

**Los Alamos County Utilities Department
Fiscal Year 2018 Budget
Board Presentation 03-15-2017**

Table Of Contents

Summary of Expenditure Budget	1
Fund Flows	
Electric Production	2
Electric Distribution	3
Gas Distribution	4
Water Production	5
Water Distribution	6
Wastewater Collection & Treatment	7
Administration & General	8
Budget Summary by Categories	9
Ten-Year Capital Plan	
Project Budgets	10-19
Project Narratives	20-38
Forecasts by Fund: 2017-2026	
Electric Production 10-Year Financial Forecast	39
Electric Distribution 10-Year Financial Forecast	40
Electric Fund Cash Reserves Analysis	41
Gas Distribution 10-Year Financial Forecast	42
Gas Fund Cash Reserves Analysis	43
Water Production 10-Year Financial Forecast	44-45
Water Distribution 10-Year Financial Forecast	46-47
Water Fund Cash Reserves Analysis	48
Wastewater 10-Year Financial Forecast	49-50
Wastewater Cash Reserves Analysis	51
Customer Impact	52
Summary of Cash and Investments	53
Residential Rate History	54

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
Electric Production	41,089,117	16,774,857	38,384,715	40,936,357	40,699,226	-1%
Electric Distribution	14,893,792	7,469,673	16,107,497	15,069,661	14,638,692	-3%
Less Interdivision Electric Sales	(8,652,139)	(3,606,802)	(7,000,000)	(7,750,000)	(6,737,615)	-13%
Total Electric Fund	47,330,771	20,637,729	47,492,212	48,256,017	48,600,302	1%
Gas	4,797,511	2,883,498	5,564,365	5,410,631	5,462,942	1%
Water Production	4,979,019	2,700,963	11,583,707	4,786,622	11,200,314	134%
Water Distribution	5,028,035	3,537,270	4,619,978	4,643,367	5,039,246	9%
Less Interdivision Water Sales	(2,528,096)	(1,447,493)	(2,456,750)	(2,505,885)	(2,650,500)	6%
Total Water Fund	7,478,958	4,790,740	13,746,935	6,924,104	13,589,060	96%
Wastewater	5,086,077	2,728,520	5,501,226	14,993,314	4,822,576	-68%
Total Expenditure Budget	64,693,316	31,040,486	72,304,737	75,584,066	72,474,881	-4%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget -- ELECTRIC PRODUCTION

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
REVENUE						
Mwh Sales - LANL	449,550	255,144	556,653	548,242	542,688	-3%
Mwh Sales - LAC Distribution	116,469	58,653	123,681	125,536	125,530	1%
Total Mwh Sales	566,018	313,797	680,334	673,778	668,218	-2%
Revenue per Mwh	\$ 67.15	\$ 47.69	\$ 51.60	\$ 55.94	\$ 52.20	1%
DOE Revenues	\$ 29,354,498	\$ 11,357,971	\$ 28,104,483	\$ 29,941,469	\$ 28,144,437	0%
Economy Sales	2,047,640	1,562,147	3,281,394	3,213,251	3,594,592	10%
Interest on Reserves	18,711	16,310	25,000	25,000	25,000	0%
Bond Federal Subsidy	31,664	16,992	33,984	33,984	33,984	0%
TOTAL REVENUE	\$ 31,452,513	\$ 12,953,420	\$ 31,444,861	\$ 33,213,704	\$ 31,798,013	1%
OPERATING EXPENSES						
El Vado Generation	\$ 492,445	\$ 148,576	\$ 628,454	\$ 488,314	\$ 620,427	-1%
Abiquiu Generation	324,465	88,683	399,655	399,088	403,881	1%
Contract Administration	20,248	3,179	19,736	20,128	20,048	2%
Load Control	2,067,004	775,343	1,696,876	1,531,455	1,822,030	7%
Transmission - PNM	1,271,864	729,813	1,380,000	1,380,000	1,405,000	2%
Transmission - Other	1,979,500	979,157	2,540,523	2,621,168	2,285,008	-10%
Purchased Power	11,684,780	6,167,656	14,147,976	14,972,854	14,614,373	3%
Photovoltaic Array	62,379	21,979	92,000	92,000	117,000	27%
Debt Service	2,498,401	1,251,951	2,529,392	2,536,071	2,635,071	4%
Property Taxes	423,907	274,706	440,212	440,212	458,055	4%
Insurance	106,189	114,844	115,000	115,000	120,000	4%
San Juan Operations	12,729,696	4,136,769	9,354,837	11,425,255	11,213,148	20%
Laramie River Operations	3,933,957	990,194	3,049,225	3,184,154	2,854,600	-6%
SMR Project	11,825	28,408	300,000	300,000	450,000	50%
Non-Pool Expenses	-	-	-	-	-	-
Interdepartmental Charges	368,819	207,845	415,689	415,689	447,280	8%
Administrative Allocation	633,806	294,716	770,140	764,968	558,305	-28%
TOTAL OPERATING EXPENSES	\$ 38,609,285	\$ 16,213,819	\$ 37,879,715	\$ 40,686,357	\$ 40,024,226	6%
OPERATING INCOME (LOSS)	\$ (7,156,772)	\$ (3,260,399)	\$ (6,434,854)	\$ (7,472,653)	\$ (8,226,213)	28%
CAPITAL EXPENDITURES						
Capital Expenditures	\$ 2,479,832	\$ 561,039	\$ 505,000	\$ 250,000	\$ 675,000	34%
OTHER FINANCING Forecast						
Transfer from Distribution Fund	\$ 8,652,139	\$ 3,606,802	\$ 7,000,000	\$ 7,750,000	\$ 6,737,615	-4%
Bond Issue Proceeds	-	-	-	-	-	-
NET INCOME (LOSS)	\$ (984,465)	\$ (214,635)	\$ 60,146	\$ 27,347	\$ (2,163,598)	-3697%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget -- ELECTRIC DISTRIBUTION

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
REVENUE						
kWh Sales	116,468,682	58,653,104	123,681,000	125,536,000	125,496,000	1%
Revenue per kWh	\$ 0.1209	\$ 0.1222	\$ 0.1220	\$ 0.1217	\$ 0.1221	0%
Sales Revenue	\$ 14,077,035	\$ 7,165,908	\$ 15,088,911	\$ 15,279,913	\$ 15,319,172	2%
Interest on Utility Reserves	57,023	35,980	(183,000)	(183,000)	(183,000)	0%
Bond Federal Subsidy	63,316	33,971	67,942	67,942	67,942	0%
Revenue on Recoverable Work	186,391	149,579	150,000	150,000	150,000	0%
TOTAL REVENUE	\$ 14,383,765	\$ 7,385,438	\$ 15,123,853	\$ 15,314,855	\$ 15,354,114	2%
OPERATING EXPENSES						
Supervision, Misc Direct Admin	\$632,824	\$355,306	\$685,771	\$702,560	\$710,342	4%
Substation Maintenance	\$25,540	\$19,466	\$37,100	\$37,815	\$36,663	-1%
Switching Station Maintenance	\$25,523	\$10,292	\$28,129	\$28,632	\$29,115	4%
Overhead Maintenance	\$476,406	\$207,430	\$455,336	\$462,907	\$488,883	7%
Underground Maintenance	\$389,360	\$265,996	\$370,640	\$377,228	\$375,882	1%
Meter Maintenance	\$135,679	\$96,062	\$126,885	\$128,416	\$126,101	-1%
Interdepartmental Charges	\$425,066	\$214,485	\$428,969	\$428,969	\$583,503	36%
Eng. Cust Svc. MR and Admin	\$536,000	\$275,211	\$986,831	\$980,204	\$852,774	-14%
In Lieu Taxes	\$510,736	\$391,794	\$538,602	\$542,422	\$558,229	4%
Debt Service	1,254,122	622,478	1,264,358	1,255,148	1,255,148	-1%
Cost of Power	8,652,139	3,606,802	7,000,000	7,750,000	6,737,615	-4%
TOTAL OPERATING EXPENSES	\$ 13,063,395	\$ 6,065,321	\$ 11,922,621	\$ 12,694,300	\$ 11,754,255	-1%
OPERATING INCOME (LOSS)	\$ 1,320,370	\$ 1,320,117	\$ 3,201,232	\$ 2,620,555	\$ 3,599,859	12%
CAPITAL EXPENDITURES						
Capital Expenditures	\$ 1,305,857	\$ 1,404,353	\$ 3,536,053	\$ 1,718,324	\$ 2,233,371	-37%
OTHER FINANCING						
Bond/Grant proceeds		\$ -				
Profit Transfer to General Fund	(524,540)		(648,823)	(657,036)	(651,065)	0%
BUDGETED NET INCOME (LOSS)	\$ (510,027)	\$ (84,236)	\$ (983,644)	\$ 245,195	\$ 715,423	-173%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget -- GAS DISTRIBUTION

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
REVENUE						
Therm Sales	8,416,085	2,542,267	8,463,113	8,463,113	8,455,275	0%
Revenue per Therm	\$ 0.5808	\$ 0.7303	\$ 0.6586	\$ 0.5927	\$ 0.6199	-6%
Sales Revenue	\$ 4,887,955	\$ 1,856,572	\$ 5,573,587	\$ 5,016,228	\$ 5,241,503	-6%
Interest on Utility Reserves	34,421	87,402	82,000	82,000	82,000	0%
Revenue on Recoverable Work	11,233	8,296	25,000	25,000	20,000	-20%
TOTAL REVENUE	\$ 4,933,609	\$ 1,952,270	\$ 5,680,587	\$ 5,123,228	\$ 5,343,503	-6%
OPERATING EXPENSES						
Supervision, Misc Direct Admin	\$298,000	\$126,362	\$297,661	\$298,322	\$256,975	-14%
Gas Distribution	273,909	180,307	341,235	337,217	280,994	-18%
Gas Meters	145,896	63,949	150,421	151,963	137,486	-9%
Interdepartmental Charges	259,528	142,518	285,035	285,035	366,631	29%
Eng. Cust Svc. MR and Admin	535,341	300,231	706,460	701,716	718,310	2%
In Lieu Taxes	179,606	144,703	207,857	196,710	202,705	-2%
Cost of Gas	1,845,485	982,794	2,505,410	2,505,410	2,537,766	1%
TOTAL OPERATING EXPENSES	\$3,537,763	\$ 1,940,864	\$ 4,494,078	\$ 4,476,373	\$ 4,500,867	0%
OPERATING INCOME (LOSS)	\$ 1,395,846	\$ 11,406	\$ 1,186,509	\$ 646,855	\$ 842,636	-29%
CAPITAL EXPENDITURES						
Capital Expenditures	\$ 12,881	\$ 942,634	\$ 810,000	\$ 700,000	\$ 700,000	-14%
OTHER FINANCING SOURCES & USES						
Profit Transfer to General Fund	(246,867)		(260,287)	(234,258)	(262,075)	1%
Budget Adjustment for ERP	(1,000,000)					
BUDGETED NET INCOME (LOSS)	\$ 1,136,098	\$ (931,228)	\$ 116,222	\$ (287,403)	\$ (119,439)	-203%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget -- WATER PRODUCTION

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
REVENUE						
Potable 1000-gallon production	974,848	607,366	1,150,000	1,150,000	1,150,000	0%
Non-potable 1000-gallon production	45,718	16,782	66,584	66,584	86,400	30%
Potable revenue per 1000 gallons	\$ 3.4121	\$ 3.4737	\$ 3.1680	\$ 3.0545	\$ 3.3949	7%
Potable Sales Revenue	\$ 3,326,321	\$ 2,109,794	\$ 3,643,200	\$ 3,716,064	\$ 4,197,500	15%
Repayment of Inter-utility Loan	187,568	72,956	187,569	187,569	187,569	0%
Interest on Utility Reserves	34,871	131,848	92,000	63,750	109,233	19%
Bond Federal Subsidy	25,683	13,788	27,576	27,576	27,576	0%
Non Potable Revenue	52,575	20,171	76,572	166,460	216,000	182%
TOTAL REVENUE	\$ 3,627,018	\$ 2,348,557	\$ 4,026,917	\$ 4,161,419	\$ 4,737,878	18%
OPERATING EXPENSES						
Supervision and Operations	\$ 957,590	\$ 442,806	\$ 975,822	\$ 991,861	\$ 963,806	-1%
Pumping Power	523,277	271,052	800,000	800,000	800,000	0%
Wells	83,118	31,803	137,508	138,775	135,631	-1%
Booster Pump Stations	165,298	28,334	125,236	126,754	123,587	-1%
Treatment	56,055	14,767	105,199	105,595	104,271	-1%
Storage Tanks	445,205	3,179	19,600	19,798	19,385	-1%
Transmission Lines	54,999	11,749	65,509	66,248	64,705	-1%
Non Potable System	179,863	175,847	642,187	372,422	393,018	-39%
Interdepartmental Charges	227,774	131,946	263,893	263,893	341,062	29%
Eng. Cust Svc. MR and Admin	578,883	284,514	505,173	501,780	678,114	34%
State Water Tax	34,855	19,008	45,000	45,000	45,000	0%
Debt Service	220,520	116,027	254,182	279,496	235,735	-7%
TOTAL OPERATING EXPENSES	\$ 3,527,436	\$ 1,531,033	\$ 3,939,307	\$ 3,711,622	\$ 3,904,314	-1%
OPERATING INCOME (LOSS)	\$ 99,582	\$ 817,524	\$ 87,610	\$ 449,797	\$ 833,564	851%
CAPITAL EXPENDITURES						
Capital Expenditures	\$ 1,451,582	\$ 1,169,930	\$ 7,644,400	\$ 1,075,000	\$ 7,296,000	-5%
OTHER FINANCING						
Grants/Loans Proceeds	\$ 1,486,656	\$ 72,956	\$ 644,400	\$ 825,000	\$ 1,271,000	97%
County/External Reimbursement		2,000,000	4,000,000		2,000,000	-50%
Sale of Scrap	10,610					
BUDGETED NET INCOME (LOSS)	\$ 145,265	\$ 1,720,550	\$ (2,912,390)	\$ 199,797	\$ (3,191,436)	10%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget -- WATER DISTRIBUTION

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
REVENUE						
Sales in Thousand of Gallons	693,335	450,124	775,000	775,000	775,000	0%
Revenue per thousand gallons	\$ 5.6549	\$ 5.6136	\$ 5.7500	\$ 5.7500	\$ 6.3300	10%
Sales Revenue	\$ 3,920,763	\$ 2,526,818	\$ 4,456,250	\$ 4,456,250	\$ 4,905,750	10%
Interest on Utility Reserves	12,300	17,460	21,000	21,000	9,161	-56%
Revenue on Recoverable Work	59,382	18,589	30,000	30,000	30,450	1%
TOTAL REVENUE	\$ 3,992,445	\$ 2,562,867	\$ 4,507,250	\$ 4,507,250	\$ 4,945,361	10%
OPERATING EXPENSES						
Supervision, Misc Direct Admin	\$ 217,881	\$ 98,214	\$ 182,979	\$ 187,327	\$ 184,778	1%
Hydrants	71,088	15,279	58,860	59,924	60,645	3%
Water Distribution	387,278	161,879	403,106	368,523	372,203	-8%
Water Meters	658,592	225,931	691,840	699,124	634,691	-8%
Interdepartmental Charges	225,566	125,825	251,649	251,649	330,744	31%
Eng. Cust Svc. MR and Admin	505,593	243,845	574,794	570,935	805,686	40%
Cost of Water	2,528,096	1,447,493	2,456,750	2,505,885	2,650,500	8%
TOTAL OPERATING EXPENSES	\$ 4,594,094	\$ 2,318,466	\$ 4,619,978	\$ 4,643,367	\$ 5,039,246	9%
OPERATING INCOME (LOSS)	\$ (601,650)	\$ 244,401	\$ (112,728)	\$ (136,117)	\$ (93,885)	-17%
CAPITAL EXPENDITURES						
Capital Expenditures	\$ 433,941	\$ 1,218,804	\$ -	\$ -	\$ -	
BUDGETED NET INCOME (LOSS)	\$ (1,035,591)	\$ (974,403)	\$ (112,728)	\$ (136,117)	\$ (93,885)	-17%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Summary of Expenditure Budget -- WASTEWATER COLLECTION AND TREATMENT

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
REVENUE						
Thousands of Gallons Processed	408,234	204,369	430,000	430,000	430,000	0%
Sales Revenue	\$ 4,632,768	\$ 2,486,397	\$ 5,174,221	\$ 5,174,221	\$ 5,269,745	2%
Interest on Utility Reserves	14,379	19,679	23,000	23,000	13,516	-41%
Revenue on Recoverable Work	-		1,500	1,523	-	-100%
TOTAL REVENUE	\$ 4,647,147	\$ 2,506,076	\$ 5,198,721	\$ 5,198,744	\$ 5,283,261	2%
OPERATING EXPENSES						
Supervision, Misc Direct Admin	\$ 159,691	\$ 100,702	\$ 323,618	\$ 254,313	\$ 230,375	-29%
Wastewater Collection	342,164	130,315	421,571	389,058	367,602	-13%
Lift Stations	336,649	105,709	245,729	248,686	275,214	12%
Wastewater Treatment	1,240,841	571,932	1,388,309	1,380,071	1,318,100	-5%
Interdepartmental Charges	372,692	205,701	411,402	411,402	590,289	43%
Eng. Cust Svc. MR and Admin	420,570	249,326	504,797	501,407	835,197	65%
Debt Service	1,151,522	575,697	1,155,799	1,808,378	1,155,799	0%
TOTAL OPERATING EXPENSES	\$ 4,024,128	\$ 1,939,383	\$ 4,451,226	\$ 4,993,314	\$ 4,772,576	7%
OPERATING INCOME (LOSS)	\$ 623,019	\$ 566,693	\$ 747,495	\$ 205,430	\$ 510,684	-32%
CAPITAL EXPENDITURES						
Capital Expenditures	\$ 1,061,949	\$ 789,137	\$ 1,050,000	\$ 10,000,000	\$ 50,000	-95%
OTHER FINANCING						
Grant/Loan Proceeds				\$ 10,000,000		
BUDGETED NET INCOME (LOSS)	\$ (438,930)	\$ (222,444)	\$ (302,505)	\$ 205,430	\$ 460,684	-252%

Los Alamos County Department of Public Utilities
Fiscal Year 2018 Budget
Summary of Expenditure Budget -- ADMINISTRATION AND GENERAL

	Actual 2016	Jul-Dec Actual 2017	Adopted Budget 2017	1st Year Budget 2018	Proposed Budget 2018	Change
Meter Reading	354,410	183,437	278,892	286,245	352,536	26%
Customer Service	510,942	258,009	552,237	564,514	840,167	52%
Engineering	1,435,797	776,086	1,628,417	1,668,980	1,530,874	-6%
Administration	464,503	215,158	829,237	722,273	752,285	-9%
Finance	609,440	305,552	783,522	796,678	974,152	24%
Public Information	176,583	102,164	245,285	251,716	259,668	6%
Capital	-	298	-	-	-	
Total Administrative Division	3,551,674	1,840,705	4,317,590	4,290,405	4,709,682	9%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
Budget Summary by Categories

	Actual FY2016	Jul-Dec Actual FY2017	Adopted Budget FY2017	1st Year Budget FY2018	Proposed Budget FY2018	Change
Expenditures by Fund:						
Electric	47,330,771	20,637,729	47,492,212	48,256,017	48,600,302	2%
Gas	4,797,511	2,883,498	5,564,365	5,410,631	5,462,942	-2%
Water	7,478,958	4,790,740	13,746,935	6,924,104	13,589,060	-1%
Wastewater	5,086,077	2,728,520	5,501,226	14,993,314	4,822,576	-12%
	64,693,316	31,040,486	72,304,737	75,584,066	72,474,881	0%
Expenditures by Type:						
Salaries	5,013,162	2,627,632	6,455,871	6,481,879	6,688,957	4%
Benefits	3,271,916	1,724,888	2,469,961	2,519,810	2,555,440	3%
Contractual Services	35,611,972	14,582,227	36,332,581	38,761,951	38,462,502	6%
Other Services	1,577,069	1,099,124	1,759,516	1,754,082	1,796,371	2%
Materials/Supplies	1,381,374	476,894	1,590,080	1,594,980	1,673,104	5%
Interfund Charges	3,997,973	2,036,925	5,274,195	5,257,010	5,684,386	8%
IDCs	3,084,250	1,587,857	2,706,690	2,706,690	2,768,398	2%
Capital Outlay	434,714	7,533	375,340	287,140	367,140	-2%
Bank Charges	2,680	2,683	-	-	-	
Misc. Other Charges	227,865	114,280	-	-	39,000	
Profit Transfer	771,407	-	909,110	891,294	913,140	0%
Debt Service	5,124,565	2,566,153	5,203,731	5,879,093	5,281,753	1%
Capital	6,746,043	6,086,195	13,545,453	13,743,324	10,954,371	-19%
Admin. & Gen. Allocation	(3,551,674)	(1,840,705)	(4,317,590)	(4,290,405)	(4,709,682)	9%
	63,693,316	31,071,684	72,304,937	75,586,848	72,474,881	0%
FTE Summary:						
Regular (full & part time)	93.00	93.00	93.00	93.00	93.00	0%
Casual, student & temp.	5.34	5.34	5.34	5.34	5.30	-1%
	98.34	98.34	98.34	98.34	98.30	0%
FTE by Division:						
Electric Production	12.00	12.00	12.00	12.00	12.00	0%
Electric Distribution	13.00	13.00	13.00	13.00	13.00	0%
Gas	24.05	29.07	29.07	29.07	29.02	0%
Water	10.25	9.25	9.25	9.25	9.75	5%
Wastewater	9.00	9.00	9.00	9.00	8.97	0%
Administrative & General	30.02	26.02	26.02	26.02	25.56	-2%
	98.32	98.34	98.34	98.34	98.30	0%

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY18 (1 July 2017 - 30 June 2018)		Budget
ELECTRIC PRODUCTION		675,000
Abiquiu Controls Upgrade		375,000
3 Ton Jib Crane Abiquiu		140,000
Replace Control System Batteries El Vado & Abiquiu		135,000
Uninterrupted Power Supply Electric SCADA		25,000
ELECTRIC DISTRIBUTION		2,233,371
Los Alamos URD Replacement (cables, jboxes, pedestals)		250,000
White Rock URD Replacement (cables, jboxes, pedestals)		250,000
WR Substation Switchgear1 Refurbishment		350,000
WR Substation Transformer Oil Retention Bay		150,000
Overhead System Replacement (poles, xarms, transformers)		400,000
LASS Substation Feeders		500,000
County Labor and Benefits		333,371
GAS DISTRIBUTION		700,000
Quemazon Loop Alternate PRV Feed		250,000
SCADA Improvements Phase 1		250,000
PRV Site Improvements Phase 1		200,000
WATER DISTRIBUTION		0
WATER PRODUCTION		7,296,000
Ski Hill Supply Pipeline Construction (County/Ski Hill 50/50 Funding, N/A DPU)		4,000,000
Otowi Well No. 2 Well House & Pipeline Construction		1,500,000
PW5 MCC Replacement - Construction		275,000
RTU Replacement - 3 Each		75,000
Auto Valves 9,10,11 R&R		150,000
Uninterrupted Power Supply Water SCADA		25,000
Non Potable: Design Group 12 Tank, Bayo Booster & Overlook Booster (WTB)		495,000
Non-Potable: Bayo Booster Second Tank (WTB)		776,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		50,000
SEWER COLLECTION		50,000
Canyon Road VCP Crossings (2 Each) Rehabilitation		50,000
WASTEWATER TREATMENT		0

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY19 (1 July 2018 - 30 June 2019)		Budget
ELECTRIC PRODUCTION		300,000
El Vado Replace Main Transformer		300,000
ELECTRIC DISTRIBUTION		3,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		300,000
White Rock URD Replacement (cables, jboxes, pedestals)		300,000
Overhead System Replacement (polex, xarms, transformers)		400,000
EA4 Feeder Replacement		2,000,000
GAS DISTRIBUTION		450,000
SCADA Improvements Phase 2		250,000
PRV Site Improvements Phase 2		200,000
WATER DISTRIBUTION		550,000
Aspen School Area Waterline Replacements Phase 1		550,000
WATER PRODUCTION		1,979,000
East Jemez Road PW3 to NM4 Pipeline R&R {DOT}		1,015,000
Non Potable: Construct Second Group 12 Tank (WTB)		964,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		753,000
SEWER COLLECTION		753,000
Rio Bravo Sewer Lift Station Rehabilitation		103,000
WR WWTP Interceptor Modifications		500,000
Aspen School Area Sewerline Replacement/Rehabilitation - Phase 1		150,000
WASTEWATER TREATMENT		0

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY20 (1 July 2019 - 30 June 2020)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		1,800,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		300,000
White Rock URD Replacement (cables, jboxes, pedestals)		300,000
Overhead System Replacement (polex, xarms, transformers)		1,200,000
Townsite Circuit 15, 3 PHASE	(\$600K)	
White Rock Circuit 1, 3 PHASE	(\$600K)	
GAS DISTRIBUTION		450,000
SCADA Improvements Phase 3		250,000
PRV Site Improvements Phase 3		200,000
WATER DISTRIBUTION		808,000
Aspen School Area Waterline Replacements Phase 2		558,000
New Vactor		250,000
WATER PRODUCTION		2,550,000
NM SR 4 Pipeline R&R {DOT}		1,545,000
OB1 Replacement Design		155,000
Non Potable: Guaje Pines, North Mesa, Diamond Connections (WTB)		850,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		2,421,000
SEWER COLLECTION		1,049,000
SCADA Implementation		203,000
Aspen School Area Sewerline Replacement/Rehabilitation - Phase 2		81,000
Bayo Canyon Sewer Lift Station Elimination		515,000
New Vactor		250,000
WASTEWATER TREATMENT		1,372,000
LA WWTP Upgrades & Rehabilitation Project - Design		361,000
WRTP Design		1,011,000

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY21 (1 July 2020 - 30 June 2021)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		1,850,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		300,000
White Rock URD Replacement (cables, jboxes, pedestals)		300,000
White Rock GWS & ED Facility		50,000
Overhead System Replacement (poles, xarms, transformers)		1,200,000
Townsite Circuit 13, 3 PHASE	(\$600K)	
White Rock Circuit 2, 3 PHASE	(\$600K)	
GAS DISTRIBUTION		300,000
White Rock Steel Valve Project Phase 1		250,000
White Rock GWS & ED Facility		50,000
WATER DISTRIBUTION		617,000
Aspen School Area Waterline Replacements Phase 3		567,000
White Rock GWS & ED Facility		50,000
WATER PRODUCTION		3,434,000
OB1 Replacement Construction		3,173,000
Non Potable: Camp May Tank SCADA & Freeze Upgrades (WTB)		261,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		16,963,000
SEWER COLLECTION		561,000
Loma Vista Sewer Lift Station Rehabilitation		157,000
Aspen School Area Sewerline Replacement/Rehabilitation - Phase 3		93,000
North Community Backyard Sewer Mains & Services Rehabilitation - Phase 1		261,000
White Rock GWS & ED Facility		50,000
WASTEWATER TREATMENT		16,402,000
LA WWTP Upgrades & Rehabilitation Project - Construction		3,137,000
(Filtration, High Efficiency Blowers, UV Controls, DO Meter Upgrades, Standby Power Upgrades, Compost Bin Safety)		
WRTP Construction		12,750,000
WRTP Construction Administration - Engineering/Inspection		515,000

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY22 (1 July 2021 - 30 June 2022)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		2,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		400,000
White Rock URD Replacement (cables, jboxes, pedestals)		400,000
Overhead System Replacement (poles, xarms, transformers)		1,200,000
Townsite Circuit 16, 3 PHASE	(\$600K)	
White Rock Circuit 1, 1 PHASE	(\$600K)	
GAS DISTRIBUTION		250,000
White Rock Steel Valve Project Phase 2		250,000
WATER DISTRIBUTION		627,000
Aspen School Area Waterline Replacements Phase 4		627,000
WATER PRODUCTION		2,228,000
Townsite 14" Pipeline R&R - Phase 1		1,061,000
Non Potable: White Rock Booster Replacement & Chamisa Pipeline (WTB)		1,167,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		583,000
SEWER COLLECTION		583,000
North Road Sewer Lift Station Elimination/Rehabilitation		478,000
Aspen School Area Sewerline Replacement/Rehabilitation - Phase 4		105,000
WASTEWATER TREATMENT		0

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY23 (1 July 2022 - 30 June 2023)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		2,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		400,000
White Rock URD Replacement (cables, jboxes, pedestals)		400,000
Overhead System Replacement (poles, arms, transformers)		1,200,000
Townsite Ski Hill Circuit, 3 PHASE	(\$600K)	
White Rock Circuit 2, 1 PHASE	(\$600K)	
GAS DISTRIBUTION		250,000
White Rock Steel Valve Project Phase 3		250,000
WATER DISTRIBUTION		849,000
North Mesa Distribution Upgrades		849,000
WATER PRODUCTION		1,915,000
Townsite 14" Pipeline R&R - Phase 2		1,077,000
Non Potable: Bayo Booster Station (WTB)		838,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		652,000
SEWER COLLECTION		517,000
Paseo Penasco Sewer Lift Station Rehabilitation		162,000
Denver Steel Area East Portion Sewerline R&R {PW-WA 5}		86,000
North Community Backyard Sewer Mains & Services Rehabilitation - Phase 2		269,000
WASTEWATER TREATMENT		135,000
Equipment/Vehicle Replacement		135,000

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY24 (1 July 2023 - 30 June 2024)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		2,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		400,000
White Rock URD Replacement (cables, jboxes, pedestals)		400,000
Overhead System Replacement (poles, arms, transformers)		1,200,000
Townsite Circuit 15, 1 PHASE	(\$600K)	
White Rock Circuit 1, Wire 3 PHASE	(\$600K)	
GAS DISTRIBUTION		250,000
Pipeline Repair & Replacement / Equipment		250,000
WATER DISTRIBUTION		970,000
Denver Steel Area East Portion Pipeline {PW-WA 5}		970,000
WATER PRODUCTION		1,913,000
Townsite 14" Pipeline R&R - Phase 3		1,093,000
Non Potable: Rover & Pinon Park Pipeline Connections (WTB)		820,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		415,000
SEWER COLLECTION		415,000
El Gancho Sewer Lift Station Rehabilitation		164,000
Arkansas Area Backyard Sewer Mains & Services Rehabilitation		164,000
Denver Steel Area West Portion Sewerline R&R		87,000
WASTEWATER TREATMENT		0

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY25 (1 July 2024 - 30 June 2025)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		2,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		400,000
White Rock URD Replacement (cables, jboxes, pedestals)		400,000
Overhead System Replacement (poles, xarms, transformers)		1,200,000
Townsite Circuit 13, 1 PHASE	(\$600K)	
White Rock Circuit 2, Wire 3 PHASE	(\$600K)	
GAS DISTRIBUTION		250,000
Pipeline Repair & Replacement / Equipment		250,000
WATER DISTRIBUTION		601,000
Denver Steel Area West Portion Water Line Replacements		601,000
WATER PRODUCTION		1,970,000
Otowi Well 4 - 2nd Tank (Anniversary)		1,110,000
RTU Replacement - 5 Each		139,000
Non Potable: Barranca Mesa Pipeline Connections (WTB)		721,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		810,000
SEWER COLLECTION		255,000
Ridge Park Sewer Lift Station Rehabilitation		166,000
Denver Steel Area Orange Street Portion Sewerline R&R {PW-WA 6}		89,000
WASTEWATER TREATMENT		555,000
LA WWTP Non-Potable Pressure Line		555,000

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY26 (1 July 2025 - 30 June 2026)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		2,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		400,000
White Rock URD Replacement (cables, jboxes, pedestals)		400,000
Overhead System Replacement (poles, xarms, transformers)		1,200,000
Townsite Circuit 16, 1 PHASE	(\$600K)	
White Rock Circuit 1, Wire 1 PHASE	(\$600K)	
GAS DISTRIBUTION		250,000
Pipeline Repair & Replacement / Equipment		250,000
WATER DISTRIBUTION		777,000
Denver Steel Area Orange Street Portion Pipeline {PW-WA 6}		777,000
WATER PRODUCTION		2,168,000
West Pajarito Road Pipeline R&R - Phase 1		1,126,000
Non Potable: Bayo BS Winter Storage Facility (WTB)		1,042,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		643,000
SEWER COLLECTION		558,000
Old Pueblo Sewer Canyon Drop Replacement		355,000
41st/45th/46th/47th Sewerline R&R {PW-WA 7}		90,000
Ponderosa Sewer Lift Station Rehabilitation		113,000
WASTEWATER TREATMENT		85,000
LA & WR WWTP SCADA Upgrades		85,000

Los Alamos County Department of Public Utilities
Fiscal Year 2018
10-Year Capital Plan

FY27 (1 July 2026 - 30 June 2027)		Budget
ELECTRIC PRODUCTION		0
ELECTRIC DISTRIBUTION		2,000,000
Los Alamos URD Replacement (cables, jboxes, pedestals)		400,000
White Rock URD Replacement (cables, jboxes, pedestals)		400,000
Overhead System Replacement (poles, xarms, transformers)		1,200,000
Townsite Circuit 16, 1 PHASE	(\$600K)	
White Rock Circuit 1, Wire 1 PHASE	(\$600K)	
GAS DISTRIBUTION		250,000
Pipeline Repair & Replacement / Equipment		250,000
WATER DISTRIBUTION		676,000
41st/45th/46th/47th Pipeline {PW-WA 7}		676,000
WATER PRODUCTION		772,000
Guaje Well 1 Booster Design		172,000
Non Potable: Upper Townsite Pipeline Connections (WTB)		600,000
WASTEWATER TREATMENT AND SEWER COLLECTION TOTAL		1,029,000
SEWER COLLECTION		743,000
Airport Canyon Sewer Canyon Drop Replacement		629,000
Eastern Area Sewerline R&R - Phase 1		114,000
WASTEWATER TREATMENT		286,000
Equipment / Vehicle		286,000

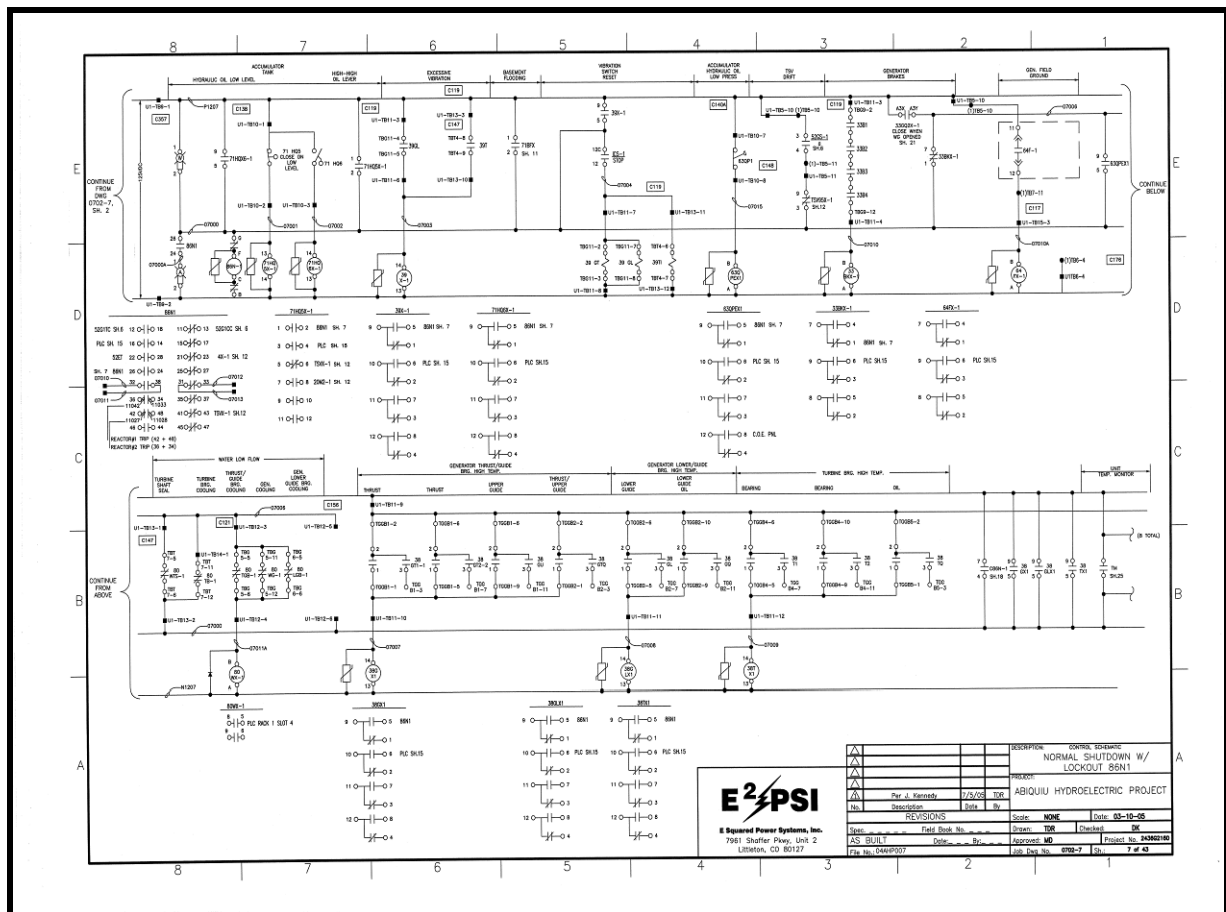
ELECTRIC PRODUCTION

FY18: Abiquiu Controls Upgrade

Project Scope: Installation of new software and hardware to replace the existing controls system in the Abiquiu hydroelectric plant. The new upgrade will integrate the controls of the low-flow turbine and the two larger turbines into one process logic controller. The improvements are a reliability upgrade that will provide safe and efficient operation for the next 10 to 15 years.

Budget: \$ 375,000

Schedule: Winter 2017/2018



ELECTRIC PRODUCTION

FY18: Abiquiu 3-Ton Jib Crane

Project Scope: A new 3-ton jib crane will be installed on the north deck of the Abiquiu hydroelectric plant to raise and lower the gates to the energy dissipating chambers. Currently, access to the gates is limited due to the location of the plant electrical gear that must be navigated through by a crane or boom truck.

Budget: \$ 140,000

Schedule: Spring 2018



ELECTRIC PRODUCTION

FY18: Abiquiu and El Vado Battery Replacement

Project Scope: The batteries in both plants area approximately 11 years old. Annual testing has indicated a declining trend in their capacity in recent years. The batteries are the power supply for the plant controls system.

Budget: \$ 135,000

Schedule: Winter 2017/2018



ELECTRIC PRODUCTION

FY18: Electric SCADA Uninterruptible Power Source Replacement

Project Scope: An uninterruptible power supply (UPS) is a critical feature of the water and electric supervisory controls and data acquisition system (SCADA). The existing UPS at the Pajarito Cliffs serves both the water and electric SCADA systems and is over 15 years old. The UPS is beyond its service life and will be replaced.

Budget: \$25,000

Schedule: Spring 2018.



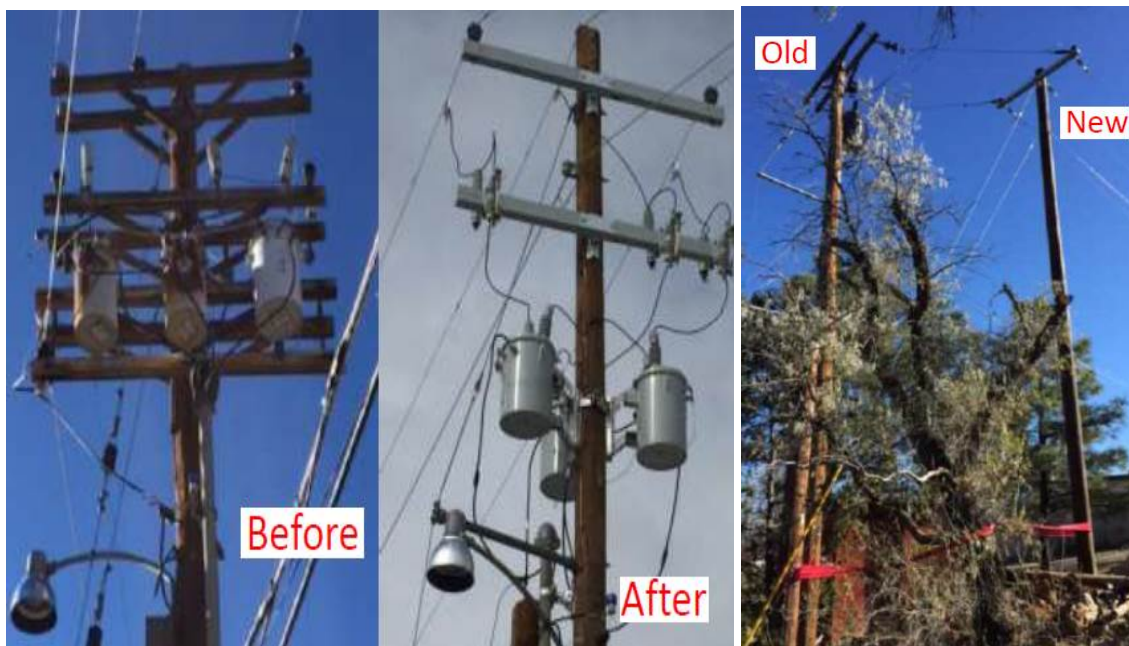
ELECTRIC DISTRIBUTION

FY18: Overhead System Replacement

Project Scope: Much of the utilities' overhead infrastructure is > 50 years and operating near or past its useful plant life. The department's Asset Management Program (AMP) prioritizes O&M projects based on root cause analysis after power outages, quarterly line inspections, etc. The O&M program includes replacement of poles, cross-arms, and other pole hardware including transformers. Priority is placed on the three phase backbone and areas affecting the highest number of consumers.

- | | |
|----------------------------|------------|
| 1. White Rock service area | \$200,000. |
| 2. Los Alamos service area | \$200,000. |

Budget: \$ 400,000
Schedule: Year round design and construction



ELECTRIC DISTRIBUTION

FY18: URD (UG residential distribution) Replacements

Project Scope: The underground system contains 1970s infrastructure which was direct-buried and in direct contact with the earth. Portions or segments of the underground system which have experienced 3 or more failures are targeted for replacement because they will fail again. Old and obsolete live-front transformers are routinely replaced due to safety and arc-flash concerns. New loop segments are designed for radial power lines which serve large amounts of customers.

- | | |
|---|------------|
| 1. Los Alamos town site area after three failure replacements | \$250,000. |
| 2. White Rock area after three failure replacements | \$250,000. |

Budget: \$ 500,000

Schedule: Year round design and construction



ELECTRIC DISTRIBUTION

FY18: White Rock Substation Tran 1 O&M

Project Scope: The original White Rock transformer and switchgear is often utilized when LANL switches or powers OFF the NL 115KV line and refeeds White Rock from the RL 115KV line. The system often remains under this configuration from a few days up to 2 weeks. The switchgear is at least 50 years and has not been maintained nor refurbished. A failure to the switchgear would result in a very prolonged power outage. Federal rules require that substations have oil containment systems in the event of a transformer leakage or rupture.

- | | |
|--|------------|
| 1. Switchgear 1 refurbishment | \$350,000. |
| 2. Substation transformers oil retention | \$150,000. |

Budget: \$ 500,000

Schedule: Year round design and construction



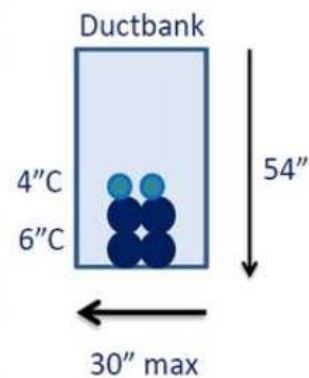
ELECTRIC DISTRIBUTION

FY18: LASS Substation Feeders (in and out)

Project Scope: Powering LASS requires the installation of two new source feeders from LANL substation called LS1 and LS2. The LASS substation would then have 8 outgoing load feeders to power 4 town site feeders and 3 other LANL feeders that power LAC loads; S6, SM6, and S18.

- | | |
|---|------------|
| 3. Incoming Source Feeders (2); LS1 and LS2 | \$200,000. |
| 4. Outgoing Load Feeders, (8) | \$300,000. |

Budget: \$ 500,000
Schedule: Continuation of FY 17



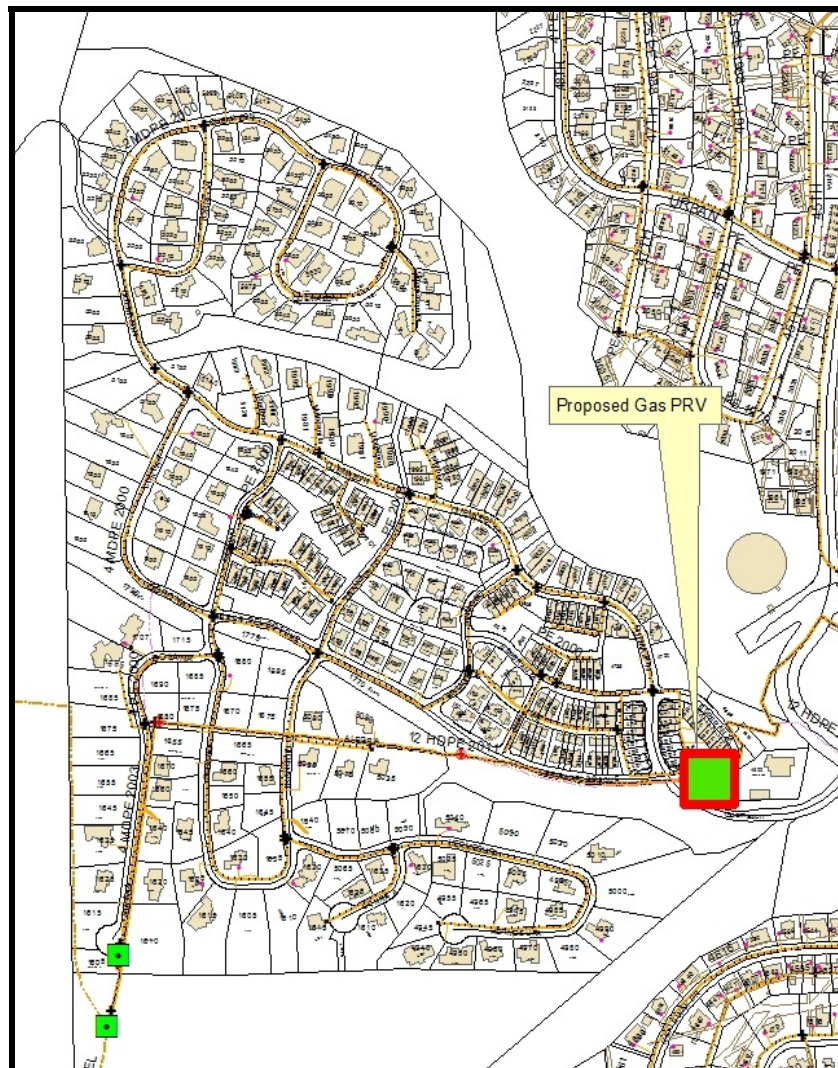
GAS DISTRIBUTION

FY18: Western Area / Quemazon Loop Alternative PRV Feed

Project Scope: Install a new gas pressure reducing valve (PRV), to allow a back feed (loop feed) into the Quemazon distribution system. The system currently has only one supply of natural gas, this project will provide a second feed providing redundancy and reliability.

Budget: \$ 250,000

Schedule: Construct Fall 2017



GAS DISTRIBUTION

FY18: PRV Site Improvements Phase 1

Project Scope: New enclosures for existing gas PRV stations will be constructed. The current facilities are not adequately protected against security threats, or natural hazards such as fire. Facilities also are extremely limited in terms of the space they provide for safe O&M activities, as well as ingress and egress.

Budget: \$ 200,000

Schedule: FY18



New East Park PRV enclosure (above)



Typical enclosure (above)

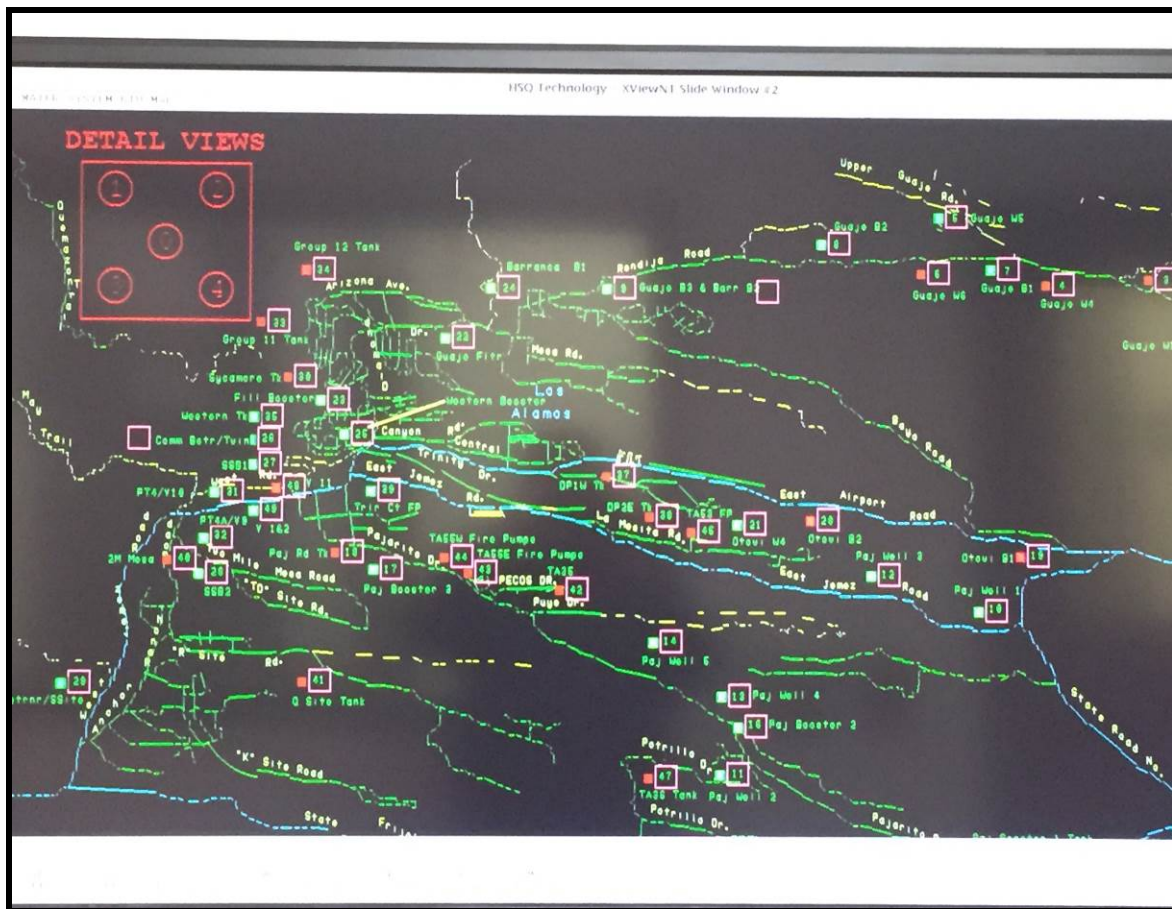
GAS DISTRIBUTION

FY18: SCADA Improvements Phase 1

Project Scope: Install SCADA transmitting (RTU's) at gas PRV stations, as well as other critical locations throughout Los Alamos and White Rock gas distribution system. SCADA alarms would alert GWS and Engineering personnel when system is operating outside of established parameters. System would also be used to monitor and demonstrate that operations are in compliance with State and Federal regulations.

Budget: \$250,000

Schedule: FY 18



Example: Photo of Water SCADA Control Board

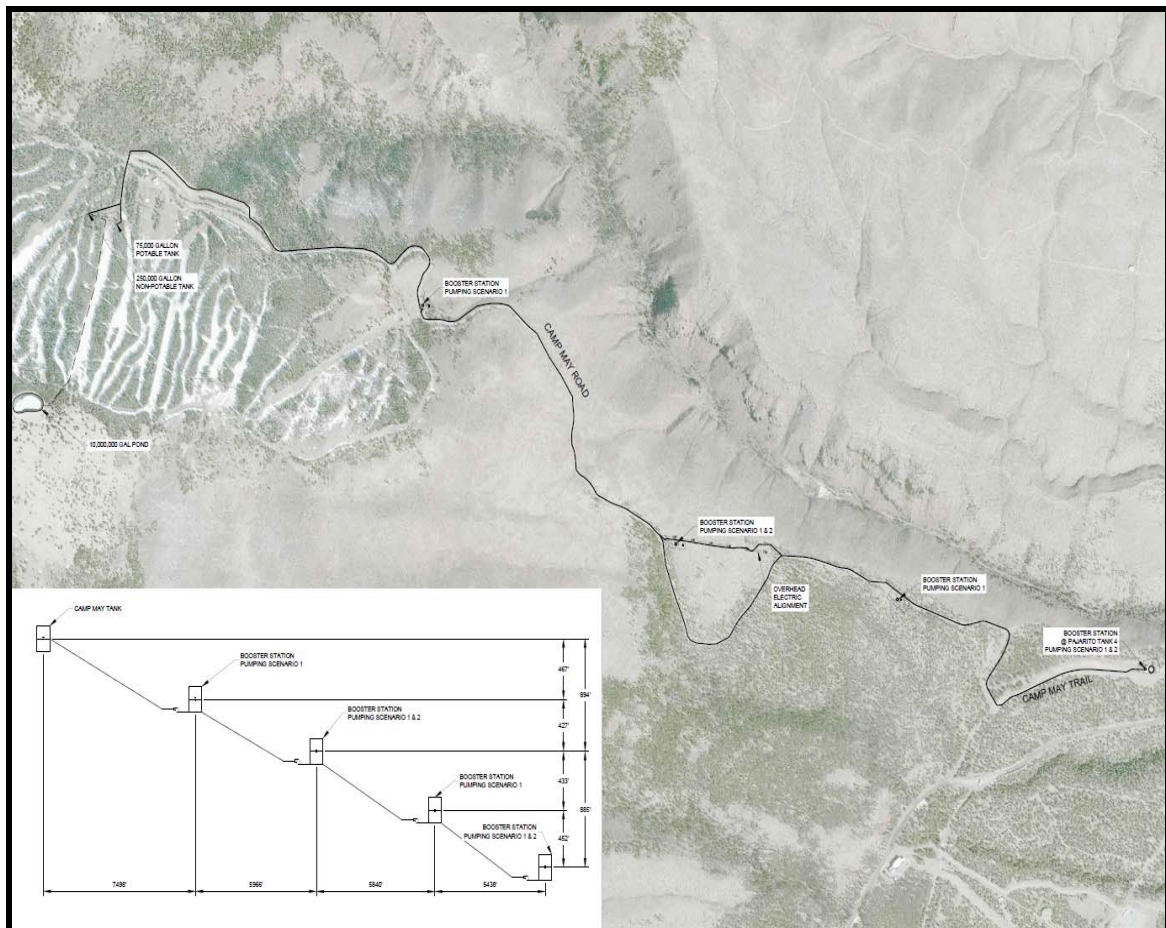
WATER PRODUCTION

FY18: Camp May Potable Water Supply Extension-Construction

Project Scope: This project will significantly improve fire suppression capabilities for the recreational facilities in Camp May, plus extend the potable water supply for current and future developments in the area. Cost will be shared under a private-public partnership between the County and the recreational facility operator.

Budget: \$4,000.000 (\$2,000,000 General Fund / remainder by third party)

Schedule: Design and environmental documents are currently in progress.



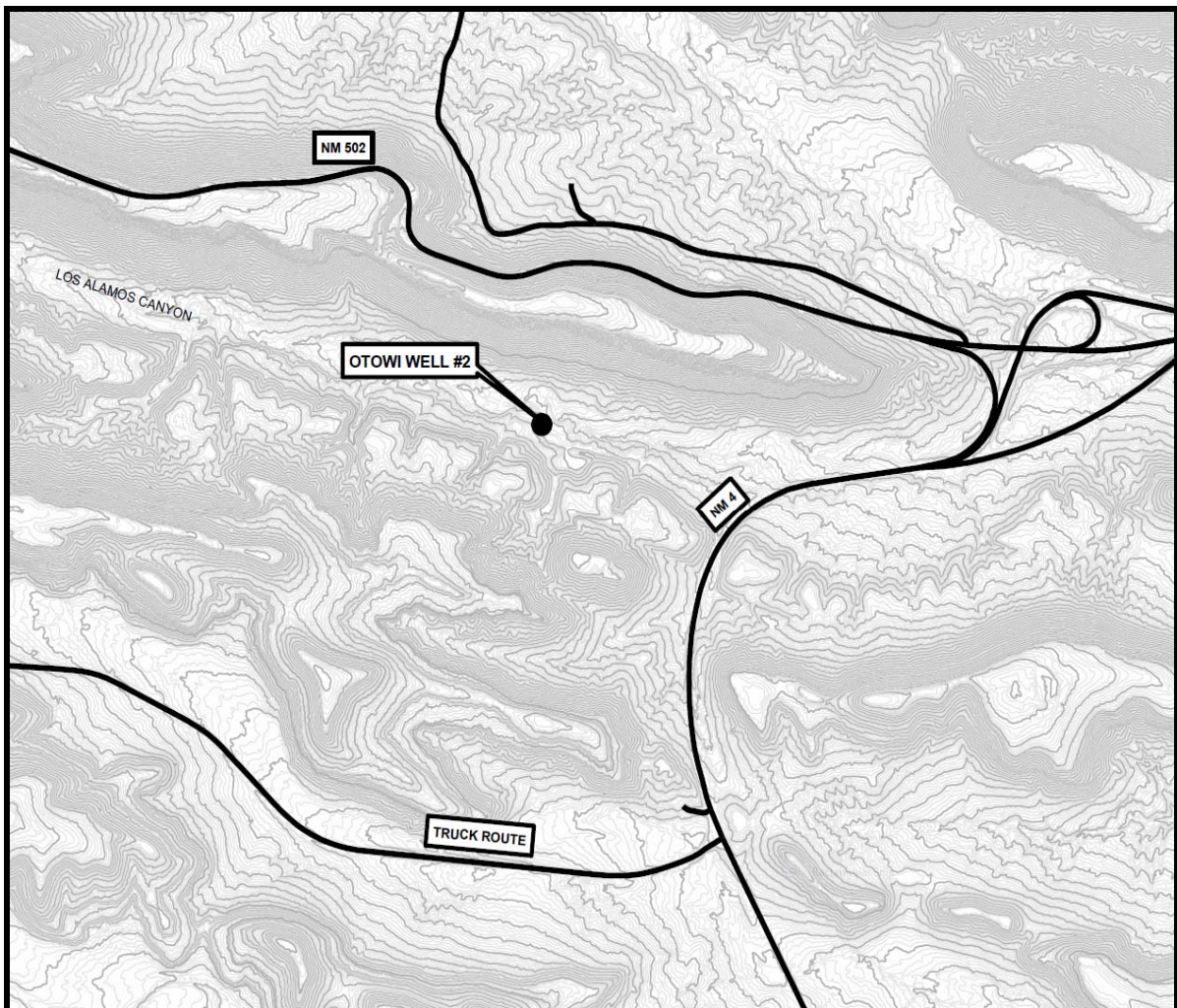
WATER PRODUCTION

FY18: Otowi Well No. 2 Pump House and Pipeline Design & Construction

Project Scope: The project will be executed in two phases. The first phase of the project will be a design-build contract for the design, drilling and development of the well scheduled for completion in the fall of 2017. The second phase of the project will be design and construction of the well house, electric gear and pipeline. The well is scheduled to be online by summer of 2018.

Budget: \$1,500,000

Schedule: Well to be drilled and developed in summer 2017. The well house and pipeline will be constructed in the summer of 2018.



WATER PRODUCTION

FY18: Pajarito Well No. 5 Motor Control Center Replacement

Project Scope: The MCC equipment on the Pajarito Well No. 5 is becoming obsolete. Parts are no longer available on the open market. The DPU has maintained this equipment using parts from spare units. New equipment is required to avoid system breakdowns and to keep the system functioning properly. This project is part of a system wide effort to update all motor control centers and control equipment so they meet current codes and maintain reliable service.

Budget: \$275,000

Schedule: Design and construction will occur in the spring/summer of 2018.



WATER PRODUCTION

FY18: Water SCADA Radio transmitter Unit (RTU) Replacement

Project Scope: Replace three water production Radio Transmitter Units (RTUs) associated with wells, boosters and tanks. The three most unreliable units will be replaced by in-house staff. New RTUs are being phased in each year throughout the system to maintain a reliable communications system.

Budget: \$75,000

Schedule: Spring 2018.



WATER PRODUCTION

FY18: Automatic Well Replacement: Valves 9, 10 & 11.

Project Scope: These automatic valves are needed to open and close pipelines to transfer water efficiently from one section of the potable water system to other sections whenever there is a need due to a booster station or well pump failure. The mechanical and electrical portions of these valves do not function properly. Further, the equipment was manufactured overseas and it is extremely difficult to order and receive parts.

Budget: \$150,000

Schedule: Spring 2018.



WATER PRODUCTION

FY18: Water SCADA Uninterruptible Power Source Replacement

Project Scope: An uninterruptible power supply (UPS) is a critical feature of the water and electric supervisory controls and data acquisition system (SCADA). The existing UPS at the Pajarito Cliffs serves both the water and electric SCADA systems and is over 15 years old. The UPS is beyond its service life and will be replaced.

Budget: \$25,000

Schedule: Spring 2018.



WATER PRODUCTION

FY18: Non-Potable Design of Booster Stations and Tank Construction

Project Scope: The next phase of non-potable capital improvements recommended by the Master Plan are related to increasing non-potable water storage and refurbishing aged booster stations. A project has been scoped to design multiple booster station replacements and a second water tank adjacent to the existing Group 12 tank. A second project to construct a new water tank adjacent to the Bayo Booster Station has also been scoped. This new tank will maximize the capture of water during peak periods which is now discharged to the environment.

Budget: \$495,000 Design
 \$776,000 Tank Construction

Schedule: Spring 2018.



WASTEWATER COLLECTION

FY-18: Canyon Road Vitrified Clay Crossings Rehabilitation

Project Scope: Sewer problems have occurred in two locations where the sewer lines crosses Canyon Road. Video inspection of the lines revealed structural damage that will require sections of the pipelines be replaced.

Budget: \$ 50,000

Schedule: Bid Spring 2018 / Construct Summer 2018



Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018-FY2027
Electric Production

	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
Expenditure Forecast												
El Vado Generation	620,427	600,000	609,000	618,135	627,407	636,818	646,370	656,066	665,907	675,896		
Abiquiu Generation	403,881	600,000	609,000	618,135	627,407	636,818	646,370	656,066	665,907	675,896		
Contract Administration	20,048	20,048	20,349	20,654	20,964	21,279	21,598	21,922	22,251	22,584		
Load Control	1,822,030	1,858,471	1,895,640	1,933,553	1,972,224	2,011,668	2,051,902	2,092,940	2,134,799	2,177,495		
Transmission - PNIM	1,405,000	1,562,371	1,640,489	1,722,514	1,808,639	1,899,071	1,994,025	2,093,726	2,198,412	2,308,333		
Transmission - Other	2,285,008	3,630,585	3,747,418	3,874,520	3,995,662	4,105,367	4,242,243	4,384,825	4,415,954	2,917,812		
Purchased Power	14,614,373	15,315,863	16,051,024	16,821,473	17,628,904	18,475,092	19,361,896	20,291,267	21,265,248	22,285,980		
Photovoltaic Array	117,000	118,755	120,536	122,344	124,180	126,042	127,933	129,852	131,800	133,777		
Debt Service	2,635,071	2,674,597	2,714,716	2,755,437	2,796,768	2,838,720	2,881,301	2,924,520	2,968,388	3,012,914		
Property Taxes	458,055	464,925	471,899	478,978	486,162	493,455	500,857	508,370	515,995	523,735		
Insurance	120,000	121,800	123,627	125,481	127,364	129,274	131,213	133,181	135,179	137,207		
San Juan Operations	11,213,148	10,630,015	10,969,002	13,327,274	11,850,582	11,997,282	13,685,184	12,901,824	12,901,824	12,901,824		
Laramie River Operations	2,854,600	2,334,374	2,096,618	2,051,189	2,074,498	2,142,696	2,265,910	2,417,012	2,494,622	2,494,622		
SMR Project	450,000	456,750	463,601	470,555	477,614	484,778	492,049	499,430	506,922	514,525		
Non-Pool Expenses	-	-	-	-	-	-	-	-	-	-		
Interdepartmental Charges	447,280	453,989	460,799	467,711	474,727	481,848	489,075	496,411	503,858	511,415		
Administrative Allocation	558,305	662,327	672,262	682,346	692,581	702,970	713,514	724,217	735,080	746,106		
Capital	675,000	300,000	-	-	-	-	-	-	-	-		
Total Operation Expenses	40,024,226	41,504,869	42,665,982	46,090,300	45,785,683	47,183,176	50,251,440	51,045,425	52,366,098	52,134,086		
Total Capital Expenditures	675,000	300,000	-	-	-	-	-	-	-	-		
Total Cash Outflow	40,699,226	41,804,869	42,665,982	46,090,300	45,785,683	47,183,176	50,251,440	51,045,425	52,366,098	52,134,086		
Revenue Forecast												
Mwh Sales - LANL	542,688	539,120	560,353	696,685	741,578	757,031	773,182	795,044	1,000,629	1,062,129		
Mwh Sales - LAC Distribution	125,530	126,934	128,386	129,853	131,334	132,830	134,341	135,868	137,409	138,966		
Total Mwh Sales	\$668,218	\$666,054	\$688,739	\$826,538	\$872,912	\$889,862	\$907,523	\$930,912	\$1,138,038	\$1,201,095		
Revenue per Mwh	52.20	50.36	52.34	54.66	49.07	51.16	52.59	52.57	50.46	48.67		
DOE Revenues	28,144,437	27,038,344	29,136,184	37,904,381	36,237,042	38,605,213	40,546,537	41,688,955	50,403,948	51,614,325		
Economy Sales	3,594,592	3,648,511	3,703,239	3,758,787	3,815,169	3,872,396	3,930,482	3,989,440	4,049,281	4,110,020		
Interest on Reserves	25,000	25,081	19,073	15,262	18,944	20,044	22,902	24,718	27,162	29,014		
Bond Federal Subsidy	33,984	(33,984)	(33,984)	(33,984)	(33,984)	(33,984)	(30,867)	(27,669)	(24,080)	(19,561)		
Bond Issue proceeds	-	-	-	-	-	-	-	-	-	-		
Transfer from Distribution Fund	6,737,615	6,505,405	6,910,136	7,277,880	6,595,061	6,917,639	7,179,711	7,249,876	7,026,526	6,845,739		
Total Cash Inflow	38,535,628	37,183,356	39,734,648	48,922,326	46,632,232	49,381,308	51,648,766	52,925,320	61,482,838	62,589,539		
Net Cash Flow	(2,163,598)	(4,621,513)	(2,931,334)	2,832,026	846,549	2,198,132	1,397,326	1,879,895	9,116,739	10,455,453		
Cumulative Net Cash Flow	(2,163,598)	(6,785,111)	(9,716,445)	(6,884,420)	(6,037,870)	(3,839,738)	(2,442,412)	(562,517)	8,554,222	19,009,674		
Cash Balance	19,292,979	14,671,466	11,740,132	14,572,158	15,418,707	17,616,839	19,014,165	20,894,060	30,010,799	40,466,252		
Recommended Cash Balance	17,368,510	18,154,003	18,425,287	18,744,275	18,940,286	18,512,088	18,149,005	17,888,062	17,467,088	16,881,623		
Reserves												
Retirement/Reclamation Reserve	10,079,922	10,204,395	10,293,261	10,421,375	10,426,053	9,808,674	9,239,130	8,708,141	8,130,692	8,149,336		
Identified items on site	300,000	304,500	309,068	313,704	318,409	323,185	328,033	332,953	337,948	343,017		
San Juan Decommissioning	4,709,820	4,898,220	5,086,620	5,275,020	5,463,420	5,651,820	5,840,220	6,028,620	6,217,020	6,405,420		
Laramie River Decommissioning	721,980	760,980	799,980	838,980	877,980	916,980	955,980	994,980	1,033,980	1,072,980		
San Juan Mine Reclamation	4,348,122	4,240,695	4,097,593	3,993,671	3,766,244	2,916,689	2,114,897	1,351,588	541,744	327,919		

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018-FY2027
Electric Distribution

1.50%		BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Expenditure Forecast												
Supervision, Misc Direct Admin		710,342	720,997	731,812	742,789	753,931	765,240	776,718	788,369	800,195	812,198	
Substation Maintenance		36,663	37,213	37,771	38,338	38,913	39,497	40,089	40,691	41,301	41,920	
Switching Station Maintenance		29,115	29,552	29,995	30,445	30,902	31,365	31,836	32,313	32,798	33,290	
Overhead Maintenance		488,883	496,216	503,660	511,215	518,883	526,666	534,566	542,585	550,723	558,984	
Underground Maintenance		375,882	381,521	387,243	393,052	398,948	404,932	411,006	417,171	423,429	429,780	
Meter Maintenance		126,101	127,992	129,912	131,861	133,839	135,846	137,884	139,952	142,051	144,182	
Interdepartmental Charges		583,503	592,256	601,139	610,156	619,309	628,598	638,027	647,598	657,312	667,171	
Administrative Division Allocation		852,774	560,121	568,522	577,050	585,706	594,491	603,409	612,460	621,647	630,972	
In Lieu Taxes		558,229	429,543	437,453	445,563	453,877	462,399	471,137	480,093	489,275	498,688	
Debt Service		1,255,148	1,271,957	1,253,438	1,253,443	1,133,909	982,377	984,776	1,015,816	1,178,311	1,178,311	
Profit Transfer		651,065	676,267	693,275	710,710	728,585	746,909	765,694	784,951	804,692	824,930	
Cost of Power		6,737,615	6,505,405	6,910,136	7,277,880	6,595,061	6,917,639	7,179,711	7,249,876	7,026,526	6,845,739	
Total Operations Expenses		12,405,320	11,829,038	12,284,357	12,722,503	11,991,862	12,235,960	12,574,853	12,751,874	12,768,260	12,666,167	
Capital		2,233,371	3,030,000	1,836,180	1,906,057	2,081,208	2,102,020	2,123,040	2,144,271	2,165,713	2,187,371	
Total Cash Outflow		14,638,692	14,859,038	14,120,537	14,628,560	14,073,070	14,337,981	14,697,893	14,896,145	14,933,974	14,853,537	
Revenue Forecast												
KWh Sales		125,496,000	126,934,000	128,203,340	129,485,373	130,780,227	132,088,029	133,408,910	134,742,999	136,090,429	137,451,333	
Revenue per KWh		\$0.1221	\$0.1239	\$0.1258	\$0.1276	\$0.1296	\$0.1315	\$0.1335	\$0.1355	\$0.1375	\$0.1396	
Rate Increase Percentage			1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
Total Sales Revenue		15,319,172	15,727,128	16,122,665	16,528,150	16,943,833	17,369,971	17,806,826	18,254,667	18,713,772	19,184,424	
Bond/Loan proceeds												
Bond Federal Subsidy		67,942	67,942	67,942	67,942	67,942	67,942	66,045	64,099	58,759	47,731	
Interest on Utility Reserves		(183,000)	(561)	26,575	82,742	137,748	218,410	305,118	395,871	495,083	607,174	
Revenue on Recoverable Work		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	
Total Cash Inflow		15,354,114	15,944,509	16,367,183	16,828,834	17,299,524	17,806,323	18,327,989	18,864,637	19,417,614	19,989,328	
R&R and Cash Flows												
Net Cash Flow		715,423	1,085,471	2,246,646	2,200,274	3,226,454	3,468,342	3,630,096	3,968,492	4,483,640	5,135,791	
Cumulative Net Cash Flow		715,423	1,800,894	4,047,539	6,247,813	9,474,267	12,942,610	16,572,705	20,541,198	25,024,838	30,160,629	
Cash Balance		(22,453)	1,063,018	3,309,664	5,509,938	8,736,392	12,204,734	15,834,830	19,803,322	24,286,962	29,422,753	
Recommended Cash Balance		13,141,299	12,177,298	12,610,185	11,961,579	12,349,383	12,495,248	12,603,710	12,447,880	12,466,662	12,607,024	

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Electric Fund Cash Reserve Analysis

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
ELECTRIC DIST & PROD CASH RESERVES										
Combined Cash Balance ED & EP	19,270,527	15,734,484	15,049,796	20,082,095	24,155,099	29,821,573	34,848,994	40,697,382	54,297,761	69,889,005
Recommended Cash Balance (ED)	13,141,299	12,177,298	12,610,185	11,961,579	12,349,383	12,495,248	12,603,710	12,447,880	12,466,662	12,607,024
Recommended Cash Balance (EP)	17,368,510	18,154,003	18,425,287	18,744,275	18,940,286	18,512,088	18,149,005	17,888,062	17,467,088	16,881,623
Recommended Cash Balance	30,509,809	30,331,301	31,035,472	30,705,853	31,289,669	31,007,335	30,752,716	30,335,942	29,933,750	29,488,647
TARGET RESERVE BALANCES										
Debt Service Reserve	3,890,219	3,946,554	3,968,154	4,008,880	3,930,677	3,821,097	3,866,077	3,940,336	4,146,699	4,191,225
Retirement/Reclamation Reserve	10,079,922	10,204,395	10,293,261	10,421,375	10,426,053	9,808,674	9,239,130	8,708,141	8,130,692	8,149,336
Identified items on site	300,000	304,500	309,068	313,704	318,409	323,185	328,033	332,953	337,948	343,017
San Juan Decommissioning	4,709,820	4,898,220	5,086,620	5,275,020	5,463,420	5,651,820	5,840,220	6,028,620	6,217,020	6,405,420
Laramie River Decommissioning	721,980	760,980	799,980	838,980	877,980	916,980	955,980	994,980	1,033,980	1,072,980
San Juan Mine Reclamation	4,348,122	4,240,695	4,097,593	3,993,671	3,766,244	2,916,689	2,114,897	1,351,588	541,744	327,919
Operations Reserve	6,234,263	6,962,715	7,131,065	7,307,698	7,484,618	7,659,211	7,850,911	8,106,017	8,247,374	7,627,966
Capital Expenditures Reserve	3,300,000	1,800,000	1,850,000	1,850,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Contingency Reserve	500,000	507,500	515,113	522,839	530,682	538,642	546,722	554,922	563,246	571,695
Rate Stabilization Reserve	6,505,405	6,910,136	7,277,880	6,595,061	6,917,639	7,179,711	7,249,876	7,026,526	6,845,739	6,948,426
	30,509,809	30,331,301	31,035,472	30,705,853	31,289,669	31,007,335	30,752,716	30,335,942	29,933,750	29,488,647
RESERVE BALANCE FORECAST										
Debt Service Reserve	3,890,219	3,946,554	3,968,154	4,008,880	3,930,677	3,821,097	3,866,077	3,940,336	4,146,699	4,191,225
Retirement/Reclamation Reserve	10,079,922	10,204,395	10,293,261	10,421,375	10,426,053	9,808,674	9,239,130	8,708,141	8,130,692	8,149,336
Operations Reserve	5,300,386	1,583,535	788,382	5,651,841	7,484,618	7,659,211	7,850,911	8,106,017	8,247,374	7,627,966
Capital Expenditures Reserve	-	-	-	-	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Contingency Reserve	-	-	-	-	313,750	538,642	546,722	554,922	563,246	571,695
Rate Stabilization Reserve	-	-	-	-	-	5,993,948	7,249,876	7,026,526	6,845,739	6,948,426
Total Cash Remaining	-	-	-	-	-	-	4,096,279	10,361,440	24,364,011	40,400,358

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018-FY2027
Gas Distribution

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
Supervision, Misc Direct Admin	256,975	260,829	264,742	268,713	272,743	276,835	280,987	285,202	289,480	293,822
Gas Distribution	280,994	285,209	289,487	293,829	298,237	302,710	307,251	311,860	316,538	321,286
Gas Meters	137,486	139,548	141,641	143,766	145,922	148,111	150,333	152,588	154,876	157,200
Interdepartmental Charges	366,631	372,130	377,712	383,378	389,129	394,966	400,890	406,904	413,007	419,202
Administrative Division Allocation	718,310	559,431	567,822	576,340	584,985	593,760	602,666	611,706	620,882	630,195
In Lieu Taxes	202,705	114,737	124,340	124,340	124,340	124,340	124,340	124,340	124,340	124,340
Profit Transfer	262,075	232,887	255,309	251,705	260,914	277,730	281,334	289,342	293,746	292,545
Cost of Gas	2,537,766	3,211,260	3,691,385	3,614,222	3,811,416	4,171,509	4,248,672	4,420,145	4,514,455	4,488,734
TOTAL Operations Expenses	4,762,942	5,176,031	5,712,437	5,656,292	5,887,685	6,289,960	6,396,472	6,602,085	6,727,323	6,727,323
Capital	700,000	454,500	459,045	309,090	260,151	262,753	265,380	268,034	270,714	273,421
TOTAL Cash Outflow	5,462,942	5,630,531	6,171,482	5,965,382	6,147,836	6,552,713	6,661,852	6,870,119	6,998,037	7,000,744
Revenue Forecast										
Therm Sales	8,455,275	8,455,275	8,455,275	8,455,275	8,455,275	8,455,275	8,455,275	8,455,275	8,455,275	8,455,275
Revenue per Therm	\$ 0.620	\$ 0.590	\$ 0.647	\$ 0.637	\$ 0.661	\$ 0.703	\$ 0.712	\$ 0.733	\$ 0.744	\$ 0.741
Rate Increase Percentage	-10.00%									
Total Sales Revenue	\$ 5,241,503	4,986,868	5,466,992	5,389,829	5,587,023	5,947,117	6,024,279	6,195,752	6,290,063	6,264,342
Interest on Utility Reserves	82,000	83,230	84,478	85,746	87,032	88,337	89,662	91,007	92,372	93,758
Revenue on Recoverable Work	20,000	20,300	20,605	20,914	21,227	21,546	21,869	22,197	22,530	22,868
TOTAL Cash Inflow	5,343,503	5,090,398	5,572,075	5,496,489	5,695,282	6,057,000	6,135,811	6,308,957	6,404,965	6,380,967
Net Cash Flow										
Cummulative net cash flow	(119,439)	(540,134)	(599,407)	(468,894)	(452,554)	(495,713)	(526,042)	(561,162)	(593,073)	(619,777)
	(119,439)	(659,573)	(1,258,980)	(1,727,873)	(2,180,427)	(2,676,140)	(3,202,182)	(3,763,344)	(4,356,416)	(4,976,193)
Cash Balance	6,513,685	5,973,552	5,374,145	4,905,251	4,452,697	3,956,984	3,430,943	2,869,781	2,276,708	1,656,931
Recommended Cash Balance	1,681,550	1,569,692	1,440,428	1,406,602	1,423,019	1,439,681	1,456,594	1,473,760	1,491,184	1,508,870

1.50%

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Gas Cash Reserve Analysis

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
GAS UTILITY CASH RESERVES										
Cash Balance	6,513,685	5,973,552	5,374,145	4,905,251	4,452,697	3,956,984	3,430,943	2,869,781	2,276,708	1,656,931
Recommended Cash Balance	1,681,550	1,569,692	1,440,428	1,406,602	1,423,019	1,439,681	1,456,594	1,473,760	1,491,184	1,508,870
TARGET RESERVE BALANCES										
Operations Reserve	981,550	865,942	882,872	895,183	907,678	920,360	933,233	946,299	959,561	973,022
Capital Expenditures Reserve	450,000	450,000	300,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Contingency Reserve	250,000	253,750	257,556	261,420	265,341	269,321	273,361	277,461	281,623	285,847
Rate Stabilization Reserve*	-	-	-	-	-	-	-	-	-	-
	1,681,550	1,569,692	1,440,428	1,406,602	1,423,019	1,439,681	1,456,594	1,473,760	1,491,184	1,508,870
RESERVE BALANCE FORECAST										
Operations Reserve	981,550	865,942	882,872	895,183	907,678	920,360	933,233	946,299	959,561	973,022
Capital Expenditures Reserve	450,000	450,000	300,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Contingency Reserve	250,000	253,750	257,556	261,420	265,341	269,321	273,361	277,461	281,623	285,847
Rate Stabilization Reserve*	-	-	-	-	-	-	-	-	-	-
Total Cash Remaining	4,832,135	4,403,860	3,933,716	3,498,649	3,029,678	2,517,303	1,974,348	1,396,020	785,524	148,062

* Assumes pass-through cost of gas rate remains in place.

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Water Production

	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Expenditure Forecast											
Supervision and Operations	963,806	978,263	992,937	1,007,831	1,022,949	1,038,293	1,053,867	1,069,675	1,085,720	1,102,006	
Pumping Power	800,000	774,300	774,300	774,300	774,300	774,300	774,300	774,300	774,300	774,300	
Wells	135,631	137,665	139,730	141,826	143,954	146,113	148,305	150,529	152,787	155,079	
Booster Pump Stations	123,587	125,441	127,323	129,233	131,171	133,139	135,136	137,163	139,220	141,308	
Treatment	104,271	105,835	107,422	109,034	110,669	112,329	114,014	115,724	117,460	119,222	
Storage Tanks	19,385	19,676	19,971	20,271	20,575	20,883	21,197	21,515	21,837	22,165	
Transmission Lines	64,705	65,676	66,661	67,661	68,676	69,706	70,751	71,813	72,890	73,983	
Non Potable System	393,018	398,913	404,897	410,970	417,135	423,392	429,743	436,189	442,732	449,372	
Interdepartmental Charges	341,062	346,178	351,371	356,641	361,991	367,421	372,932	378,526	384,204	389,967	
Administrative Division Allocation	678,114	604,933	614,007	623,217	632,565	642,054	651,685	661,460	671,382	681,453	
State Water Tax	45,000	45,675	46,360	47,056	47,761	48,478	49,205	49,943	50,692	51,453	
Debt Service	235,735	271,610	296,354	319,015	326,175	624,275	636,639	531,435	385,374	410,451	
Capital	2,025,000	1,015,000	1,700,000	3,173,000	1,061,000	1,077,000	1,093,000	1,249,000	1,126,000	172,000	
Capital Paid with Debt/Grants/Reimb	3,771,000	964,000	850,000	261,000	1,167,000	838,000	820,000	721,000	1,042,000	600,000	
Capital Paid with Cash	1,500,000										
Total Operations Expenses	3,904,314	3,874,165	3,941,332	4,007,054	4,057,921	4,400,382	4,457,773	4,398,272	4,298,599	4,370,759	
Total Capital Expenditures	7,296,000	1,979,000	2,550,000	3,434,000	2,228,000	1,915,000	1,913,000	1,970,000	2,168,000	772,000	
Total Cash Outflow	11,200,314	5,853,165	6,491,332	7,441,054	6,285,921	6,315,382	6,370,773	6,368,272	6,466,599	5,142,759	
Revenue Forecast											
Non-potable											
Non-potable production in kgal	86,400	90,400	90,400	94,500	94,500	108,600	136,500	136,500	136,500	136,500	
Non-potable rate per 1000 gallons	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	
Rate Increase Percentage	117%										
Non-potable sales revenue	\$ 216,000	\$ 226,000	\$ 226,000	\$ 236,250	\$ 236,250	\$ 271,500	\$ 341,250	\$ 341,250	\$ 341,250	\$ 341,250	

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Water Production

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
Potable										
Production in thousand gallons	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000
Revenue per thousand gallons	\$ 3.42	\$ 3.65	\$ 3.85	\$ 4.02	\$ 4.18	\$ 4.32	\$ 4.45	\$ 4.56	\$ 4.66	\$ 4.75
Rate Increase Percentage	8.00%	6.75%	5.50%	4.50%	4.00%	3.25%	3.00%	2.50%	2.25%	2.00%
Potable sales revenue	\$ 3,933,000	\$ 4,197,500	\$ 4,427,500	\$ 4,623,000	\$ 4,807,000	\$ 4,968,000	\$ 5,117,500	\$ 5,244,000	\$ 5,359,000	\$ 5,462,500
Total Sales Revenue	\$ 4,149,000	\$ 4,423,500	\$ 4,653,500	\$ 4,859,250	\$ 5,043,250	\$ 5,239,500	\$ 5,458,750	\$ 5,585,250	\$ 5,700,250	\$ 5,803,750
Repayment & Interest on Inter-Utility Loans	187,569	187,569	187,569	187,569	187,569	187,569	187,569	93,784	-	-
Interest on Utility Reserves	109,233	113,428	111,371	101,452	71,389	74,552	75,329	78,212	80,086	85,579
Bond Federal Subsidy	27,576	27,576	27,576	27,576	27,576	27,576	21,338	14,940	10,459	8,496
Econ Dev Fund/Ski Hill Reimb	2,000,000									
Federal or State Grant/Loan	1,271,000	964,000	850,000	261,000	1,167,000	838,000	820,000	721,000	1,042,000	600,000
Total Cash Inflow	7,744,378	5,716,073	5,830,016	5,436,847	6,496,784	6,367,197	6,562,986	6,493,186	6,832,794	6,497,824
R&R and Cash Flows										
Net Cash Flow	(3,455,936)	(137,092)	(661,316)	(2,004,207)	210,863	51,815	192,213	124,914	366,195	1,355,065
Cumulative Net Cash Flow	(3,455,936)	(3,593,028)	(4,254,344)	(6,258,552)	(6,047,689)	(5,995,874)	(5,803,661)	(5,678,747)	(5,312,552)	(3,957,487)
Cash Balance	7,561,856	7,424,764	6,763,448	4,759,240	4,970,103	5,021,918	5,214,131	5,339,045	5,705,240	7,060,305
Recommended Cash Balance	3,835,025	4,534,138	6,064,512	4,008,293	4,065,071	4,413,291	4,616,288	4,423,237	3,358,856	3,748,148

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Water Distribution

	BUDGET	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	1.50%	
Expenditure Forecast												
Supervision, Misc Direct Admin	184,778	187,550	190,363	193,218	196,117	199,058	202,044	205,075	208,151	211,273		
Hydrants	60,645	61,555	62,478	63,415	64,367	65,332	66,312	67,307	68,316	69,341		
Water Distribution	372,203	377,786	383,453	389,204	395,042	400,968	406,983	413,087	419,284	425,573		
Water Meters	634,691	700,000	700,000	225,000	228,375	231,801	235,278	238,807	242,389	246,025		
Interdepartmental Charges	330,744	335,705	340,741	345,852	351,040	356,305	361,650	367,075	372,581	378,169		
Administrative Division Allocation	805,686	528,345	536,270	544,314	552,478	560,766	569,177	577,715	586,380	595,176		
Cost of Water	2,650,500	2,828,750	2,983,750	3,115,500	3,239,500	3,348,000	3,448,750	3,534,000	3,611,500	3,681,250		
Capital	0	550,000	808,000	617,000	627,000	849,000	970,000	601,000	777,000	676,000		
Total Operation Expenses	5,039,246	5,019,690	5,197,054	4,876,504	5,026,919	5,162,230	5,290,193	5,403,065	5,508,601	5,606,807		
Total Capital Expenditures	0	550,000	808,000	617,000	627,000	849,000	970,000	601,000	777,000	676,000		
Total Expenditures	5,039,246	5,569,690	6,005,054	5,493,504	5,653,919	6,011,230	6,260,193	6,004,065	6,285,601	6,282,807		
Revenue Forecast												
kgal Sales	775,000	775,000	775,000	775,000	775,000	775,000	775,000	775,000	775,000	775,000		
Revenue per kgal	\$ 6.33	\$ 6.73	\$ 7.06	\$ 7.36	\$ 7.62	\$ 7.81	\$ 7.97	\$ 8.11	\$ 8.23	\$ 8.35		
Rate Increase Percentage	8.00%	6.25%	5.00%	4.25%	3.50%	2.50%	2.00%	1.75%	1.50%	1.50%		
Total Sales Revenue	4,905,750	5,212,359	5,472,977	5,705,579	5,905,274	6,052,906	6,173,964	6,282,008	6,376,239	6,471,882		
Interest on Utility Reserves	9,161	7,870	3,092	-	-	3,541	4,712	3,988	8,724	10,729		
Revenue on Recoverable Work	30,450	30,907	31,370	31,841	32,319	32,803	33,295	33,795	34,302	34,816		
Total Cash Inflow from Operations	4,945,361	5,251,136	5,507,439	5,737,420	5,937,593	6,089,251	6,211,971	6,319,791	6,419,264	6,517,427		
R&R and Cash Flows												
Net Cash Flow												
Cumulative Net Cash Flow	(93,885)	(318,554)	(497,615)	243,916	283,674	78,021	(48,222)	315,726	133,663	234,620		
	(93,885)	(412,439)	(910,054)	(666,138)	(382,464)	(304,443)	(352,665)	(36,939)	96,725	331,345		
Cash Balance	524,661	206,107	(291,507)	(47,591)	236,083	314,104	265,881	581,608	715,271	949,891		
Recommended Cash Balance	1,744,373	1,903,470	1,723,652	1,507,502	1,742,709	1,877,115	1,521,722	1,711,533	1,624,550	1,762,779		

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Water Distribution

Rates												
Commodity rate per kgal												
Residential Tier 1 - < 9,000 gals	4.98	5.29	5.55	5.79	5.99	6.14	6.26	6.37	6.47	6.57		
Residential Tier 2 - 9 to 15,000 gals	5.29	5.62	5.90	6.15	6.37	6.53	6.66	6.78	6.88	6.98		
Residential Tier 3 - > 15,000 gals	6.32	6.71	7.05	7.35	7.61	7.80	7.96	8.10	8.22	8.34		
Multi-Family Tier 1 - < 9,000 gals	4.98	5.29	5.55	5.79	5.99	6.14	6.26	6.37	6.47	6.57		
Multi-Family Tier 2 - 9 to 15,000 gals	5.23	5.55	5.83	6.08	6.29	6.45	6.58	6.70	6.80	6.90		
Multi-Family Tier 3 - > 15,000 gals	5.35	5.68	5.96	6.21	6.43	6.59	6.72	6.84	6.94	7.04		
Commercial All Tiers	4.98	5.29	5.55	5.79	5.99	6.14	6.26	6.37	6.47	6.57		
County & Schools All Tiers	4.98	5.29	5.55	5.79	5.99	6.14	6.26	6.37	6.47	6.57		
Customer Charge per Meter Size												
= or < 1.25"	9.42	10.01	10.51	10.96	11.34	11.62	11.85	12.06	12.24	12.42		
1.5"	29.84	31.71	33.30	34.72	35.94	36.84	37.58	38.24	38.81	39.39		
2"	44.55	47.33	49.70	51.81	53.62	54.96	56.06	57.04	57.90	58.77		
2.5" to 3"	87.91	93.41	98.08	102.25	105.83	108.48	110.65	112.59	114.28	115.99		
4"	149.69	159.04	166.99	174.09	180.18	184.68	188.37	191.67	194.55	197.47		
6"	316.01	335.76	352.55	367.53	380.39	389.90	397.70	404.66	410.73	416.89		
8"	522.13	554.76	582.50	607.26	628.51	644.22	657.10	668.60	678.63	688.81		

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Water Fund Cash Reserve Analysis

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
WATER DIST & PROD CASH RESERVES										
Combined Cash Balance DW & WP *	5,955,461	5,499,815	4,340,884	2,580,593	3,075,130	3,204,965	3,348,956	3,789,596	4,289,455	5,879,140
Recommended Cash Balance (DW)	1,744,373	1,903,470	1,723,652	1,507,502	1,742,709	1,877,115	1,521,722	1,711,533	1,624,550	1,762,779
Recommended Cash Balance (WP)	3,835,025	4,534,138	6,064,512	4,008,293	4,065,071	4,413,291	4,616,288	4,423,237	3,358,856	3,748,148
Recommended Cash Balance	5,579,398	6,437,607	7,788,164	5,515,795	5,807,780	6,290,406	6,138,010	6,134,770	4,983,407	5,510,926
TARGET RESERVE BALANCES										
Debt Service Reserve	235,735	271,610	296,354	319,015	326,175	624,275	636,639	531,435	385,374	410,451
Operations Reserve	3,028,663	2,896,747	2,929,141	2,724,521	2,759,582	2,795,168	2,831,289	2,867,951	2,905,163	2,942,933
Capital Expenditures Reserve	1,565,000	2,508,000	3,790,000	1,688,000	1,926,000	2,063,000	1,850,000	1,903,000	848,000	1,300,000
Contingency Reserve	750,000	761,250	772,669	784,259	796,023	807,963	820,082	832,384	844,869	857,542
	5,579,398	6,437,607	7,788,164	5,515,795	5,807,780	6,290,406	6,138,010	6,134,770	4,983,407	5,510,926
RESERVE BALANCE FORECAST										
Debt Service Reserve	235,735	271,610	296,354	319,015	326,175	624,275	636,639	531,435	385,374	410,451
Operations Reserve	3,028,663	2,896,747	2,929,141	2,261,578	2,748,955	2,580,690	2,712,317	2,867,951	2,905,163	2,942,933
Capital Expenditures Reserve	1,565,000	2,331,457	1,115,389	-	-	-	-	390,210	848,000	1,300,000
Contingency Reserve	750,000	-	-	-	-	-	-	-	150,918	857,542
Total Cash Remaining	376,063	-	-	-	-	-	-	-	-	368,214

* Cash balance doesn't include WTB funding or WTB-funded projects

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018-FY2027
Wastewater Division

1.50%

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
EXPENSE FORECAST										
WASTEWATER COLLECTION										
Supervision, Misc Direct Admin	230,375	233,831	237,338	240,898	244,512	248,179	251,902	255,681	259,516	263,409
Wastewater Collection Operations	367,602	373,116	378,713	384,394	390,160	396,012	401,952	407,981	414,101	420,313
Sewer Lift Stations	275,214	279,342	283,532	287,785	292,102	296,483	300,931	305,444	310,026	314,677
Total WWC Operations Expenses	873,191	886,289	899,583	913,077	926,773	940,675	954,785	969,107	983,643	998,398
WASTEWATER TREATMENT										
LA WWTP Operations & Maintenance	869,508	882,550	895,788	909,225	922,864	936,707	950,757	965,019	979,494	994,186
WR WWTP Operations & Maintenance	448,592	455,321	462,151	469,083	476,119	483,261	490,510	497,868	505,336	512,916
Total WWT Operations Expenses	1,318,100	1,337,871	1,357,939	1,378,308	1,398,983	1,419,968	1,441,267	1,462,886	1,484,830	1,507,102
Interdepartmental Charges	590,289	599,143	608,130	617,252	626,511	635,909	645,448	655,129	664,956	674,931
Administrative Division Allocation	835,197	439,495	446,088	452,779	459,571	466,464	473,461	480,563	487,772	495,088
Debt Service (WWT)	1,155,799	1,155,799	1,155,799	2,236,725	2,236,725	2,236,625	2,236,726	2,142,941	2,049,156	2,049,156
Capital	50,000	753,000	1,049,000	561,000	583,000	652,000	415,000	810,000	643,000	1,029,000
Capital Paid with WTB Loan				17,774,000						
Total Operations Expenses	4,772,576	4,418,597	4,467,540	5,598,142	5,648,563	5,699,640	5,751,686	5,710,626	5,670,357	5,724,674
Total Capital Expenditures	50,000	753,000	1,049,000	18,335,000	583,000	652,000	415,000	810,000	643,000	1,029,000
Total Cash Outflow	4,822,576	5,171,597	5,516,540	23,933,142	6,231,563	6,351,640	6,166,686	6,520,626	6,313,357	6,753,674
REVENUE FORECAST										
<i>Mgal Processed</i>										
Res'l Single-Family Flat Rate Customers	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000
Res'l Single Family Flat Rate	6,629	6,629	6,629	6,629	6,629	6,629	6,629	6,629	6,629	6,629
Res'l Single-Family Service Charge	37.18	40.15	42.66	44.79	46.69	48.32	49.53	50.52	51.40	52.17
	10.27	11.09	11.78	12.37	12.90	13.35	13.68	13.95	14.19	14.40
Rate Increase Percentage	8.00%	8.00%	6.25%	5.00%	4.25%	3.50%	2.50%	2.00%	1.75%	1.50%
Total Revenue from Res'l SF Flat Rate	3,736,807	4,035,279	4,287,287	4,501,494	4,692,863	4,856,668	4,977,947	5,077,175	5,165,378	5,242,555

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018-FY2027
Wastewater Division

1.50%

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
Res'l Multi-Family Flat Rate Customers	75	75	75	75	75	75	75	75	75	75
Res'l Multi-Family Service Charge	10.27	11.09	11.78	12.37	12.90	13.35	13.68	13.95	14.19	14.40
No. of Res'l Multi-Family Dwelling Units	1,585	1,585	1,585	1,585	1,585	1,585	1,585	1,585	1,585	1,585
Res'l Multi-Family Flat Rate	30.97	33.45	35.54	37.32	38.91	40.27	41.28	42.11	42.85	43.49
Rate Increase Percentage	8.00%	8.00%	6.25%	5.00%	4.25%	3.50%	2.50%	2.00%	1.75%	1.50%
Total Revenue from Res'l MF Flat Rate	562,395	607,428	645,378	677,702	706,578	731,273	749,610	764,678	778,111	789,731
Non-Residential Customers	291	291	291	291	291	291	291	291	291	291
Non-Residential Service Charge	10.27	11.09	11.78	12.37	12.90	13.35	13.68	13.95	14.19	14.40
Non-Residential Sales in Kgal	47,522	47,427	47,332	47,237	47,143	47,049	46,955	46,861	46,767	46,673
Adjustment Factor	16.00%	8.00%	1.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Non-Residential Sales in Kgal	55,126	51,221	48,160	47,237	47,143	47,049	46,955	46,861	46,767	46,673
Non-Res'l Commodity Charge per Kgal	17.50	18.90	20.08	21.08	21.98	22.75	23.32	23.79	24.21	24.57
Rate Increase Percentage	8.00%	8.00%	6.25%	5.00%	4.25%	3.50%	2.50%	2.00%	1.75%	1.50%
Total Revenue from Non-Residential	970,543	976,601	977,951	1,007,792	1,048,812	1,083,466	1,108,469	1,128,623	1,146,326	1,161,139
Total Sales Revenue	5,269,745	5,691,324	6,047,032	6,349,384	6,619,232	6,850,905	7,022,178	7,162,622	7,287,968	7,397,287
Interest on Utility Reserves	13,516	10,192	18,141	292,980	33,619	39,938	48,026	61,579	72,132	87,833
Bond Issue Proceeds	-	-	17,774,000	-	-	-	-	-	-	-
Revenue on Recoverable Work	-	-	-	-	-	-	-	-	-	-
Total Cash Inflow	5,283,261	5,701,516	23,839,173	6,642,364	6,652,851	6,890,843	7,070,204	7,224,200	7,360,100	7,485,120
Net Cash Flow	460,685	529,919	18,322,633	(17,290,778)	421,288	539,203	903,518	703,574	1,046,743	731,446
Cumulative Net Cash Flow	460,685	990,604	19,313,236	2,022,458	2,443,746	2,982,948	3,886,466	4,590,040	5,636,783	6,368,229
Cash Balance	679,461	1,209,380	19,532,012	2,241,234	2,662,522	3,201,724	4,105,242	4,808,816	5,855,559	6,587,005
Recommended Cash Balance	4,067,187	4,191,448	3,733,249	4,866,421	4,966,121	4,760,182	5,186,911	4,958,229	5,283,029	5,037,102

Los Alamos County Utilities Department
10-Year Financial Forecast - FY2018 through FY2027
Wastewater Fund Cash Reserve Analysis

WASTEWATER UTILITY CASH RESERVES										
BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027	
679,461	1,209,380	1,758,012	2,241,234	2,662,522	3,201,724	4,105,242	4,808,816	5,855,559	6,587,005	
4,067,187	4,191,448	3,733,249	4,866,421	4,966,121	4,760,182	5,186,911	4,958,229	5,283,029	5,037,102	
TARGET RESERVE BALANCES										
Debt Service Reserve	1,155,799	1,155,799	2,236,725	2,236,725	2,236,625	2,236,726	2,142,941	2,049,156	2,049,156	
Operations Reserve	1,808,389	1,631,399	1,655,870	1,705,919	1,731,508	1,757,480	1,783,843	1,810,600	1,837,759	
Capital Expenditures Reserve	753,000	1,049,000	561,000	652,000	415,000	810,000	643,000	1,029,000	750,000	
Contingency Reserve	350,000	355,250	360,579	371,477	377,049	382,705	388,446	394,272	400,186	
	4,067,187	4,191,448	4,866,421	4,966,121	4,760,182	5,186,911	4,958,229	5,283,029	5,037,102	
RESERVE BALANCE FORECAST										
Debt Service Reserve	679,461	1,155,799	2,236,725	2,236,725	2,236,625	2,236,726	2,142,941	2,049,156	2,049,156	
Operations Reserve	-	53,581	4,509	425,797	965,100	1,757,480	1,783,843	1,810,600	1,837,759	
Capital Expenditures Reserve	-	-	-	-	-	111,036	643,000	1,029,000	750,000	
Contingency Reserve	-	-	-	-	-	-	239,033	394,272	400,186	
Total Cash Remaining	-	-	-	-	-	-	-	572,530	1,549,903	

* Cash balance doesn't include bond funding or bond funded projects

Los Alamos County Department of Public Utilities
10-Year Financial Forecast - FY2018 - FY1027
Customer Impact

Projected Average Bill for Residential

	ELECTRIC 500 kwh	GAS 75 therms (assumes \$0.30 variable)	WATER 6,000 gal	SEWER	Total (excludes refuse)	Total % annual Increase	Total cumulative % Increase
FY2017	\$69.60	\$49.25	\$36.38	\$43.94	\$199.17		
FY2018	\$69.60	\$47.75	\$39.29	\$47.46	\$204.10	2.47%	2.47%
FY2019	\$70.64	\$47.75	\$41.75	\$51.25	\$211.39	3.57%	6.14%
FY2020	\$71.70	\$47.75	\$43.83	\$54.45	\$217.74	3.00%	9.32%
FY2021	\$72.78	\$47.75	\$45.70	\$57.18	\$223.40	2.60%	12.17%
FY2022	\$73.87	\$47.75	\$47.30	\$59.61	\$228.52	2.29%	14.74%
FY2023	\$74.98	\$47.75	\$48.48	\$61.69	\$232.90	1.92%	16.94%
FY2024	\$76.10	\$47.75	\$49.45	\$63.24	\$236.54	1.56%	18.76%
FY2025	\$77.25	\$47.75	\$50.31	\$64.50	\$239.81	1.38%	20.40%
FY2026	\$78.40	\$47.75	\$51.07	\$65.63	\$242.85	1.27%	21.93%
FY2027	\$79.58	\$47.75	\$51.83	\$66.61	\$245.78	1.21%	23.40%

Utility Expense as a Percentage of Income

	Total Bill for Average Household	Los Alamos Median Household Income	Assumed Annual Income Increase	Percentage Needed to Pay Utility Bill
FY2017	\$199.17	\$105,989		2.25%
FY2018	\$204.10	\$108,639	2.5%	2.25%
FY2019	\$211.39	\$111,355	2.5%	2.28%
FY2020	\$217.74	\$114,139	2.5%	2.29%
FY2021	\$223.40	\$116,992	2.5%	2.29%
FY2022	\$228.52	\$119,917	2.5%	2.29%
FY2023	\$232.90	\$122,915	2.5%	2.27%
FY2024	\$236.54	\$125,988	2.5%	2.25%
FY2025	\$239.81	\$129,137	2.5%	2.23%
FY2026	\$242.85	\$132,366	2.5%	2.20%
FY2027	\$245.78	\$135,675	2.5%	2.17%

Los Alamos County Department of Public Utilities
Fiscal Year 2018 Budget
Cash Investment Budget

	FY2016 ACTUAL	FY2017 ADOPTED BUDGET	FY2018 1ST YEAR BUDGET	FY2018 PROPOSED BUDGET
EP Cash & Investments - UNRESTRICTED	7,602,785	6,960,245	6,760,192	3,759,966
EP Cash & Investments - RESTRICTED	11,630,049	10,206,109	10,433,509	13,369,416
EP Cash & Investments - TOTAL	19,232,834	17,166,354	17,193,701	17,129,382
ED Cash & Investments - UNRESTRICTED	(7,887,776)	(5,960,945)	(5,715,751)	(2,119,944)
ED Cash & Investments - RESTRICTED	8,848,967	1,388,292	1,388,292	2,812,914
ED Cash & Investments - TOTAL	961,191	(4,572,653)	(4,327,458)	692,970
GAS Cash & Investments - UNRESTRICTED	6,397,463	6,078,231	5,790,829	6,394,246
GAS Cash & Investments - RESTRICTED	-	-	-	-
GAS Cash & Investments - TOTAL	6,397,463	6,078,231	5,790,829	6,394,246
DW Cash & Investments - UNRESTRICTED	637,389	1,417,326	1,281,209	430,776
DW Cash & Investments - RESTRICTED	-	-	-	-
DW Cash & Investments - TOTAL	637,389	1,417,326	1,281,209	430,776
WP Cash & Investments - UNRESTRICTED	10,294,284	7,277,625	7,477,423	4,177,581
WP Cash & Investments - RESTRICTED	179,962	192,838	192,838	192,838
WP Cash & Investments - TOTAL	10,474,246	7,470,464	7,670,261	4,370,420
WW Cash & Investments - UNRESTRICTED	(539,199)	154,834	360,264	(381,019)
WW Cash & Investments - RESTRICTED	1,362,985	1,362,985	1,362,985	1,362,985
WW Cash & Investments - TOTAL	823,786	1,517,818	1,723,248	981,965
DPU TOTAL Cash & Investments - UNRESTRICTED	16,504,946	15,927,316	15,954,166	12,261,606
DPU TOTAL Cash & Investments - RESTRICTED	22,021,963	13,150,225	13,377,625	17,738,153
DPU TOTAL Cash & Investments - TOTAL	\$ 38,526,908	\$ 29,077,541	\$ 29,331,790	\$ 29,999,759

Los Alamos County Department of Public Utilities
Rate History - Residential

ELECTRIC					
Date Adopted	Commodity Rate per kwh	Service Charge	Average Residential @ 500 kwh		
					%
2/17/15	0.1152	12.00	69.60		20.4%
12/17/13	0.1028	6.43	57.83		8.0%
2/22/11	0.0952	5.95	53.55		5.0%
9/9/08	0.0907	5.67	51.02		

GAS					
Date Adopted	Commodity Rate per Therm	Service Charge	Average Residential @ 75 therms		
					%
9/27/2016	.23 per therm + variable rate for gas	9.50	48.50		-21.8%
<i>Note: assumes .29 variable for FY17</i>					
11/5/2013	.29 per therm + variable rate for gas	9.50	62.00		22.2%
<i>Note: assumes .41 variable for FY16</i>					
1/25/11	0.5500	9.50	50.75		-18.1%
11/17/09	0.7000	9.50	62.00		-17.8%
11/24/06	0.9200	6.43	75.43		

WATER					
Date Adopted	Commodity Rate per 1,000 gal	Service Charge	Average Residential @ 6,000 gal		
					%
BUD	4.98	9.42	39.29		8.0%
9/27/16	4.61	8.72	36.38		10.0%
7/8/14	4.19	7.93	33.07		1.2%
7/5/11	4.19	7.55	32.69		4.8%
3/23/10	3.95	7.50	31.20		6.3%
4/20/99	3.72	7.02	29.34		

SEWER					
Date Adopted	Commodity Rate per 1,000 gal	Service Charge	Customer Charge	Average Residential	%
BUD		35.46	9.80	45.26	8.0%
7/1/16		34.43	9.51	43.94	8.0%
7/1/15		31.88	8.81	40.69	8.0%
7/1/14		29.52	8.16	37.68	8.0%
7/1/13		27.33	7.56	34.89	8.0%
2/26/13		25.31	7.00	32.31	-15.2%
<i>Note: Prior to flat rate, calcs based on 4,000 gallons</i>					
8/2/11	5.89	14.52		38.08	10.1%
11/17/09	5.35	13.20		34.60	