73,589,063	74,062,330	79,789,520	80,262,788	80,736,055	81,209,323	81,682,590	82,155,857	82,629,125	83,102,392	83,575,660	84,048,927	84,522,195	84,995,462	85,468,729	85,941,997	86,415,264	86,888,532	87,361,799	87,835,066	88,308,334	88,781,601	89,254,869	90,201,404	90,674,671	91,147,938	91,621,206	
BENEFITS (£ 000s):																															
G. Total Benefits (Annual)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
H. Total Benefits (Cumulative)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
NET UNDISCOUNTED COST* (=E-G)	3,644,434	10,677,680	55,139,767	4,127,182	473,267	5,727,190	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
DISCOUNT FACTOR @ 3.5% p.a.	1.00000	0.96618	0.93351	0.90194	0.87144	0.84197	0.81350	0.78599	0.75941	0.73373	0.70892	0.68495	0.66178	0.63940	0.61778	0.59689	0.57671	0.55720	0.53836	0.52016	0.50257	0.48557	0.46915	0.45329	0.43796	0.42315	0.39901	0.38165	0.36875	0.35628	
NET PRESENT COST* (Annual)	3,644,434	10,316,599	51,473,562	3,722,482	412,425	4,822,140	385,003	371,984	359,405	347,251	335,508	324,162	313,200	302,609	292,376	282,489	272,936	263,706	254,789	246,173	237,848	229,805	222,034	214,525	207,271	200,262	186,946	180,625	174,516	168,615	
NET PRESENT COST* (Cumulative)	3,644,434	13,961,033	65,434,595	69,157,077	69,569,502	74,391,643	74,776,646	75,148,630	75,508,035	75,855,286	76,190,794	76,514,956	76,828,157	77,130,766	77,423,142	77,705,631	77,978,567	78,242,273	78,497,062	78,743,235	78,981,083	79,210,888	79,432,921	79,647,447	79,854,718	80,054,979	80,435,415	80,616,040	80,790,556	80,959,171	
TOTAL NET PRESENT COST* =	80,959,171																														

* A minus sign in these rows denotes a Net Present Value rather than a Net Present Cost.

NPV @ 3.5% p.a.																															
APPRaisal DATE: Jun-10																															
OPTION NUMBER & TITLE: Option 4a NPC: Full Renewal with Two Loops including a DDA compliant station at Bellarena																															
YEAR	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 27	Year 28	Year 29	Year 30	TOTAL
CAPITAL COSTS (£ 000s):	Add Row																														
Option 4a Costs (excluding sunk costs, risk and OB)																															66781648
OB (at 20%)	3,369,026.36	9,433,273.79	50,535,395.32	3,443,953.30																											13489893
	680,543	1,906,521	10,208,150	686,679																											0
A. Total Capital Costs (Annual)	4,049,570	11,338,795	60,743,545	4,139,632	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B. Total Capital Costs (Cumulative)	4,049,570	15,388,365	76,131,910	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	80,271,542	2343173015	
REVENUE COSTS (£ 000s):	Add Row																														
Annual Revenue Cost		473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
																															0
C. Total Revenue Costs (Annual)	-	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
D. Total Revenue Costs (Cumulative)	-	473,267	946,535	1,419,802	1,893,070	2,366,337	2,839,605	3,312,872	3,786,139	4,259,407	4,732,674	5,205,942	5,679,209	6,152,477	6,625,744	7,099,011	7,572,279	8,045,546	8,518,814	8,992,081	9,465,349	9,938,616	10,411,883	10,885,151	11,358,418	11,831,686	12,304,954	12,778,221	13,251,489	13,724,756	14,198,023
E. Total Costs (Annual) (=A+C)	4,049,570	11,812,063	61,216,813	4,612,899	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
F. Total Costs (Cumulative) (=B+D)	4,049,570	15,861,632	77,078,445	81,691,344	82,164,612	82,637,879	83,111,146	83,584,414	84,057,681	84,530,949	85,004,216	85,477,483	85,950,751	86,424,018	86,897,286	87,370,553	87,843,821	88,317,088	88,790,355	89,263,623	89,736,890	90,210,158	90,683,425	91,156,693	91,629,960	92,103,227	92,576,494	93,049,762	93,523,030	93,996,297	94,469,565
BENEFITS (£ 000s):	Add Row																														
																															0
G. Total Benefits (Annual)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H. Total Benefits (Cumulative)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NET UNDISCOUNTED COST* (=E-G)	4,049,570	11,812,063	61,216,813	4,612,899	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	
DISCOUNT FACTOR @ 3.5% p.a.	1.00000	0.96618	0.93351	0.90194	0.87144	0.84197	0.81350	0.78599	0.75941	0.73373	0.70892	0.68495	0.66178	0.63940	0.61778	0.59689	0.57671	0.55720	0.53836	0.52016	0.50257	0.48557	0.46915	0.45329	0.43796	0.42315	0.39501	0.38165	0.36875	0.35628	
NET PRESENT COST* (Annual)	4,049,570	11,412,621	57,146,550	4,160,571	412,425	398,478	385,003	371,984	359,405	347,251	335,508	324,162	313,200	302,609	292,376	282,489	272,936	263,706	254,789	246,173	237,848	229,805	222,034	214,525	207,271	200,262	186,946	180,625	174,516	168,615	
NET PRESENT COST* (Cumulative)	4,049,570	15,462,190	72,608,740	76,769,311	77,181,736	77,580,215	77,965,218	78,337,202	78,696,607	79,043,858	79,379,366	79,703,528	80,016,729	80,319,338	80,611,714	80,894,203	81,167,139	81,430,845	81,685,634	81,931,807	82,169,655	82,399,460	82,621,494	82,836,019	83,043,290	83,243,551	83,438,387	83,628,612	83,814,128	84,147,743	
TOTAL NET PRESENT COST* =	84,147,743																														

* A minus sign in these rows denotes a Net Present Value rather than a Net Present Cost.

NPV @ 3.5% p.a.																															
APPRaisal DATE: Jun-10																															
OPTION NUMBER & TITLE: Option 4b NPC: Full Renewal with Two Loops including a DDA compliant station at Bellarena																															
YEAR	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 27	Year 28	Year 29	Year 30	TOTAL
CAPITAL COSTS (£ 000s):	Add Row																														
Option 4b Costs (excluding sunk costs, risk and OB)	3,250,452.51	9,101,265.88	48,756,782.73	3,301,790.88		4,370,984.00																									68781276
OB (at 20%)	666,591	1,838,456	9,948,870	666,962		882,339																									13889816
A. Total Capital Costs (Annual)	3,907,044	10,939,722	58,605,653	3,968,753	-	5,253,923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. Total Capital Costs (Cumulative)	3,907,044	14,846,766	73,452,418	77,421,171	77,421,171	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	82,675,094	2396601007
REVENUE COSTS (£ 000s):	Add Row																														
Annual Revenue Cost		473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	14199023
C. Total Revenue Costs (Annual)	-	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267
D. Total Revenue Costs (Cumulative)	-	473,267	946,535	1,419,802	1,893,070	2,366,337	2,839,605	3,312,872	3,786,139	4,259,407	4,732,674	5,205,942	5,679,209	6,152,477	6,625,744	7,099,011	7,572,279	8,045,546	8,518,814	8,992,081	9,465,349	9,938,616	10,411,883	10,885,151	11,358,418	11,831,686	12,304,953	12,778,220	13,251,488	13,724,755	14,198,023
E. Total Costs (Annual) (=A+C)	3,907,044	11,412,989	59,078,920	4,442,020	473,267	5,727,190	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	96873117
F. Total Costs (Cumulative) (=B+D)	3,907,044	15,320,033	74,398,953	78,840,973	79,314,241	85,041,431	85,514,698	85,987,966	86,461,233	86,934,501	87,407,768	87,881,035	88,354,303	88,827,570	89,300,838	89,774,105	90,247,373	90,720,640	91,193,907	91,667,175	92,140,442	92,613,710	93,086,977	93,560,245	94,033,512	94,506,779	94,980,047	95,453,314	95,926,582	96,399,849	96,873,117
BENEFITS (£ 000s):																															
G. Total Benefits (Annual)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H. Total Benefits (Cumulative)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NET UNDISCOUNTED COST* (=E-G)	3,907,044	11,412,989	59,078,920	4,442,020	473,267	5,727,190	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	473,267	96,873,117
DISCOUNT FACTOR @ 3.5% p.a.	1.00000	0.96618	0.93351	0.90194	0.87144	0.84197	0.81350	0.78599	0.75941	0.73373	0.70892	0.68495	0.66178	0.63940	0.61778	0.59689	0.57671	0.55720	0.53836	0.52016	0.50257	0.48557	0.46915	0.45329	0.43796	0.42315	0.39501	0.38165	0.36875	0.35628	0.34423
NET PRESENT COST* (Annual)	3,907,044	11,027,043	55,150,804	4,006,448	412,425	4,822,140	385,003	371,984	359,405	347,251	335,508	324,162	313,200	302,609	292,376	282,489	272,936	263,706	254,789	246,173	237,848	229,805	222,034	214,525	207,271	200,262	193,496	186,946	180,625	174,516	168,615
NET PRESENT COST* (Cumulative)	3,907,044	14,934,086	70,084,891	74,091,338	74,503,763	79,325,904	79,710,907	80,082,891	80,442,296	80,789,547	81,125,055	81,449,218	81,762,418	82,065,027	82,357,403	82,639,892	82,912,828	83,176,535	83,431,323	83,677,496	83,915,344	84,145,149	84,366,183	84,578,708	84,782,979	84,989,241	85,186,677	85,375,301	85,554,116	85,723,121	85,892,316
TOTAL NET PRESENT COST* =	85,893,433																														

* A minus sign in these rows denotes a Net Present Value rather than a Net Present Cost.