

Boulder Canyon Project
Power Repayment Study
Executive Summary

Fiscal Year	(1) OPERATIONS AND MAINTENANCE EXPENSE	(2) PAYMENTS TO STATES	(3) OTHER EXPENSES	(4) ANNUAL UPRATER INTEREST PAYMENTS	(5) ANNUAL UPRATER PRINCIPAL PAYMENTS	(6) ANNUAL REPLACEMENT PAYMENTS	(7) WORKING CAPITAL	(8) DEBT SERVICE INTEREST EXPENSE	(9) CAPITALIZED DEFICIT INTEREST EXPENSE	(10) OTHER INTEREST EXPENSE	(11) TOTAL INTEREST EXPENSE <small>Columns(8+9+10)</small>	(12) DEBT SERVICE PRINCIPAL PAYMENT	(13) CAPITALIZED DEFICIT PRINCIPAL PAYMENT	(14) TOTAL PRINCIPAL PAYMENT <small>Column(12)+ Column(13)</small>	(15) Sum of Columns (1)thru(7)+ Col.(11)+Col.(14)
1988	14,518,316	600,000	1,362,498	3,038,305	41,888	4,724,736	0	3,194,673	0	0	3,194,673	1,659,977	(2,586,667)	(926,690)	26,553,726
1989	16,868,512	600,000	1,021,185	8,520,499	16,454	2,376,942	0	2,513,200	219,867	0	2,733,067	1,866,208	(2,329,541)	(463,333)	31,673,326
1990	18,987,849	600,000	1,097,740	10,935,114	81,349	5,143,434	0	2,466,308	435,350	0	2,901,658	1,107,074	(2,545,023)	(1,437,949)	38,309,195
1991	16,731,812	600,000	7,307,701	7,913,027	0	3,591,038	0	2,427,824	661,221	0	3,104,219	940,635	(2,770,895)	(1,830,260)	37,417,537
1992	15,509,820	600,000	1,905,698	13,277,959	912,939	7,536,153	0	2,399,605	896,747	0	3,296,352	924,596	0	924,596	43,963,517
1993	18,152,024	600,000	2,077,663	13,562,765	2,885,399	6,693,055	2,834,789	2,439,484	896,747	0	3,336,261	1,389,255	681,166	2,070,421	52,212,377
1994	20,482,950	600,000	2,397,810	12,162,513	4,068,171	7,861,229	(487,868)	2,355,151	833,739	0	3,188,860	1,338,704	740,834	2,079,538	52,353,203
1995	20,081,233	600,000	2,936,045	12,056,977	4,417,241	3,709,606	0	2,271,174	765,212	0	3,036,386	1,275,846	805,734	2,081,580	48,919,068
1996	21,642,765	600,000	4,400,129	11,526,374	3,945,530	3,720,973	0	12,118,113	634,093	0	12,752,206	1,494,035	876,328	2,370,363	60,958,340
1997	20,613,185	600,000	4,367,140	8,489,318	1,448,671	4,704,124	0	12,025,698	551,111	27,224	12,604,033	1,547,945	953,113	2,501,058	55,327,529
1998	23,434,651	600,000	3,647,350	8,603,234	2,005,549	3,867,101	0	11,935,205	466,734	0	12,433,184	1,604,004	1,036,633	2,640,637	57,231,706
1999	25,512,750	600,000	4,044,587	8,301,472	2,600,930	3,019,716	0	11,841,654	377,942	36,877	12,256,473	757,368	2,033,080	2,790,448	59,126,375
2000	26,521,151	600,000	6,117,505	8,221,682	2,959,433	1,667,009	0	11,901,057	52,707	36,132	11,989,896	777,209	3,105,238	3,882,447	61,959,123
2001	27,642,610	600,000	8,881,303	7,906,721	2,826,121	2,377,465	0	11,729,145	0	31,723	11,760,868	2,696,659	0	2,696,659	64,691,747
2002	28,171,154	600,000	6,862,682	8,521,447	2,538,839	2,886,712	0	11,605,769	0	20,663	11,626,432	2,771,279	0	2,771,279	63,978,545
2003	30,166,505	600,000	7,375,886	6,668,285	3,011,062	2,580,475	0	11,425,671	0	12,516	11,438,187	1,409,829	0	1,409,829	63,250,229
2004	31,042,955	600,000	7,158,289	6,490,565	3,984,519	2,937,415	0	11,321,912	0	9,528	11,331,440	1,435,126	0	1,435,126	64,980,309
2005	30,656,397	600,000	8,526,712	6,497,214	4,081,817	4,465,460	0	11,420,392	0	12,195	11,432,587	1,498,330	0	1,498,330	67,758,516
2006	30,882,149	600,000	8,875,903	6,153,834	4,404,016	3,081,498	0	11,297,293	0	10,059	11,307,352	1,574,967	0	1,574,967	66,879,719
2007	39,742,024	600,000	7,925,070	6,324,376	5,135,616	5,466,304	0	11,208,241	0	8,776	11,217,017	1,646,818	0	1,646,818	78,057,225
2008	41,377,742	600,000	8,294,446	6,282,800	8,253,658	6,817,934	0	11,124,877	0	7,587	11,132,464	1,779,859	0	1,779,859	84,538,903
2009	42,865,799	600,000	7,112,149	5,800,420	8,858,076	5,485,897	0	11,065,768	0	7,388	11,073,156	1,900,052	0	1,900,052	83,695,548
2010	45,397,385	600,000	7,136,591	5,754,983	9,322,156	6,161,066	0	11,023,174	0	6,907	11,030,081	1,890,398	0	1,890,398	87,292,659
2011	42,689,343	600,000	7,613,259	5,231,995	9,926,799	5,024,202	0	10,949,281	0	10,641	10,959,922	1,960,285	0	1,960,285	84,005,806
2012	51,095,645	600,000	8,895,000	4,872,558	10,436,524	12,119,000	0	10,921,290	0	12,000	10,933,290	1,931,322	0	1,931,322	100,883,338
Prior Year Adj	(1,035,991)	0	(3,006,290)	2,371,917	(2,036,046)	(688,193)	(2,346,921)	0	0	94,757	94,757	7	0	7	(6,646,760)
Historical Total	699,750,734	15,000,000	134,334,051	205,486,353	96,126,710	117,330,351	0	214,981,959	6,791,470	376,218	222,164,821	39,177,787	0	39,177,787	1,529,370,807
2013	52,576,597	600,000	8,623,000	4,169,414	11,001,787	10,142,000	0	10,863,350	0	12,000	10,875,350	1,910,139	0	1,910,139	99,898,288
Historical Total	752,327,331	15,600,000	142,957,051	209,655,767	107,128,497	127,472,351	0	225,845,310	6,791,470	388,218	233,040,172	41,087,926	0	41,087,926	1,629,269,095
2014	51,264,940	600,000	8,882,000	3,589,699	11,582,796	11,670,000	0	10,806,046	0	12,000	10,818,046	2,013,335	0	2,013,335	100,420,816
2015	55,293,984	600,000	9,148,000	2,978,297	12,212,961	12,269,000	0	10,745,646	0	12,000	10,757,646	2,123,637	0	2,123,637	105,383,525
2016	52,376,861	600,000	9,423,000	2,350,290	13,052,789	10,815,000	0	10,681,937	0	12,000	10,693,937	2,241,595	0	2,241,595	101,553,473
2017	56,811,246	600,000	9,706,000	1,124,354	7,579,209	6,026,000	0	10,614,689	0	12,000	10,626,689	2,367,802	0	2,367,802	94,841,299
Future Yr Subtotal	968,074,362	18,000,000	180,116,051	219,698,407	151,556,252	168,252,351	0	268,693,629	6,791,470	436,218	275,936,491	49,834,295	0	49,834,295	2,031,468,208
2018	58,600,153	600,000	9,997,000	0	0	7,392,000	0	10,543,658	0	12,000	10,555,658	1,938,163	0	1,938,163	89,082,974
2019	57,865,252	600,000	10,296,000	0	0	4,459,000	0	10,352,943	0	12,000	10,364,943	2,068,135	0	2,068,135	85,653,329
2020	60,072,382	600,000	10,605,000	0	0	1,148,000	0	10,149,438	0	12,000	10,161,438	2,208,005	0	2,208,005	84,794,826
2021	61,099,295	600,000	10,922,000	0	0	1,134,000	0	9,944,171	0	12,000	9,956,171	2,358,577	0	2,358,577	86,058,042
2022	62,837,752	600,000	11,250,000	0	0	1,501,000	0	9,700,087	0	12,000	9,712,087	2,520,716	0	2,520,716	88,421,555
2023	59,668,752	600,000	11,250,000	0	0	1,501,000	0	9,477,123	0	12,000	9,489,123	2,695,365	0	2,695,365	85,204,240
2024	59,668,752	600,000	11,250,000	0	0	1,501,000	0	9,259,823	0	12,000	9,271,823	2,883,542	0	2,883,542	85,175,116
2025	59,668,752	600,000	11,250,000	0	0	1,501,000	0	9,027,352	0	12,000	9,039,352	3,086,350	0	3,086,350	85,145,454
2026	59,668,752	600,000	11,250,000	0	0	1,501,000	0	8,778,530	0	12,000	8,790,530	3,304,986	0	3,304,986	85,115,269
2027	59,668,752	600,000	11,250,000	0	0	1,501,000	0	8,512,082	0	12,000	8,524,082	3,540,748	0	3,540,748	85,084,582
2028	59,668,752	600,000	11,250,000	0	0	1,501,000	0	8,226,627	0	12,000	8,238,627	3,795,039	0	3,795,039	85,053,418
2029	59,668,752	600,000	11,250,000	0	0	1,501,000	0	7,920,671	0	12,000	7,932,671	4,069,384	0	4,069,384	85,021,807
2030	59,668,752	600,000	11,250,000	0	0	1,501,000	0	7,592,597	0	12,000	7,604,597	4,365,433	0	4,365,433	84,989,783
2031	59,668,752	600,000	11,250,000	0	0	1,501,000	0	7,240,656	0	12,000	7,252,656	4,684,977	0	4,684,977	84,957,385
2032	59,668,752	600,000	11,250,000	0	0	1,501,000	0	6,862,953	0	12,000	6,874,953	5,029,957	0	5,029,957	84,924,662
2033	59,668,752	600,000	11,250,000	0	0	1,501,000	0	6,457,438	0	12,000	6,469,438	5,402,476	0	5,402,476	84,891,666
2034	59,668,752	600,000	11,250,000	0	0	1,501,000	0	6,021,891	0	12,000	6,033,891	5,804,817	0	5,804,817	84,858,460
2035	59,668,752	600,000	11,250,000	0	0	1,501,000	0	5,553,906	0	12,000	5,565,906	6,239,454	0	6,239,454	84,825,112
2036	59,668,752	600,000	11,250,000	0	0	1,501,000	0	5,134,413	0	12,000	5,146,413	6,709,071	0	6,709,071	84,875,236
2037	59,668,752	600,000	11,250,000	0	0	1,501,000	0	4,933,140	0	12,000	4,945,140	7,216,579	0	7,216,579	85,181,472
2038	59,668,752	600,000	11,250,000	0	0	1,501,000	0	4,716,643	0	12,000	4,728,643	5,593,202	0	5,593,202	83,341,597
2039	59,668,752	600,000	11,250,000	0	0	1,501,000	0	4,265,719	0	12,000	4,277,719	6,044,123	0	6,044,123	83,341,595
2040	59,668,752	600,000	11,250,000	0	0	1,501,000	0	3,778,442	0	12,000	3,790,442	6,531,398	0	6,531,398	83,341,592
2041	59,668,752	600,000	11,250,000	0	0	1,501,000	0	3,251,881	0	12,000	3,263,881	7,057,956	0	7,057,956	83,341,589
2042	59,668,752	600,000	11,250,000	0	0	1,501,000	0	2,682,868	0	12,000	2,694,868	7,626,965	0	7,626,965	83,341,586
2043	59,668,752	600,000	11,250,000	0	0	1,501,000	0	2,067,982	0	12,000	2,079,982	8,241,848	0	8,241,848	83,341,583
2044	59,668,752	600,000	11,250,000	0	0	1,501,000	0	1,403,524	0	12,000	1,415,524	8,906,304	0	8,906,304	83,341,580
2045	59,668,752	600,000	11,250,000	0	0	1,501									

39	(16) Linked to Cash Management sheet	(17)	(18)	(19) Col.(15) minus Cols. (16+17+18)	(20)	(21) Col.(19)*0.5 + Capacity Credit	(22)	(23)	(24) Col.(19)*0.5 - Capacity Credit	(25)	(26) Sum of Columns (17, 18, 21, 24)	(27) Column 26 Minus Column 15	(Cols. (16:18)+ 21 + 24 + 26 PCum + Col. 27 PCum)
Fiscal Year	PRIOR YEAR CRDF CARRY-OVER BALANCE	WATER SALES	OTHER REVENUE	ANNUAL REVENUE REQUIREMENTS BASE CHARGE	ENERGY SALES	ENERGY DOLLARS	FORECAST/ CALCULATED ENERGY RATE	CAPACITY SALES	CAPACITY DOLLARS	FORECAST CAPACITY RATE	TOTAL REVENUES	TOTAL REVENUES Minus TOTAL EXPENSES Net Operating Amt	(INFO ONLY) 4/ OPERATING AMOUNT
1988	0	635,383	873,169	25,045,174	6,229,969	21,244,192.0	3.41	1,657,200	19,152,600.0	0.7500	41,905,344	15,351,618	0
1989	15,351,618	531,174	948,736	14,841,798	4,122,181	14,056,637.0	3.41	1,821,000	15,410,850.0	0.7500	30,947,397	(725,929)	0
1990	14,625,689	486,831	710,842	22,485,833	4,338,148	14,793,085.0	3.41	1,854,800	16,439,700.0	0.7500	32,430,458	(5,878,737)	0
1991	8,746,952	570,061	4,423,121	23,677,403	3,986,720	15,778,076.0	5.11	1,855,400	18,363,152.0	1.0500	39,134,410	1,716,873	0
1992	10,463,825	450,000	822,934	32,226,758	3,716,512	18,991,376.0	5.11	1,859,801	23,433,491.0	1.0500	43,697,801	(265,716)	0
1993	5,153,079	542,813	1,252,848	45,263,637	3,358,539	22,079,706.0	7.28	1,900,792	27,912,798.0	1.2800	51,788,165	(424,212)	0
1994	2,802,787	564,157	1,718,505	47,267,754	4,307,494	28,886,180.0	6.31	1,951,000	26,689,680.0	1.0700	57,858,522	5,505,319	0
1995	9,330,884	472,306	2,919,369	36,196,509	3,933,887	25,287,606.0	6.31	1,951,000	25,050,840.0	1.0700	53,730,121	4,811,053	0
1996	13,761,727	589,160	4,941,645	41,665,808	4,755,603	23,460,357.0	6.12	1,951,000	21,736,609.0	0.9284	50,727,771	(10,230,569)	0
1997	4,742,334	644,586	7,686,159	42,254,449	5,326,574	22,976,824.0	5.28	1,951,000	21,460,664.0	0.9167	52,768,233	(2,559,296)	0
1998	4,705,821	664,122	10,113,374	41,748,385	5,773,690	22,527,359.0	4.41	1,951,000	20,951,824.0	0.8949	54,256,679	(2,975,027)	0
1999	783,133	662,242	11,788,504	45,892,495	5,538,633	25,208,830.5	4.86	1,951,000	23,633,295.5	1.0095	61,292,872	2,166,497	0
2000	3,652,099	734,413	14,016,521	43,556,089	5,345,537	23,860,434.5	4.59	1,951,000	22,284,899.5	0.9519	60,896,268	(1,062,854)	0
2001	3,833,364	729,480	13,732,223	46,396,680	4,978,926	24,682,054.5	5.04	1,951,000	23,106,519.5	0.9870	62,250,277	(2,441,469)	0
2002	1,783,653	750,827	9,231,689	52,212,374	4,800,343	26,159,767.0	5.33	1,951,000	24,587,540.0	0.9924	60,729,823	(3,248,722)	0
2003	(2,375,188)	669,936	11,367,177	53,588,303	4,153,830	25,380,864.5	5.58	1,840,000	25,380,864.5	1.0841	62,798,842	(451,387)	0
2004	0	676,122	14,653,812	49,650,375	4,093,096	25,859,537.5	6.46	1,840,000	25,859,537.5	1.1712	67,049,009	2,068,700	9,973,517
2005	493,452	725,848	12,626,557	53,912,658	3,406,915	28,827,341.5	7.41	1,731,000	28,827,341.5	1.3878	71,007,088	3,248,572	11,187,701
2006	2,615,227	653,269	12,241,662	51,369,560	4,000,956	28,732,509.0	7.03	1,750,000	28,732,509.0	1.3682	70,359,949	3,480,230	12,756,028
2007	4,732,788	682,133	13,595,997	59,046,308	3,927,909	33,754,568.0	8.51	1,721,000	33,754,568.0	1.6344	81,787,266	3,730,041	14,987,679
2008	6,957,045	760,841	15,773,984	61,047,032	3,871,370	33,487,641.5	8.82	1,713,000	33,487,641.5	1.6291	83,510,108	(1,028,794)	14,380,046
2009	4,564,504	760,294	14,453,985	63,916,766	3,502,305	35,106,748.5	9.31	1,696,000	35,106,748.5	1.7250	85,427,776	1,732,227	12,281,687
2010	4,083,453	755,313	17,204,058	65,249,835	3,619,844	35,340,670.0	9.76	1,677,000	35,340,670.0	1.7561	88,640,711	1,348,052	12,086,672
2011	4,119,778	699,847	17,033,527	62,152,654	3,810,978	37,591,261.0	9.86	1,645,000	37,591,261.0	1.9043	92,915,896	8,910,090	15,574,874
2012	7,384,216	530,000	13,171,000	79,798,121	4,003,600	42,268,386.0	10.56	1,910,167	42,268,386.0	1.8440	98,237,772	(2,645,566)	12,635,153
Prior Year Adj	0	(78,701)	(4,010,947)	0	0	308,707.0	0.00	0	(2,108.0)	0.0000	(3,783,049)	2,863,711	
Historical Total		15,862,457	223,290,452	81,179,637	108,903,559	656,650,719		46,031,160	656,561,882		1,552,365,510	22,994,702	
2013	4,738,651	530,000	13,450,000	81,179,637	3,887,087	40,589,818.6	10.4422	1,787,167	40,589,818.6	1.8927	95,159,637	(4,738,651)	7,856,031
Historical Total		16,392,457	236,740,452		112,790,646	697,240,538		47,818,327	697,151,701		1,647,525,147	18,256,052	
2014	0	530,000	13,450,000	86,440,816	4,101,000	43,220,408.2	10.5390	1,727,000	43,220,408.2	2.0855	100,420,816		7,856,031
2015	0	530,000	13,450,000	91,403,525	4,099,000	45,701,762.3	11.1495	1,727,000	45,701,762.3	2.2053	105,383,525		7,856,031
2016	0	530,000	13,450,000	87,573,473	4,133,000	43,786,736.4	10.5944	1,727,000	43,786,736.4	2.1129	101,553,473		7,856,031
2017	0	530,000	13,450,000	80,861,299	4,149,000	40,430,649.7	9.7447	1,727,000	40,430,649.7	1.9509	94,841,299		7,856,031
Future Yr Subtotal		18,512,457	290,540,452		129,272,646	870,380,094		54,726,327	870,291,257		2,049,724,260	18,256,052	
2018	0	530,000	13,450,000	75,102,974	4,083,000	37,551,487.0	9.1970	2,074,000	37,551,487.0	1.5088	89,082,974		
2019	0	530,000	13,450,000	71,673,329	4,039,000	35,836,664.7	8.8727	2,074,000	35,836,664.7	1.4399	85,653,329		
2020	0	530,000	13,450,000	70,814,826	4,020,000	35,407,412.9	8.8078	2,074,000	35,407,412.9	1.4227	84,794,826		
2021	0	530,000	13,450,000	72,078,042	3,977,000	36,039,021.1	9.0619	2,074,000	36,039,021.1	1.4480	86,058,042		
2022	0	530,000	13,450,000	74,441,555	3,987,000	37,220,777.6	9.3355	2,074,000	37,220,777.6	1.4955	88,421,555		
2023	0	530,000	13,450,000	71,224,240	4,501,001	35,612,120.1	7.9120	2,074,000	35,612,120.1	1.4309	85,204,240		
2024	0	530,000	13,450,000	71,195,116	4,501,001	35,597,558.2	7.9088	2,074,000	35,597,558.2	1.4303	85,175,116		
2025	0	530,000	13,450,000	71,165,454	4,501,001	35,582,726.8	7.9055	2,074,000	35,582,726.8	1.4297	85,145,454		
2026	0	530,000	13,450,000	71,135,269	4,501,001	35,567,634.3	7.9022	2,074,000	35,567,634.3	1.4291	85,115,269		
2027	0	530,000	13,450,000	71,104,582	4,501,001	35,552,291.0	7.8988	2,074,000	35,552,291.0	1.4285	85,084,582		
2028	0	530,000	13,450,000	71,073,418	4,501,001	35,536,709.2	7.8953	2,074,000	35,536,709.2	1.4279	85,053,418		
2029	0	530,000	13,450,000	71,041,807	4,501,001	35,520,903.5	7.8918	2,074,000	35,520,903.5	1.4272	85,021,807		
2030	0	530,000	13,450,000	71,009,783	4,501,001	35,504,891.4	7.8882	2,074,000	35,504,891.4	1.4266	84,989,783		
2031	0	530,000	13,450,000	70,977,385	4,501,001	35,488,692.7	7.8846	2,074,000	35,488,692.7	1.4259	84,957,385		
2032	0	530,000	13,450,000	70,944,662	4,501,001	35,472,331.0	7.8810	2,074,000	35,472,331.0	1.4253	84,924,662		
2033	0	530,000	13,450,000	70,911,666	4,501,001	35,455,833.1	7.8773	2,074,000	35,455,833.1	1.4246	84,891,666		
2034	0	530,000	13,450,000	70,878,460	4,501,001	35,439,229.8	7.8736	2,074,000	35,439,229.8	1.4239	84,858,460		
2035	0	530,000	13,450,000	70,845,112	4,501,001	35,422,556.2	7.8699	2,074,000	35,422,556.2	1.4233	84,825,112		
2036	0	530,000	13,450,000	70,895,236	4,501,001	35,447,618.0	7.8755	2,074,000	35,447,618.0	1.4243	84,875,236		
2037	0	530,000	13,450,000	71,201,472	4,501,001	35,600,735.9	7.9095	2,074,000	35,600,735.9	1.4304	85,181,472		
2038	0	530,000	13,450,000	69,361,597	4,501,001	34,680,798.6	7.7051	2,074,000	34,680,798.6	1.3935	83,341,597		
2039	0	530,000	13,450,000	69,361,595	4,501,001	34,680,797.3	7.7051	2,074,000	34,680,797.3	1.3935	83,341,595		
2040	0	530,000	13,450,000	69,361,592	4,501,001	34,680,795.8	7.7051	2,074,000	34,680,795.8	1.3935	83,341,592		
2041	0	530,000	13,450,000	69,361,589	4,501,001	34,680,794.3	7.7051	2,074,000	34,680,794.3	1.3935	83,341,589		
2042	0	530,000	13,450,000	69,361,586	4,501,001	34,680,792.8	7.7051	2,074,000	34,680,792.8	1.3935	83,341,586		
2043	0	530,000	13,450,000	69,361,583	4,501,001	34,680,791.3	7.7051	2,074,000	34,680,791.3	1.3935	83,341,583		
2044	0	530,000	13,450,000	69,361,580	4,501,001	34,680,790.2	7.7051	2,074,000	34,680,790.2	1.3935	83,341,580		
2045	0	530,000	13,450,000	68,240,081	4,501,001	34,120,040.4	7.5805	2,074,000	34,120,040.4	1.3709	82,220,081		
Study Total		33,352,457	667,140,452		252,901,669	1,862,122,890		112,798,327	1,862,034,053		4,424,649,851	18,256,052	