BOARD OF PUBLIC UTILITIES

ADDITIONAL MEETING DOCUMENTS

Additional or revised information or documents are often passed out to the Board at the meetings. Whenever possible, this informational cover page will accompany those documents.

MAKE 20 COPIES OF ANY DOCUMENTS, INCLUDING THIS COVER SHEET, AND RETURN TO JAIME KEPHART PRIOR TO THE MEETING.

MEETING DATE	02/15/2017
AGENDA ITEM	4.G.2 Review of Department of Public Utilities Quarterly Report
DOCUMENT TITLE(S)	Quarterly Report
FROM	Tim Glasco
NEW OR REVISED? **Is this a revision that is different than what was in the agenda packet or is it something entirely new?**	New
RECOMMENDED ACTION **If you have a new or revised recommended motion for the Board, enter it here.**	**N/A**
ADDITIONAL INFORMATION **Please VERY BRIEFLY explain the purpose of this information or document.**	At the time of agenda publication, the quarterly report was not yet ready.

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LOS ALAMOS
Department of Public Utilities

Electric, Gas, Water, and Wastewater Services

QUARTERLY PERFORMANCE / QR 02 FY 17

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Table of Contents


U.S.A.
ELECTRIC
ALHAMBRA FOUNDRY CO. LTD.

MANAGER STATEMENT

Timothy A. Glasco
Utilities Manager

This quarter saw extensive activity at the Department of Public Utilities. First, on October 15 we sponsored a Home Efficiency Tour in Los Alamos in cooperation with the Pajarito Environmental Education Center. The tour was well attended and participants were highly complementary of the homes on display. This was an opportunity to showcase the many ingenious energy and water savings measures Los Alamos residents have incorporated into their homes.

At the October and November Utilities Board meetings, Deputy Utilities Manager for GWS Jack Richardson presented an in-depth condition assessment of our water distribution infrastructure, its renewal and replacement needs, and an estimate of the rates that will be necessary to address those concerns.

The first public meeting presenting the draft Long-Range Water Supply Plan was held on November 15. Follow up meetings were held before the Board of Public Utilities and the County Council. Public, Council and Board comments were collected at those meetings and will be incorporated into the final Plan, expected late in the 3rd Quarter.

Also in November, a presentation was made before the Board on a recommended Value of Solar tariff. The recommendation basically

was for a “buy all/sell all” method of handling citizen-owned distributed generation resources, with the solar energy generated paid for at the value of solar tariff at approximately $0.08/kwh. Staff will be evaluating the recommendation and bringing a revised rate ordinance back to the Board for their consideration in the fall of 2017.

The biennial employee satisfaction survey was completed and the results reviewed by DPU Senior Staff. There appeared to be a wide disparity in sentiments between different groups within the DPU. In order to address some of the concerns raised, an employee focus group was formed with representatives of each division in the Department. The County's human resource department provided a facilitator for the meetings. A final report and recommendations from the group should be ready in the 3rd quarter.

The County is considering a next-generation nuclear facility to add to its electric generation portfolio.

Through DPU's membership with the Utah Associated Municipal Power Systems, the County is considering a next-generation nuclear facility to add to its electric generation portfolio. Public education about the county's possible participation in the Carbon Free Power Project which utilizes small modular reactors began on December 1. NuScale, the company developing the reactors, made a presentation on the technical aspects of the proposed generation plant to an audience of approximately 70 citizens. Many questions were answered by the panel speakers: Dasari V. Rao, Program Director, Civilian Nuclear Power Office with the Los Alamos National Laboratory; Mike McGough, Chief Commercial Officer with NuScale Power; Doug Hunter, Chief Executive Officer and General Manager with Utah Associated Municipal Power Systems; and Steve Cummins Deputy Utilities Manager - Electric Production with DPU. A second meeting to discuss mainly the business/financial aspects of the project is scheduled for January, 2017.

Approximately 70 citizens attended a December 1, 2016 Public Meeting on Small Modular Reactor technology.

DEPARTMENT OF PUBLIC UTILITIES

Established under Article 5 of the 1968 Charter for the Incorporated County of Los Alamos, the DPU falls under the jurisdiction of the Board of Public Utilities.

County-owned, DPU provides Los Alamos County with electric, natural gas, water and wastewater services.

Mission

Provide safe and reliable utility services in an economically and environmentally sustainable fashion.

Vision

Be a high-performing utility matched to our community, contributing to its future with diversified and innovative utility solutions.

Values

We value our:

- **CUSTOMERS** by being service-oriented and fiscally responsible;
- **EMPLOYEES AND PARTNERSHIPS** by being a safe, ethical and professional organization that encourages continuous learning;
- **NATURAL RESOURCES** through innovative and progressive solutions; and
- **COMMUNITY** by being communicative, organized and transparent.

Strategic Objectives

Achieve & sustain measurable performance excellence
- 2025 receive a Malcolm Baldrige award for quality
- 2030 unaccounted for water down to 2%
- 2035 sewer overflow per mile of pipe will be less than half of the national average

Achieve excellence in customer satisfaction & loyalty
- Customer satisfaction mean rating of $\geq$ 3.5 on a 1 - 4 scale and a net promoter score (NPS) $\geq$ the industry benchmark

Achieve excellence in employee satisfaction
- Employee satisfaction mean rating of $\geq$ 4 on a 1 - 5 scale

Achieve environmental sustainability
- 2040 be a carbon neutral electric provider
- Promote electrical energy efficiency through targeted energy conservation programs
- 2050 reduce per capita per day potable water use by 12%
- 2030 reduce energy use by 3% for Los Alamos customers as measured by therms per capita per heating degree day through education efforts on improving energy efficiency
- 2020 provide class 1A effluent water in White Rock

Achieve & maintain excellence in financial performance
- Utilize revenues to sustain a high level of service as evidenced by high customer service ratings
- Conduct cost of service studies for each utility at least every 5 years

Develop & strengthen partnerships with stakeholders
- Initiate communications annually with stakeholder to identify potential partnering opportunities that are mutually beneficial
- Initiate communications annually with stakeholder to strengthen existing partnerships

In 2012, the Board of Public Utilities adopted a safety culture vision:

- Safety is first
- Lead by example
- Establish and enforce a high standard of work performance
- Brief or tail-gate before every job
- Empower all employees to make work and safety suggestions

Thank You

Paul Trujillo

Utilities Manager Tim Glasco congratulates and thanks Paul Trujillo for twenty-five years of dedicated service to the Gas, Water and Sewer Division. Extremely knowledgeable of all three utility services - gas, water and sewer - Paul's co-workers describe him has reliable, trustworthy, and patient. DPU customers routinely praise Paul for his excellent customer service skills. Thank you Paul!

ELECTRIC DISTRIBUTION UPDATE

Los Alamos Switchgear Substation

In the 2nd quarter, DPU staff continued negotiations with the Department of Energy for an easement to install the new Los Alamos Switchgear Substation (LASS). The site under discussion is between the County's Eco Station and the entrance to the Los Alamos National Laboratory just off of East Jemez Road. The New Mexico Environment Department approved DPU's plan to construct an above-ground duct bank with berms across the landfill. Additionally, the Board of Public Utilities and County Council voted to begin the prefabrication of the LASS substation to be delivered within eight months.

Bandelier National Monument Electric Upgrades

DPU has been working with Bandelier's contractor to install a new three-phase primary from the Bandelier entrance throughout the park and into Frijoles Canyon. The fairly extensive project began mid-November and is expected to be completed in May 2017. Once the project concludes, the DPU will take over the operations and maintenance of the system. The $4.2 million project is 50 percent complete and consists of approximately two miles of buried underground power lines with other electrical devices.

In-house Electric Work on San Ildefonso on North Mesa

In-house crews have been trenching a section of San Ildefonso Road between North Mesa and Hawk Road. They will replace a direct bury cable with conduit and pull a new electric cable to complete electric upgrades to North Mesa.
In the past year, DPU crews have replaced underground direct bury electric lines on Sioux, Big Rock Loop, and

Electric Lineman undertaking system upgrades on the electric distribution system.

Tsankawi. Crews will schedule an electric outage in either spring or summer to tie-in the newest line on San Ildefonso Road. DPU will give customers advance notice of the planned outage.

Tree Trimming Activities

DPU continued its tree trimming program throughout the Los Alamos townsite. Maintaining proper clearances around electric lines and equipment helps DPU mitigate outages. Many dead and leaning trees were cut, clearing approximately ten miles of distribution lines of potential vegetation hazards.

2016 System Improvement Award

DPU received a System Improvement Award on December 21 at the 2016 Member Meeting of the Utah Associated Municipal Power Systems (UAMPS) in Salt Lake City.

The System Improvement Award recognizes members of the Utah Associated Municipal Power Systems (of which DPU is one) for undertaking system upgrades, capital improvements and preventive maintenance measures to modernize facilities, improve system reliability, reduce losses, reduce outage times or improve power quality.

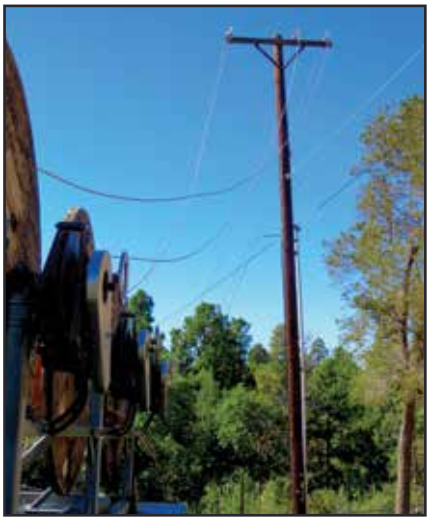
DPU greatly improved its electrical system reliability over a number of years, reducing outage times with a focused team approach. The system average interruption duration index dropped from 300 minutes in 2008-2009 to only 23 minutes in December 2016. The effort has required

involvement by field personnel, engineering, finance and management.

DPU received a System Improvement Award on December 21 at the 2016 Member Meeting of the Utah Associated Municipal Power Systems (UAMPS) in Salt Lake City.

Rafael De La Torre
Deputy Utility Manager
Electric Distribution

Utah Associated Municipal Power Systems (UAMPS) presented DPU in December with a 2016 System Improvement Award for lowering its SAIDI from 300 minutes to below 19 minutes.



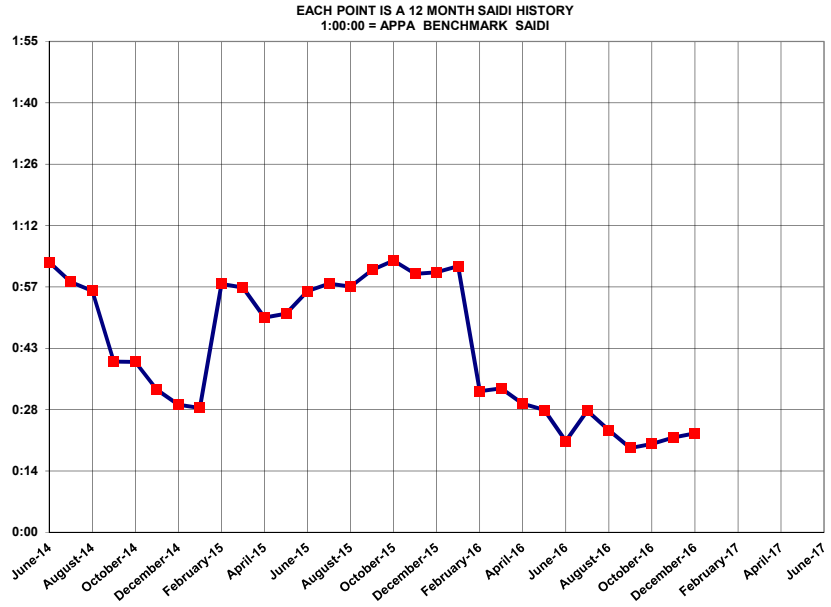
Temporary Removal of Lines for the Canyon Rim Trail Bridge

Last fall DPU electric crews temporarily removed power lines to permit two large cranes on either side of the canyon to install the new Canyon Rim trail bridge. Crews also relocated one pole.

ELECTRIC DISTRIBUTION UPDATE

Improving system reliability and reducing outage times became a primary focus for the Los Alamos Department of Public Utilities (DPU) in 2008. The system average interruption duration index (SAIDI) had risen to an all-time high, exceeding 300 minutes as the annual average time that a DPU customer could expect to be without power. Accordingly, DPU set a goal in 2008 to reduce its SAIDI to below 60 minutes. As of December 2016 DPU successfully reduced its SAIDI to 23 minutes (well below its goal).

System Average Interruption Duration Index



Distributed Generation Resources

29kW

New Distributed Generation Resources

Six residential customers added a total of 29.07 kW of distributed generation on to DPU's electric distribution grid during the 2nd quarter.

521kW

Total Distributed Generation Resources

As of the 2nd quarter, distributed generation resources totaled 520.966 kW.

Residential systems totaled 358.536 kW and commercial systems totaled 162.43 kW.

30kW

Pending Distributed Generation Resources

Six residential customers are currently in the process of adding 30.513 kW systems on the electric distribution grid. This will bring the total distributed generation resources to 551.479 kW

GAS, WATER, SEWER & WASTEWATER

The 2nd quarter was an unseasonably warm fall. The first frost did not occur until November. As a result, gas sales were down significantly when compared to average 2nd quarter gas sales. Gas, Water and Sewer (GWS) administration spent significant time developing the framework for improved forecasting of sewer collection and treatment volumes, or "sales," as well as wastewater system condition assessments. These new 20-year capital improvement programs (CIP) and forecasting models will be used to project sewer rates and system CIP possibilities into the future.

Gas, Water, Sewer (GWS)

A significant portion of the GWS crew has been concentrating on the installation of new meters and associated meter equipment and vaults for the non-potable water system this quarter. These new meters will ensure accurate water use numbers for both billing and environmental permitting reporting.

There were some difficulties with the manufacturer's supply of new potable water meters this quarter. A batch of new meters was supplied with defective batteries. The supplier offered free replacement meters, plus an order of additional meters at no cost in order to compensate GWS for the labor & equipment expenses associated with replacing those meters twice. Because of this difficulty, time was lost in the effort to change out water meters in White Rock; however, the plan is to emphasize the effort in the middle of next quarter and continue until all of White Rock has been changed out. The drop deadline for the completion of this effort is 30 June 2017.

An RFQ was published this quarter for the purchase of a new set of sewer video inspection equipment. The desired equipment will be a smaller package capable of being transported in a single vehicle (no trailer required). Further, it will be better suited for use in more remote, hard to reach portions of the sewer collection system. The final purchase should be completed next quarter.

Water Production

Jerome Martinez was hired full time as a new hire Trainee in Water Production this quarter. Jerome had worked with Water Production previously as a summer temporary laborer and did excellent work. We are glad to have him on board as a permanent full-time employee.

The pump in Pajarito Well #4 is vibrating and losing flow. To investigate, staff pulled the pump up from 1,500 feet below ground, in 20 foot sections. This process took about two weeks. Results of the pump inspection by the Water Production team are expected to be known by the next quarter.

The non-potable water system is shut down for the winter. Water Production staff is taking this opportunity to drain and clean the storage tank for the Bayo Booster Station.

Wastewater Treatment

Hiring of an engineering consultant to perform a value engineering study and final design for the White Rock wastewater treatment plant is delayed for one month. DPU is consulting with the Department of Energy/National Nuclear Security Administration in regard to options with the Los Alamos National Laboratory's (LANL) wastewater treatment plant. Specifically, should the LANL plant used for domestic wastewater, be abandoned and the wastewater piped to the new DPU White Rock wastewater treatment plant. Depending on the outcome of these discussions, activities for the White Rock wastewater treatment plant project will resume, moving toward design and ultimately construction.

Significant discussion and evaluation of required wastewater system infrastructure CIP needs and costs, as well as, the proposed cost of the new White Rock wastewater treatment plant, and how these things affect

sewer rates, will need to occur starting next quarter.

Meter Reading
Due to unanticipated delays in the implementation of the automated meter infrastructure (AMI) program, the meter reading crew has been returned to its original size of four meter readers and a supervisor. This crew size configuration is expected to remain in place until at least some significant portions of the AMI program have been implemented, tested and are fully functional. The meter reading crew is pleased to be back to full staff.

GWS administration spent significant time developing the framework for improved forecasting of sewer collection and treatment volumes, or "sales," as well as wastewater system condition assessments.

Jack Richardson
Deputy Utility Manager
GWS Division

ENGINEERING UPDATE

The Department of Public Utilities had two large capital improvement projects in progress through the quarter. Winter construction is difficult, but both of these projects used trenchless technologies that minimize excavation and the risk posed by snow and frozen ground. The White Rock Sanitary Sewer Trenchless Repair and Rehabilitation project replaced approximately 1,600 LF of sanitary wastewater collection pipelines with minimal excavation. A plastic liner was installed in the existing sewer lines through existing manholes. Only a minimum length of pipe was replaced by conventional trenching where structural repairs were needed. In addition, approximately 70 new service line cleanouts and 40 service line clean-out/ backflow assemblies were installed. Disruptions to traffic and affected residents were minimal. Even in situations where the contractor worked in residents' front lawns, inconveniences were kept to a minimum. The project was completed well within budgetary and time limitations (about $120,000 below contract amount). The savings were realized in service line replacements. Each existing service line was inspected by video camera to evaluate the condition before authorizing any work by the contractor. DPU planned about $100,000 for replacement of service lines, not knowing the actual condition during the design period. In the end, little or no service line replacements were needed. The main challenge faced by the contractor in this project was locating service lines. We found that service lines in the yard were routed in unpredictable locations. The contractor not only performed its work in a highly professional manner, but also made every effort to minimize site disruption and provided excellent customer service to residents.

Trenchless replacement and rehabilitation of sanitary wastewater collection pipes.

The second project is the East Road Gas and Electric Infrastructure Improvements, which included about 14,000 feet of gas pipelines and about 5,500 feet of 4-inch and 6-inch electric conduit and manholes along the NM 502 (East Road) corridor in the vicinity of the airport. A new 8-inch gas pipeline replaced an aging high-pressure steel pipeline that is vital for redundancy in the gas supply of Los Alamos. A new 4-inch gas line was installed to provide redundant low-pressure distribution for all of the Entrada Area businesses and Pajarito Cliffs campus. The project crossed NM 502 (East Road) in two locations. Horizontal directional drilling methods were used to install infrastructure at the crossings, therefore avoiding traffic disruptions or asphalt replacement. The project is scheduled to be completed in February 2017.

A revised 40-Year Water Plan was presented in draft form to the Board of Public Utilities and the County Council this quarter. Findings in the plan were presented at a public meeting held on November 15. The plan is currently being finalized and will incorporate input from the public, Board and Council. It will be presented for Board approval and Council adoption in February. Significant differences presented in the revised plan are adjustments to the projections for population growth and a trend

beginning in 2014 indicating reduced water use by Department of Public Utilities customers and Los Alamos National Laboratory.

The NM 502 reconstruction project, administered by the New Mexico Department of Transportation (NMDOT), is scheduled to be bid in February 2017. Engineering staff worked closely with the NMDOT team preparing the bid documents and pre-bid coordination. Construction

We replaced approximately 1,600 LF of sanitary wastewater collection pipelines with minimal excavation.

is scheduled to take place over a two-year period. In 2017 the focus of the work will be utility reconstruction and in 2018 the roadway will be completed. The Department of Public Utilities will be replacing water, gas, electric, county owned fiber optics and sewer infrastructure as part of the project.

James Alarid
Deputy Utility Manager
Engineering Division

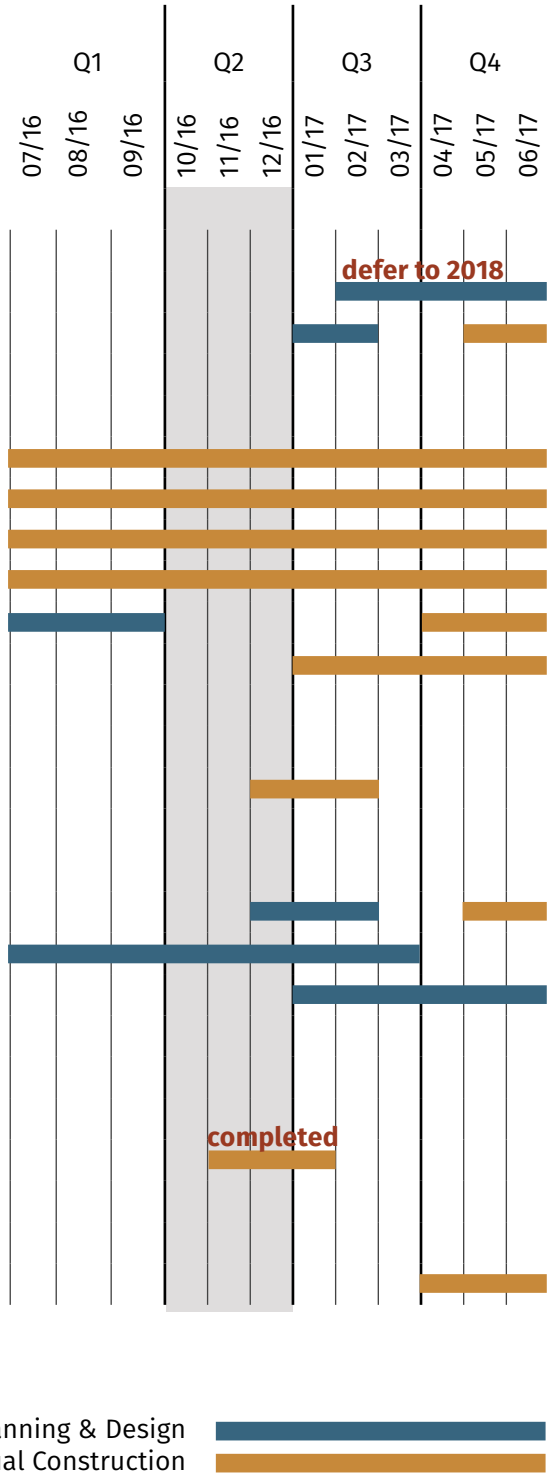
CAPITAL IMPROVEMENT

East Road Gas and Electric Infrastructure Improvements

This past winter a new 8-inch gas pipeline replaced a high-pressure steel pipeline along the East Road corridor near the airport. The new line is vital for redundancy in the gas supply of Los Alamos. In addition, conduit was included to expand and improve the electric distribution system.

FY17 CIP Projects

	Budgeted
Electric Production	**$505,000**
Abiquiu - Upgrade Controls	375,000
Abiquiu & El Vado - Replace Batteries	130,000
Electric Distribution	**$3,227,000**
WR - Replace Overhead System (Poles & Cross-arms)	313,000
LA - Replace Overhead System (Poles & Cross-arms)	314,000
WR - Replace Underground Resid. Dist. Segments	300,000
LA - Replace Underground Resid. Dist. Segments	300,000
Install New Los Alamos Substation (LASS)	1,000,000
Install New Feeders for Los Alamos Substation	1,000,000
Natural Gas Distribution	**$810,000**
Replace Steel Gas line - East Road	810,000
Water Production	**$5,644,400**
Replace NP Los Alamos Reservoir Pipeline (WTB)	644,400
Extend Potable Water Supply - Camp May (50% of $4M)	2,000,000
Install Otowi Well No. 2	3,000,000
Sewer Collection & Wastewater Totals	**$1,050,000**
Sewer Collection	
Rehabilitate VCP Sewer Mains - La Joya, Mimbres, Kayenta	150,000
Wastewater Treatment	
Engineering for New WR Wastewater Treatment Plant	900,000



Electric Production
Upgrade Abiquiu Controls

Install new software and hardware at the Abiquiu hydroelectric plant to integrate the controls of low-flow turbine and the two larger turbines into one process logic controller.

Budget: $375,000
Schedule: Defer to 2018

Electric Production
Replace Batteries

Replace the battery systems that supply the plant control systems at the Abiquiu and El Vado hydroelectric facilities.

Budget: $130,000
Schedule: Winter 2016/17

Electric Distribution
Replace Overhead System

Replace poles, cross-arms, and pole hardware including transformers. 3-phase backbone and areas with the most number of customers is the priority.

Budget WR: $313,000
Budget LA: $314,000
Schedule: Year round

Electric Distribution
Replace Underground Residential Distribution (URD)

Replace portions or segments of URD that have failed three or more times. Replace live-front transformers.

Budget WR: $300,000
Budget LA: $300,000
Schedule: Year round

Electric Distribution
Install New Los Alamos Substation

Install a new Los Alamos Substation (LASS) as a new utility source at the western edge of Los Alamos and greatly reduce thermal loading for TC1, TC2 and townsite distribution load feeders 13, 15, and 16.

Budget: $1,000,000
Schedule: Year round.

Electric Distribution
Install LASS Feeders

Install two new source feeders from LANL substation to power the new LASS. Install eight outgoing load feeders to power four townsite feeders and three LANL feeders that power LAC loads.

Budget: $1,000,000
Schedule: Year round.

Water Production
Replace Non-potable Waterline

Replace the 7,000 ft of 10-inch non-potable waterline from the LA Reservoir to West Road damaged by flooding.

Budget: $644,400 (60% grant/40% WTB Loan)
Schedule: Spring/Summer 2017.

Water Production
Extend Potable Water Supply

Extend the potable water supply to improve fire suppression and for current and future developments in the Camp May area. Costs shared under private-public partnership (50/50).

Budget: Total $4,000,000
Schedule: Fall 2017

Water Production
Design & Construct Water Well

Design and construct Otowi Well No. 2, a high yield well to supplement the drinking water supply.

Budget: $3,000,000
Schedule: Drill and develop in Summer 2017

Gas Distribution
Replace Steel Gas Line

Replace 7,300' of 8-inch high-carbon steel gas main on East Road, with 8" high density polyethylene pipe. Project supports the DPU loop feed master plan.

Budget: $810,00
Schedule: Winter 2016/2017

Wastewater Collection
Rehabilitate VCP Sewer Mains

Phase 2 - Rehabilitate VCP sewer mains on La Joya, Mimbres, and Kayenta as necessary to prevent root intrusion and malfunctions. Trenchless technology will be used.

Budget: $150,000
Schedule: Winter 2016/2017

Wastewater Treatment
New Water Resource Recovery Facility

Engineering services to replace the White Rock wastewater treatment facility with a new water resource recovery facility that produces high quality irrigation water for public spaces.

Budget: $900,000
Schedule: Winter 2016/2017

ELECTRIC PRODUCTION UPDATE

Integrated Resource Plan

The Department of Public Utilities contracted with Pace Global to develop an Integrated Resource Plan (IRP) to consider the viability of all the power generation resources available to the County based on a levelized cost of energy. The plan will consider all of the risks and benefits associated with each option while considering the Department's goal of being a carbon neutral electricity provider by 2040. The plan is scheduled to be completed in April 2017. This plan will help staff and members of the Board of Public Utilities and County Council make informed decisions on new or replacement generation resources to serve the County's power demands.

Carbon Free Power Project

One of several generation resource options available to Los Alamos County is to add a next-generation nuclear facility to the power generation portfolio. The Carbon Free Power Project (CFPP) utilizes small modular reactor technology and is to be sited at the Idaho National Laboratory.

Currently a Power Sales Agreement (PSA) and a budget for the next phase of the CFPP development is being prepared by the project management committee. The next phase will include all of the work necessary to complete the Combined Operating License Application (COLA) for the Nuclear Regulatory Commission's review. If the results of the County's IRP show the CFPP to be a viable option, staff will be seeking Board and Council approvals in May and June 2017 to participate in the next phase.

If the Board and Council approve DPU participating in this next phase, it will not preclude the County from taking advantage of several future off-ramps in the project, if it is determined that the project is no longer an economically viable option for this community.

Community Solar Garden

In December, DPU staff launched a community survey to gauge the public's interest in a community solar garden.

A community solar garden is an array of photovoltaic panels with multiple subscribers. The subscribers may purchase or lease one or more photovoltaic panels in the array, rather than install a photovoltaic system at their home. This could be advantageous for customers who live in areas that are not conducive to solar systems (such as apartments or homes shaded by trees), but still choose to invest in solar power.

Staff will use this information when soliciting proposals for the installation of a utility-scale solar array for the County. The DPU will request prospective developers to include a community solar garden option.

Abiquiu Hydroelectric Vent Shaft Leak

In July 2015 Los Alamos County's hydroelectric plant in Abiquiu was shut down because of a leak in the U.S. Army Corps of Engineers (USACE) vent shaft located within the bell chamber of the dam.

While executing repairs the USACE discovered additional areas within the vent shaft where the protective coating is compromised, resulting in extensive corrosion. The USACE, in collaboration with DPU, recommends installing a butterfly valve directly above the manway located near the bell chamber floor to allow the County to resume electric generation while repairs are completed to the remainder of the vent shaft.

The USACE hired a contractor to install the valves by the March 18, 2017 deadline, just in time for spring run-off. During the 2nd quarter the valves were ordered and are expected to be delivered by the 3rd quarter.

Boy Scouts visit Los Alamos County and DPU

DPU was honored to be visited by the Boy Scouts on December 12. After a discussion on the workings of local government with Councilor James Chrobocinski, DPU got

to explain all things energy. Where does our electricity come from, what challenges do we face, and where does the community want to be in the future? After an intelligent exchange, the scouts left with energy conservation kits.

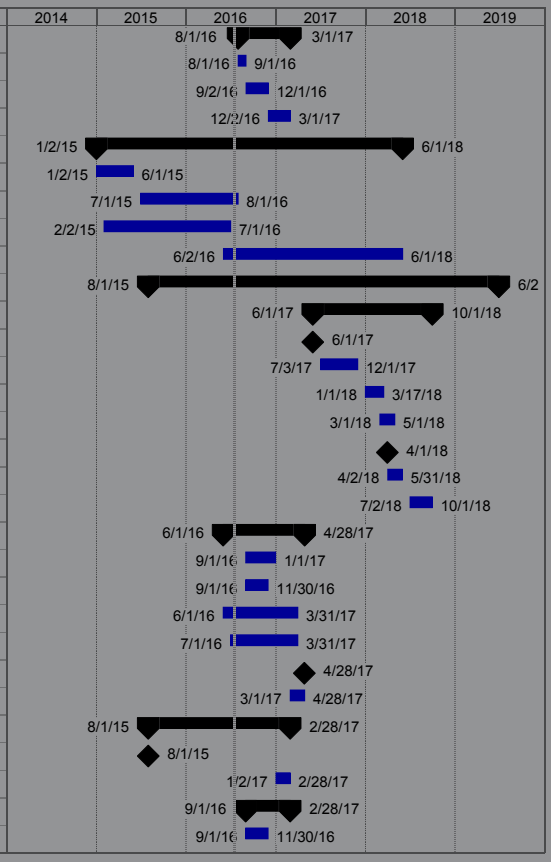
Pace Global is developing an Integrated Resource Plan to consider the viability of all the power generation resources available to the County based on a levelized cost of energy.

Steve Cummins
Deputy Utility Manager
Electric Production

A Boy Scouts troop visited Los Alamos County to learn about the workings of local government. We were honored that they stopped by the Department of Public Utilities to discuss challenges with providing the County with electricity.

FUTURE ENERGY RESOURCES

ID	Task Name
A	**A- Integrated Resource Plan (IRP)**
2	Prepare Outline (Goals and Objectives)
3	Prepare Draft Report
4	Prepare Final Report
5	**B- Studies**
6	LANL- Phase 1
7	LANL- Phase 2
8	SNL- Phase 1
9	SNL- Phase 2
10	**C - FEERR Recommendations (Projects 1 - 8)**
11	**1- San Juan Generating Station Project**
12	Get pricing and Fuel Supplier Ts&Cs for post 2022
13	Evaluate IRP's next best alternative
14	Establish Power Pool's position at LAPP meeting
15	Public outreach findings
16	Staff recommendation to Board and Council
17	Board/Council Decision as to when to exit
18	RFP (if appropriate) for asset's market value
19	**2- Carbon Free Power Project, Small Modular Reactor (UAMPS)**
20	Project financing options
21	Public outreach findings
B	Power Purchase Agreement with DOE/LANL
C	Transmission agreement with PAC
24	Power Purchase Agreement with CFPP
25	Board/Council Decision on project participation
26	**3- Identify Options for PV Array Property**
27	DOE/LANL's PV Feasibility Assessment NREL Final Report
28	Developers interest and estimated cost from project solicitation.
29	**4- Determine Community Interest in Solar Garden**
D	Survey results on public interest in solar garden and location preference



Note: While several of these projects will have durations up to 2040 this preliminary schedule only forecasts to 2019. This does not reflect major decisions that will alter the course for these projects past 2019.

The Future Energy Resources Committee prepared a July 2015 report to recommend future energy generation resources for the County. BPU adopted a majority of the recommendations in January and March 2016. DPU's plan to implement the BPU adopted policies are described in the preliminary schedule (above) and updates (below).

A Integrated Resource Plan

Pace Global was contracted on October 25, 2016.

The task is three months behind schedule. Initially DPU was working with LANL to develop consulting services for a joint IRP through the Electric Coordination Agreement. For several reasons this contract was not renewed so DPU made the decision to procure these services at DPU's expense (the cost of an IRP was approved in the FY2017 budget cycle). DPU continues to work with DOE-LANL on coordinating the near- and long-term planning with the goal of sharing resources for the benefit of both parties.

The draft report is currently expected to be completed by April 1, 2017. It will have sufficient detail for the BPU and Council to make informed decisions as to whether or not to proceed with the next phase of the Carbon Free Power Project - Perform the site characterization work necessary for a Combined Operating License Submittal to the Nuclear Regulatory Commission for review and approval.

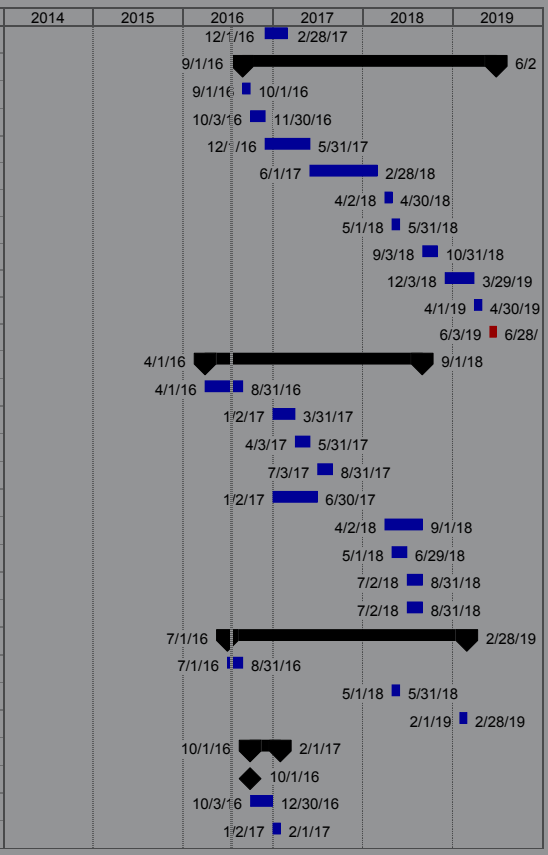
The IRP analysis, including BPU input, will be completed before making recommendations on long-term resources.

B Purchase Power Agreement

LANL submitted a white paper to the DOE Contracting Officer to request options for signing a 40-year Purchase Power Agreement with the County to participate in the Carbon Free Power Project (CFPP). DOE-LANL site office and the DOE Albuquerque contracting staff are communicating with DOE-Nuclear Engineering.

Kutak Rock attorney Seth Kirshenberg out of D.C. is working closely with the DOE Nuclear Energy Office on a contracting mechanism for DOE facilities to participate in the UAMPS CFPP over a 40-year term, potentially through the Western Area Power Administration. Kutak Rock delivered

ID	Task Name
31	Potential sites for a solar garden with terms and conditions
32	**5- Develop Electric Distribution Models**
33	Upload Distribution model from MilSoft
E	Develop engineering model with no-load (1a, 1b)
35	Attach connected load to engineering model (1c)7
36	Phase 1, Engineering Study (with connected KVA, 5.1 c)
37	Provide Phase 1 study results to customers
38	Staff recommendation to Utilities Board/Council Phase 1
39	Smart Meter Implementation/tie smart meters to transformers to MDMS Phase 2
40	Phase 2, Update Engineering Study with true smart meter data
41	Provide Phase 2 study results to cistomers; if necessary
42	Staff Recommendations to Utilities Board/Council Phase 2; if necessary
F	**6- Development of New Rate Structure**
44	Value of Solar Tariff w/o time of day considerations $15k
45	Development of "unbundled" cost of service tariffs for energy consumption
46	Public outreach on rate structure and AMI metering deployment $15k
47	Ordinance for adoption/Implementation of Unbundled rate structure
48	Contract for deployment of AMI metering $75k
49	Development of New Rate Structure with time of use considerations $250k
50	Public outreach on time of use rate structure $15k
51	Ordinance for adoption/Implementation of time of use rate structure
52	Deployment of AMI Metering completed $4.5M
53	**7- Update Rules and Interconnection Agreement**
G	Modify Rule E-5 and IA (not guaranteed rates/smart inverter rqmts.
55	Phase 1 Update Rule E-5 and IA to include PV limits by feeder
56	Phase 2 Update Rule E-5 and IA to include PV limits by feeder
57	**8- Dispatchable Loads**
58	Results of pilot project with OATI and Trane
59	DPU will present for a phased implementation plans to UB and CC
60	Propose purchase of DERMS



Note: While several of these projects will have durations up to 2040 this preliminary schedule only forecasts to 2019. This does not reflect major decisions that will alter the course for these projects past 2019.

a draft report in December.

C Transmission Agreement

Currently UAMPS has three participants in the Carbon Free Power Project (CFPP) that will need transmission through the PacifiCorp system. The transmission options available to the County and the concerns of potential major changes in transmission tariffs will greatly impact the CFPP economics for the County. DPU staff will work with industry experts to identify the risks associated with transmission for the CFPP and the most likely outcome.

D Community Solar Garden

DPU staff launched a short survey using the "Open Forum" instrument to gauge community interest in participating in a community solar garden. Results from the survey indicate there may be interest for approximately 300 kW. When DPU solicits proposals for a utility-scale solar array in the future, it will request that prospective developers include a community solar garden option.

E Develop Engineering Model

The electrical connectivity model database was installed in September. In November, a DPU employee attended a week-long Milsoft training session. This employee will edit and correct as necessary the electrical model database with no load.

F Value of Solar Tariff

On November 16 PU's consultant Utility Financial Solutions presented a value of solar study specific to Los Alamos County. His findings were that the peak demand for Los Alamos National Laboratory directly lines up with the peak time that solar panels generate electricity. Therefore, the value the solar offsets DPU expenses for residential customers is $0.08 and commercial customers is $0.09. Utilities Financial Solutions also recommended that DPU replace its net-metering program with a "buy all, sell all" formula to ensure DPU recovers all fixed costs equitable from all DPU customers.

G Modify Rule E-5 and IA

DPU engineering staff modified the DPU rules and regulations as it relates to the interconnection agreements. Staff took the modifications to the January Board of Public Utilities meeting.

FINANCE & ADMINISTRATION

Electric Operations

In a continuation of what was seen in FY16, electric sales were below budget for the 1st and 2nd quarters of FY17, both for retail customers and sales to DOE. Year-to-date KWh sales to DOE were 16.9 percent below the expected 307,112,000 KWh. Factoring in a retail variance that was 7.0 percent below budget, overall KWh sales for retail and DOE were 15.2 percent below budget.

In electric distribution, the 2nd quarter closed with year-to-date net operating revenues of $645,516. Capital expenditures totaled $1,404,353, which is about 39 percent of the $3.5 million budgeted for FY17. Capital spending is expected to pick up in the 3rd quarter as the Los Alamos switchgear substation project begins construction.

FY17 year to date after the 2nd quarter shows a net loss of ($758,837) for electric distribution, about 14.8 percent of the anticipated loss including encumbrance rollovers projects carried over from FY16, of ($5,098,053). This budgeted loss was largely due to capital expenditures which were intended to be covered by proceeds from FY14 debt issuance for capital projects.

Gas Operations

Retail gas sales year to date after the 2nd quarter were 14.2 percent below budgeted sales volume for that period, with total sales of 2,542,267 therms. Net cash flow from operations after two quarters was negative ($407,110). The budget reflects anticipated operating revenue of $1,186,508 before capital projects and the revenue transfer. The 2nd and 3rd quarters are typically the highest revenue periods, so we should be more in line with that budget after the 3rd quarter.

Capital expenditures to date total $942,634, yielding year-to-date net gas loss of ($1,349,744). For the full fiscal year, gas operations' budgeted operating cash flow is $1,186,509, budgeted capital expenditures are $810,000, and the budgeted transfer to the general fund is $260,287. Budget adjustments of $1,043,383 factor in to yield a budgeted net loss of ($927,161). This budgeted loss will be covered through existing fund balance.

Water Operations

After the 2nd quarter of FY2017, year-to-date retail sales were 1.6 percent less than budget. Sales to DOE are 27.5 percent less than budgeted after two quarters. Total sales in thousands of gallons for both retail and DOE were 9.0 percent below budget after two quarters.

Year-to-date cash flow from water operations was $753,089. Capital spending totaled $2,388,733, with about 49 percent of that falling under water production. While no new capital projects were budgeted under water distribution for FY17 and water production's capital budget was scaled back from what was identified in previous 10-year plans, capital spending included projects that were rolled forward from previous fiscal years. In the 1st quarter, the bulk of water distribution's capital costs were related to the NM502 project DP Road to Tewa Loop and to phase 4 of the Western Area reconstruction. Both projects were carried over from FY16. Water production's capital spending was primarily related to the Arizona and golf course pipeline and the Kwage Mesa non-potable water line replacement project. With capital spending factored in, net water revenues were negative ($1,635,644) for the first two quarters of FY17.

For the full fiscal year, water operations' budgeted operating cash flow is ($25,118), and budgeted capital expenditures—including carryforward project amounts and encumbrance rollovers are $7,644,400. The capital budget includes receipt of $4,644,400 in county reimbursements and grants/loans, resulting in a budgeted net loss of ($3,025,118). Negative cash flow was budgeted with the intent to absorb it from existing fund balance.

Wastewater Operations

Cash flow from operations was $549,751 for the six months ended December 31, 2016. Capital expenditures for the period totaled $789,137, yielding a net cash flow of negative ($239,386). The net loss for the first two quarters is about 14.1 percent of the adjusted net loss budgeted for FY17.

For the full fiscal year, wastewater operations' budgeted operating cash flow is $747,495, budgeted capital expenditures are $1,050,000. After consideration of $1,397,855 in budget adjustments, encumbrance rollovers, and capital budgets carried forward from FY16, adjusted net loss is budgeted at ($1,700,360).

Robert Westervelt
Deputy Utility Manager
Finance & Administration

Every year DPU Staff donates Christmas presents to an adopted family. 2017 was no different.

2016 Home Efficiency Tour

On October 15, five homeowners opened their doors to share their homes and energy-efficient design features and upgrades that successfully reduced energy and water use. Homes featured on the tour in the Los Alamos townsite and White Rock neighborhoods incorporate passive solar design, energy-efficient building materials, energy-efficient windows and doors, thermal insulation, water-and-energy-conserving garden designs and irrigation systems, and photovoltaic systems. Special thanks to Pajarito Environmental Education Center for organizing the event and our energy conserving homeowners that opened their homes: Kathy Gursky, Rick Bolton, Paul and Rosmarie Frederickson, Coleen Meyer, Sally and Joe Fitzgibbon, and Tom and Rebecca Shankland.

NATURAL GAS RATE

Since 2013 the Department of Public Utilities has included in its rate a "pass-through" cost of natural gas. In addition to a service fee, the gas consumption charge comprises a fixed cost recovery fee per therm and a variable cost of gas fee (pass-through rate) per therm based on the San Juan Index.

Schedule

7A: Residential Customer
7E: Commercial Customer
7L: County Customer
7N: School Customer

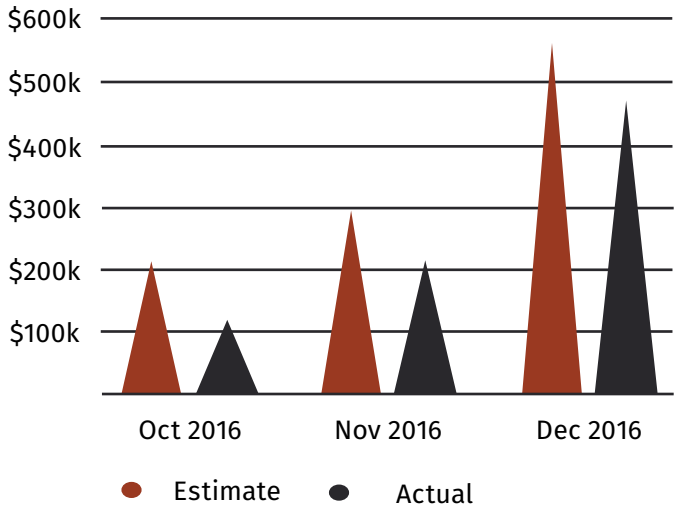
Service Charge

Schedule	Meter Rated	Service Charge
ALL	≤ 250 CFH	$ 9.50
ALL	> 250 CFH	$28.50

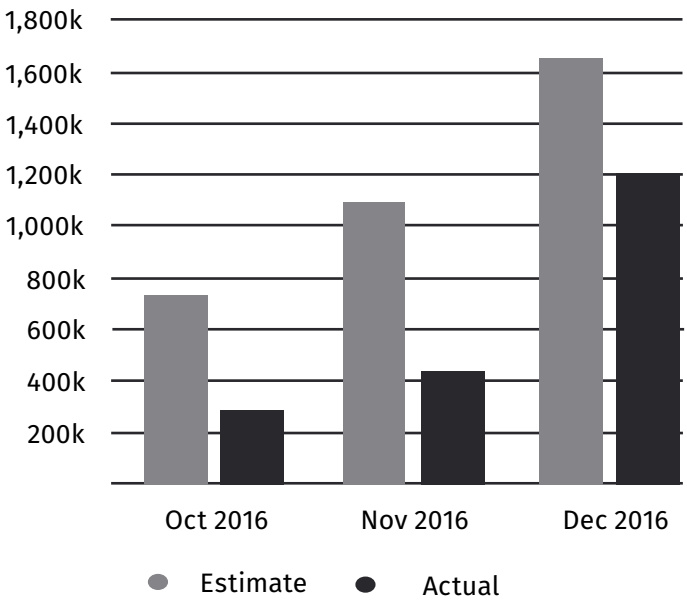
Consumption Charge

			Variable Cost of Gas Rate		
Month	**Schedule**	**Fixed Consumption Rate/therm**	Projected Variable Cost of Gas/therm	Adjustment to prior Month Estimate/therm	**Total Consumption charge/therm**
October 2016	7A & 7E	$0.23	$0.30	$0.01	$0.54
October 2016	7L & 7N	$0.20	$0.30	-	$0.50
November 2016	7A & 7E	$0.23	$0.27	$(0.02)	$0.48
November 2016	7L & 7N	$0.20	$0.27	$(0.01)	$0.46
December 2016	7A & 7E	$0.23	$0.34	$(0.05)	$0.52
December 2016	7L & 7N	$0.20	$0.34	$(0.05)	$0.49

Cost of Gas



Total Therms

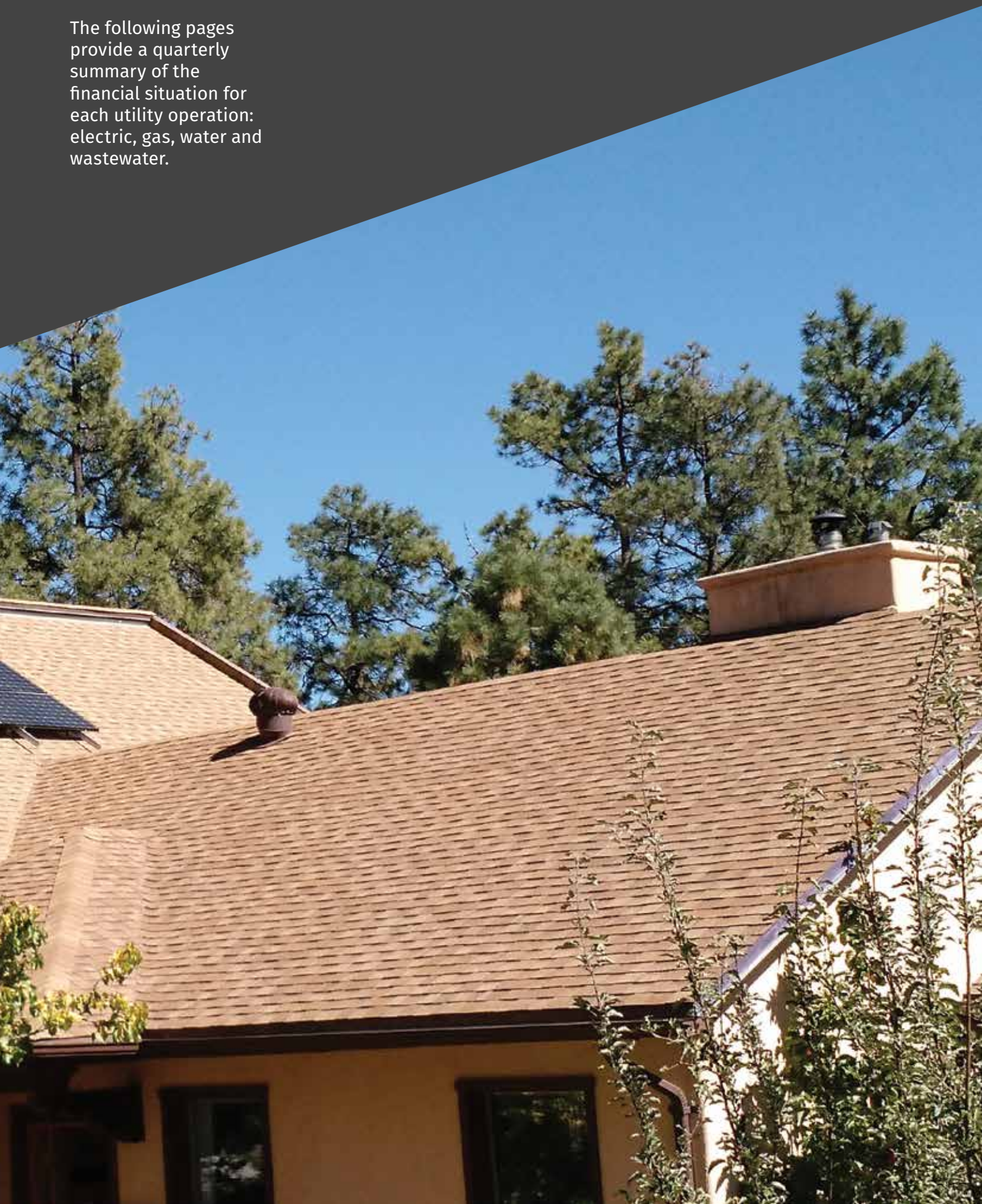


2016 HOME EFFICIENCY TOUR

The Pajarito Environmental Education Center, arranged the first ever Home Efficiency Tour on behalf of the Department of Public Utilities. Over 80 individuals visited the five homes on the tour. Homes included passive solar design, energy-efficient building materials, energy efficient windows and doors, thermal insulation, water and energy conserving garden designs and irrigation systems and photovoltaic systems.

OPERATIONS

The following pages provide a quarterly summary of the financial situation for each utility operation: electric, gas, water and wastewater.



ELECTRIC OPERATIONS

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Unit Sales	Retail Electric (KWh)					
	Total retail sales	30,796,168	27,856,935			58,653,104
	Budgeted sales	33,393,870	29,683,440			63,077,310
	Retail sales variance (KWh)	(2,597,702)	(1,826,505)	$0	$0	(4,424,206)
	Sales to NNSA	126,393,394	128,750,607			255,144,001
	Budgeted sales to NNSA	153,727,000	153,385,000			307,112,000
	NNSA sales variance (KWh)	(27,333,606)	(24,634,393)	$0	$0	(51,967,999)
	Total actual KWh sales	157,189,562	156,607,542	$0	$0	313,797,105
	Total budgeted sales	187,120,870	183,068,440	$0	$0	370,189,310
	Total sales variance (KWh)	(29,931,308)	(26,460,898)	$0	$0	(56,392,205)
Financial Results	Electric production revenues	$8,617,293	$7,758,396			$16,375,689
	Electric production expenditures	$8,957,853	$7,772,883			$16,730,736
	Electric distribution (ED) revenues	$3,731,756	$3,413,983			$7,145,739
	ED other revenue	($6,924)	$27,093			$20,169
	ED operating expenses	$3,255,814	$3,264,578			$6,520,392
	Net ED operating revenues	$469,018	$176,498	$0	$0	$645,516
	ED capital expenditures	$1,000,841	$403,512			$1,404,353
	Net ED Income(Loss)	($531,823)	($227,014)	$0	$0	($758,837)
Budgeted	Budgeted Operating Income(Loss)					$3,201,232.42
	Budgeted Capital Expenditures					($3,536,053)
	5% Revenue Transfer					($648,823)
	Budgeted Net ED Income(Loss)					($983,644)
	Budget Adjustments*					($4,114,409)
	Adj. Budgeted Net ED Income (Loss)					($5,098,053)

Unaudited quarterly reports may include changes to prior quarters' data. Financial data is not final until audited.

*Includes carryforward project amounts, encumbrance rollovers and board/council approved budget adjustments.

NATURAL GAS OPERATIONS

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Unit Sales	Retail Sales - Therms (100,000 BTU)					
	Total sales	638,832	1,903,435			2,542,267
	Budgeted sales	761,680	2,200,409			2,962,090
	Retail sales variance (therms)	(122,848)	(296,975)	$0	$0	(419,823)
Financial Results	Gas distribution revenues	$573,341	$1,197,339			$1,783,207
	Gas other revenues	$12,527	$85,892			$73,365
	Gas distribution operating expenses	$575,861	$1,687,821			$2,263,682
	Net Gas operating revenues	$10,007	(404,590)	$0	$0	($407,110)
	Gas distrib. capital expenditures	$630,880	311,754			$942,634
	Net Gas Revenue	($620,873)	(716,344)	$0	$0	($1,349,744)
Budgeted	Budgeted Operating Income(Loss)					$1,186,509
	Budgeted Capital Expenditures					($810,000)
	5% Revenue Transfer					($260,287)
	Budgeted Net Gas Income(Loss)					$116,222
	Budget Adjustments*					($1,043,383)
	Adj. Budgeted Net Gas Income (Loss)					($927,161)

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*Includes carryforward project amounts, encumbrance rollovers and board/council approved budget adjustments.

WATER OPERATIONS

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Unit Sales	Water Sales in thousand gallons					
	Wholesale sales to LANL	82,848	74,394			157,242
	Budgeted wholesale sales	105,000	105,000			210,000
	Retail sales	280,816	169,308			450,124
	Budgeted retail sales	286,750	170,500			457,250
	Total sales	363,664	243,702	$0	$0	607,366
	Total budgeted sales	391,750	275,500	$0	$0	667,250
	Sales variance, in thousand gallons	(28,086)	(31,798)	$0	$0	(59,884)
Financial Results	Wholesale Revenues	$329,849	$332,452			$662,301
	Retail revenues	$1,474,986	$1,037,703			$2,507,415
	Other revenues	($5,275)	$14,129			$19,403
	Total water revenues	$1,799,560	$1,384,284	$0	$0	$3,189,119
	Water prod. operating expenses	$881,435	$683,621			$1,565,056
	Water dist. operating expenses	$432,426	$438,548			$870,974
	Total water operating expenses	$1,313,861	$1,122,169	$0	$0	$2,436,030
	Net water operating revenues	$485,699	$262,115	$0	$0	$753,089
	Water production capital	$803,046	$366,884			$1,169,930
	Water distribution capital	$1,179,458	$39,345			$1,218,803
	Total capital expenditures	$1,982,504	$406,229	$0	$0	$2,388,733
	Net water revenues	($1,496,805)	($144,114)	$0	$0	($1,635,644)
Budgeted	Budgeted Operating Income(Loss)					(25,118)
	Budgeted Capital Expenditures					(7,644,400)
	Budgeted Grant/Loan/GF Transfers					4,644,400
	Budgeted Net Water Income(Loss)					(3,025,118)
	Budget Adjustments*					(2,667,185)
	Adj. Budgeted Net Water Income (Loss)					(5,692,303)

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*Includes carryforward project amounts, encumbrance rollovers and board/council approved budget adjustments.

WASTEWATER OPERATIONS

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Unit Sales	Sewer Treated in thousand gallons					
	Total treated	99,335	105,033			204,368
	Budget treated	117,000	112,500			229,500
	Variance (thousands of gallons)	(17,665)	(7,467)	$0	$0	(25,132)
Financial Results	Sewer revenues	$1,242,436	$1,235,649			$2,486,889
	Sewer misc. revenues	$3,298	$5,014			($492)
	Sewer operating expenses	$941,377	$995,269			$1,936,646
	Net Sewer operating revenues	$304,357	$245,394	$0	$0	$549,751
	Sewer capital expenditures	$638,517	$150,620			$789,137
	Net Sewer Revenue	($334,160)	$94,774	$0	$0	($239,386)
Budgeted	Budgeted Operating Income(Loss)					747,495
	Budgeted Capital Expenditures					(1,050,000)
	Budgeted Net Wastewater Income(Loss)					(302,505)
	Budget Adjustments*					(1,397,855)
	Adj. Budgeted Net Wastewater Income (Loss)					(1,700,360)

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CONSUMPTION

The following pages provide a quarterly summary of the consumption status by customer class for each utility operation: electric, gas, water and wastewater.

ELECTRIC CONSUMPTION

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Electric Revenues	Residential	$1,785,332	$1,642,922			$3,428,254
	Private Area Lights	$3,380	$3,247			$6,627
	Commercial	$1,286,078	$1,079,897			$2,365,975
	Municipal	$314,252	$345,070			$659,321
	Water Production	$149,523	$104,633			$254,155
	Educational	$119,843	$139,723			$259,566
	Pole Rentals	$22,262	$0			$22,262
	Misc/Backcharges	$51,086	$98,492			$149,579
	TOTAL	$3,731,756	$3,413,983	-	-	$7,145,739
Electric Sales (KWh)	Residential	13,370,145	12,337,409			25,707,554
	Private Area Lights	9,354	9,354			18,708
	Commercial	10,937,932	8,926,839			19,864,771
	Municipal	2,335,319	3,080,301			5,415,620
	Water Production	3,203,389	2,302,276			5,505,665
	Educational	940,030	1,200,756			2,140,786
	TOTAL	30,796,168	27,856,935	-	-	58,653,104
Billed Locations (Average)	Residential	8,171	7,785			7,978
	Commercial	666	633			649
	Municipal	179	174			177
	Educational	50	46			48
	TOTAL	9,066	8,638	-	-	8,852
Revenue/KWh (Average)	Residential	$0.1335	$0.1332			$0.1334
	Private Area Lights	$0.3613	$0.3471			$0.3542
	Commercial	$0.1176	$0.1210			$0.1191
	Municipal	$0.1346	$0.1120			$0.1217
	Water Production	$0.0467	$0.0454			$0.0462
	Educational	$0.1275	$0.1164			$0.1212
	AVERAGE	$0.1188	$0.1190	-	-	$0.1189
Loss Calculation	Power Recv'd, KWh	31,183,267	30,131,432			61,314,699
	PV Power Recv'd, KWh	96,743	362,222			458,965
	Qtrly Losses <Gains>, KWh	483,841	2,636,719			3,120,560
	% Qtrly Losses <Gains>	1.55%	8.65%			5.05%
	YTD CUMM LOSSES <Gains>	1.55%	5.05%			5.05%

NATURAL GAS CONSUMPTION

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Gas Revenues	Residential	$440,053	$967,680			$1,407,733
	Commercial	$99,597	$130,521			$230,118
	TA-3 Sales	-	$0			$0
	Municipal	$23,527	$47,581			$71,108
	Water Production	$14,028	$9			$14,037
	Educational	$5,773	$46,141			$51,914
	Misc/Backcharges	$2,890	$5,406			$8,296
	TOTAL	$585,868	$1,197,339	-	-	$1,783,207
Gas Sales (Therms)	Residential	405,241	1,450,354			1,855,595
	Commercial	143,781	268,757			412,539
	TA-3 Sales	-	-			-
	Municipal	26,879	92,165			119,044
	Water Production	54,670	30			54,700
	Educational	8,262	92,128			100,390
	TOTAL	638,832	1,903,435	-	-	2,542,267
Billed Locations (Average)	Residential	7,087	7,084			7,086
	Commercial	375	354			365
	Municipal	43	42			43
	Educational	29	23			26
	TOTAL	7,534	7,504	-	-	7,519
Revenue /Therm (Average)	Residential	$1.0859	$0.6672			$0.8766
	Commercial	$0.6927	$0.4856			$0.5892
	TA-3	$0.0000	$0.0000			$0.0000
	Municipal	$0.8753	$0.5163			$0.6958
	Water Production	$0.2566	$0.3003			$0.2785
	Educational	$0.6987	$0.5008			$0.5998
	AVERAGE	$0.9126	$0.6262	-	-	$0.6982
Loss Calculation	Gas Recv'd, therms	577,960	1,484,280			2,062,240
	Qtrly Losses <Gains>, therms	(60,872)	(419,155)			(480,027)
	% Qtrly Losses <Gains>	-10.53%	-28.24%			-23.28%
	YTD CUMM LOSSES <Gains>	-10.53%	-23.28%			-23.28%

WATER CONSUMPTION

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Water Revenues	Residential	$1,168,774	$815,382			$1,984,156
	Commercial	$143,584	$108,048			$251,632
	Municipal	$100,139	$75,470			$175,610
	Educational	$51,908	$25,520			$77,428
	Misc/Backcharges	$5,306	$13,284			$18,589
	TOTAL	$1,469,711	$1,037,703	-	-	$2,507,415
Water Sales (KGal)	Residential	218,093	133,075			351,168
	Commercial	29,819	18,328			48,147
	Municipal	22,243	14,084			36,327
	Educational	10,661	3,822			14,482
	TOTAL	280,816	169,308	-	-	450,124
Billed Locations (Average)	Residential	6,620	6,624			6,622
	Commercial	293	282			288
	??Municipal	89	89			89
	Educational	28	26			27
	TOTAL	7,030	7,021	-	-	7,026
Revenue/KGal (Average)	Residential	$5.3591	$6.1272			$5.6502
	Commercial	$4.8152	$5.8952			$5.2263
	Municipal	$4.5021	$5.3587			$4.8342
	Educational	$4.8691	$6.6778			$5.3464
	AVERAGE	$5.2148	$6.0506			$5.5292
Loss Calculation	Water Recv'd, KGal	294,415	181,951			476,366
	Qtrly Losses <Gains> KGal	13,599	12,643			26,242
	% Qtrly Losses <Gains>	4.62%	6.95%			5.51%
	YTD CUMM LOSSES <Gains>	4.62%	5.51%			5.51%

WASTEWATER TREATED

FY2017 Financial Status - Unaudited

		Q1	Q2	Q3	Q4	Total
Sewer Revenues	All Retail	$1,242,436	$1,224,282			$2,466,718
	Municipal/Effluent**	$8,804	$11,367			$20,171
	Misc/Backcharges	$0	$0			$0
	TOTAL	$1,251,240	$1,235,649	-	-	$2,486,889
Sewage Treated (KGal)	Los Alamos	73,513	75,516			149,030
	White Rock	25,822	29,517			55,339
	TOTAL TREATED	99,335	105,033	-	-	204,369
	REVENUE/KGal Treated	$12.60	$11.76			$12.17

** Effluent revenue is reported on the financial statements under Water Production


GAS
INDIA

LOS ALAMOS
Department of Public Utilities

Electric, Gas, Water, and Wastewater Services

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Web: www.losalamosnm.us/utilities
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BOARD OF PUBLIC UTILITIES

ADDITIONAL MEETING DOCUMENTS

Additional or revised information or documents are often passed out to the Board at the meetings. Whenever possible, this informational cover page will accompany those documents.

MAKE 20 COPIES OF ANY DOCUMENTS, INCLUDING THIS COVER SHEET, AND RETURN TO JAIME KEPHART PRIOR TO THE MEETING.

MEETING DATE	02/15/2017
AGENDA ITEM	7.D. Department of Public Utilities FY2018 Budget Presentation
DOCUMENT TITLE(S)	Revised 10-Year Financial Forecast
FROM	Bob Westervelt
NEW OR REVISED? **Is this a revision that is different than what was in the agenda packet or is it something entirely new?**	Revision
RECOMMENDED ACTION **If you have a new or revised recommended motion for the Board, enter it here.**	**N/A**
ADDITIONAL INFORMATION **Please VERY BRIEFLY explain the purpose of this information or document.**	Shortly after agenda publication, some errors were found in the 10-year draft financial forecast and some changes were made to reduce confusion. The Capital R&R and Transfer to R&R Fund lines were removed to reduce confusion, and the following additional changes were due to misaligned data links and incorrect formulas: **Page 237 ED:** Cash balance 2018 only Profit transfer 2018 only **Page 238 EP:** Operating expenditures (links were one row off for whole section) Transfer from distribution fund 2018 only Cash balance 2018 only **Page 239 GA:** Cash balance 2018 only Cost of gas **Page 240 DW:** NO CHANGES (included to keep the section complete) **Page 242 WP:** Cash balance 2018 only **Page 244 WW:** Cash balance 2018 only Net cash flow

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

1.50%	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 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	566,670	575,170	583,798	592,555	601,443	610,465	619,621	628,916	638,350	647,925
Administrative Division Allocation	932,632	944,463	956,471	968,659	981,030	993,587	1,006,331	1,019,268	1,032,398	1,045,725
In Lieu Taxes	542,422	429,528	437,438	445,547	453,861	462,383	471,120	480,076	489,258	498,670
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	651,034	676,235	693,242	710,677	728,551	746,874	765,658	784,914	804,654	824,891
Cost of Power	7,375,000	7,827,826	8,317,058	8,249,972	8,240,559	8,519,385	8,714,375	8,929,365	9,144,355	9,359,345
Total Operations Expenses	13,089,892	13,518,670	14,061,838	14,068,553	14,014,767	14,218,616	14,493,981	14,819,435	15,277,823	15,575,222
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	15,323,264	16,548,670	15,898,018	15,974,610	16,095,975	16,320,636	16,617,022	16,963,706	17,443,536	17,762,593
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	15,318,453	15,726,390	16,121,908	16,527,374	16,943,038	17,369,155	17,805,990	18,253,810	18,712,893	19,183,523
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)	(15,684)	(5,030)	14,112	41,090	73,779	110,748	151,122	191,853
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	15,353,395	15,943,770	16,324,167	16,740,286	17,175,092	17,628,187	18,095,813	18,578,658	19,072,774	19,573,107
R&R and Cash Flows										
Net Cash Flow	30,131	(604,899)	426,149	765,677	1,079,116	1,307,551	1,478,791	1,614,952	1,629,238	1,810,514
Cumulative Net Cash Flow	30,131	(574,768)	(148,619)	617,057	1,696,174	3,003,724	4,482,516	6,097,468	7,726,706	9,537,220
Cash Balance	(22,453)	(627,352)	(201,203)	564,473	1,643,590	2,951,140	4,429,932	6,044,884	7,674,122	9,484,636
Recommended Cash Balance	5,495,965	4,289,832	4,368,941	4,558,184	4,563,435	4,561,130	4,597,758	4,642,002	4,719,574	4,493,722

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

	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
1.50%										
Expenditure Forecast										
El Vado Generation	568,653	577,183	585,841	594,628	603,548	612,601	621,790	631,117	640,584	650,193
Abiquiu Generation	403,881	409,939	416,088	422,330	428,665	435,095	441,621	448,245	454,969	461,794
Contract Administration	20,048	20,349	20,654	20,964	21,279	21,598	21,922	22,251	22,584	22,923
Load Control	1,576,030	1,599,671	1,623,666	1,648,021	1,672,741	1,697,832	1,723,299	1,749,149	1,775,386	1,802,017
Transmission - PNM	1,400,000	1,421,000	1,442,315	1,463,950	1,485,909	1,508,198	1,530,821	1,553,783	1,577,090	1,600,746
Transmission - Other	2,285,008	2,319,283	2,354,072	2,389,383	2,425,224	2,461,603	2,498,527	2,536,005	2,574,045	2,612,655
Purchased Power	13,219,781	13,418,078	13,619,349	13,823,639	14,030,994	14,241,459	14,455,080	14,671,907	14,891,985	15,115,365
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	488,000	495,320	502,750	510,291	517,945	525,715	533,600	541,604	549,728	557,974
Insurance	160,000	162,400	164,836	167,309	169,818	172,365	174,951	177,575	180,239	182,942
San Juan Operations	11,213,148	11,381,345	11,552,065	11,725,346	11,901,227	12,079,745	12,260,941	12,444,855	12,631,528	12,821,001
Laramie River Operations	2,854,600	2,897,419	2,940,880	2,984,993	3,029,768	3,075,215	3,121,343	3,168,163	3,215,686	3,263,921
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	455,373	462,204	469,137	476,174	483,316	490,566	497,925	505,393	512,974	520,669
Administrative Allocation	903,234	916,783	930,534	944,492	958,660	973,040	987,635	1,002,450	1,017,486	1,032,749
Capital	675,000	300,000	-	-	-	-	-	-	-	-
Total Operation Expenses	38,749,828	39,331,075	39,921,041	40,519,857	41,127,655	41,744,570	42,370,738	43,006,299	43,651,394	44,306,165
Total Capital Expenditures	675,000	300,000	-	-	-	-	-	-	-	-
Total Cash Outflow	39,424,828	39,631,075	39,921,041	40,519,857	41,127,655	41,744,570	42,370,738	43,006,299	43,651,394	44,306,165
1.01%										
Revenue Forecast										
Mwh Sales - LANL	542,688	548,169	553,706	559,298	564,947	570,653	576,417	582,238	588,119	594,059
Mwh Sales - LAC Distribution	125,530	126,798	128,079	129,372	130,679	131,999	133,332	134,678	136,039	137,413
Total Mwh Sales	$668,218	$674,967	$681,784	$688,670	$695,626	$702,652	$709,748	$716,917	$724,158	$731,472
Revenue per Mwh	**55.84**	**56.62**	**57.44**	**57.44**	**57.53**	**58.03**	**58.41**	**58.81**	**59.20**	**59.60**
DOE Revenues	29,941,469	30,390,591	30,846,450	31,309,147	31,778,784	32,255,466	32,739,298	33,230,387	33,728,843	34,234,776
Economy Sales	3,213,251	3,261,450	3,310,372	3,360,027	3,410,427	3,461,584	3,513,508	3,566,210	3,619,703	3,673,999
Interest on Reserves	25,000	25,081	27,473	30,783	33,898	36,891	40,134	43,521	47,077	50,801
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	7,375,000	7,827,826	8,317,058	8,249,972	8,240,559	8,519,385	8,714,375	8,929,365	9,144,355	9,359,345
Total Cash Inflow	40,588,704	41,470,964	42,467,368	42,915,945	43,429,684	44,239,341	44,976,447	45,741,815	46,515,898	47,299,360
Net Cash Flow	1,163,876	1,839,888	2,546,327	2,396,088	2,302,029	2,494,771	2,605,709	2,735,515	2,864,505	2,993,195
Cumulative Net Cash Flow	1,163,876	3,003,764	5,550,091	7,946,179	10,248,208	12,742,979	15,348,688	18,084,204	20,948,708	23,941,903
Cash Balance	19,292,979	21,132,868	23,679,194	26,075,282	28,377,311	30,872,082	33,477,792	36,213,307	39,077,811	42,071,007
Recommended Cash Balance	13,987,457	13,832,769	13,980,260	14,129,964	14,281,914	14,436,142	14,592,685	14,751,575	14,912,848	15,076,541

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

1.50%	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	351,003	356,268	361,612	367,036	372,542	378,130	383,802	389,559	395,402	401,333
Administrative Division Allocation	816,091	825,722	835,498	845,420	855,492	865,714	876,090	886,621	897,310	908,160
In Lieu Taxes	205,330	119,830	119,830	119,830	119,830	119,830	119,830	119,830	119,830	119,830
Profit Transfer	262,075	244,778	244,778	244,778	244,778	244,778	244,778	244,778	244,778	244,778
Cost of Gas	2,537,766	2,575,832	2,614,470	2,653,687	2,693,492	2,733,895	2,774,903	2,816,527	2,858,775	2,901,656
TOTAL Operations Expenses	4,847,719	4,808,017	4,872,058	4,937,060	5,003,036	5,070,003	5,137,974	5,206,964	5,276,989	5,348,065
Capital	700,000	454,500	459,045	309,090	260,151	262,753	265,380	268,034	270,714	273,421
TOTAL Cash Outflow	**5,547,719**	**5,262,517**	**5,331,103**	**5,246,150**	**5,263,187**	**5,332,755**	**5,403,354**	**5,474,998**	**5,547,703**	**5,621,486**
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	$ 0.620	$ 0.620	$ 0.620	$ 0.620	$ 0.620	$ 0.620	$ 0.620	$ 0.620	$ 0.620
Rate Increase Percentage	**-10.00%**									
Total Sales Revenue	$ 5,241,503	5,241,503	5,241,503	5,241,503	5,241,503	5,241,503	5,241,503	5,241,503	5,241,503	5,241,503
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	5,345,033	5,346,586	5,348,162	5,349,762	5,351,386	5,353,034	5,354,707	5,356,405	5,358,129
Net Cash Flow	(204,216)	82,516	15,483	102,012	86,575	18,631	(50,319)	(120,291)	(191,298)	(263,357)
Cummulative net cash flow	(204,216)	(121,700)	(106,217)	(4,205)	82,370	101,000	50,681	(69,610)	(260,908)	(524,265)
Cash Balance	6,513,685	6,596,201	6,611,684	6,713,697	6,800,271	6,818,902	6,768,583	6,648,292	6,456,994	6,193,636
Recommended Cash Balance	1,016,470	1,005,897	862,293	819,800	828,944	838,212	847,607	857,129	866,780	850,408

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

1.50%	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 2027
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	328,386	333,312	338,311	343,386	348,537	353,765	359,071	364,458	369,924	375,473
Administrative Division Allocation	594,839	603,762	612,818	622,010	631,340	640,811	650,423	660,179	670,082	680,133
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	550,000	558,000	817,000	677,000	849,000	970,000	601,000	777,000	676,000	858,000
Total Operation Expenses	4,826,041	5,092,714	5,271,173	4,951,734	5,103,278	5,239,735	5,368,861	5,482,912	5,589,646	5,689,068
Total Capital Expenditures	550,000	558,000	817,000	677,000	849,000	970,000	601,000	777,000	676,000	858,000
Total Expenditures	5,376,041	5,650,714	6,088,173	5,628,734	5,952,278	6,209,735	5,969,861	6,259,912	6,265,646	6,547,068
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	1,876	-	-	-	-	-	-	-
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	5,506,224	5,737,420	5,937,593	6,085,709	6,207,259	6,315,803	6,410,540	6,506,698
R&R and Cash Flows										
Net Cash Flow	(430,680)	(399,578)	(581,949)	108,685	(14,685)	(124,025)	237,399	55,891	144,894	(40,370)
Cumulative Net Cash Flow	(430,680)	(830,258)	(1,412,207)	(1,303,522)	(1,318,207)	(1,442,232)	(1,204,833)	(1,148,942)	(1,004,048)	(1,044,418)
Cash Balance	**524,661**	**125,084**	**(456,865)**	**(348,180)**	**(362,865)**	**(486,891)**	**(249,492)**	**(193,601)**	**(48,706)**	**(89,076)**
Recommended Cash Balance	1,551,885	1,832,991	1,698,856	1,758,059	1,885,944	1,523,934	1,707,028	1,613,228	1,802,536	1,744,536

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 Production

1.5%	BUDGET 2018	FORECAST 2019	FORECAST 2020	FORECAST 2021	FORECAST 2022	FORECAST 2023	FORECAST 2024	FORECAST 2025	FORECAST 2026	FORECAST 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	337,902	342,971	348,115	353,337	358,637	364,016	369,477	375,019	380,644	386,354
Administrative Division Allocation	601,111	610,128	619,280	628,569	637,997	647,567	657,281	667,140	677,147	687,304
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	300,961	329,249	363,657	383,583	668,186	682,822	556,213	391,332	391,332
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	3,824,151	3,905,504	3,976,245	4,053,744	4,117,406	4,446,402	4,506,097	4,425,223	4,306,761	4,353,878
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	11,120,151	5,884,504	6,526,245	7,487,744	6,345,406	6,361,402	6,419,097	6,395,223	6,474,761	5,125,878
Revenue Forecast										
Non-potable										
Non-potable production in kgals	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	$ 2.70	$ 2.89	$ 3.08	$ 3.27	$ 3.47	$ 3.66	$ 3.84	$ 4.01	$ 4.17
Rate Increase Percentage	**117%**	**8.00%**	**7.00%**	**6.50%**	**6.25%**	**6.00%**	**5.50%**	**5.00%**	**4.50%**	**4.00%**
Non-potable sales revenue	$ 216,000	$ 244,080	$ 261,256	$ 291,060	$ 309,015	$ 376,842	$ 499,590	$ 524,160	$ 547,365	$ 569,205

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

1.5%	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**	**$ 4,441,580**	**$ 4,688,756**	**$ 4,914,060**	**$ 5,116,015**	**$ 5,344,842**	**$ 5,617,090**	**$ 5,768,160**	**$ 5,906,365**	**$ 6,031,705**
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	111,173	101,255	71,311	74,672	76,341	80,889	85,142	93,680
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	4,000,000									
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	9,744,378	5,734,153	5,865,074	5,491,460	6,569,471	6,472,659	6,722,337	6,678,773	7,043,966	6,733,881
R&R and Cash Flows										
Net Cash Flow	(1,375,773)	(150,351)	(661,172)	(1,996,284)	224,064	111,256	303,240	283,550	569,205	1,608,003
Cumulative Net Cash Flow	(1,375,773)	(1,526,124)	(2,187,296)	(4,183,579)	(3,959,515)	(3,848,258)	(3,545,018)	(3,261,468)	(2,692,264)	(1,084,261)
Cash Balance	**7,561,856**	**7,411,505**	**6,750,333**	**4,754,050**	**4,978,114**	**5,089,370**	**5,392,611**	**5,676,161**	**6,245,365**	**7,853,368**
Recommended Cash Balance	2,597,839	3,352,097	4,863,998	2,797,179	2,844,039	3,155,740	3,337,641	3,099,466	1,992,189	3,489,120

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	646,445	656,142	665,984	675,974	686,113	696,405	706,851	717,454	728,216	739,139
Administrative Division Allocation	605,847	613,432	621,130	628,944	636,875	644,925	653,095	661,389	669,806	678,350
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	200,000	843,350	2,878,722	3,770,902	497,409	685,259	440,531	868,430	696,277	1,125,402
Capital Paid with WTB Loan				12,000,000						
Total Operations Expenses	4,599,382	4,649,532	4,700,436	5,833,028	5,885,469	5,938,597	5,992,724	5,953,776	5,915,651	5,972,145
Total Capital Expenditures	200,000	843,350	2,878,722	15,770,902	497,409	685,259	440,531	868,430	696,277	1,125,402
Total Cash Outflow	4,799,382	5,492,882	7,579,158	21,603,930	6,382,878	6,623,855	6,433,255	6,822,206	6,611,928	7,097,547
REVENUE FORECAST										
Mgal Processed	*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 Customers	6,629	6,629	6,629	6,629	6,629	6,629	6,629	6,629	6,629	6,629
Res'l Single Family Flat Rate	37.18	40.15	42.66	44.79	46.69	48.32	49.53	50.52	51.40	52.17
Res'l Single-Family Service Charge	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 -0.20%	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	7,819	10,913	247,175	22,064	25,941	29,736	39,015	44,707	55,518
Bond Issue Proceeds			17,272,000							
Revenue on Recoverable Work	-	-	-	-	-	-	-	-	-	-
Total Cash Inflow	5,283,261	5,699,143	23,329,945	6,596,558	6,641,297	6,876,846	7,051,914	7,201,637	7,332,674	7,452,805
Net Cash Flow	483,879	206,261	15,750,787	(15,007,371)	258,419	252,991	618,659	379,431	720,747	355,258
Cumulative Net Cash Flow	483,879	690,140	16,440,927	1,433,556	1,691,975	1,944,966	2,563,624	2,943,056	3,663,802	4,019,060
Cash Balance	521,281	727,542	16,478,330	1,470,959	1,729,377	1,982,368	2,601,027	2,980,458	3,701,204	4,056,462
Recommended Cash Balance	3,360,045	5,407,954	18,312,860	4,133,210	4,334,170	4,102,649	4,544,155	4,291,927	4,641,182	4,279,903

245