



# QUARTERLY PERFORMANCE REPORT: Qtr 3-FY 2021

**LOS ALAMOS**  
Department of Public Utilities  
Electric, Gas, Water, and Wastewater Services

**FISCAL YEAR 2021:**  
Jul 01, 2020 - Jun 30, 2021

**QUARTER 3:**  
Jan 01 - Mar 31, 2021  
(Issued June 2021)

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WE LOVE OUR CUSTOMERS. ABOVE: A THANK YOU NOTE FROM CHILDREN ON BIG ROCK LOOP WAS DELIVERED TO DPU'S WATER CREWS WHO RESPONDED TO AND REPAIRED A WATER LINE BREAK ON MAY 12, 2021.

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## PHILO SHELTON UTILITIES MANAGER



### Overlook Booster Station Project

The above photo shows the excavation and installation of vertical turbine pumps which will be located beneath the new Overlook booster station. When completed, the booster station will provide effluent irrigation to all the Overlook fields.

# A WORD FROM THE UTILITIES MANAGER

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Through this pandemic, the Department of Public Utilities (DPU) continues to maintain essential utility services. This quarter, vaccinations were offered to all DPU staff. I am pleased to report that we reached the so-called herd immunity among our essential staff this quarter and we have not had any COVID-19 leave requests after receiving vaccinations. While the Governor's Emergency Order remains in place, our staffing issues due to required COVID-19 quarantines have abated and have allowed for regular operations. Finally, since out of state travel restrictions were lifted, this has allowed for DPU's out of state contractor to install the Advance Metering Infrastructure (AMI) equipment.

This quarter is when next year's budget for FY 2022 is prepared. Activities include meeting with our asset management teams, other partners such as Los Alamos National Laboratory, and coordinating with Public Works on road construction projects as part of our budget development. This year, the Board of Public Utilities were presented the water line GIS data and shown how capital renewal and replacement funds are being dedicated to problem areas within our community. The five percent profit transfer from gas and electric utility funds are in the second year of a three-year ordinance that allows the revenue transferred to the General Fund to be returned to DPU to be reinvested for infrastructure. These funds are necessary to follow road construction projects to

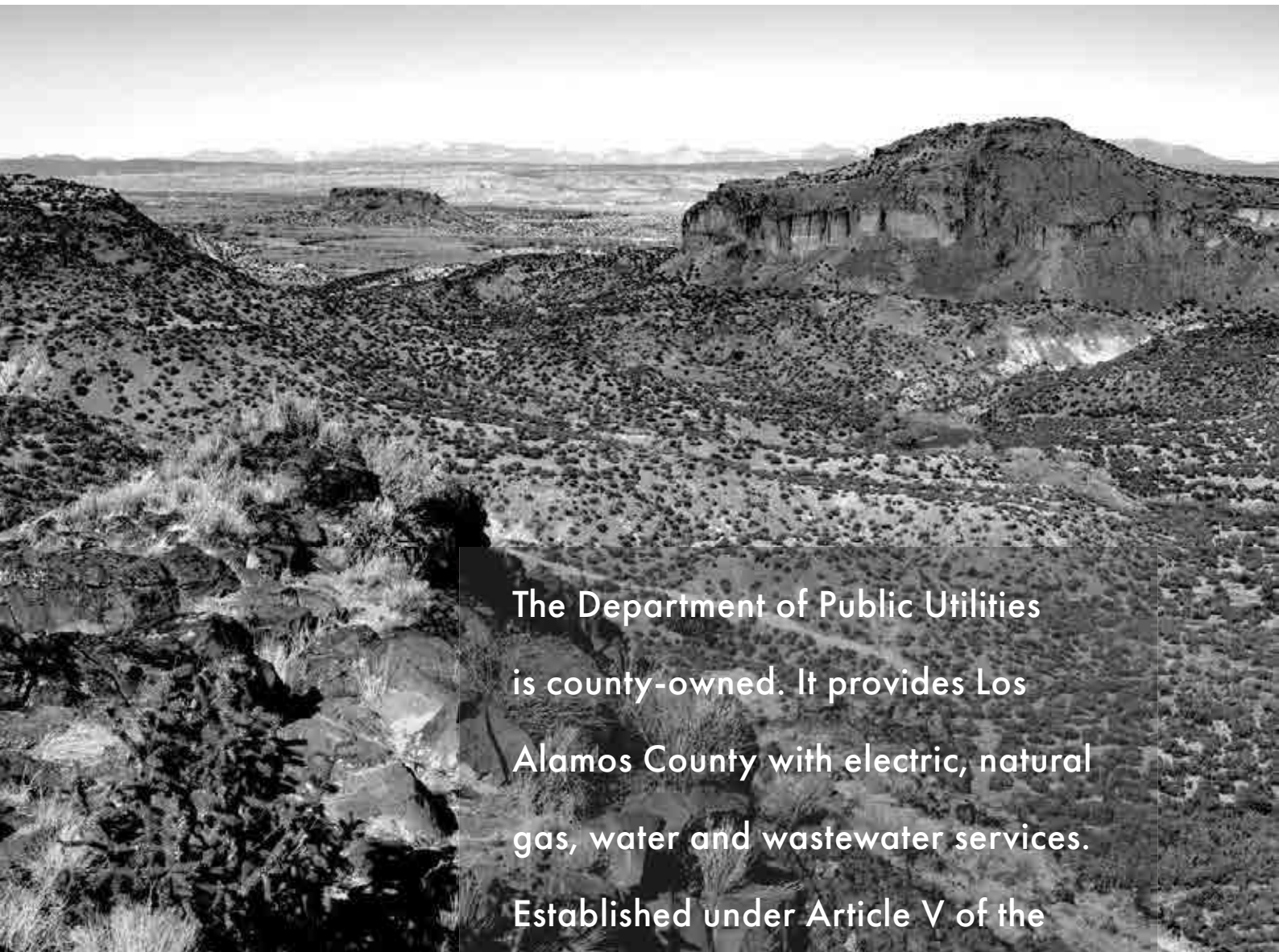
repair and replace aging infrastructure. Furthermore, this coordination saves costs on traffic control, mobilization, and reduces community disruptions with a single construction project while increasing reliability of the utility services provided. Finally, DPU is pursuing financing and refinancing of projects while one percent loans are being offered by the New Mexico Finance Authority for water and sewer projects.

While Los Alamos County had no disruptions in power, water, and gas like Texas, we were impacted. Since we share regional gas supplies, the market price for natural gas increased greatly. DPU's gas purchases in February to meet the community's demand was well over budget. According to the rate ordinance in place, starting April 1st DPU's purchases are being recovered by raising the cost of gas to our customers to \$1.22 per therm until these expenditures are repaid. For comparison, in January DPU's customers paid between \$0.47 and \$0.48 per therm. Since these charges will be spread out over the spring and summer months when usage is generally lower, it should lessen the impact to our customers. Preliminary estimates indicate that this elevated charge per therm may be in effect for four to six months.

Last quarter BPU updated the environmental sustainability goals for FY 2022. One of the updated goals was to increase local solar peak production

to 6 MW by 2040. To implement this goal, DPU's Rule E-5 required some updates to make allowances for this increase in local electric generation and application fees were increased by \$100 to \$360/application to cover average cost to upsize transformers to allow for this expansion. At the current rate of local solar installations, DPU has projected we can reasonably achieve this goal before 2040. Next, DPU completed the Power Purchase Agreement (PPA) with Uniper Global Commodities that will provide Los Alamos County with 15 megawatts of firm energy supply over a 15-year period. The agreement guarantees an energy supply primarily sourced from new wind and solar generation facilities now under development in New Mexico. It also secures a long-term, firm power solution for Los Alamos at pricing lower than the County's current blended cost of power. Deliveries under the new agreement are scheduled to begin in January 2022. This agreement is replacing existing coal-sourced power with supply from renewable energy facilities and could reduce the County's carbon emissions by as much as 70,000 metric tons each year. It is an important step forward that brings the DPU closer to its goal of becoming a carbon-neutral electric provider by 2040.

In conclusion, next quarter DPU looks forward to initiating many stalled projects due to COVID-19 restrictions and adopting the FY 2022 budget.



The Department of Public Utilities is county-owned. It provides Los Alamos County with electric, natural gas, water and wastewater services. Established under Article V of the 1968 Charter for the Incorporated County of Los Alamos, the DPU falls under the jurisdiction of the Board of Public Utilities.

# ABOUT THE DEPARTMENT OF PUBLIC UTILITIES

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## 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.

## We Value

- Customers by being service-oriented and fiscally responsible;
- Employees and partnerships by being a safe, ethical and professional organization that encourages continuous learning;
- Environment and natural resources through innovative solutions; and
- Community by being communicative, organized and transparent.

Revised and adopted: 2020  
for fiscal year 2022

## Goals/Objectives

### 1.0 Provide safe & reliable utility services

- Efficiently deliver safe and reliable electric, gas, water & wastewater services;
- Efficiently implement and maintain secure and reliable business systems;
- Ensure utility control and mapping systems and processes are accurate, safe and secure;
- Develop a culture of continuous improvement.

### 2.0 Achieve & maintain excellence in financial performance

- Utilize revenues to provide a high-level of service and keep rates competitive with similar utility providers;
- Conduct cost of service studies for each utility at least every five years;
- Meet financial plan targets by 2025, and water by 2028;
- Achieve work plans while operating within budget.

### 3.0 Be a customer service-oriented organization that is communicative, efficient & transparent

- Ensure customer service processes and systems are efficient, secure and user-friendly;
- Engage and inform stakeholders on utilities' operations affecting the community.
- Conduct a community survey of the conservation (environmental) objectives.

## Goals/Objectives

### 4.0 Sustain a capable satisfied, engaged, ethical & safe workforce focused on customer service

- Invest in employee training and professional development;
- Promote a culture of safe, ethical and customer-focused behavior;
- Engage employees, improve employee satisfaction and compensate fairly.

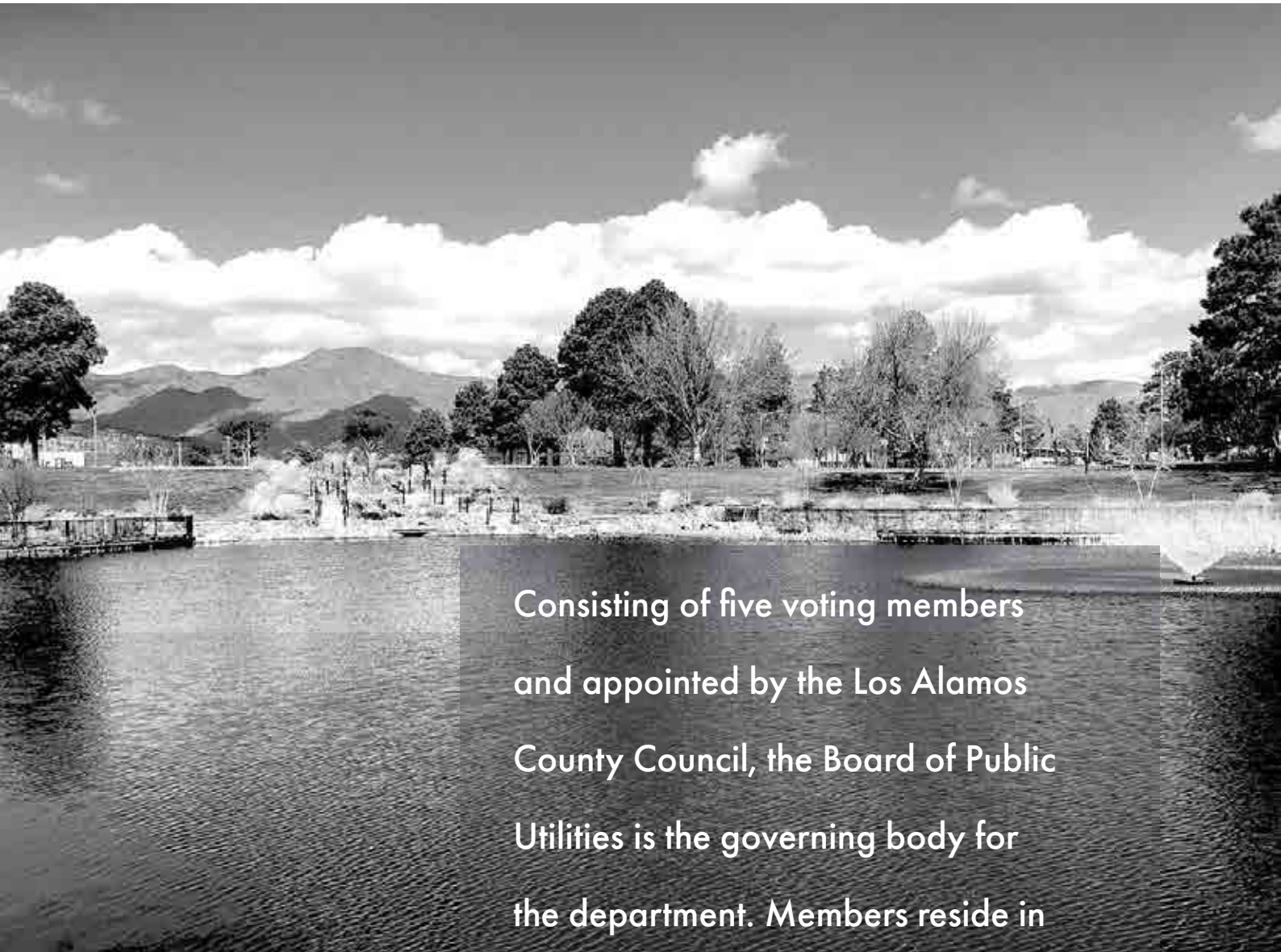
### 5.0 Achieve environmental sustainability

- Be a carbon neutral electric provider by 2040;
- Promote electric efficiency through targeted electrical conservation programs. Increase local solar peak production to 6 MW by 2040 (this is 30% of local solar produced based on the county peak load of 18 MW);
- Reduce potable water use by 12% per capita per day by 2030 using a 2020 calendar year-end baseline;
- Reduce natural gas use by 5% per capita per heating degree day by using a 2020 calendar year-end baseline and support elimination of natural gas usage by 2070;
- Provide class 1A effluent water in Los Alamos County.

### 6.0 Develop and strengthen partnerships with stakeholders

- Communicate with stakeholders to strengthen existing partnerships and identify new potentially beneficial partnering opportunities.

Revised and adopted: 2020  
for fiscal year 2022



Consisting of five voting members and appointed by the Los Alamos County Council, the Board of Public Utilities is the governing body for the department. Members reside in

Los Alamos and are customers of the department. Calendars, policies and procedures, agendas, minutes, and videos of meetings are available at <https://ladpu.com/BPU>.

# BOARD OF PUBLIC UTILITIES

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.1/

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**CORNELL WRIGHT**  
Chair



.2/

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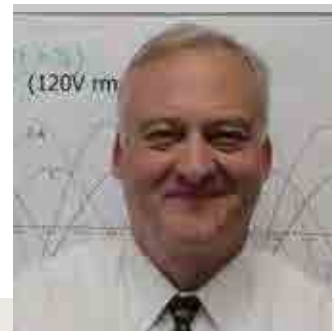
**STEPHEN MCLIN**  
Vice Chair



.3/

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**ERIC STROMBERG**  
Member



.4/

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**STEVE TOBIN**  
Member



.5/

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**CARRIE WALKER**  
Member



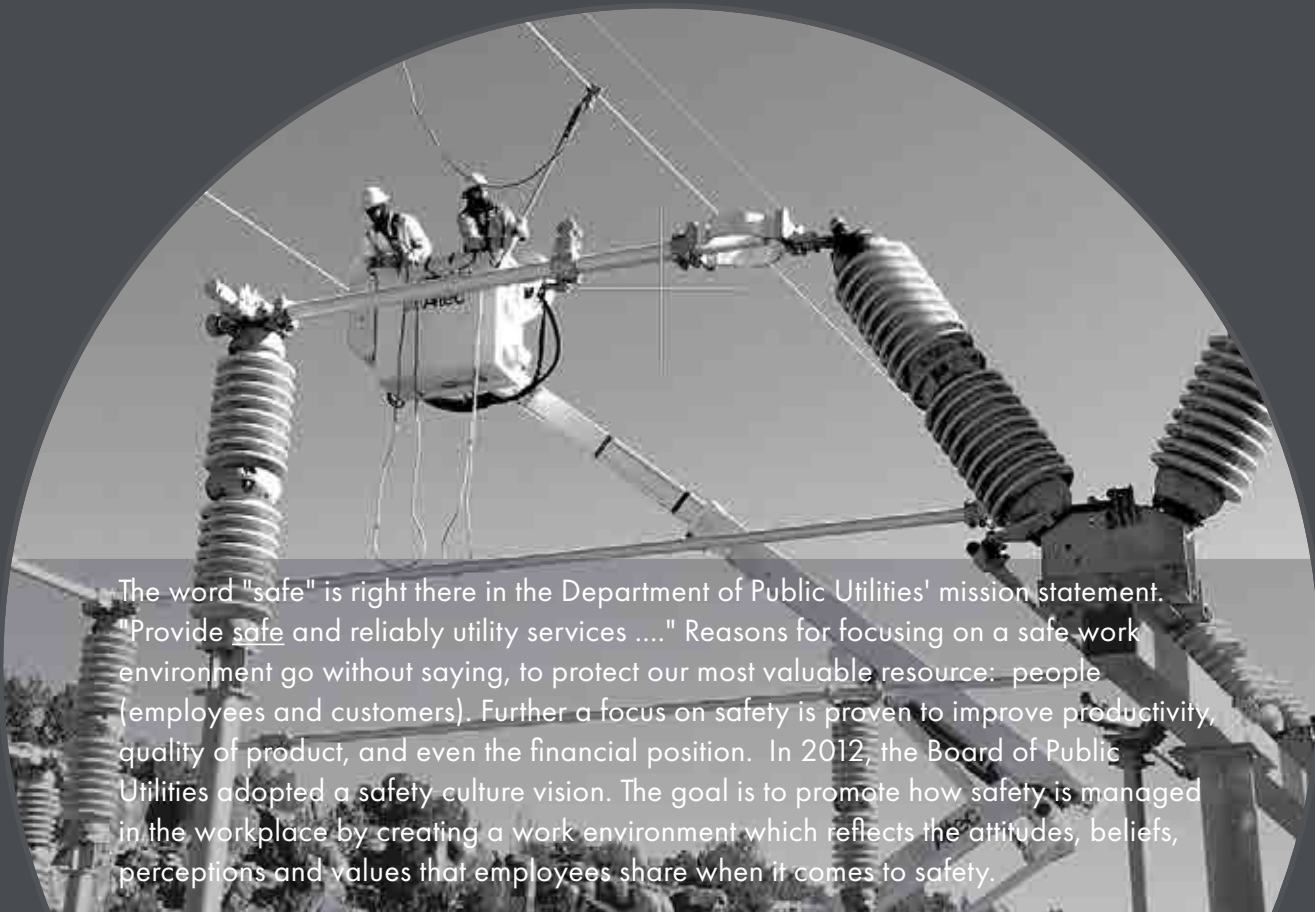
## Meetings

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### BOARD OF PUBLIC UTILITIES

The board meets on the third Wednesday of each month at 5:30 p.m. in Council Chambers, 1000 Central, Los Alamos, NM. During the COVID pandemic, however, meetings are held via the ZOOM platform. Watch the meetings streamed online at: [ladpu.com/BPUliveproceedings](http://ladpu.com/BPUliveproceedings)

# SAFETY



The word "safe" is right there in the Department of Public Utilities' mission statement. "Provide safe and reliably utility services ...." Reasons for focusing on a safe work environment go without saying, to protect our most valuable resource: people (employees and customers). Further a focus on safety is proven to improve productivity, quality of product, and even the financial position. In 2012, the Board of Public Utilities adopted a safety culture vision. The goal is to promote how safety is managed in the workplace by creating a work environment which reflects the attitudes, beliefs, perceptions and values that employees share when it comes to safety.

## Safety Culture Vision

DPU seeks to create a safety culture where employees practice safety every hour on the job, while no one is watching, because employees want to and not because employees have to. To create this safety culture, DPU employees believe in:

- Putting safety first
- Leading by example
- Establishing and enforcing a high standard of work performance
- Briefing or tailgating before every job
- Making work and safety suggestions.

## Safety Committee

DPU employees representing each utility division comprise the 13-person Safety Committee. They hold a committee meeting quarterly to review and share best practices. They also analyze accidents, incidents and near misses and discuss and implement appropriate prevention measures.

Each member of the Safety Committee is responsible for discussing the accident, incident or near miss with the rest of the staff at the next available weekly group meeting and share agreed upon prevention measures.

## Safety Employee

The Safety Employee of the Quarter program was developed by the safety committee with an intent to reward those who most clearly and effectively demonstrate DPU's safety culture vision.

Each quarter all DPU employees nominate fellow employees who exemplify the safety culture vision. A review of the nominee applications is conducted and voted on by the safety committee members and forwarded to DPU's senior management team for concurrence. The selected employee is recognized and earns an additional day of administrative leave.

Adopted 2012



# SAFETY EMPLOYEE OF THE QUARTER

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## qtr3/fy21

**DAVID RODRIGUEZ**

Senior Pipe Fitter  
Gas, Water & Sewer Division



## qtr2/fy21

**JULIE WILLIAMS-HILL**

Public Relations Manager  
Administration



## qtr 1 /fy21

**TIMOTEO MARTINEZ**

Electric Linemen  
Electric Distribution Division



## qtr4/fy20

**WAYNE VALDEZ**

Electric Linemen  
Electric Distribution Division



## qtr3/ y20

**HEATHER GARCIA**

Business Operations Manager  
Finance and Administration



## qtr2/fy20

**JAMES MARK LUJAN**

Engineering Associate  
Engineering Division



**SAFETY EMPLOYEE OF QUARTER 3, FISCAL YEAR 2021:** David Rodriguez, Senior Pipe Fitter for the Gas, Water & Sewer Division is the safety employee of the quarter. This is the second time that David's peers have voted for him as safety employee due to his dedication and commitment to safety. Most recently, David observed a serious public safety hazard near the Canyon Walk Apartments. Heavy steel traffic plates had been placed over a four-foot deep bell hole that contained a 6-inch gas main and a 12-inch water main. Over time, the plates had shifted due to the curvature of the road, heavy traffic from large construction equipment and erosion along the sides of the trench. The plates were no longer secure over the hole, and had David not barricaded and secured the area, a moving vehicle potentially could have driven into an open hole, injuring the driver, damaging the car and the gas and water lines as well. David notified the contractor who then rendered the area safe.



# STEPHEN MAREZ

## ELECTRICAL ENGINEERING MGR



### Electric Linemen

During quarter 3 electric linemen finished up work on the NM502 road reconstruction and utility upgrade project.

# ELECTRIC DISTRIBUTION DIVISION UPDATE

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During quarter 3, Department of Public Utilities' electric crews completed all work on the New Mexico Department of Transportation project to rehabilitate NM 502 and construct a roundabout. This included relocating existing and installing new electric infrastructure. These new facilities will improve redundancy and service to the downtown area.

Electric engineering staff worked with customers at the Gold Street Apartments to install electric master meters on all buildings. Staff also coordinated with the apartment owner to add a 25-kilowatt photovoltaic system at the complex, contributing to the Board of Public Utilities' goal to increase local distributed generation to six megawatts by 2040.

In regard to the Advanced Metering Infrastructure project, department crews installed all six antennas and placed them into service. While the installation of residential electric smart meters began this quarter by the subcontractor, the delivery of commercial electric smart meters has been delayed. Production of the commercial meters was stalled due to COVID-19 and supply chain issues. Department staff was advised to anticipate the arrival in August 2021. Testing of existing meters will coincide with the installation of the new commercial meters which will be

accomplished by in-house crews.

The El Mirador subdivision in White Rock is in full construction mode with housing units being erected on Confianza Street. Electric line crews will continue to install conductors, transformers, and meters to service the new subdivision. Development of upper Confianza phase two is underway.

Tree trimming started up this quarter by the department's contractor who will focus on specific areas throughout the county. To prepare for a potentially dry and windy summer season, the department has prioritized trees in the canyons and the ski hill.

The Los Alamos Substation Switchgear project has been delayed due to the Los Alamos National Laboratory site construction issues. The anticipated date for completion will now be later in the 2021 calendar year. When completed, the townsite will have a second substation and eight new power lines with which to distribute power. The project is important to ensure reliable power to Los Alamos County.

Engineering staff is in the process of designing capital improvement projects identified in the latest condition assessment and scheduled for fiscal year 2022. Engineering is getting a jump

start and working with the procurement department now to order these materials in advance to prevent material shortages since the supply chain is disrupted due to COVID-19. Products that typically arrive in four weeks are now taking 20 weeks. Additionally, the increased number of capital projects within the county will put a strain on supplies needed for maintenance and repair.

Electric engineering continued to work on designs and specifications for several county projects during quarter 3:

- The replacement White Rock wastewater plant. 100% design complete - Begins in Q3
- The White Rock effluent water booster station- Begins in Q3
- The Canyon Rim Trail underpass project- Begins in Q3
- The Hills Apts- In design
- Arkansas Place Apts –In Construction
- Canyon Walk Apts– In construction
- Canyon Walk Apts off site development – In construction
- The Bluffs Apts- In design
- El Vado hydroelectric transformer replacement - In design
- Century Bank – In construction
- Pet Pangea- In design
- Aquatic Center Kiddie Pool- In construction

## System Average Interruption Duration Index

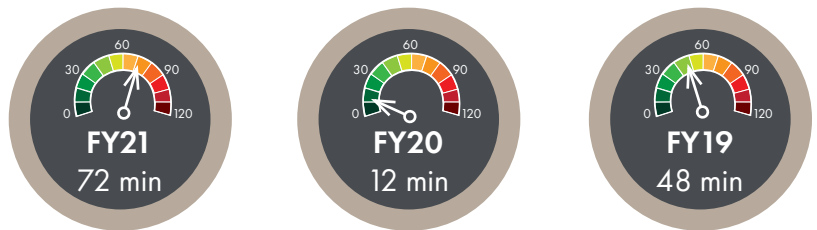
As a reliability indicator, DPU measures its System Average Interruption Duration Index (SAIDI). This is a formula to determine the annual average time that a DPU customer could expect to be without power. According to the Energy Information Administration (EIA), the mean SAIDI in 2019 was 132 minutes without major events and 267 minutes with major events for 809 utilities across the nation (excluding U.S. territories). This information is available on the EIA website - <https://www.eia.gov/electricity/data/eia861/>

DPU set a goal in 2008 to reduce its SAIDI to below 60 minutes (including major events). At the end of quarter 3, FY2021 DPU's SAIDI increased to 72 minutes which includes major events. This is slightly above the DPU 60-minute goal and well below the 2019 National mean SAIDI of 267 minutes.

## QUARTER THREE

### QUARTER THREE DPU RESULTS

As of March 31, DPU's rolling 12-month SAIDI results for quarter 3 were 72 minutes in FY 2021; 12 minutes in FY 2020; and 48 minutes in FY 2019.

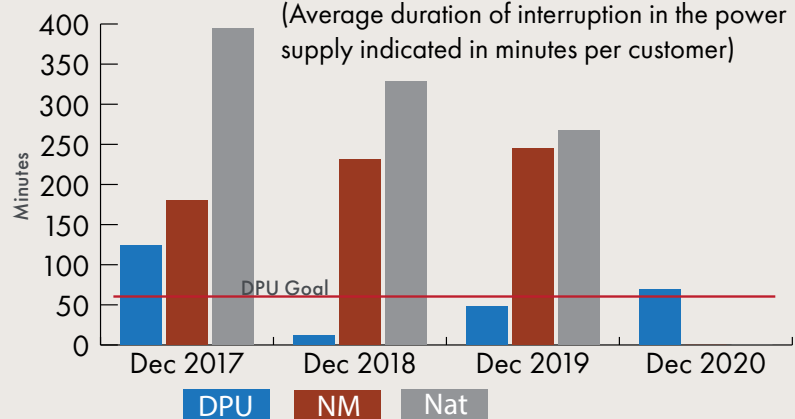


### CALENDAR YEAR RESULTS /Comparisons

Reliability reports issued by the Energy Information Administration\* demonstrate that DPU's SAIDI is lower than the average of combined New Mexico utilities (includes New Mexico cooperatives, investor- and municipal-owned utilities) and the average of combined U.S. utilities. Note that the EIA will release Dec. 2020 SAIDI data in Oct. 2021.

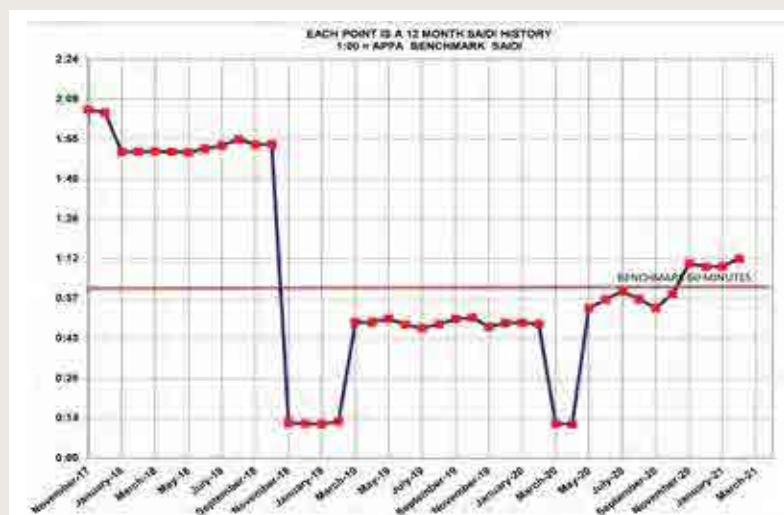
\*EIA website - <https://www.eia.gov/electricity/data/eia861/>

**System Average Interruption Duration Index**  
(Average duration of interruption in the power supply indicated in minutes per customer)



### DPU SAIDI /2017 - Present

DPU records its SAIDI each month (the rolling 12 month average), and includes major events. In November 2017 DPU experienced a major event when the incoming transmission line from Los Alamos National Laboratory was lost and the townsit lost power, negatively impacting DPU's SAIDI.



## Distributed Generation

Unlike conventional power generating stations that are centralized and require transmission lines, distributed generation resources are decentralized and close to the load, such as rooftop solar systems. In addition to the utility-scale solar array on the landfill, Los Alamos has several commercial and residential customers who have opted to install small solar or photovoltaic distributed generation systems.

### Total Distributed Generation

As of the end of quarter 3, distributed generation resources total 1,515 kilowatts connected to the distribution grid.

- Residential systems total 1,133 kilowatts, and
- Commercial systems total 382 kilowatts.

### New Distributed Generation

547 kilowatts of distributed generation were added to DPU's electric distribution grid during quarter 3.

### Pending Distributed Generation

Currently customers are in the process of adding another 382 kilowatts of distributed generation to DPU's electric grid.

## CARBON-NEUTRAL ELECTRICAL ENERGY PROVIDER

On January 20, 2016, the Board of Public Utilities adopted the following: The Department of Public Utilities will be a carbon-neutral electrical energy provider when the electricity distributed to Los Alamos County consumers is generated or purchased from sources that in their normal operation cause no net release of carbon dioxide to the atmosphere.

1. "Los Alamos County customers" means those customers scheduled in the Los Alamos County Code of Ordinances Section 40-121; this does not include DOE/LANL.
2. "No net release of carbon dioxide" means that purchases or generation of carbon-based electrical energy, necessary when carbon-free supplies are not practically available to supply Los Alamos County consumers, will be fully offset from previous sales of surplus carbon-free electricity to other entities.



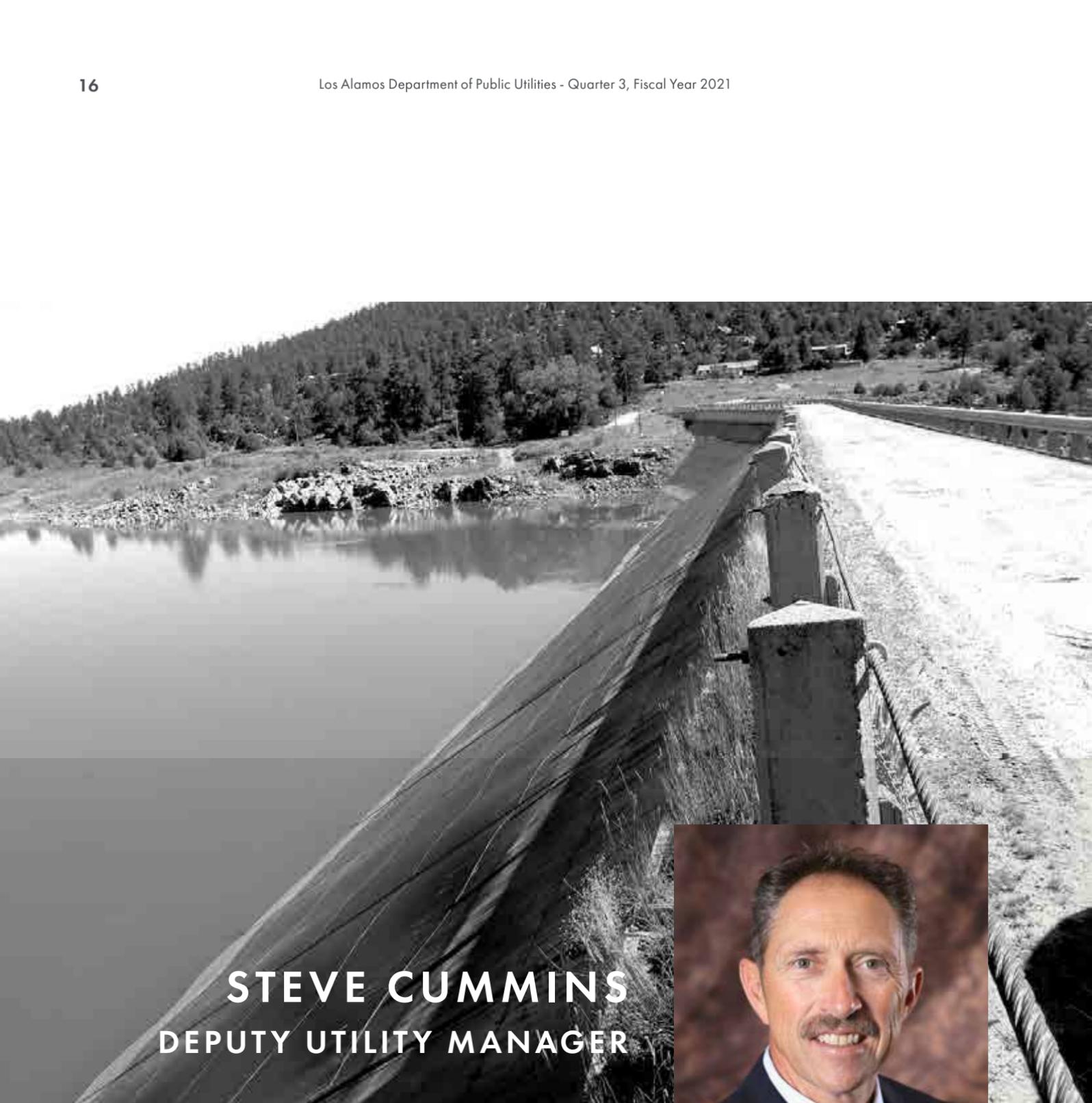
**2.1 MW**  
Total DG

**1.5 MW**  
Metered  
DG

**1.1 MW**  
Residential

**382 kW**  
Commercial

**623 kW**  
Pending DG



**STEVE CUMMINS**  
**DEPUTY UTILITY MANAGER**



**El Vado Dam**

Los Alamos County's hydroelectric facility is on the other side of the dam.

# ELECTRIC PRODUCTION DIVISION UPDATE

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## San Juan Generating Station

The City of Farmington is pursuing a carbon sequestration project along with Enchant Energy that would keep the San Juan Generating Station (SJGS) open beyond the June 30, 2022 expiration date of the Project Participation Agreement. DPU notified all parties that Los Alamos County will exit the facility as planned in 2022 when the Agreement expires. At this time, no evidence has been presented to the satisfaction of the non-extendors to demonstrate: 1) the viability of the project, 2) that Enchant Energy is able to assume liabilities, and 3) Enchant Energy and City of Farmington are able to provide assurances of a clean break to those exiting the facility. The non-extendors expressed concern.

As the last year of operation approaches under the current Project Participation Agreement, the SJGS owners have agreed to move forward on a decommissioning study for the facility in parallel with negotiating a transfer of ownership to the City of Farmington and Enchant Energy.

## Hydroelectric Facilities

As spring run-off enters the reservoirs, flow releases have accelerated and increased electric generation at the El Vado and Abiquiu hydroelectric facilities.

DPU crews are preparing to replace the El Vado transformer. Actual installation is to occur in the summer of 2022 while the facility is off-line and will coincide with

the Bureau of Reclamation's repairs to the dam face. The engineering division issued a bid to paint the interior floors at El Vado, and the outside decks, gantry cranes, jib cranes and railings for both plants. Meanwhile, the hydro staff is replacing the lighting at both plants with LED fixtures.

## One-megawatt Solar Array/Landfill

An inverter failed at the one-megawatt solar array on the Los Alamos landfill, taking 400 kilowatts off-line. Staff received a bid for repairs and a contract was approved by the Board of Public Utilities in April. We anticipate that the 400 kilowatts will be brought back online by the 4th quarter.

DPU and the county procurement office prepared a request for proposals to decommission the Battery Energy Storage System comprising the sodium sulfur and lead acid batteries. DPU was in the process of finalizing a contract with the selected offeror, when the attorney's office alerted staff that they had not complied with the real property disposal policy and obtained an appraisal. Staff appropriately terminated the process. After an appraisal is acquired, staff will advertise for proposals again.

## Energy Imbalance Market (EIM)

As of April 1st, the Public Service Company of New Mexico (PNM) began operating in the California Independent System Operator Energy Imbalance Market. Over the last three quarters DPU was preparing for PNM's

go-live date. Utilicast completed a gap assessment and recommended:

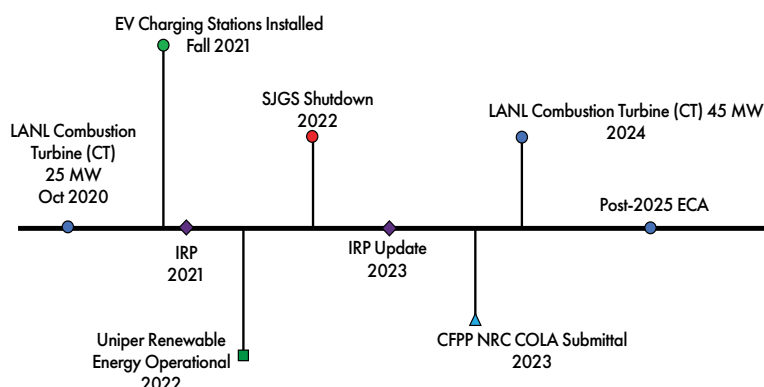
1) adding a full-time employee to the electric production division, 2) hiring a consultant to assist with the implementation of EIM procedures, and 3) purchasing the necessary software to support the requirements of load forecasting. While recommendations two and three are completed, DPU's efforts to complete recommendation one - to hire a new employee by the first week in January - were unsuccessful. After three attempts of advertising for the position, DPU was not able to hire a qualified candidate. Working with representatives from Human Resources, DPU is currently modifying the job description and will advertise again upon Board and Council approval. Until a new employee is hired, existing employees, on top of their regular duties, are staying apprised of the EIM to anticipate and respond appropriately to activity that may affect DPU's operation.

## Sandia & Kirtland Air Force Bases merchant desk services

Staff continues to support Sandia and Kirtland Air Force Bases in a post 2023 power purchase agreement to meet their combined power demands. These efforts require an updated Interagency Agreement between Department of Energy-NNSA and WAPA. Additionally, Kirtland Air Force Base is conducting a study to meet future power demands that considers resiliency and incorporates more sustainable resources such as renewable energy.

# INITIATIVES FOR FUTURE ENERGY RESOURCES

The Future Energy Resources Committee (an ad hoc citizen committee) prepared a July 2015 report to recommend future energy generation resources for Los Alamos County to meet a goal to be a carbon neutral electric provider by 2040. The Board of Public Utilities adopted most of the recommendations in January and March 2016. DPU's plan to implement the BPU adopted policies are described here.



## EV charging stations

On September 18, 2020, DPU received a signed Project Agreement from the New Mexico Environment Department (NMED) formalizing two grants for electric vehicle charging stations. The grants provide \$63,800 for the construction and operation of one direct current fast charger at the White Rock Visitor Center parking lot and \$71,800 for the construction and operation of one direct current fast charger at the Los Alamos County Municipal Building parking lot. The Electric Production division has budgeted an additional \$150,000 for the installation of electric vehicle chargers; approximately \$50,000 for grant matching on the two fast chargers, and \$100,000 for the construction and operation of additional level-two chargers subject to Board and Council approval. DPU has postponed conducting a competitive procurement process for the materials and labor to install the charging stations until later in the summer to help relieve procurements workload. The new plan is to have this project completed in the fall of 2021 prior to the winter months.

## Carbon Free Power Project

Through DPU's membership with the

Utah Associated Municipal Power Systems (UAMPS), staff has been following the development of the Carbon Free Power Project (CFPP) which is a projected 720 MW nuclear generating station to be built in Idaho using small modular reactor (SMR) technology.

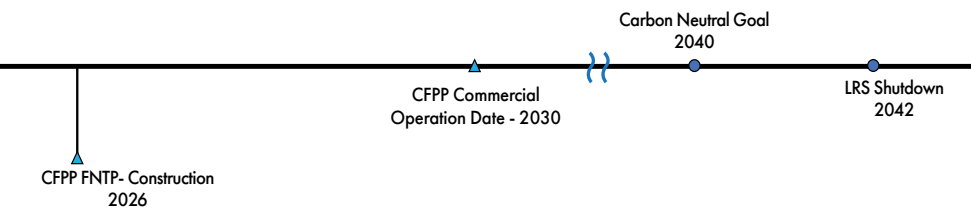
On August 25, 2020, the Council approves DPU continued participation in the CFPP project up to \$1.26 million contingent upon UAMPS receiving the DOE-Multi Year cost share award. On October 16, 2020, DOE approves cost-share award of \$1.355 billion for UAMPS' Carbon Free Power Project representing approximately 23 percent of the estimated development and construction cost of the CFPP, spread over a period of nine years, concluding with the commercial operation of the CFPP. October 31, 2020 was the end of the phase allowing the option for participants to reduce project subscription or to withdraw from the project per the Power Sales Contract. As a result the project subscription decreased from 213 MW to 100.6 MW. The elimination of the DOE joint Use Modular Plant (JUMP) concept was responsible for one module or 60MW.

The JUMP concept was replaced with the DOE Multi-year cost share award. The County's reduced its share to 6.37 MW keeping us under the spending cap authorized by Board and Council. Other UAMPS participants in the project reduce for similar reasons.

Since there was a reduction in subscription the Project Management Committee voted to establish an additional contractual off-ramp in January of 2022. The primary goal over the next year is to increase the subscription in the project from utilities outside of UAMPS who have expressed interest but have not signed a power sales contract. Without the full subscription the project may no longer be viable at the \$55/MWh. The first subscribers in the project will have an opportunity to increase their subscription prior to the remaining capacity being committed to other utilities.

## Utility-Scale Renewable Projects

In January 2020, the Board and Council approved a power and renewable energy credit sales agreement with Uniper Global Commodities North America, LLC. The contract quantity is a firm 15 MWs around the clock



## FUTURE ENERGY TIMELINE

Power Purchase Agreement (PPA). It is a take-or-pay PPA for a 15-year term with no escalator. Under the agreement, renewable energy will be sourced from two power-generation facilities now under construction in New Mexico. Solar power will be supplied from a project in northwest San Juan County with wind power coming from a generation center in central New Mexico. DPU expects to begin taking power from this contract in fiscal year 2022, prior to Los Alamos exiting the San Juan Generating Station in June of 2022.

### Electric Coordination Agreement (ECA)

Staff is working with the Department of Energy-NNSA on a post 2025 ECA. This includes efforts to update the Interagency Agreement between DOE-NNSA and Western Area Power Administration (WAPA) to allow DOE-NNSA the ability to contract for Power Purchase Agreements for periods up to 40 years. This will ensure that DOE-NNSA can secure power for LANL well into the future. The first project under consideration in an eight MW solar PV array to be constructed at LANL using a power purchase agreement for an expected 25-year term.

### Advanced Metering Infrastructure (AMI)

Installation of Advanced Metering Infrastructure equipment began this quarter. In March, and commencing in White Rock, Utility Metering Solutions (UMS) attached smart points or communication modules to existing water and natural gas meters and began replacing electric meters with smart electric meters. Work has now extended into the townsite. DPU hopes to roll out the customer portal functions by July.

### Laramie River Station (LRS)

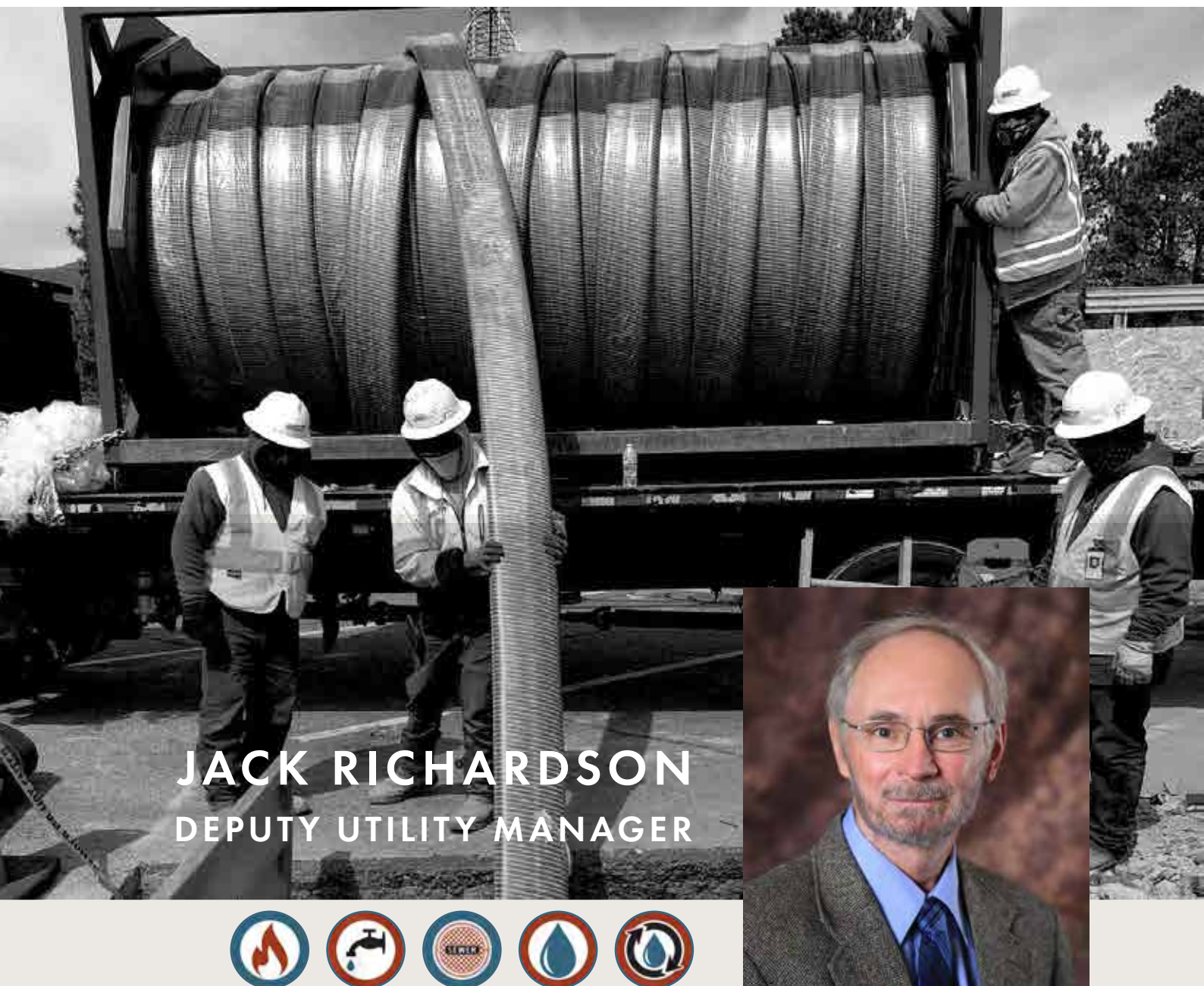
Alternatives to exit the Laramie River Station prior to the end of the life-of-the-plant power purchase agreement are being explored by staff. Since LRS is one of the county's cheapest resources, staff is looking at a potential power swap with a power marketer who is developing wind and solar resources in the region. The swap would be a firm power, unit contingent swap at no additional cost above what we currently pay. We expect the swap to include approximately 75 percent renewable energy with the remaining 25 percent coming from base load resources such as LRS. If staff can negotiate terms acceptable to the county, they will bring the contract to the Board and Council for approval.

### FER Timeline

The timeline (left) shows the strategic plan with several important dates which play a significant role in the decision making process to achieve the goal to be a carbon neutral electric energy provider by 2040 while sustaining the electric demands of the community.

It started with the development of an Integrated Resource Plan (IRP) in 2017, which provides the most economical options to achieve the goal based on the best information available at that time and the County's partnership through the Electric Coordination Agreement with DOE-NNSA.

Staff is planning on updating the 2017 IRP in 2021 to see if there are any changes in the recommended resource portfolios for achieving our 2040 carbon neutral goal. There are three future contract dates which provide an opportunity to shape our future power supply. First the expiration of the San Juan Project Participation Agreement and anticipated shut down of the San Juan Generating Station in 2022. Second, the County's expected exit from the coal-fired Laramie River Station, where the County signed a life of the plant (2042), power purchase agreement. Third, the expiration of the current Electric Coordination Agreement (ECA) between the County and DOE-NNSA LANL in 2025. Through the current agreement resources are pooled together to serve the combined load of the County and Los Alamos National Laboratory. Today LANL accounts for approximately 80% of the total electrical demand. An extension of the ECA along with the negotiated terms and conditions will have a significant impact in DPU's decision to add new or replacement generation resources to the mix to ensure we don't have an over or under supply of energy post 2025.



**JACK RICHARDSON**  
DEPUTY UTILITY MANAGER



**16-Inch water line insertion project on Pajarito Road.**

This project utilized a revolutionary new pipeline rehabilitation material using a thin Kevlar material encapsulated within a thin polyethylene inner and outer shell used to slip line the existing pipeline and was completed in April 2021.

# GAS, WATER & SEWER DIVISION UPDATE

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Employees in the Gas, Water and Sewer; Water Production; Wastewater Treatment; and Meter Reading divisions continued functioning while adhering to COVID-19 safety protocols. This included splitting crews into smaller units and driving in separate vehicles. The quarterly report on the condition for the water system was presented to the Board of Public Utilities at the February 24, 2021 board meeting. W

## Gas, Water, Sewer (GWS)

The GWS crew is excited now that both vactor trucks are available for use. The existing vactor truck returned from the repair shop and the new vactor truck arrived this quarter. The rental vactor truck was returned but did not travel far as the City of Espanola was experiencing problems with their vactor trucks and so they began renting the same vehicle we had been renting once we were done using it.

The new supervisory control and data acquisition (SCADA) system contract for wastewater collection and natural gas distribution was approved this quarter. The contractor has started development of HMI screens and background programming as well as acquisition of the necessary software licenses. Completion of field work (SCADA prep) continued to be delayed into the next quarter because of the COVID, weather and huge boulders.

Progress was made with the approval of a contract for field prep construction at the Fairway lift station. Gas system SCADA prep work design in Engineering continues and construction bidding is scheduled in the near future.

Water pipeline breaks were minimal due to relatively mild and stable weather. There was a single small sewer overflow event (no damage claim) which was handled well for the homeowner. The gas system cruised through the deep winter with no problems.

A GWS crew dedicated to the White Rock cathodic protection project continued replacing anodes to protect the steel pipeline from corroding. The crew, at the suggestion of a supervisor, brought back a previous method of temporary road patching that holds up well until the Public Works on call contractor can affect the permanent repair. DPU has expanded the scope of work for their new on call contract to include road patching and after receiving bids next quarter should have multiple firms to select from for road patching within a DPU controlled on-call contract.

Work continued on the capital improvement planning project for adding a pressure regulating valve (PRV) station in Barranca Mesa,

to prepare to paint the Barranca Mesa water tank No. 2. The sewer crew conducts daily visits to two small volume sewer lift stations due to faulty control systems. Two other sewer lift stations with faulty control systems are running on temporary, emergency control systems purchased for circumstances like this. A third sewer lift station with a faulty control system component was repaired in-house with assistance/training from an outside consultant JCH. The plan is to have all of these sewer lift stations up and running with new control systems, and SCADA, within the next six months.

The GWS crew welcomed Robert Lucero into their ranks full time. Robert transferred into GWS from the meter reading crew this quarter.

## Water Production

The waterline repair project along Pajarito Road on DOE land near the Diamond Drive intersection began construction this quarter. This project is utilizing a revolutionary new pipeline rehabilitation material using a thin Kevlar material encapsulated within a thin polyethylene inner and outer shell used to slip line the existing pipeline. The project was delayed due to the cold snap in Texas that caused the ship carrying the material to relocate to California for off-loading. Fortunately, the mild cooler weather remained

during this delay and so water demand did not dramatically increase while this pipeline was out of service. This project will be 100 percent complete and buttoned up next quarter.

Pajarito Well No. 4 continues to function only for preliminary testing. The one remaining item is a reworking of the cooling system for the main bearings to the angle drive between the engine and the pump shaft which is scheduled for completion in the next quarter.

The project to design the new Otowi Well No. 2 pump equipment and housing was completed with bidding and award next quarter. Bids have been received for the Tsankawi chlorination building and partial New Mexico State Road 4 pipeline replacement project. We expect the projects to be awarded next quarter.

The design of the Overlook Park booster station project for the non-potable water system was completed and awarded. Construction begins next quarter. Project design for the non-potable water system Bayo booster station tank No. 2 project is nearing completion with bidding and award scheduled for next quarter.

#### Wastewater Treatment

Bohannen Huston (BHI) and DPU engineering team have completed

the 95 percent design review for the replacement White Rock wastewater treatment plan. The team is moving toward 100 percent design completion early next quarter. The formal public hearing and field site visit with New Mexico Environment Department

Rock wastewater treatment plant comes on line. This new equipment is expected to cut the time needed to pick up and screen a windrow for placing into a curing pile as final compost by half (from 16 to 8 hours) and is also expected to remove any miscellaneous

metal and plastics received in the incoming waste streams for horse manure and green waste used in the composting process.

Evelyn Maestas received a promotion to Apprentice III after passing her level 3 examination for State certification.

#### Meter Reading

The Advanced Metering Infrastructure project finally started in earnest this quarter. Installations of smart points to residential water meters began in White Rock in March. To keep up with the contractor who is installing the AMI equipment, the Meter Reader supervisor has been trouble shooting issues in the field, while working with the DPU Project Manager and GWS crews to record other issues in a work order tracking system.

This has kept the staff quite busy and is only expected to continue to grow with the addition of gas meters next quarter.



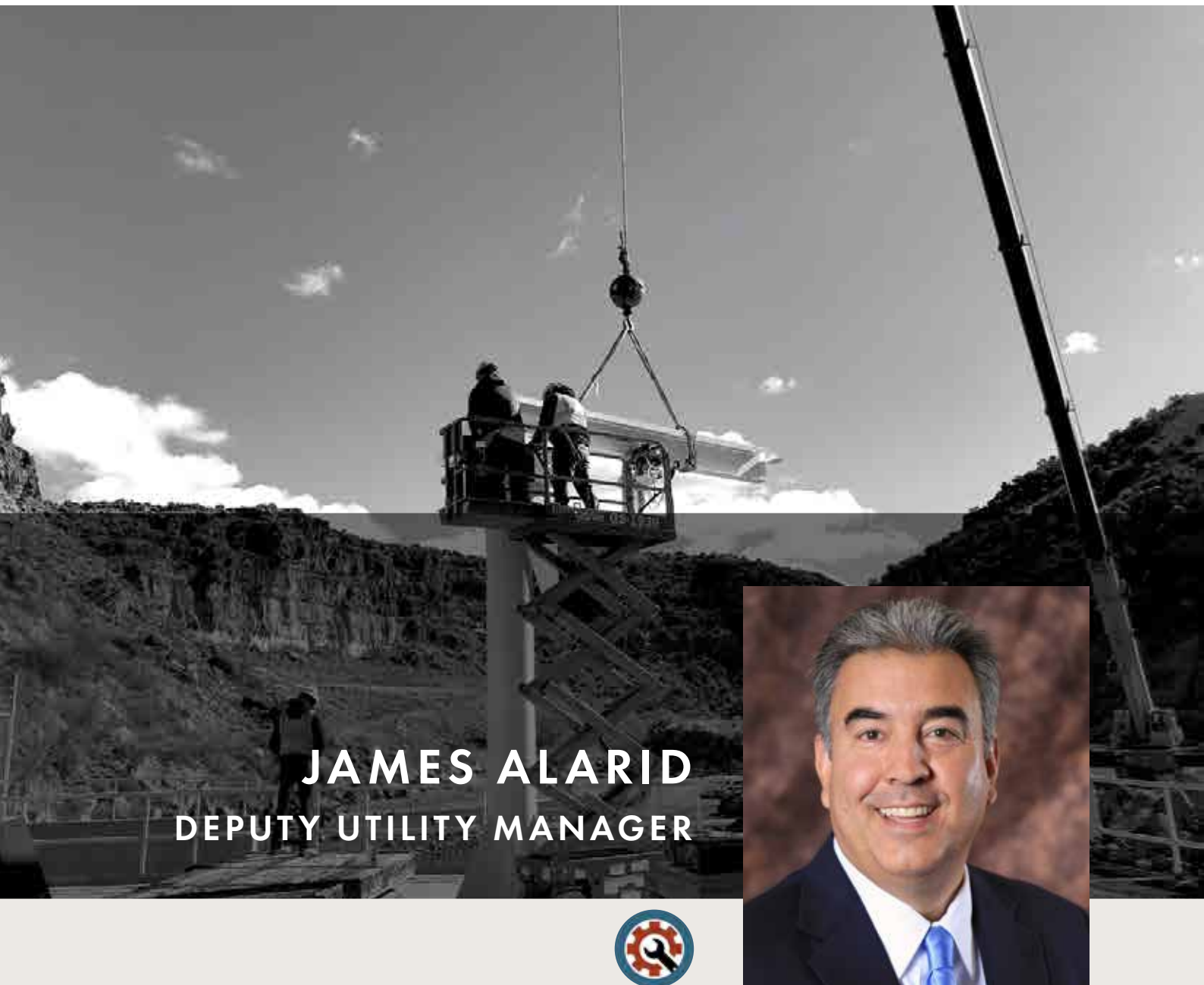
16-INCH WATER LINE INSERTION PROJECT ON PAJARITO ROAD.

(NMED) and San Ildefonso Tribal leaders was completed. Following these events, NMED began developing the Environmental Assessment document. Final environmental clearance and bidding is expected in the near future.

Supervisory staff for the wastewater treatment division has been researching equipment in preparation for compost facility expansion which will be needed when the new White



Wastewater treatment plant sludge composting



**JAMES ALARID**  
**DEPUTY UTILITY MANAGER**

#### **Jib Crane Installation**

In December 2020/January 2021, a new jib crane was hoisted by a larger crane across the river and assembled at the Abiquiu hydroelectric facility. The jib crane operates the wicket gates to release the outflows from turbine chamber into the river.

# ENGINEERING DIVISION UPDATE

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The Engineering Division has been working on projects in various stages of design, bidding and construction.

## Construction

The Pajarito 16-inch waterline rehabilitation project was completed in April. Approximately 2,500 feet of 16-inch waterline was rehabilitated by installing a structural liner. This was the first time DPU has used a structural liner to rehabilitate a waterline. The project successfully completed the rehabilitation in two weeks and this critical transmission line was placed back into service prior to our peak water demand season.

The Overlook booster station reconstruction project is progressing well. The contractor has completed the water tie-in to the pond discharge line and completed the excavation to install the turbine shaft pump cans. Work will continue through the summer as scheduled and will be completed by Fall 2021.

As part of the kiddie pool addition to the Aquatic Center there were some extensive utility relocations that were completed this quarter. A major sewer trunk line and gas line were rerouted to clear the area for the pool expansion.

The final utility punch list items are being completed on the NM-502 /Trinity (round-about) project. The project is scheduled to be complete by the end of May 2021.

The advanced metering infrastructure (AMI) project kicked off the mass installation of the gas, water and electric AMI radios this quarter. The mass installations began in March 2021. As of May 5, 2021, all of the residential water

meters have either been equipped with AMI radios or are on a short list of meters requiring meter change-outs, specialized radios or other work required to complete the AMI upgrade. Gas meters that have been equipped with the AMI radios total 1,801 and electric meters that have been changed out to AMI compatible meters total 1,149. The contractor is continuing to install the gas and electric AMI equipment and is scheduled to be complete the summer of 2021. DPU staff is working diligently to work through the AMI conversion. A number of challenges continue to present themselves as the conversion affects all aspects of the DPU's operations and work systems.

## Design

The design is being finalized in-house for a new tank at the Bayo booster station site. The project is funded by a low interest loan and grant from the Water Trust Board. The project will be bid at the end of May 2021 and is scheduled to be online by the 2022 irrigation system. Staff has also been working on the design of new metering, SCADA system and pressure relief system for the County's three natural gas border stations. The project will be bid in early June 2021.

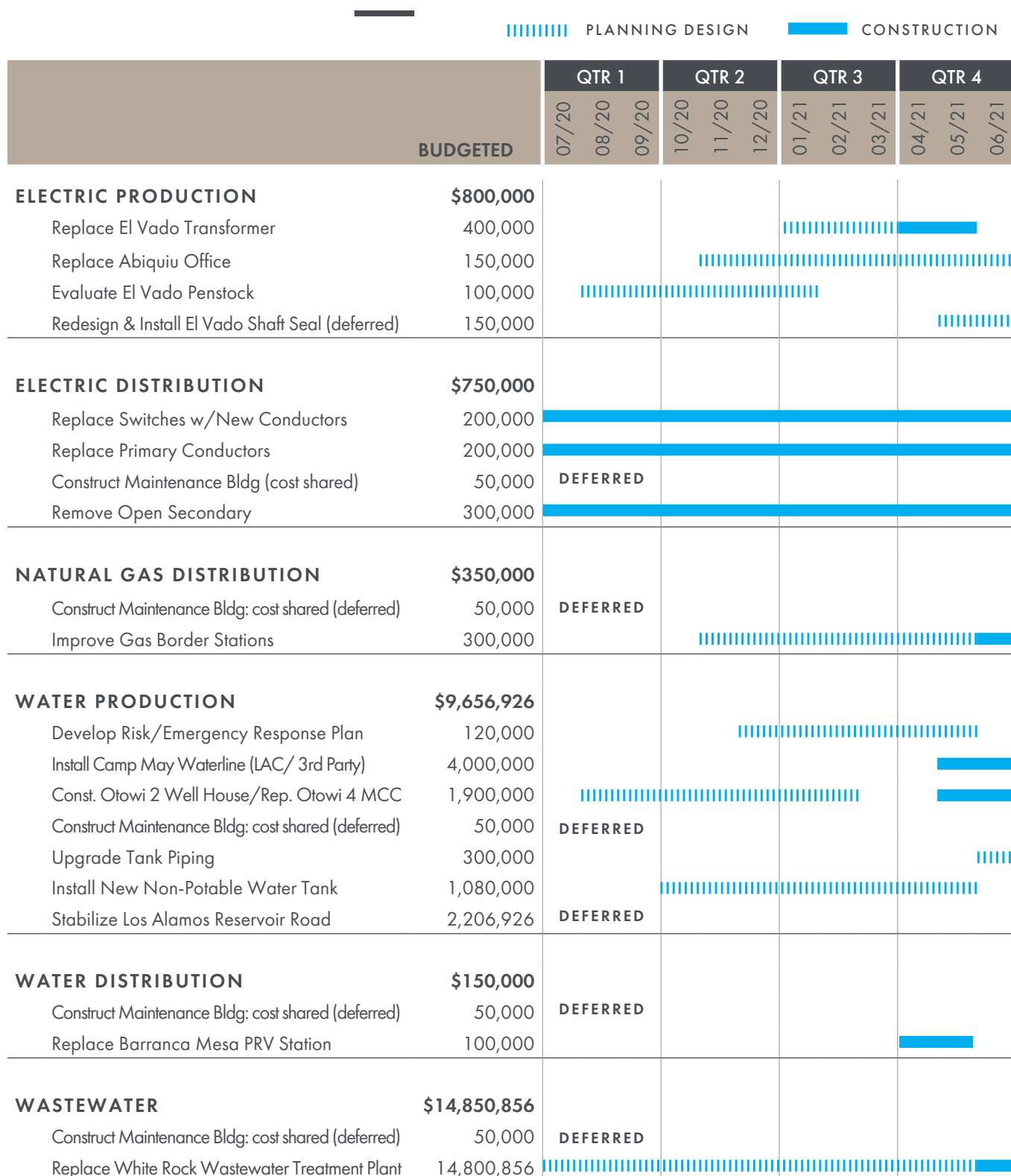
## Engineering

Work has begun on the water production system Motor Control Center/Power Supply/Control Valve evaluation project for the 27 wells and booster stations in the system. A consultant will provide a condition assessment and evaluation of the various control valves and electric gear that are at the end of their service life. The evaluation will identify and prioritize the system needs and DPU will secure a low interest loan in the amount

of \$2 million to perform the highest prioritized improvements. To comply with a new federal mandate the DPU has hired a consultant to prepare a Risk and Resiliency Evaluation and an Emergency Preparedness Plan. All public water systems are required to complete these plans and submit to the Environmental Protection Agency by June 2021. The Risk and Resiliency Plan is complete and the Emergency Preparedness Plan is scheduled to be complete by mid-May.

## Bidding

This quarter a number of planned fiscal year 2021 projects were bid for construction. The Tsankawi chlorination building and pipeline replacement project was bid and awarded. The project will replace the existing chlorination building and sodium hypochlorite generation system which are in need of upgrading to treat the additional flows from the new Otowi Well #2. The El Vado and Abiquiu hydroelectric plant deck and floor painting project was bid this quarter and will be awarded in May. The decks and miscellaneous deck features will be painted to protect the facility from leakage, corrosion and apply a new non-skid finish on the interior floors. The Otowi Well #2 and Otowi Well #4 motor control center replacement project is out to bid, with bids scheduled to be received May 18, 2021. The project will complete the well house, electric gear and pump to bring the new well online. The motor control center at the Otowi Well #4 will replace the existing gear which is at the end of its service life.





### Replace El Vado Transformer

*(Funded through: Electric Production)*

**Scope:** Replace the transformer at the El Vado hydroelectric plant.

**Budget:** \$400,000

**Schedule:** Advertise for bids May 2021



### Replace Abiquiu Office

*(Funded through: Electric Production)*

**Scope:** Relocate and replace the office at the Abiquiu hydroelectric plant away from the transformer for safety reasons.

**Budget:** \$150,000

**Schedule:** Deferred to fiscal year 2022



### Evaluate El Vado Penstock

*(Funded through: Electric Production)*

**Scope:** Evaluate the penstock valve to coincide with and take advantage of the dam refurbishment work that is planned by the Bureau of Reclamation.

**Budget:** \$100,000

**Schedule:** Complete



### Redesign & Install El Vado Shaft Seal

*(Funded through: Electric Production)*

**Scope:** Redesign and install a new shaft seal at the El Vado hydroelectric plant with one that is self-lubricating.

**Budget:** \$150,000

**Schedule:** Deferred



### Replace Switches

*(Funded through: Electric Distribution)*

**Scope:** Replace aging switches with new conductors throughout Los Alamos County

**Budget:** \$200,000

**Schedule:** Year round



### Replace Primary Conductors

*(Funded through: Electric Distribution)*

**Scope:** Replace aging primary conductors throughout Los Alamos County.

**Budget:** \$200,000

**Schedule:** Year round



### Construct A Maintenance Bldg

(Funded: Elect. Dist., Water Prod. & GWS)

**Scope:** Construct a maintenance facility at the White Rock replacement wastewater treatment plant that can be used by field crews with electric distribution, gas, water & sewer, and water production.

**Budget:** \$250,000

**Schedule:** Deferred to fiscal year 2022



### Remove Open Secondary

(Funded through: Electric Distribution)

**Scope:** Remove open secondary

**Budget:** \$300,000

**Schedule:** Year Round



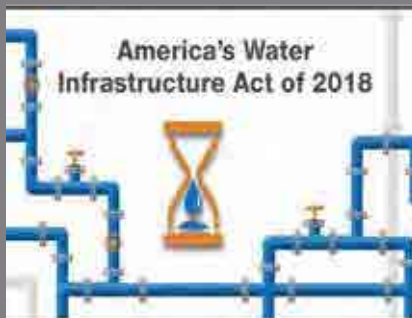
### Improve Gas Border Stations

(Funded through: Gas Distribution)

**Scope:** Improve natural gas border stations (two) with over pressure protection, metering and SCADA functions. Will permit staff to monitor and trend the flows and pressures at these critical points in the system.

**Budget:** \$300,000

**Schedule:** Bid June 2021



### Prepare Risk & Resilience/ Emergency Response Plan

(Funded through: Water Production)

**Scope:** Prepare a risk and resilience assessment and an emergency response plan in accordance with the 2018 America's Water Infrastructure Act. Utilities must certify to the Environmental Protection Agency completion of each.

**Budget:** \$120,000

**Schedule:** Completed by June 2021



### Install Camp May Waterline

(Funded: Los Alamos Co. & Ski Hill Operator)

**Scope:** Install four booster stations and 23,000 feet of waterline along Camp May Road. The project will convey water from the existing potable water system in Los Alamos to the ski lodge, Camp May campground and provide a reliable water supply for regional fire protection.

**Budget:** \$2,000,000 (LA County)  
\$2,000,000 (Ski Hill Operator)

**Schedule:** Constructing pending environmental clearance



### Construct Otowi 2 Well House, Replace Motor Control Center for Otowi 4 Well

*(Funded through Water Production)*

**Scope:** Construct the well house, install pumps and associated equipment for Otowi Well 2. Replace the motor control center for Otowi Well 4 which is located in the same vicinity.

**Budget:** \$1,900,000

**Schedule:** Bids received May 18, 2021



### Upgrade Tank Piping

*(Funded through: Water Production)*

**Scope:** Replace miscellaneous valves throughout the water production system. Work will be performed by in-house staff and supported by contractors as needed depending on the complexity of the work.

**Budget:** \$300,000

**Schedule:** Bid Summer 2021



### Install New Non-Potable Tank

*(Funded: Water Trust Board Loan/Grant and Water Production)*

**Scope:** Install a new one million-gallon effluent storage tank at the Bayo booster station adjacent to the composting operation. The new tank will capture effluent during peak times to expand non-potable water use.

**Budget:** \$1,080,000

*(\$360k Loan / \$540k Grant / \$180k Match)*

**Schedule:** Bid May 2021



### Stabilize LA Reservoir Road

*(Funded: FEMA grant, Water Prod. & LAC)*

**Scope:** Stabilize the Los Alamos Reservoir road. Clear debris from the channel and reroute the channel back to its original path.

**Budget:** \$2,206,926

*(\$1.5M Grant / \$262,500 LAC / \$262,500 DPU)*

**Schedule:** FEMA reauthorized funds in 2020 - DPU is now pursuing a New Mexico River Stewardship grant.



### Replace the White Rock Wastewater Treatment Plant

*(Funded through: Wastewater Treatment)*

**Scope:** Construct a replacement wastewater treatment plant in White Rock to be operational by FY21.

**Budget:** \$14,800,856

**Schedule:** Bid July 2021

# SUSTAINABLE LOS ALAMOS UPDATE

## Reclaimed Wastewater

Reclaimed water use during the months of quarter 3 - January, February and March - are typically non-existent. In fiscal year 2021, however, some reclaimed water use to meet the county's demand to irrigate parks, ballfields and the golf course started to pick up in February and March. Quarter 3 reclaimed wastewater used during fiscal year 2021 for townsite irrigation totaled 3.3 million gallons. White Rock, meanwhile, used no reclaimed wastewater during quarter 3. Quarter 4 includes months when the peak watering season begins and the department anticipates seeing reclaimed wastewater quantities increase drastically. Irrigating with reclaimed wastewater water has saved the county a total 67.5 million gallons of drinking water so far between July and March for fiscal year 2021.

## Water & Energy Conservation

DPU has been working to update the Energy and Water Conservation Plan in fiscal year 2021, now that the Board of Public Utilities has adopted new conservation goals.

DPU maintains a conservation plan for the following three reasons.

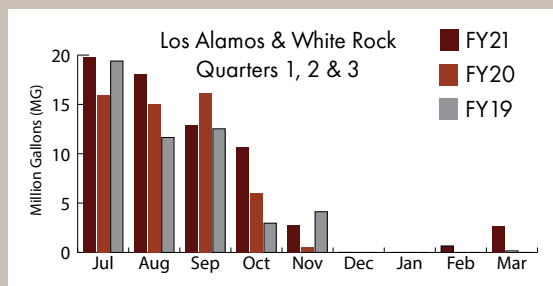
- As a public water supplier, the

Office of the New Mexico State Engineer (OSE), Conservation Division requires a current water conservation plan be reviewed, approved and filed with their office. The OSE has published a guidance document titled "New Mexico's Water Conservation Planning Guide for Public Water Suppliers." The guidance provides a template which must be adhered to for acceptance

year's initiatives and progress in managing the electric demand and supply effectively and efficiently. This includes an energy conservation plan that establishes DPU's demand management strategies, initiatives and measurements.

- The third component of the Water and Energy Conservation Plan is establishing conservation initiatives, policy, programs and measures that reflect the community's demographics, planning efforts, residential and commercial sector and stakeholder interests. In 2015, DPU assembled an advisory group of community stakeholders which is typical in preparation of conservation plans. Gathering community input and recommendations ensure that there will be community buy-in and support.

## Gallons of Reclaimed Wastewater Used to Irrigate County Turf



by the OSE. We will follow this template for both the water and energy components of the plan.

- As a requirement to receive the County's allocation of hydroelectric power from Glenn Canyon Dam, the Western Area Power Administration (WAPA) mandates members issue annual progress reports. The reports summarize the

In fiscal year 2020 a volunteer citizen committee at the request of the Board of Public Utilities, prepared a report and presented it at the July 2020 BPU meeting. The citizen committee recommended several initiatives that could be implemented to conserve water and energy in Los Alamos:

- Educating customers on a variety of topics including tracking usage, changing habits, etc.



- Customizing bills to compare usage with neighborhoods and the community at large,
- Researching grants for conservation programs,
- Partnering with the public schools and the environmental services department,
- Developing ordinances that would restructure rates
- Working with other county departments to encourage building code changes, etc.

Based on these recommendations, board members adopted new or modified environmental goals at the October 21, 2020 meeting to be incorporated into the updated DPU energy and water conservation plan.

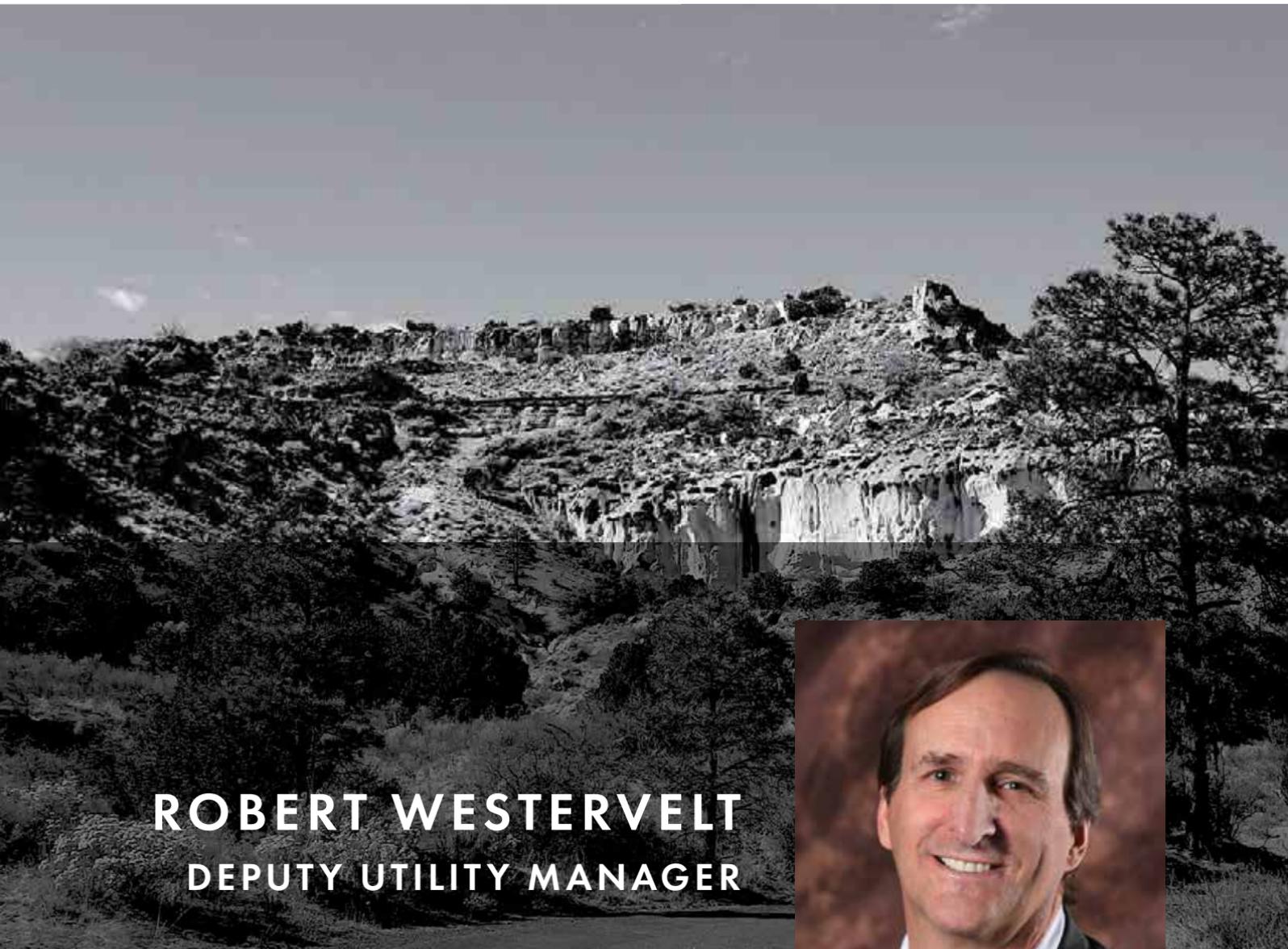
DPU employees were also asked by the BPU to survey the community on the overall sentiment of the adopted environmental goals. This was conducted by Triton Polling in December 2020. Results are as follows:

- 76.9% support and 11% oppose DPU's goal to be a carbon neutral electric provider by 2040.
- 87.4% support and 7.7% oppose DPU's goal to increase local solar (such as roof top solar panels) from two to six megawatts by 2040.
- 44.7% support and 32.1% oppose DPU's goal to reduce today's drinking water use by 12 percent by 2030.
- 68.8% support and 21.1% oppose DPU's goal to reduce today's

natural gas use by five percent by 2030.

- 54% support and 33.7% oppose DPU's goal to eliminate natural gas usage by 2070 (requiring all energy use be from carbon neutral electricity).
- 81.8% support and 8.8% oppose DPU's goal to improve the reclaimed wastewater that is used to irrigate county and school turf so that it is the highest quality possible for unrestricted urban uses.





**ROBERT WESTERVELT**  
**DEPUTY UTILITY MANAGER**



**View from Los Alamos Canyon**

Looking up at NM502 as it heads into Los Alamos County.

# FINANCE AND ADMINISTRATION

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## Electric Operations

In a continuation of what has been seen in the past several years, electric sales were below budget for the first three quarters of FY21, both for retail customers and for sales to DOE. Retail sales were 10.28 percent below the budgeted 92,814,408 kWh and sales to DOE were 34.71 percent below the budgeted 460,389,091 kWh. Overall kWh sales for all customers were 30.61 percent below budget.

In electric distribution, the third quarter closed with year-to-date net operating revenues of \$3,065,936 which is just over the total budgeted for the year. Due to a power shortage in the southwest region power costs spiked in August, and LAC cost of power for the first three quarters of the fiscal year was \$58.176, compared to a budget projection of \$47.997. This higher than projected cost of power was offset by the allocation of admin charges and several maintenance categories being significantly lower than anticipated. It is expected these maintenance programs will ramp up now in the summer months, but with COVID concerns it may be difficult to schedule crews to meet all maintenance goals. Capital expenditures totaled \$348,232, which is 46.43 percent of the \$750,000 budgeted for FY21.

The first three quarters of FY21 yielded total net income of \$2,717,705 for electric distribution. Net income of \$1,692,890 was budgeted for the year, which includes the profit transfer. Budget adjustments and carryovers totaling \$3,808,002 yield a net loss budgeted at (\$2,115,112), which would be funded through revenues



JEFF ROMERO, SHOP SUPERVISOR WITH GAS, WATER & SEWER DISCUSSES CUSTOMER ISSUES WITH AMANDA BURNWORTH, CUSTOMER CARE REPRESENTATIVE.

earned in the budget year those expenditures were first budgeted. As the department moves forward with planned maintenance activities and capital projects, we should see the early net revenue dissipate over the year to match budget projections more closely.

## Gas Operations

Due to continuing cool temperatures, gas sales in the second and third quarters of FY21 were higher than budgeted, reversing the first quarter's result and yielding year to date gas sales at 4.83 percent over budget, with total sales of 6,632,911 therms. Net cash flow from operations in

the third quarter was negative (\$349,973), reversing the first two quarters positive operating cash flow and yielding year to date operating cash flow of negative (\$78,238). In February there was a short-term regional gas supply shortage due to a polar vortex weather event and for a period of several days market cost of gas was extremely high. While we purchase most of our gas (approximately 80%) at month-end prices through the New Mexico Energy Acquisition Authority (NMMEAA), we did have limited exposure to those market prices for a few days. The total additional gas cost of approximately \$1.3M is covered by a budget adjustment

approved in March, but because the "pass through" rate for gas has an upper cap of \$0.99/therm, that additional gas cost will take several months to offset through additional revenues, especially since it is normal for gas consumption to drop off in the fourth quarter summer season.

For the full fiscal year, gas operations' budgeted operating cash flow was originally \$236,728, and the budgeted transfer to the general fund is \$201,959. There are \$350,000 capital expenditures budgeted in FY21. After the budget adjustment for gas purchases discussed above totaling \$2,500,000, and 3,074,786 in other budget adjustments and carryovers, mostly related to the gas portion of the AMI project and other encumbrances, a negative net cash flow of (\$5,890,017) is budgeted. The additional cost of gas will be recovered through the pass-through rate mechanism over the next three to five months. The remainder of that negative cash flow is funded from existing fund balance.

#### **Water Operations**

Retail water sales of 627,133 kgal were 16.67 percent higher than budget estimates of 537,545 for the first three quarters of FY2021. Warm weather and a mild monsoon season most likely led to somewhat higher consumption for irrigation, tempered somewhat by continuing conservation efforts throughout the community. Wholesale sales to LANL of 242,324 kGal were 14.79 percent less than budgeted. The COVID Pandemic has resulted in numerous LANL sites being minimally staffed and normal domestic and irrigation consumption has likely been affected. Process loads at LANL

may have been somewhat curtailed as well. Combined total sales in thousands of gallons for both Retail and DOE were 5.78 percent higher than budgeted for the period.

Net cash flow from water operations were \$1,577,764 year to date. Capital projects funded through sales totaling \$2,975,865 were budgeted in the water fund for the year, but only \$79,590 has been expended to date, yielding total water net revenues of \$1,498,174 for the period. Water production's budget includes certain projects that are to be funded from other sources, which will only be expended if those funding sources are realized. There are \$6.8M in revenue funded projects budgeted, but only minimal costs on those projects have been realized as of the end of the third quarter of the fiscal year.

For the full fiscal year, water operations' budgeted operating cash flow is \$851,928, and budgeted capital expenditures are \$2,975,865, net of external funding. \$5,339,788 in carryovers and budget adjustments, mostly related to the water portion of the AMI and several projects in Water Production result in budgeted net negative cash flow of (\$7,463,725), funded through existing fund balance.

#### **Wastewater Operations**

Cash flow from operations was \$1,958,223 for the nine months

ended March 31, 2021. There have been modest capital expenditures totaling \$524,271 to date this fiscal year, yielding total net sewer revenue of \$1,433,952.

For the full fiscal year, wastewater operations' budgeted operating cash flow is \$1,721,316. In total, \$14,850,856 in capital expenditures are budgeted, which includes the debt funded White Rock treatment facility. Besides the Treatment Facility, there were \$50,000 in additional capital expenditures budgeted. With budget adjustments and carryovers totaling \$2,627,326, total net negative cash flow is budgeted at (\$956,010), funded through existing fund balance.



### **MUNICIPAL BUILDING**

Home to DPU's administrative offices and the Customer Care Center.

## Pass-Through Cost Of Gas

Since 2013 the Department of Public Utilities has included a “pass-through” cost of natural gas in its rate. In addition to a monthly service fee, the gas consumption charge comprises a fixed cost recovery fee per therm and a variable cost of gas per therm (pass-through cost). The fixed cost recovery fee includes set distribution maintenance and operation expenses. DPU’s actual cost to purchase the natural gas commodity is passed directly to the customer in the variable cost of gas per therm charge. This price is calculated each month based on the San Juan Index and then adjusted based on the actual cost from the prior month. Customers benefit from this approach as the DPU does not need to maintain a substantial rate stabilization fund to absorb the volatile, fluctuating gas prices. Each month DPU posts the new variable cost of gas rate on the website at: <https://ladpu.com/DPUGasRateSchedule>.

### TOTAL GAS CHARGE COMPRISES THREE COMPONENTS

(1. Monthly Service Fee) + [(2. Fixed Cost Recovery Fee + 3. Variable Cost of Gas) x Total Therms] = Total Charged

#### SCHEDULE OF CUSTOMERS

7A: Residential  
7E: Commercial  
7L: County  
7N: Schools

#### 1. MONTHLY SERVICE FEE

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

#### 2. FIXED COST RECOVER FEE/THERM

Schedule	Fee/Therm
7A & 7E	\$0.23
7L & 7N	\$0.20

#### 3. VARIABLE COST OF GAS/THERM

(Pass-Through Cost of Gas)

Calculated each month based on the San Juan Index and then adjusted based on the actual cost from the prior month

Month and Year	Schedule	Projected Variable Cost of Gas	Adjustment to Prior Month Estimate	Total Variable Cost of Gas/Therm
Mar 2021	ALL	\$0.32	\$0.00	\$0.32
Feb 2021	ALL	\$0.28	(\$0.06)	\$0.22
Jan 2021	ALL	\$0.28	(\$0.04)	\$0.24



**Example:**  
Residential Family (7A)  
that used 40 therms in  
March 2021.

$$\$9.50 + [(\$0.23 + \$0.32) \times 40] =$$

**\$31.50**



**Example:**  
Commercial Customer (7E)  
that used 120 therms in  
March 2021.

$$\$28.50 + [(\$0.23 + \$0.32) \times 120] =$$

**\$94.50**

# NATURAL GAS RATES

## Fluctuating Gas Rates

Natural gas prices are mainly a function of market supply and demand and fluctuate. There are multiple factors that affect the price of gas, one is weather. Cold temperatures, for example, increase demand for heating, while hot weather increases demand for cooling, which increases natural gas demand by electric power plants.

To mitigate some of the fluctuations, DPU joined the New Mexico Municipal Energy Acquisition Authority (NMMEAA). Created by local

governments in 2008 through a Joint Powers Agreement, the purpose of NMMEAA is to obtain reliable, long-term gas supply under favorable terms, conditions and price. NMMEAA benefits government-owned utilities like DPU and through this membership, DPU is able to pass its savings directly to customers.

When comparing the variable cost of gas or the pass-through rate with the rates of New Mexico Gas Company, DPU's rates are usually lower although

not always. This past quarter (three months) DPU's average cost at \$0.26 per therm was lower than NMGC.

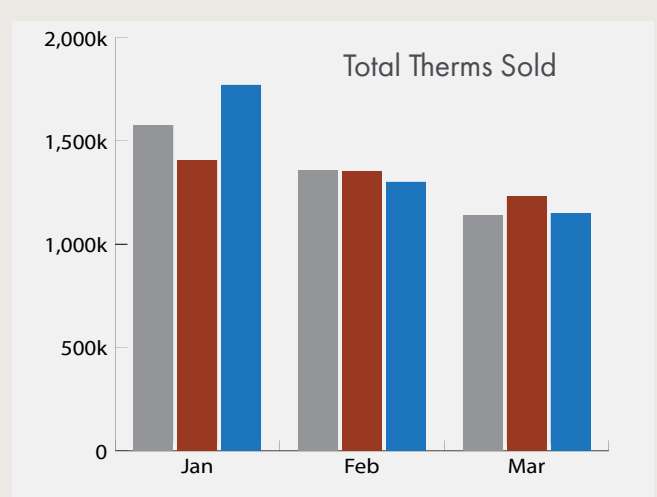
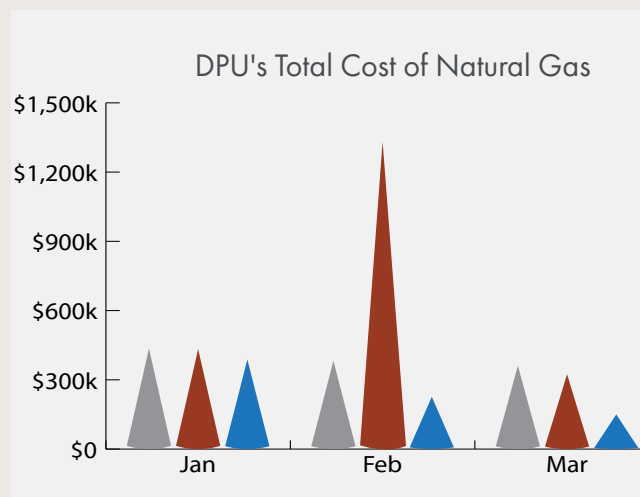
### VARIABLE COST OF GAS/THERM

Mo/Year	DPU	NMGC*
Mar 2021	\$0.32	\$0.42
Feb 2021	\$0.22	\$0.31
Jan 2021	\$0.24	\$0.31
Avg price	\$0.26	\$0.35

\*New Mexico Gas Company

Source: [nmgco.com/en/cost\\_of\\_gas](http://nmgco.com/en/cost_of_gas)

San Juan Index/MMBTU			Total Cost of Gas for Qtr 3			Total Therms Sold for Qtr 3		
	2021	2020		2021	2020		2021	2020
Mar:	\$2.97	\$1.42	Mar:	\$324,332	\$150,189	Mar:	1,232,218	1,150,082
Feb:	\$2.65	\$1.58	Feb:	\$1,331,883	\$226,656	Feb:	1,354,723	1,302,261
Jan:	\$2.61	\$2.43	Jan:	\$433,163	\$388,370	Jan:	1,404,912	1,777,635
			Total:	\$2,089,378	\$765,215	Total:	3,991,853	4,229,978



Estimate 2021

Actual 2021

Actual 2020

# ELECTRIC OPERATIONS

## Financial Status - Unaudited // FY2021

Fiscal Year: July 01 through June 30, 2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>UNIT SALES: KILOWATT HOURS</b>					
Total Retail Sales	28,486,530	26,221,690	28,561,544		83,269,764
Budgeted Sales	32,283,763	29,693,690	30,836,955		92,814,408
Retail Sales Variance	(3,797,233)	(3,472,000)	(2,275,411)		(9,544,644)
Sales to NNSA	124,408,781	108,184,345	68,001,554		300,594,680
Budgeted Sales to NNSA	169,653,529	168,664,348	122,071,214		460,389,091
NNSA Sales Variance	(45,244,748)	(60,480,003)	(54,069,660)		(159,794,411)
Other Wholesale Sales	1,805,485	1,758,165	1,472,323		5,035,973
Budgeted Other Wholesale Sales	2,639,839	1,904,703	1,680,613		6,225,155
Wholesale Sales Variance	(834,354)	(146,538)	(208,290)		(1,189,182)
Total Actual Sales	152,895,311	134,406,035	96,563,098		383,864,444
Total Budgeted Sales	201,937,292	198,358,038	152,908,170		553,203,499
Total Sales Variance	(49,041,981)	(63,952,003)	(56,345,072)		(169,339,055)
<b>FINANCIAL RESULTS</b>					
Electric Distribution Revenues	\$3,887,257	3,450,251	3,902,774		\$11,240,282
Total Electric Production Expenditures	10,988,245	9,573,412	6,790,637		27,352,295
Total Electric Production Revenues	8,966,808	7,730,336	5,810,887		22,508,032
Net Cost of Power to Electric Dist.	2,021,437	1,843,076	979,750		4,844,263
Other Electric Dist. Operating Expenses	764,426	1,510,574	1,055,083		3,330,083
Total Electric Dist. Operating Expenses	2,785,863	3,353,650	2,034,833		8,174,346
Net Electric Dist. Operating Revenue	1,101,394	96,602	1,867,941		3,065,936
Electric Dist. Capital Expenditures	104,748	157,469	86,014		348,232
Net Electric Dist. Total Revenue	\$996,646	(60,867)	1,781,926		\$ 2,717,705
<b>BUDGETED</b>					
Budgeted Operating Income(Loss)					\$3,060,129
Budgeted Capital Expenditures					(\$750,000)
5% Revenue Transfer					(\$617,238)
Budgeted Net Income(Loss)					\$1,692,890
Budget Adjustments*					(3,808,002)
Adj. Budgeted Net Income (Loss)					(\$2,115,112)

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

# NATURAL GAS OPERATIONS

Financial Status - Unaudited // FY2021

Fiscal Year: July 01 through June 30, 2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>UNIT SALES: THERMS (100,000 BTU)</b>					
Total Sales	571,648	2,069,410	3,991,853		6,632,911
Budgeted Sales	587,490	1,954,484	3,785,297		6,327,271
Retail Sales Variance	(15,842)	114,927	206,555		305,640
<b>FINANCIAL RESULTS</b>					
Gas Distribution Revenues	\$539,420	1,234,482	\$2,074,144		\$3,848,046
Gas Other Revenues	(26)	(270)	\$167,781		\$167,485
Gas Distribution Operating Expenses	377,814	1,152,327	\$2,591,898		\$4,093,769
Net Gas Operating Revenue	161,581	81,885	(349,973)		(\$78,238)
Gas Distribution Capital Expenditures	104,663	29,944	\$9,460		144,067
Net Gas Revenue	\$56,918	51,941	(359,433)		(\$222,305)
<b>BUDGETED</b>					
Budgeted Operating Income(Loss)					\$236,728
Budgeted Capital Expenditures					(\$350,000)
5% Revenue Transfer					(\$201,959)
Budgeted Net Income(Loss)					(\$315,231)
Budget Adjustments*					(\$5,574,786)
Adj. Budgeted Net Income (Loss)					(\$5,890,017)

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

# WATER OPERATIONS

## Financial Status - Unaudited // FY2021

Fiscal Year: July 01 through June 30, 2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>UNIT SALES: THOUSAND GALLONS</b>					
Wholesale Sales to LANL	98,546	84,303	59,475		182,850
Budgeted Wholesale Sales	105,149	103,525	75,708		208,674
Retail Sales	321,713	201,803	103,617		523,516
Budgeted Retail Sales	275,814	151,328	110,404		427,141
Total Sales	420,260	286,106	163,092		706,365
Total Budgeted Sales	380,963	254,853	186,112		635,816
Total Sales Variance	39,297	31,253	(23,020)		70,550
<b>FINANCIAL RESULTS</b>					
Wholesale Revenues	\$1,857,772	\$1,068,012	\$812,279		\$3,738,062
Retail Revenues	\$2,287,011	\$1,345,303	\$972,660		\$4,604,973
Other Revenues	\$0	\$0	(\$22,222)		(\$22,222)
Total Water Revenues.	\$4,144,783	\$2,413,315	\$1,762,717		\$8,320,814
Water Production Operating Expenses	\$856,985	\$1,129,440	\$730,881		\$2,718,263
Water Distribution Operating Expenses	\$1,779,676	\$1,259,275	\$975,862		\$4,024,787
Total Water Operating Expenses	\$2,636,661	\$2,388,715	\$1,706,743		\$6,743,050
Net Water Operating Revenue	\$1,508,122	\$24,600	\$55,974		\$1,577,764
Water Production Capital	\$0	\$44,955	\$16,603		\$61,558
Water Distribution Capital	\$4,989	\$8,750	\$4,293		\$18,032
Total Capital Expenditures	\$4,989	\$53,705	\$20,895		\$79,590
Net Water Revenues	\$1,503,132	(\$29,105)	\$35,078		\$1,498,174
<b>BUDGETED</b>					
Budgeted Operating Income(Loss)					851,928
Budgeted Capital Expenditures					(9,806,926)
Budgeted Grant/Loan/GF Transfers					6,831,061
Budgeted Net Income(Loss)					(2,123,937)
Budget Adjustments*					(5,339,788)
Adj. Budgeted Net Income (Loss)					(7,463,725)

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

# WASTEWATER OPERATIONS

Financial Status - Unaudited // FY2021

Fiscal Year: July 01 through June 30, 2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>UNIT SALES: THOUSAND GALLONS</b>					
Total Treated	103,361	99,217	95,679		298,257
Budgeted Treated	114,658	109,783	105,181		329,623
Variance	(11,297)	(10,566)	(9,502)		(31,366)
<b>FINANCIAL RESULTS</b>					
Sewer Revenues	\$1,669,590	\$1,507,833	\$1,546,600		\$4,724,022
Sewer Miscellaneous Revenues	(\$133,093)	(\$33,241)	(\$8,408)		(\$174,741)
Sewer Operating Expenses	\$685,355	\$1,072,871	\$832,832		\$2,591,058
Net Sewer Operating Revenue	\$851,142	\$401,720	\$705,361		\$1,958,223
Sewer Capital Expenditures	\$0	\$172,000	\$352,271		\$524,271
Net Sewer Revenue	\$851,142	\$229,720	\$353,090		\$1,433,952
<b>BUDGETED</b>					
Budgeted Operating Income(Loss)					1,721,316
Budgeted Capital Expenditures					(14,850,856)
Budgeted Grant/Loan/GF Transfers					14,800,856
Budgeted Net Income(Loss)					1,671,316
Budget Adjustments*					(2,627,326)
Adj. Budgeted Net Income (Loss)					(956,010)

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

# ELECTRIC CONSUMPTION

Financial Status - Unaudited // FY2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>REVENUES</b>					
Residential	2,081,076	1,763,700	2,052,461		5,897,237
Private Area Lights	3,673	3,339	3,580		10,592
Commercial	1,141,733	956,461	1,025,965		3,124,159
Municipal	327,860	468,917	290,957		1,087,733
Water Production	116,624	141,996	79,985		338,606
Educational	106,214	99,238	122,857		328,309
Misc./Backcharges	121,544	223,834	148,210		493,859
TOTAL	\$3,898,724	\$3,657,484	3,724,016		\$11,280,224
<b>SALES: KILOWATT HOURS</b>					
Residential	15,382,994	14,749,504	16,724,500		46,856,998
Private Area Lights	9,354	9,354	9,354		28,062
Commercial	9,679,167	8,167,154	8,608,849		26,455,170
Municipal	2,582,273	2,217,979	2,227,631		7,027,883
Water Production	1,805,485	1,758,165	1,472,323		5,035,973
Educational	832,742	1,077,699	991,210		2,901,651
TOTAL	30,292,015	27,979,855	30,033,867		88,305,737
<b>BILLED LOCATIONS: AVERAGE</b>					
Residential	7,866	8,029	7,769		7,888
Commercial	637	623	625		628
Municipal	164	155	159		159
Educational	54	59	54		56
TOTAL	8,721	8,867	8,608		8,732
<b>REVENUE/KILOWATT HOUR: AVERAGE</b>					
Residential	\$0.1353	\$0.1196	\$0.1227		\$0.1259
Private Area Lights	\$0.3926	\$0.3570	\$0.3827		\$0.3774
Commercial	\$0.1180	\$0.1171	\$0.1192		\$0.1181
Municipal	\$0.1270	\$0.2114	\$0.1306		\$0.1548
Water Production	\$0.0646	\$0.0808	\$0.0543		\$0.0672
Educational	\$0.1275	\$0.0921	\$0.1239		\$0.1131
AVERAGE	\$0.1247	\$0.1227	\$0.1191		\$0.1222
<b>LOSS CALCULATION</b>					
Power Received (kWh)	29,329,795	29,346,869	30,502,609		89,179,274
Photovoltaic Power Received (kWh)	203,592	155,841	144,533		503,966
Qtrly Losses (Gains)	(758,628)	1,522,855	613,275		1,377,503
% Qtrly Losses (Gains)	(2.57%)	5.16%	2.00%		1.54%
YTD CUMM LOSSES (GAINS)	(2.57%)	1.29%	1.54%		1.54%

# NATURAL GAS CONSUMPTION

Financial Status - Unaudited // FY2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>REVENUES</b>					
Residential	\$395,984	916,866	1,576,924		2,889,773
Commercial	99,745	233,637	365,379		698,761
TA-3 Sales	-	-	-		-
Municipal	14,586	45,221	70,920		130,727
Water Production	140	156	1,129		1,425
Educational	5,270	25,252	59,951		90,473
Misc./Backcharges	23,696	13,350	(159)		36,887
TOTAL	\$539,420	1,234,482	2,074,144		\$3,848,046
<b>SALES: THERMS</b>					
Residential	387,601	1,590,985	3,120,620		5,099,206
Commercial	149,597	331,197	597,390		1,078,184
Municipal	29,217	91,177	161,464		281,858
Water Production	889	646	1,799		3,334
Educational	4,344	55,405	110,580		170,329
TOTAL	571,648	2,069,410	3,991,853		6,632,911
<b>BILLED LOCATIONS: AVERAGE</b>					
Residential	7,047	7,254	7,059		7,120
Commercial	365	363	361		363
Municipal	44	43	43		43
Educational	25	25	25		25
TOTAL	7,482	7,685	7,488		7,551
<b>REVENUE/KILOWATT HOUR: AVERAGE</b>					
Residential	\$1.0216	\$0.5763	\$0.5053		\$0.5667
Commercial	\$0.6668	\$0.7054	\$0.6116		\$0.6481
Municipal	\$0.4992	\$0.4960	\$0.4392		\$0.4638
Water Production	\$0.1575	\$0.2410	\$0.6276		\$0.4274
Educational	\$1.2131	\$0.4558	\$0.5422		\$0.5312
AVERAGE	\$0.9022	\$0.5901	\$0.5196		\$0.5746
<b>LOSS CALCULATION</b>					
Gas Received (therms)	555,690	1,683,165	4,276,820		6,515,675
Qtrly Losses (Gains)	(15,958)	(386,245)	284,967		(117,236)
% Qtrly Losses (Gains)	(2.87%)	(22.95%)	6.66%		(1.80%)
YTD CUMM LOSSES (GAINS)	(2.87%)	(17.96%)	(1.80%)		(1.80%)

# WATER CONSUMPTION

Financial Status - Unaudited // FY2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>REVENUES</b>					
Residential	\$1,876,868	1,093,075	795,448		3,765,391
Commercial	180,120	129,006	105,864		414,990
Municipal	125,066	69,587	25,364		220,018
Educational	80,724	45,392	18,500		144,616
Misc./Backcharges	24,233	8,242	27,484		59,959
TOTAL	\$2,287,011	1,345,303	972,660		\$4,604,973
<b>SALES: THOUSAND GALLONS</b>					
Residential	259,528	164,919	86,599		511,047
Commercial	30,664	17,893	12,699		61,256
Municipal	19,902	11,121	3,277		34,301
Educational	11,619	7,870	1,042		20,530
TOTAL	321,713	201,803	103,617		627,133
<b>BILLED LOCATIONS: AVERAGE</b>					
Residential	6,558	6,763	6,560		6,627
Commercial	271	270	291		277
Municipal	85	85	77		82
Educational	22	25	18		22
TOTAL	6,936	7,142	6,945		7,008
<b>REVENUE/THOUSAND GALLONS: AVERAGE</b>					
Residential	\$7.2318	\$6.6279	\$9.1854		\$7.3680
Commercial	\$5.8739	\$7.2100	\$8.3365		\$6.7747
Municipal	\$6.2840	\$6.2573	\$7.7390		\$6.4144
Educational	\$6.9479	\$5.7681	\$17.7576		\$7.0442
AVERAGE	\$7.0335	\$6.6256	\$9.1218		\$7.2473
<b>LOSS CALCULATION</b>					
Water Received (kGal)	366,219	215,580	209,632		791,431
Qtrly Losses (Gains)	44,506	13,777	106,015		164,298
% Qtrly Losses (Gains)	12.15%	6.39%	50.57%		20.76%
YTD CUMM LOSSES (GAINS)	12.15%	10.02%	20.76%		20.76%

# WASTEWATER CONSUMPTION

Financial Status - Unaudited // FY2021

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>REVENUES</b>					
All Retail	\$1,534,347	1,474,592	1,546,600		4,555,539
Municipal/Effluent*	133,093	33,241	0		166,333
Misc./Backcharges	2,150	0	0		2,150
TOTAL	\$1,669,590	1,507,833	1,546,600		\$4,724,022
<b>TREATED: THOUSAND GALLONS</b>					
Los Alamos	72,802	70,461	69,123		212,386
White Rock	30,559	28,756	26,556		85,871
TOTAL	103,361	99,217	95,679		298,257
REVENUE/TREATED	\$16.13	\$15.20	\$16.16		\$15.83

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





# QUARTERLY PERFORMANCE REPORT