LOS ALAMOS
Department of Public Utilities

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# FY2023 Q1 REPORT

JUL1 thru SEP30 / 2022

# About DPU

ON THE COVER: The downstream outlet at the El Vado Hydroplant allows water to exit the turbine piping once energy has been transferred to the turbine.

The Department of Public Utilities is county-owned. It provides Los Alamos County with electric, natural gas, water and wastewater services.

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.

Serving a population of 19,419 citizens with an authorized budget of approximately $83 million, DPU operates and maintains assets totaling $219 million with about 100 employees.

Los Alamos is situated at the foot of the Jemez Mountains on the Pajarito Plateau with an elevation ranging from 6,200 to 9,200 feet. Because of this unique topography, DPU's assets are incredibly complex for the population served. For example, Santa Fe serves its 88,000 citizens with four lift stations. Here in Los Alamos, our population is a fifth of that size but 27 lift stations are required to properly serve our citizens with wastewater services.



# Table of Contents

# A Word from the Utility Manager

**PHILO SHELTON**
UTILITIES MANAGER
June 2019 through present

Professional Engineer
Master of Science in Civil Engineering
Bachelor of Science in Civil Engineering
Master of Public Administration
Certified Public Manager

## In a nutshell...

Annually in September, the Board of Public Utilities (BPU) and Senior Management hold strategic planning meetings. It is important we take a step back to see where the organization is going and perform a SWOT analysis. Next, we reviewed the organization's mission, vision, and values to be sure they are current and relevant.

The update to DPU's vision to include being a "Community Centric Utility" is an important change as we seek to better serve our community. Finally, the six strategic focus areas, goals and objectives are reviewed, revised, and prioritized by the BPU. This guidance helps staff better understand the BPU's priorities and if our organization needs to change or pivot on a direction the organization is headed. For example, the BPU has consistently year after year put forward this departmental directive: "All utilities services are delivered safely, reliability and efficiently." The revised priorities are important for staff to understand as the department's asset management teams meet to review the department needs in developing next year's budget request.

This quarter, DPU saw a large loss in staffing in the Gas Water Sewer division with seven employees pursuing better opportunities. This trend was not limited to DPU as other county departments, including Police, Fire and Transit, also experienced a large loss of employees. As a result, all four labor unions asked for a limited reopener to their contracts for economic reasons. These negotiations have occurred this quarter and have been finalized in the middle of November. I want to thank the BPU and Council for supporting these wage and benefit increases to be competitive with the local labor market and help with employee retention and recruitment.

The San Juan Generating Station (SJGS) last unit—Unit 4—shut down permanently at approximately at 10:30


a.m. on September 29 as the coal stockpile was exhausted. The project is now officially moving into the decommissioning phase. DPU has contracted with Uniper to replace this energy resource for the next several years, however, DPU will need to find a long-term replacement for the SJGS. The BPU goal to be a carbon neutral electric provider by 2040 is important direction as the community considers these replacement resources. The Carbon Free Power Project (CFPP) is one replacement resource to consider as well as resources such as wind, solar and batteries. Over the next couple of quarters, staff will be presenting these options as we look to transition away from carbon emitting resources.

Going forward, the challenges with any large capital project are the same issues DPU experienced in replacing the wastewater treatment facility in White Rock: limited labor pool, supply chain constraints, schedule delays and resulting cost escalations. Finally, in the current economic environment of rising interest rates and inflation, DPU will need to plan its large capital investments carefully as we balance loans with competitive rates for utility services. With these issues in mind, BPU established a new goal this year to "meet financial reserve targets within our 10-year financial policy, with a debt coverage ratio of 1.6 of greater every fiscal year."

"The update to DPU's vision to include being a "Community Centric Utility" is an important change as we seek to better serve our community.

# M.V.V.

## Mission

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

## Vision

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

## We Value

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

Mission, Vision, Values, Goals and Strategic Objectives: updated and adopted October 2022



## STRATEGIC FOCUS AREAS

### OPERATIONS & PERFORMANCE

**GOAL: Provide safe and reliable utility services**

- All utilities services are delivered safely, reliably and efficiently
- Efficiently implement and maintain secure and reliable business systems
- Develop a culture of continuous inprovement
- Utility control and mapping systems and processes are accurate, safe and secure
- Be flexible and adaptable in delivering all utility operations

### FINANCIAL PERFORMANCE

**GOAL: Achieve and maintain excellence in financial performance**

- Meet financial reserve targets within our 10-year financial policy, with a debt coverage ratio of 1.6 or greater every fiscal year
- Utilize revenues to provide a high level of service while keeping rates competitive with similar utilities
- Achieve workplans while operating within budget
- Conduct cost of service studies for each utility at least every 5 years

### CUSTOMERS, STAKEHOLDERS & COMMUNITY

**GOAL: Be a customer service-oriented organization that is communicative, efficient and transparent**

- Customer service processes and systems are efficient, secure and user-friendly
- Educate Board Members on markets, contracts and production options for all electric production resources
- Utilize Voice of the Customer survey results to improve utility operations
- Stakeholders are engaged in and informed about Utilities operations affecting the community

### WORKFORCE

**GOAL: Sustain a capable, satisfied, engaged, ethical and safe workforce focused on customer service**

- Leaders invest in employee training and professional development
- Employees promote a culture of safe, ethical and customer-focused behavior
- Employees are engaged, satisfied and fairly compensated

### ENVIRONMENTAL SUSTAINABILITY

**GOAL: Continuously, conscientiously, work toward environmental sustainability**

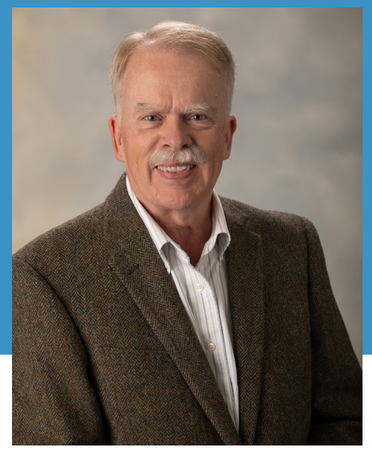
- Provide class 1A effluent water in Los Alamos County
- Promote electric efficiency through targeted electric conservation programs
- Be a net carbon neutral electric provider by 2040
- Reduce natural gas usage by 5% per capita per heating degree day by 2030 using a 2020 calendar year-end baseline and support elimination of natural gas usage by 2070
- Reduce potable water use by 12% from 143 gallons per capita per day (2020 calendar baseline) to 126 gallons per capita per day by 2030

### PARTNERSHIPS

**GOAL: Develop and strengthen partnerships with stakeholders**

- Communicate with stakeholders to strengthen existing partnerships and identify new potential mutually beneficial partnering opportunities

# Board of Public Utilities



## Cornell Wright

**Chair**

Appointed: July 2020 (partial term)

1st Term: July 2021 - June 2026

Chair: 2021, 2022

## Steve Tobin

**Vice Chair**

Appointed: July 2019

1st Term: July 2019 - June 2024

Vice Chair: 2022

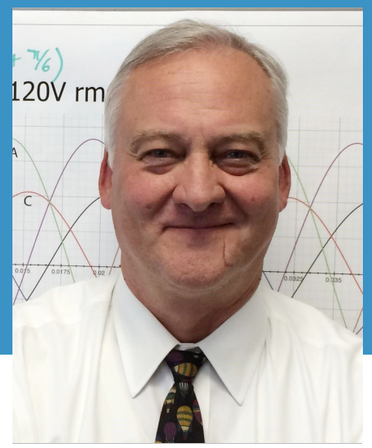
## Stephen McLin

**Member**

Appointed: July 2014 (partial term)

2nd Term: July 2018 - June 2023

Vice Chair: 2015, 2020, 2021




## Eric Stromberg

**Member**

Appointed: July 2020

1st Term: July 2020 - June 2025

## Charles Nakhleh

**Member**

Appointed: July 2022

1st Term: July 2022 - June 2027

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

For calendars, policies and procedures, agendas, minutes and videos of meetings, visit LADPU.com/BPU.

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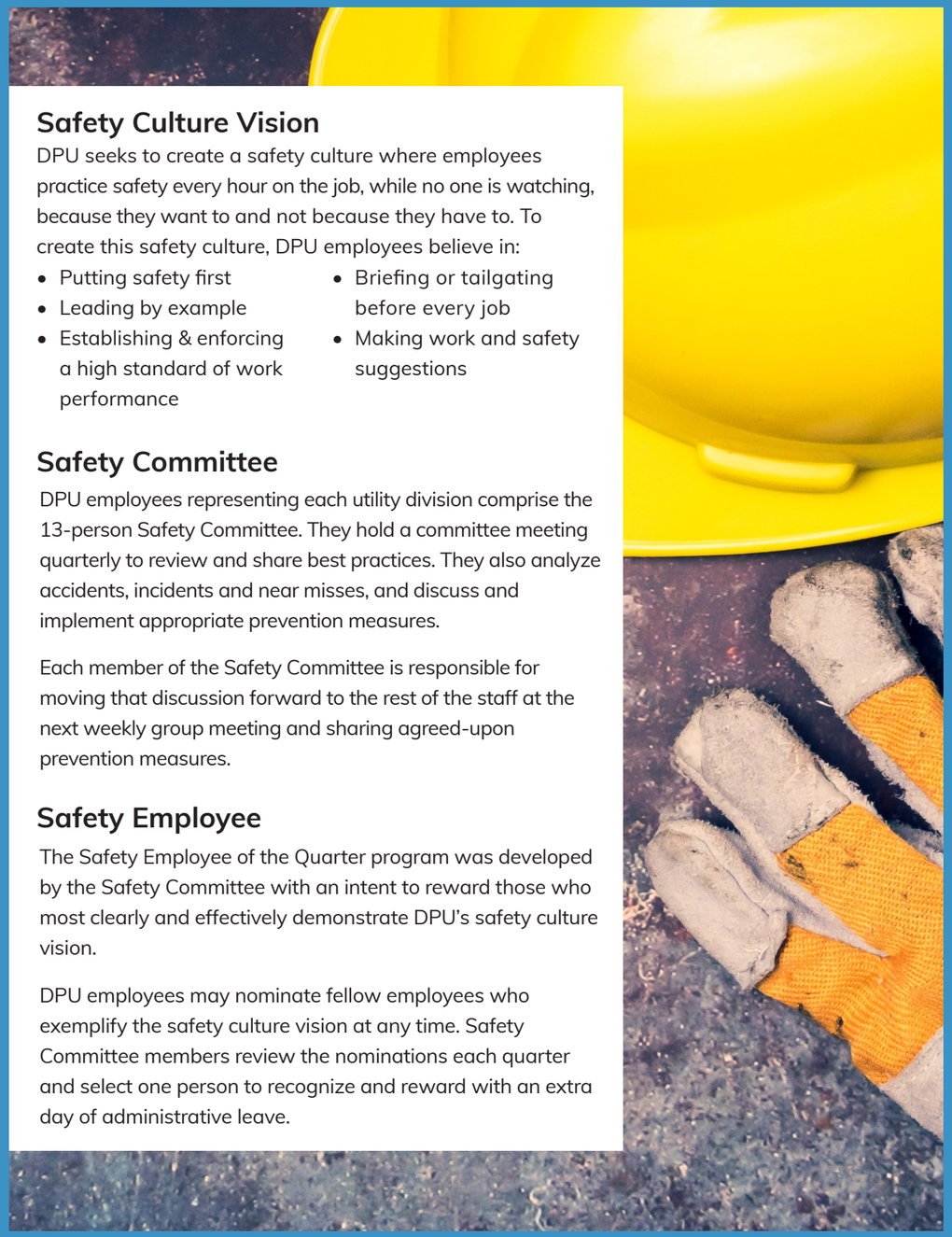
The BPU meets on the first Wednesday of each month via Zoom and on the third Wednesday of each month via Zoom and in Council Chambers, 1000 Central Ave., Los Alamos, NM.

Meetings are at 5:30 p.m. and streamed online. To view them, visit: LADPU.com/BPUliveproceedings.

Members of the public are welcome to attend.

# 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 they want to and not because they have to. To create this safety culture, DPU employees believe in:

- Putting safety first
- Leading by example
- Establishing & 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 moving that discussion forward to the rest of the staff at the next weekly group meeting and sharing 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.

DPU employees may nominate fellow employees who exemplify the safety culture vision at any time. Safety Committee members review the nominations each quarter and select one person to recognize and reward with an extra day of administrative leave.



# SAFETY EMPLOYEE OF THE QUARTER

**QUARTER 1 / FY23**

## Joel Martinez

Water Systems Electrical Technician
Water Production Division


**Joel ensured that what potentially could have become a critical incident wouldn't happen on his watch by taking the initiative to react quickly and appropriately. During a staff meeting to discuss MCCs and the electrical panels at each well, an employee moved too close to an open electrical panel at one of the wells. The employee wanted to get a better look at a diagram inside the panel door. As he moved toward it and started to point in tight proximity to the panel, Joel quickly stepped in. He asked the employee to back up as he shut down power to the unit. Joel's reaction was quick, professional and showed his dedication to the safety of those around him.**

**JONATHON GONZALES**
Trainee
Wastewater Treatment


Q4 / FY22

**ERWIN LOPEZ**
Engineering Aide
Gas, Water & Sewer


Q3 / FY22

**JAMES SUAZO**
Journeyman Lineman
Electric Distribution

Q2 / FY22

**CHARLES LOPEZ**
Trainee
Wastewater Treatment


Q1 / FY22

# Electric Distribution

**STEPHEN MAREZ**
ACTING DEPUTY UTILITY MANAGER

Registered Professional Engineer
Bachelor of Science in Electrical Engineering
Master of Information Systems
Certified Project Management Professional

Memberships:
Institute for Electronic & Electrical Engineers
National Society of Professional Engineers

## In a nutshell...

FY2023 got off to an exciting start when a lightning strike on Barranca Mesa not only disrupted power, but also started a small fire on the canyon top. The photo on page 15 gives a bird's eye view of that occurance. Our lineworkers are in red helmets.

That incident reinforces the danger trees can pose around power lines, particularly when lightning strikes. That's why DPU contracts with Southwest Fire Defense to trim or remove branches and trees that ED's staff has identified as hazards. Staff inspects the overhead lines throughout the county on a regular basis and intense drought conditions have increased the need for this maintenance as large numbers of trees have died in the past few years. Where these trees could hit power lines if they fall, they are added to the list for removal.

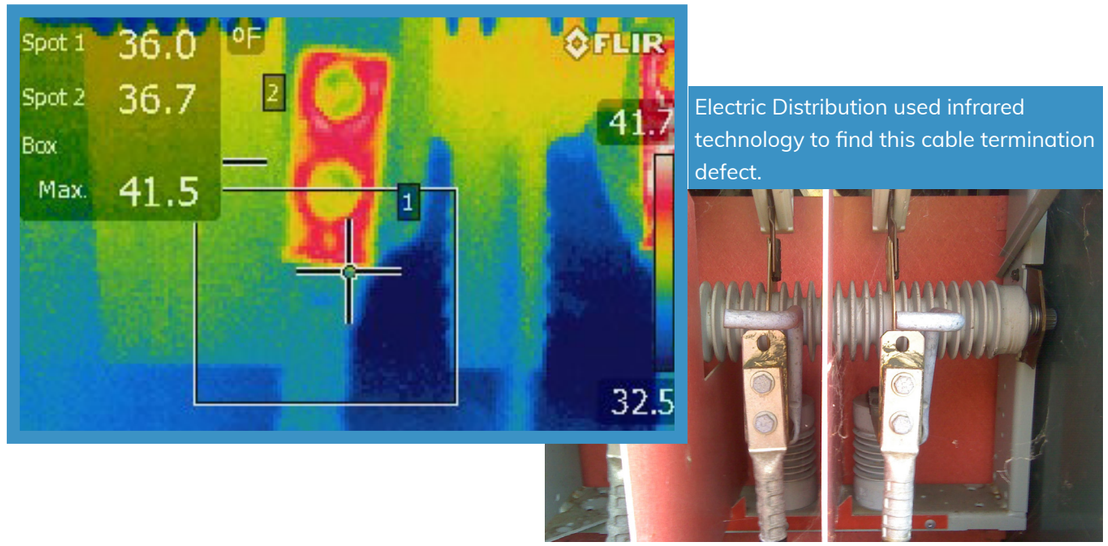
During high wind events, even trees that are still very green can fall. It is impossible to foresee where live trees may fall and DPU does not clear cut healthy trees within impact proximity of power lines.

Crews have been using thermal imaging to detect heat caused by loose connections or damaged electric components. Proactive detection of these issues allows crews to make repairs and prevent power outages.

As has been the case in recent years, customer service requests for power upgrades, solar installations and new services come in on a continual basis. In the first quarter, we received 21 applications for new PV installations.

In Q1, we were anxiously awaiting a new cable pulling machine! It finally arrived in November. This machine will be a great asset to the electric crew, increasing our capability to safely and efficiently remove or replace underground cable for large projects.

The Connie/Cheryl project to replace electric primary cable and switches on Aragon Street in White Rock is complete. This project was targeted as a priority in the asset management process because the area has experienced many faults in the past. Construction in this area included the installation of a new switch and a line extension.




Electric Distribution used infrared technology to find this cable termination defect.

The electric distribution supply chain is greatly disrupted. Many products such as transformers and termination components have lead times of over 60 weeks. The prices for these items also increased by more than 500%. These supply shortages and inflated prices are expected to cause delays even for future projects that have yet to be proposed.

Engineering staff continue to work on designs and specifications for all current and upcoming construction projects.

Projects completed in Q1

Connie/Cheryl Electric Primary Replacement Project $150,000

In construction

- El Mirador Subdivision (8 new installations)
- White Rock Water Reclamation Facility (transformer and power line extension complete)
- The Hills Apartments
- Arkansas Place Apartments (primary cable to HIlltop Plaza installed)
- The Bluffs Apartments
- LASS Protection Settings

In Design and Procurement

- Ski Hill Water Line
- Oppenheimer Primary Replacement
- La Senda Primary Replacement
- East Gate Primary Cable Replacement
- White Rock Visitors Center Food Trucks and Pavilion
- East Jemez Conduit Intercepts for LASS Feeders

Pending Developer Information for Design

- Tres Alamos Subdivision
- Piñon Elementary School
- Chamisa Elementary School
- Arbolada Subdivision
- Cañada Bonita

Consulting and Support

- El Vado Hydro Electric Transformer Project-Consulting
- Abiquiu Hydro Electric Transformer Project-Consulting
- Hilltop House Demolition

On the Radar:

- San Ildefonso PV

# SAIDI

## 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 2021 was 126 minutes without major events and 476 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/annual/. DPU set a goal in 2008 to reduce its SAIDI to below 60 minutes (including major events). At the end of quarter 1 of FY2023, DPU's SAIDI increased slightly from 204 to 207 minutes* which includes major events. While this is well above the DPU 60-minute goal, it is also well below the 2021 national SAIDI of 476 minutes. It is within three minutes of New Mexico's 2021 SAIDI of 204.

* DPU's SAIDI does not include outages caused by LANL substation failures.

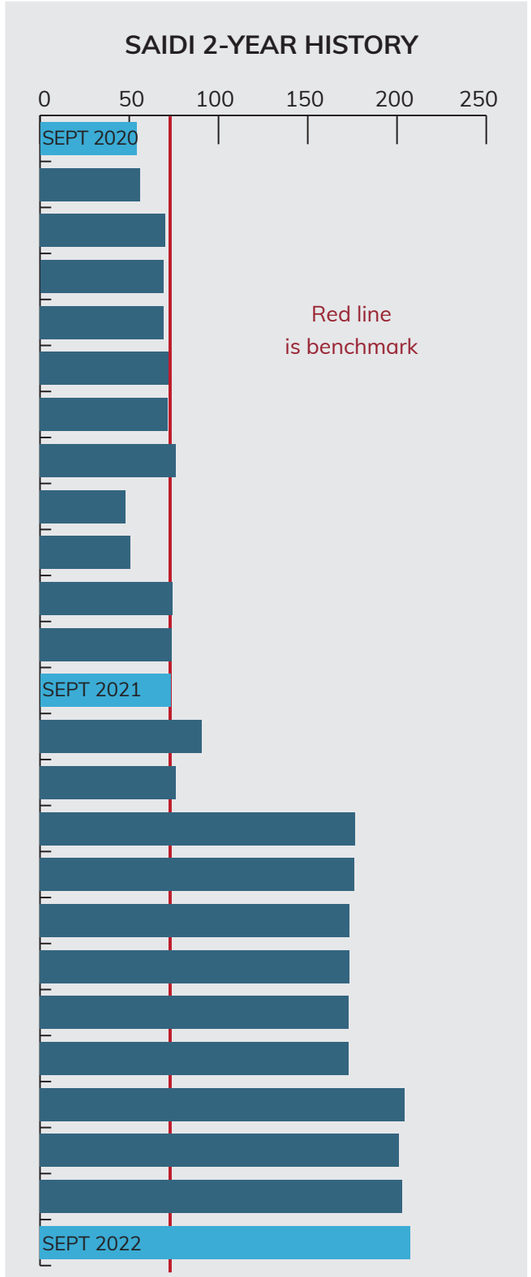



PHOTO AT TOP RIGHT:
DPU's Electric Distribution lineworkers were among the responders when lightning not only took down power on Barranca Mesa, but it also started a small fire.

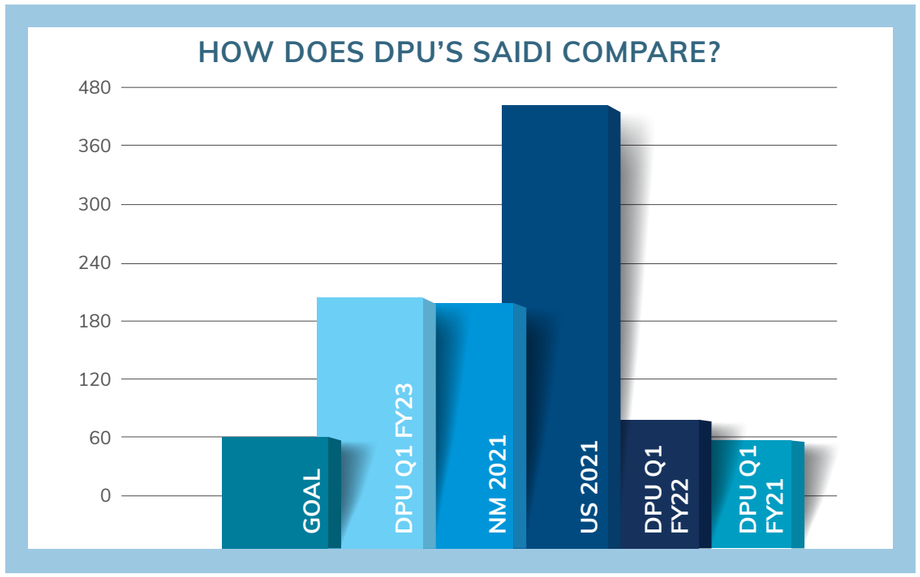


### Results & Comparisons

As of Sept. 30, DPU's rolling 12-month SAIDI for Q1 was 207 minutes in FY2023; 73 minutes in FY2022; and 54 minutes in FY2021.

Reliability reports issued by the Energy Information Administration* demonstrate that DPU's current SAIDI is close to the average of combined New Mexico utilities (includes New Mexico cooperatives, investor- and municipal-owned utilities) and lower than the average of combined U.S. utilities through December 2021. Note that the EIA will release calendar 2022 SAIDI data in Oct. 2023.

* www.eia.gov/electricity/annual/html/epa_11_01.html



# Distributed Generation

## 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 Q1, distributed generation resources totaled 3,440 kw connected to the distribution grid.

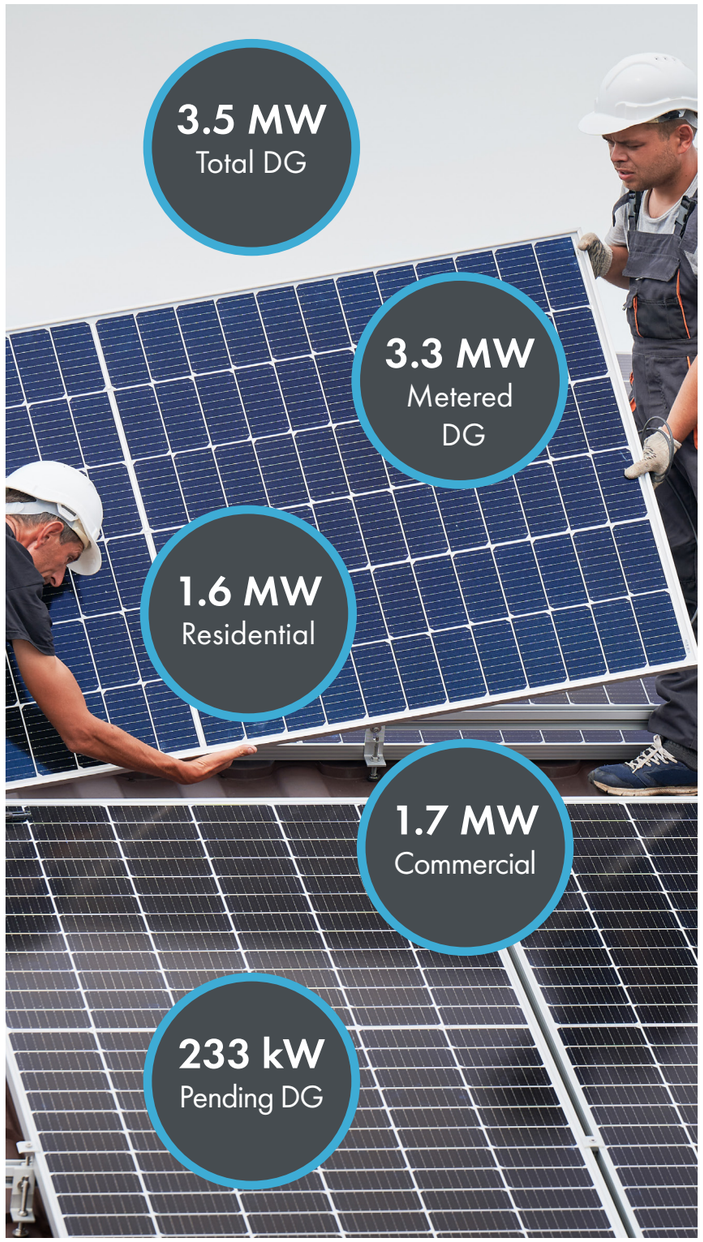
- Residential systems = 1,757 kw
- Commercial systems = 1,683 kw

### New Distributed Generation

A total of 141 kw of distributed generation were added to DPU's electric distribution grid during Q1.

### Pending Distributed Generation

Currently customers are in the process of adding another 302 kw of distributed generation to DPU's electric distribution.



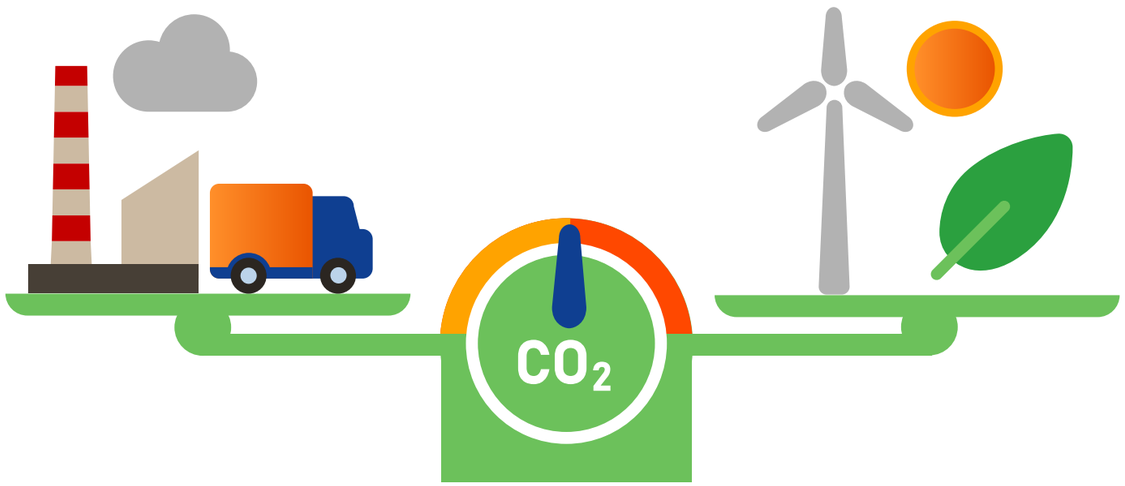



## Carbon-Neutral Electrical Energy Provider

In 2013, 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.



# Electric Production

**JORDAN GARCIA**
DEPUTY UTILITY MANAGER

Bachelor of Business Administration-Finance
Master of Business Administration

## In a nutshell...

**San Juan Generating Station/City of Farmington/Enchant Energy Carbon Sequestration Project Proposal**

San Juan Generating Station terminated operation on September 29. The unit finished strong with a very high-capacity factor and was only derated due to poor coal quality. Because of the shutdown and termination of the New Exit Date Amendment (NEDA), the negotiations with Farmington and Enchant have all but ended. In August, Farmington acting independently of Enchant sent a letter to current ownership insisting the plant be turned over to Farmington at the end of the NEDA period. In September, Farmington took the disagreement to the courts, aiming to force the current ownership to give Farmington exclusive rights to the plant after the shutdown. The argument has since moved to arbitration per current agreements and there is a pending termination of the NEDA under consideration by the Federal Energy Regulatory Commission (FERC). LAC and other owners of San Juan are hoping to continue decommissioning activities at the San Juan Generating Station.

**Decommissioning**

All plant participants initiated a decommissioning study in hopes that it will be the final study for the San Juan Generating Station. At the completion of the study, a request for bids was solicited from industry-recognized demolition contractors and five bids were received—three of which were very competitive. The bids are approximately $80 million net of salvage value and good through the end of 2022. LAC's share of the $80 million is approximately $2 million. This estimate will vary depending on the Net Present Value (NPV).
Inflation and interest rates are currently highly volatile and will play a significant role regarding the NPV. The Los Alamos Power Pool (LAPP) has collected about $6 million to pay for its share of the decommissioning cost. In conjunction with the decommissioning study, the firm of Burns and McDonnell has been contracted to put together a plan required by San Juan County. An ordinance was instituted by San Juan County that requires the plant to be demolished, thus eliminating retirement-in-place options. San Juan County must review and approve of the demolition plan prior to executing the contract.

**Hydroelectric Facilities**

Staff continues to perform recurring maintenance as scheduled and support the planned capital projects. The El Vado Transformer Replacement Project is progressing with a delivery time of 26 to 28 weeks for the equipment. The installation will most likely be delayed until spring 2023 prior to the run-off.

The El Vado Dam Restoration project began on May 23 when the minimum operating pool for the El Vado hydroelectric facility was reached. Generation was stopped and flow control was passed to the U.S. Bureau of Reclamation (USBR). The El Vado hydroelectric facility is expected to be offline for two spring run-off seasons while the USBR completes the dam face rehabilitation before beginning work on the spillway. DPU's power operators are making short-term market purchases as needed to account for this planned outage. El Vado is expected to begin generating again in spring of 2024.

Using American Recovery and Reinvestment Act funds, DPU purchased a replacement transformer for the Abiquiu facility. That transformer is currently stored at the plant. A Request for Proposals (RFP) was prepared in Q4 of FY2022 for the transformer removal and replacement. We received bids for the project and, as expected, they were significantly higher than pre-pandemic cost estimates. Approval by BPU will be sought in quarter two of this fiscal year.

The Army Corps of Engineers is planning some significant work on the tunnel gates, vent shaft and outlet-works at Abiquiu. DPU staff is working closely with the Corps on the work identified on the outlet works steel liner and vent shaft as it relates to the hydro facility operation. The vent shaft work is a continuation of a 2016 project during which the County paid for the installation of a butterfly valve in the vent shaft to mitigate safety concerns about extensive corrosion. The valve installation allowed the Abiquiu hydroelectric plant to return to service as soon as possible. The

Trenching for installation of EV DC fast chargers at the White Rock Visitors Center was completed in August

# Electric Production (continued)

Corps wants to finish the repairs on the remaining section of the vent shaft located above the newly installed butterfly valve. The project is currently estimated at $4 million of which the Corps is seeking 50% from the County. The design for the project is expected by the end of calendar 2022 and Los Alamos intends to incorporate this capital project into the FY2024 budget.

Preliminary site plan drawings were prepared for the Abiquiu office addition that is being planned to mitigate the risk of a catastrophic failure of the Abiquiu transformer causing harm to personnel.

**One-Megawatt Solar Array/Landfill**

An inverter failed at the one-megawatt solar array on the Los Alamos landfill, taking 400 kilowatts offline. Staff received one bid after the subsequent repair project was advertised a second time. The agreement with the successful bidder to repair the facility was approved at the April 2021 Board of Public Utilities' meeting. The term of the agreement ended without the work being completed. Staff is seeking new bids to replace the failed inverter.

**Electric Vehicle Charging Stations**

On September 18, 2020, DPU received a signed project agreement from the New Mexico Environment Department (NMED) formalizing two grants for the construction and operation of two electric vehicle direct-current, fast-charging stations—$63,800 for one charger at the White Rock Visitor Center parking lot and $71,800 for one at the Los Alamos County Municipal Building parking lot. ChargePoint Inc. is the selected equipment supplier and Allied 360 is the selected installation contractor. The agreements and the task order for the chargers, operations and maintenance support services, and construction work were approved by the BPU on April 20, 2022, and the County Council two weeks later with a project budget of $285,600. **The chargers were ordered in June from ChargePoint Inc. with an anticipated shipping date by the end of the year. Trenching, installation of conduits and concrete pads, and site restoration at the White** Rock parking lot site was completed in September, with electrical work on hold until the chargers are received. Site work at the Municipal Building parking lot is planned for the second quarter of FY2023. Installation and commissioning are expected to be completed within two months of receiving the chargers, weather permitting.

**Carbon Free Power Project**

Through DPU's membership with the Utah Associated Municipal Power Systems (UAMPS), DPU is participating in the Carbon Free Power Project (CFPP) as a generation resource option. The CFPP is a planned 462 MW (gross electric capacity) nuclear generating station to be built in Idaho using small modular reactor (SMR) technology.

In July 2021, the Council approved DPU's continued participation in the CFPP project through the remaining phase 1—completing the Combined Operating License Application (COLA). The next off ramp is scheduled for the 3rd quarter.

The primary goal 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. This past quarter UAMPS staff has worked diligently with these interested utilities, specifically on solving the lack of transmission to serve these utilities. Transmission availability, paths and cost are the most significant barriers for the utilities in the Northwest. UAMPS submitted transmission service requests from the CFPP to the Bonneville Power Authority with both Pacific Corp and the Idaho Power Company. A wires solution is preferred but as an alternative, UAMPS staff is exploring exchange opportunities with utilities who currently have transmission capacity on these paths.

NuScale (developer of the small modular reactors) and Fluor continue to work on project cost estimates for a six-module plant, with the goal of achieving a Levelized Cost of Energy (LCOE) of $58/MWh with full subscription. UAMPS expects to have the Class 3 cost estimate (ranging from -20% on the low side, to +30% on the high side) by November. The September milestone date and next off-ramp for the project is expected to slide until the Class 3 estimate and Economic Competitive Test (ECT) are completed. The first subscribers in the project will have an opportunity to increase their subscriptions prior to the remaining capacity being committed to other utilities.

> San Juan Generating Station terminated operation on September 29. The unit finished strong with a very high-capacity factor & was only derated due to poor coal quality.

**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 (ATC) 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 contract in New Mexico. Solar power will be supplied from a project in northwest San Juan County when it's completed. However, the current supply chain issues along with the solar tariffs being reviewed by the commerce department may further delay the commercial operation date. The wind power is coming from the Pattern Energy wind center in central New Mexico. The contracted Energy began flowing on January 1, 2022.

**Electric Coordination Agreement (ECA), Post 2025**

Negotiations continue with DOE-NNSA on a post 2025 ECA. Both parties are meeting monthly with the goal of having a tentative agreement by June 2023. EP staff is supporting DOE-NNSA efforts on updating their Interagency Agreement (IA) with Western Area Power Administration (WAPA) that would allow DOE-NNSA the ability to contract through WAPA for PPAs for periods up to 30 years. DOE indicated that the IA would be finalized this summer. The first project under consideration is an 8 MW solar photovoltaic (PV) array to be constructed at LANL for an expected 25-year term. On March 10, staff met with the BPU and Council subcommittee to provide an update on the post-2025 ECA negotiations and seek guidance on the sharing of renewable energy with LANL from County-owned facilities. The consensus of the subcommittee and DPU staff was to share the renewable energy as we've always done based on energy usage. The goal is for the Los Alamos County service area, which includes all power demands with the County boundaries, to be served with carbon-free electric energy and not distinguish between County and LANL individual loads. The team is finalizing the changes to the contract statement of work and the exhibits to the contract.

**Sandia and Kirtland Air Force Base Merchant Desk Services**

To meet the combined power demands of Sandia National Laboratories and Kirtland Air Force Base, DPU staff is providing support for a post-2023 PPA. These efforts require an updated IA between DOE-NNSA and WAPA that is expected to be executed in the next three months. Kirtland Air Force Base is working with a consultant on how best to meet the power demands into the future for a Department of Defense (DOD) Facility. Factors under consideration include resilience while moving toward sustainable resources such as renewables. DPU staff is supporting this effort as Kirtland Air Force Base's Merchant Desk Service provider.

**Integrated Resource Plan (IRP) Implementation**

On April 8, 2022, contractor FTI presented the IRP findings to the BPU for discussion and feedback. Staff presented final IRP findings and report to the BPU and County Council in June. Staff have developed an implementation plan to acquire the generation resources which are part of the IRP's preferred portfolio and meet DPU's reliability, operational and sustainability goals. On July 11, staff distributed a Request for Information (RFI) to more than 20 electrical generation developers and marketers, seeking offers for 30 Megawatts (MW) of battery energy storage systems, 70 MW of PV generation, and 50 MW of wind generation. No offers were received for energy storage or wind. One offer was received for firmed PV generation, which will be evaluated. Staff continues efforts to seek out and evaluate new resource opportunities, including participation in a UAMPS search for geothermal resources, and pursuit of PV and storage both within and outside of Los Alamos County.

# Electric Production (continued)

## 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 carbon-neutral goal is described here.

**FER Timeline**

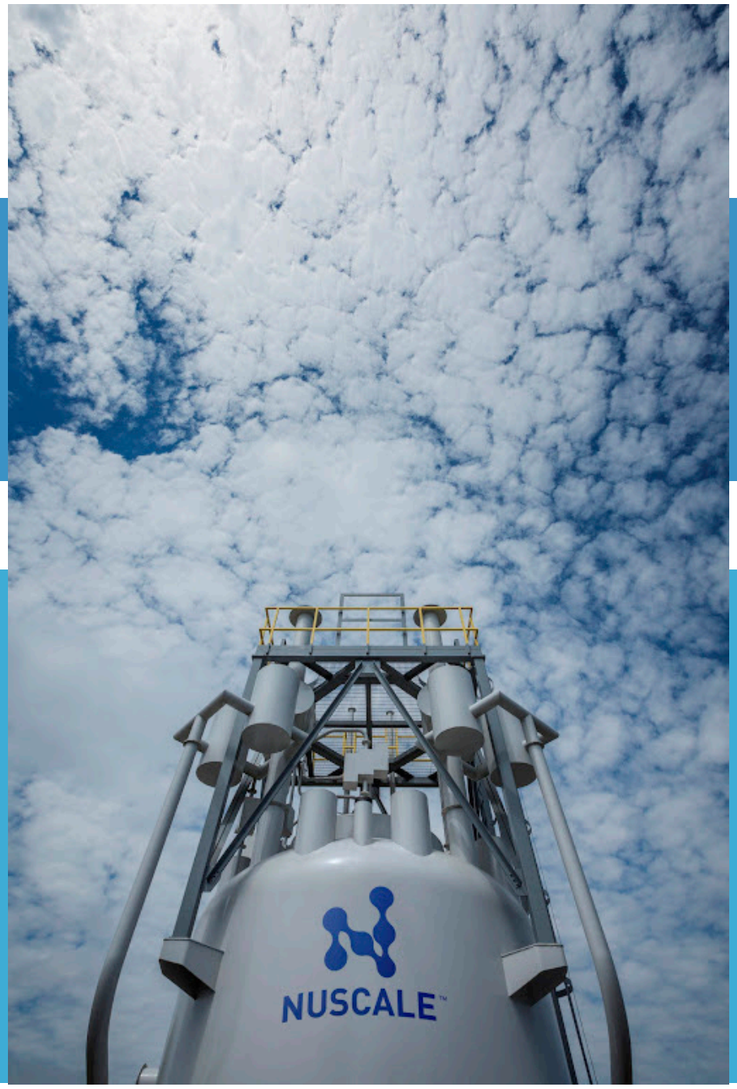
The timeline below shows the strategic plan with several important dates which play a significant role in the decision making process to achieve the goal to be a carbon neutral electric energy provider by 2040 while sustaining the electric demands of the community.

It started with the development of an Integrated Resource Plan (IRP) in 2017, which identified 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 developed a new IRP in 2022.

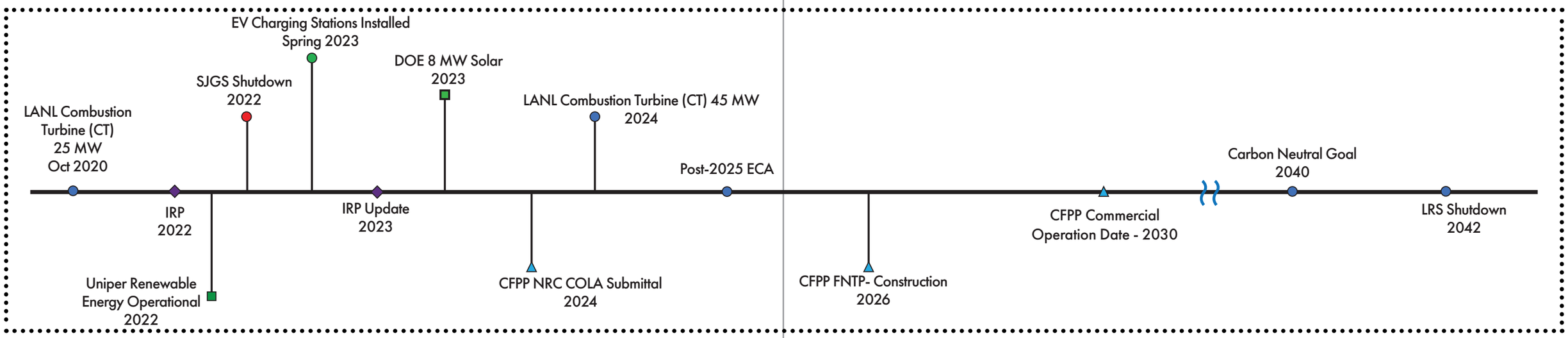
There are three contract dates which provide an opportunity to shape our future power supply. First, the expiration of the San Juan Generating Station Agreement occurred in September. Second, the County's expected exit from the coal-fired Laramie River Station, where the County signed a life of the plant power purchase agreement, in 2042. Third, the expiration of the current Electric Coordination Agreement (ECA) between the County and DOE-NNSA LANL will occur 2025.

Through the current ECA, 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.

The timeline below will be updated in the near future pending input from BPU and Council regarding Los Alamos Resiliency, Energy & Sustainability (LARES) task force recommendations and in consideration of generating resource recommendations from the 2022 IRP.




The Carbon Free Power Project (CFPP) is a proposed nuclear electric generation facility to be constructed at Idaho National Laboratory utilizing small modular reactor (SMR) technology developed by NuScale Power. Utah Associated Municipal Power Systems (UAMPS) and NuScale Power entered into a teaming agreement to investigate the viability of developing the Carbon Free Power Project. UAMPS' participating partners are the project owners. UAMPS' participating partners expect to allow other entities to subscribe power through Power Purchase Agreements. Of the 46 municipal and cooperative utilities that comprise UAMPS, 28 members, including DPU, have subscribed power from the CFPP and make the decisions regarding UAMPS' involvement.



# Gas, Water & Sewer

**JACK RICHARDSON**
DEPUTY UTILITY MANAGER

Registered Professional Engineer
Bachelor of Science in Civil Engineering

## In a nutshell...

**ALL GWS Groups**

COVID continues to plague the crews with occasional cases and resulting time off work. DOE/LANL and their union associates continue to recruit our personnel by offering significantly higher salaries for a temporary multi-year period. Union negotiations are ongoing with the County with the goal of stopping the loss of staff to DOE/LANL and other surrounding agencies.

The wet summer continued. The good news is the aquifer was not as heavily stressed as usual during the dry irrigation season. The bad news is water sales and revenue for the NP system were significantly less than normal.

The Sr. Office Specialist for GWS and ED has worked hard to organize the uniform systems from our various suppliers/cleaners. An RFP for potentially new suppliers has been finalized. A supplier selection and new contract is anticipated in the next quarter.

**Gas, Water, Sewer (GWS)**

The field prep work for the gas system entry station upgrades and SCADA showed good progress. GWS Superintendent Sammy Maestas has tested the qualifications of six different steel gas pipeline welders for approval to provide steel pipeline welding on our gas system for this project. The annual gas system PRV station maintenance checks, gas pipeline leak survey and gas key valve testing were completed ahead of the cold season.

GWS staff continued water and gas meter changeouts as a high priority facilitating the AMI program. Water line breaks were fairly frequent this quarter, with many of them being on smaller diameter delivery lines where the crews completed wholesale delivery line replacements rather than simple leak repairs due to the age and condition of the delivery lines that were leaking. There were a few sewer overflow events. GWS crews need to spend some time next quarter in the canyons doing a little more cleanup of vegetation and earthwork that was done so they could access the recent major sewer overflow event that occurred in Pueblo Canyon last quarter.


The GWS fleet received a number of replacement vehicles this quarter. Also received this quarter was the complete replacement, for all GWS crews, of the SCBA (Self Contained Breathing Apparatus) equipment used during critical confined space activities. The old equipment was antiquated and no longer met OSHA guidelines.

The single unified project RFP to locate, test, repair or replace, and permanently mark all main line gate valves in the WP, DW and NP systems and the GA system, as well as for the WC system manholes and cleanouts, is in the final stages of purchasing/legal review. The project will be bid next quarter. The project still includes uncovering buried and paved-over valves and manholes as well as locating remote valves and manholes in the canyons and fields outside the urban areas. This multi-contractor/ multi-year approach will allow the DPU to schedule this work within the constraints of each fiscal year's approved budget and allow enough time to complete the needs of each system.

Slow, but steady, progress on the El Gancho, Paseo Peñasco, North Road, Rio Bravo, Fairway and East Gate sewer lift stations (SLS) continues. Our realistic schedule now calls for completion of all field prep work by the end of November 2022 with installation of the first SLS SCADA equipment in December 2022. On-call consultant BHI has completed the final design for the project to eliminate the Ridge Park SLS and replace it with a short gravity sewer main into the Timber Ridge SLS. The project is out to bid this quarter and will be awarded next quarter.

This summer's active fire hydrant testing season was completed with no known water pipeline breaks resulting from hydrant testing.

GWS is down to two primary staff (both sr. pipefitters). The standby system was revised to allow for secondary staff, albeit the more experienced secondary staff, to stand in as primaries. At the very least, they answer the phone and coordinate with primary staff to come on site if primary staff is required to safely make a field

# Gas, Water & Sewer (continued)

determination. Many duties during a standby system call-out can, and have been, completed by secondary staff so hopefully this revision will not become too burdensome for the staff during this period. We are now purposefully holding open two positions—hoping that the union negotiations are concluded successfully, and we may have a possibility to bring back some of the experienced people we recently lost to competition.

**Water Production**

Management staff completed the coordination with DOE/LANL staff on the revisions to the ownership and O&M responsibility determinations for DPU pipelines on DOE property. Finalizing this project is now in the hands of the DOE's legal/real estate staff. The pipeline relocation project along Pajarito Road on DOE land is progressing slowly.

Water Production staff finished data mining and organizing our aquifer water levels over the past few months. The data indicates that the aquifer, in the area where the three Los Alamos County well fields are located, have averaged approximately 0.5 feet per year drop over the past 10 years. We believe this is indicative of a localized aquifer drop within the well field area and that the larger regional aquifer is stable.

Crew members, utilizing the new SCBA safety equipment required for confined space entry, installed SCADA and motor control equipment inside the El Gancho lift station wet well recently. This equipment helps DPU staff analyze conditions inside lift stations, such as water levels, discharge pressure, flow rates and electrical parameters. Armed with that data, we can better understand the operational dynamics and improve preventive maintenance activities.

Water Production staff have also been researching all the meters in the WP and NP systems. This effort is in response to a notification from the Office of the State Engineer (OSE). Verification of all water meters for compliance with State regulations (approved meter, calibration testing, etc.) has been requested along with some modifications to the OSE reporting form for water usage in relation to the County's water rights. Once all data has been accumulated and verified, a formal response to the OSE will be submitted.

Progress was made on the project for Electrical and Mechanical Upgrades to all WP Well Stations, with work begun on the design plans and specifications package. Coordination between the contractor and the firm completing the SCADA Transition Project will be necessary to ensure equipment and system compatibility.

OW4 is scheduled for shut down, possibly as early as next quarter, to install the new replacement MCC and miscellaneous control and electrical equipment. A new split shaft modification will be simultaneously completed with this shut down to better enable future O&M activities of the OW4 motor and pump. OW2 is still in the supply chain regarding receipt of new pump and control equipment. The motor for Pajarito Well 2 is currently being rebuilt and refurbished and is scheduled to be re-installed next quarter.

Under the Tsankawi Chlorination project, final equipment mounting and electrical installation, as well as work on instrumentation and control systems, are ongoing. The construction of the Overlook Park Booster Station for the NP system is complete and functions well but we are still waiting for closeout documentation of O&M manual and as-built drawings. The design and specification package for refurbishing/repainting Barranca Tank No. 2, adjacent to Barranca Elementary School, has progressed this quarter. The NP system Bayo Booster Station Tank No. 2 Project (Phase One) is still delayed by supply chain issues but is now scheduled to restart in November.

Even with extended employee leave taken within the division, the WP group was able to cover the work and complete the heaviest portion of the high-water use season successfully without undue stress.

**Wastewater Treatment**

Construction continues on the White Rock WWTP replacement project—primarily excavation, steel and concrete work so far. Equipment has been ordered and is still in the supply chain. The project to add tertiary filtration equipment to the LA WWTP, to upgrade this WWTP's effluent classification from 1B to 1A, is also still in the supply chain and the anticipated restart remains February 2023. The in-house final design of the compost facility upgrade project remains in progress.

The alarm call-out system at the LA WWTP malfunctioned again this quarter and repair and/or replacement has been scheduled for next quarter. The SCADA system at the LA WWTP is scheduled to receive upgrades in conjunction with the implementation of the new SCADA system at the White Rock WWTP. An upgraded and more robust alarm system will be included in this work, scheduled to be completed in 2024, and will be active for both plants in the future.

**Meter Reading**

It has been business as usual for the meter reading crew. Meter changeouts still occur as rapidly as GWS staffing and scheduling allow. The meter read crew is expected to remain at the present staffing level of three for the foreseeable future.

# Engineering

**JAMES ALARID**
DEPUTY UTILITY MANAGER

Registered Professional Engineer
Bachelor of Science in Civil Engineering
Master of Science in Civil Engineering

Memberships:
American Society of Engineers
American Water Works Association

## In a nutshell...

The first quarter of fiscal year 2023 has been busy with construction activities. The White Rock Water Resource Reclamation Facility Project is proceeding on schedule. The concrete structure associated with the oxidation ditch is nearly complete, the piping below the filtration building is nearly in place and the concrete floors will soon be poured. The entrance works building is close to having foundations and floors poured. Most of the electric conduits throughout the site have been installed.

The Otowi Well No. 2 building and site work is complete. The electric gear, pump motor and pump shaft will not be received for a few months. Once the remaining equipment is received the well will be completed and tested in April of 2023. Of all our projects, this one is the most impacted by supply chain delays. The project was originally scheduled to be complete in the spring of 2022.

The NM-4 Water Transmission Line and Chlorination Building is nearing completion. The final electric and process equipment installation will take place in November and the new chlorination process will be placed into service by the end of November.

One bid was received for the El Vado Fiber Optic project. The bid was not responsive since it did not have some of the required information. Additionally, the price was double the available budget. The project will be deferred and reconsidered in the FY2024 budget.

The contract to install a new transformer at the Abiquiu Hydroelectric Plant will be awarded in November. This work is scheduled to be complete by March 2023.

The Canyon Road Repaving and Utility Upgrade Project reached substantial completion in October. A number of sewer, water and electric upgrades were completed as part of the project.

DPU's engineers coordinated a project with the UNM Civil Engineering program. Students are working on a process to use a drone to capture 3D LIDAR images of structural steel in reinforced concrete structures to perform quality assurance/quality control inspections. The project was conducted on the construction site of the White Rock Water Resource Reclamation Facility

The 33rd, 34th and Arkansas Road and Utility Upgrade Project was bid in the spring of 2022 and no bids were received. The project was bid again in October and bids should be received in early November. Work will begin in the spring of 2023.

The Gas Border Station Project is in progress. The work in White Rock is halfway complete. Work on the two Los Alamos border stations will be complete by the end of November.

The Water Production SCADA Replacement Evaluation is nearing completion. The consultant has completed the field work to assess and inventory the existing SCADA system and communications equipment. They have also completed an evaluation of the available communication alternatives for a new system. The final evaluation is scheduled to be complete in December.

The design of the Water Production Wells Electrical and Mechanical Upgrades is ongoing. The consultant has submitted a 50% design and the final design documents should be complete by January 2023. A Drinking Water State Revolving Loan for construction of these improvements has been secured. The project will be bid as soon as the design is complete.

The project to replace about 2,500 feet of 16-inch waterline along Pajarito Road on LANL property is in the final stages of design. The materials have been pre-ordered for the project to keep the project on schedule for construction in the summer of 2023.

The design for repainting and performing upgrades to Barranca Mesa Tank No. 2 is nearing completion. The final design is expected in November and the project will be advertised for bids in December.


# FY2023 Capital Improvement Plan

PLANNING/DESIGN | CONSTRUCTION

| | BUDGETED | QTR 1 JULY | QTR 1 AUG | QTR 1 SEPT | QTR 2 OCT | QTR 2 NOV | QTR 2 DEC | QTR 3 JAN | QTR 3 FEB | QTR 3 MAR | QTR 4 APR | QTR 4 MAY | QTR 4 JUNE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ELECTRIC PRODUCTION** | **$145,000** | | | | | | | | | | | | |
| El Vado Backup Generator Diesel Tank Replacement | 85,000 | | | | | | | | | | | | |
| Extend Abiquiu's Interior Concrete Deck | 60,000 | | | | | | | | | | | | |
| **ELECTRIC DISTRIBUTION** | **$1,725,000** | | | | | | | | | | | | |
| Replace Underground Residential Distribution | 1,350,000 | | | | | | | | | | | | |
| Replace Overhead Distribution | 300,000 | | | | | | | | | | | | |
| Electric distribution replacement on Arkansas Ave | 75,000 | | | | | | | | | | | | |
| **GAS DISTRIBUTION** | **$575,376** | | | | | | | | | | | | |
| Rose Street Utility Upgrades | 115,376 | DEFERRED | | | | | | | | | | | |
| Upgrade Utilities in Deacon St Reconstruction | 85,000 | | | | | | | | | | | | |
| SCADA Pressure Monitoring Stations | 375,000 | | | | | | | | | | | | |
| **WATER DISTRIBUTION** | **$1,415,185** | | | | | | | | | | | | |
| Rose Street Utility Upgrades | 330,816 | DEFERRED | | | | | | | | | | | |
| Upgrade Utilities in Deacon St Reconstruction | 212,775 | | | | | | | | | | | | |
| North Mesa Distribution Upgrades (Phase I) | 871,594 | DEFERRED | | | | | | | | | | | |
| **WATER PRODUCTION** | **$9,740,345** | | | | | | | | | | | | |
| Rose Street Utility Upgrades | 322,980 | DEFERRED | | | | | | | | | | | |
| Paint Barranca Mesa Water Tank | 1,300,000 | | | | | | | | | | | | |
| Motor Control Center Upgrades | 2,727,000 | | | | | | | | | | | | |
| Pajarito Rd/TA-50 Waterline Replacement | 1,210,485 | | | | | | | | | | | | |
| Bayo Booster Station Tank (Phase II) | 2,929,880 | | | | | | | | | | | | |
| LA Reservoir Rd Stabilization Project (plan/permit) | 800,000 | | | | | | | | | | | | |
| Tank Piping Upgrades (Phase II) | 450,000 | | | | | | | | | | | | |
| **WASTEWATER COLLECTION** | **$2,187,686** | | | | | | | | | | | | |
| Upgrade Utilities in Deacon St Reconstruction | 418,686 | | | | | | | | | | | | |
| Arkansas Backyard Sewer Renewal/Replacement | 269,000 | | | | | | | | | | | | |
| Ridge Park Sewer Lift Station Elimination | 300,000 | | | | | | | | | | | | |
| Bayo Lift Station Elimination Pipeline | 1,200,000 | | | | | | | | | | | | |
| **WASTEWATER TREATMENT** | **$743,000** | | | | | | | | | | | | |
| Composting Improvements (Phase II) | 743,000 | | | | | | | | | | | | |

# FY2023 Capital Improvement Projects

## EL VADO BACKUP GENERATOR DIESEL TANK REPLACEMENT

The existing 1,000 gallon underground diesel storage tank is regulated and inspected by the New Mexico Environment Department. New regulations require that leak detection be installed on the tank piping. The existing tank is an underground tank installed in 1987. Given the age and increasing regulations on underground storage tanks, DPU will replace the tank with a new tank.

Budget: $85,000
Schedule: Spring 2023

## EXTEND ABIQUIU'S INTERIOR CONCRETE DECK

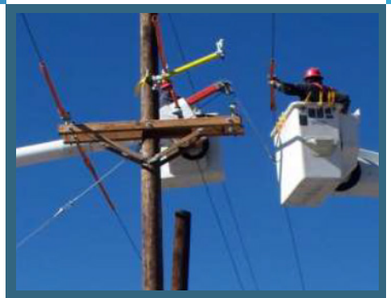
A portion of the existing floor within the powerhouse is gravel. This gravel area is aligned with the garage door where the majority of the loading and handling of heavy materials takes place. A new 25' x 55' reinforced concrete slab will be constructed to facilitate the handling of equipment and materials.

Budget: $60,000
Schedule: Spring 2023


## REPLACE UNDERGROUND RESIDENTIAL DISTRIBUTION

The UG system contains 1970s infrastructure that was direct-buried and in direct contact with the earth. Sections of the UG system which have experienced 3+ failures are targeted for replacement as they will fail again. The 3-phase primary feeder on Trinity Drive at Oppenheimer has failed many times. The line failure affects 1600+ customers.

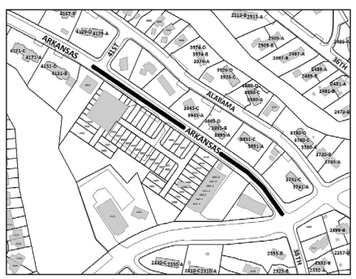
Budget: $1,350,000
Schedule: Year-Round



## REPLACE OVERHEAD DISTRIBUTION

Many components of DPU's OH infrastructure operate near or past their useful life—50+ years. DPU's Asset Management Program prioritizes O&M projects by: root cause analysis after power outages, quarterly line patrols and year-end assessments. The O&M program includes replacement of power poles and cross-arms. Townsite areas: Pueblo, Questa and Ridgeway. White Rock areas: Beryl and Aztec.

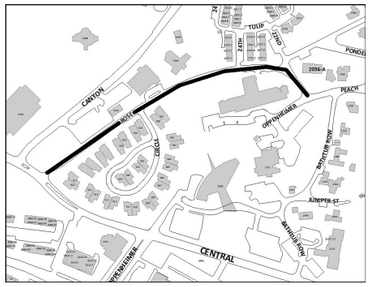
Budget: $300,000
Schedule: Year-Round




## ELECTRIC DISTRIBUTION REPLACEMENT ON ARKANSAS AVE

This project will be a joint project between DPU and the Public Works Department to repave the roadway and upgrade portions of the electric distribution system along this segment of the road.

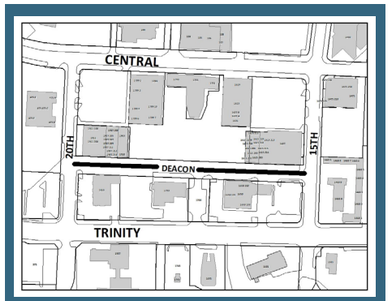
Budget: $75,000 (profit transfer)
Schedule: Summer 2023



## ROSE STREET UTILITY UPGRADES (GA, DW, WP)

DPU and Public Works are jointly repaving the roadway and replacing utility infrastructure beneath Rose Street from Central Avenue to Peach Street. Sections of waterlines from the 1950s will be replaced, as well as undersized gas pipelines. DPU's portion of the project will be funded by the profit transfer monies allocated to the DPU by the County Council.

Budget: $115,376 (GA)
$330,816 (DW)
$322,980 (WP)
Schedule: Deferred




## DEACON ST UTILITY UPGRADES (GA, DW, WC)

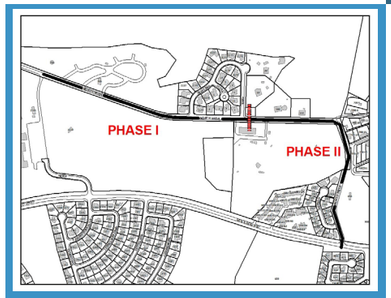
DPU and Public Works are jointly reconstructing Deacon St and upgrading existing utilities. Aged existing utilities will be replaced and public utilities from adjacent easements will be relocated into the street right-of-way to free up property for development. The work will potentially be funded by LAC's economid development budget.

Budget: $85,000 (GA)
$212,775 (DW)
$418,686 (WC)
Schedule: Deferred

## SCADA PRESSURE MONITORING STATIONS

A new Supervisory Controls and Data Acquisition System (SCADA) is currently being launched for the gas distribution system. DPU will install various pressure monitoring stations throughout Los Alamos and White Rock to allow remote monitoring of the system pressures, provide trends of the system performance and provide alarms if there are any pressure drops.

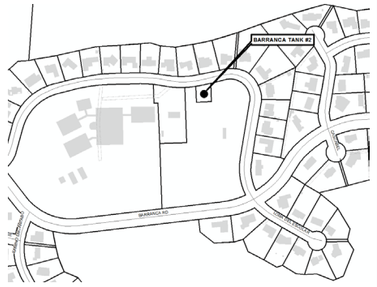
Budget: $375,000 (FY2023 portion)
Schedule: Spring 2023




## N MESA DISTRIBUTION UPGRADES (PHASE I)

The waterline in North Mesa Rd is over 65 years old and in poor condition. It will be replaced with a larger line for increased fire protection to North Mesa, more capacity and connections to the proposed new development of 300-400 new homes adjacent to the Middle School and additional capacity and connections to the horse stables. The work will potentially be funded by the County's economic development budget.

Budget: $871,594
Schedule: Deferred




## PAINT BARRANCA MESA WATER TANK

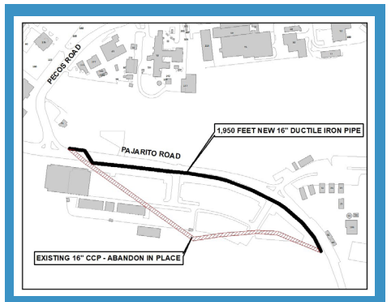
The Barranca Mesa Tank #2 is an elevated steel water tank near Barranca School. The deteriorated tank coating needs repainting to protect it for 30 more years. Structural repairs and a new cathodic protection system will be incorporated. LAC allocated $1,128,660 of American Rescue Plan Act funds to the project. DPU applied for a low-interest Drinking Water State Revolving Loan to fund the remaining balance of the project.

Budget: $1,128,660 (ARPA)
$171,340 (DWSRL)
Schedule: Summer 2023


## MOTOR CENTER CONTROL UPGRADES

LAC's water production system has 27 wells and booster stations ranging in age from 25 to 70 years. WP is increasingly seeing failures related to the motor control centers (MCC), electric service feeds and miscellaneous electric components. An RFP to design priority projects based on an already-completed condition assessment was issued and construction will begin in the Summer of 2022.

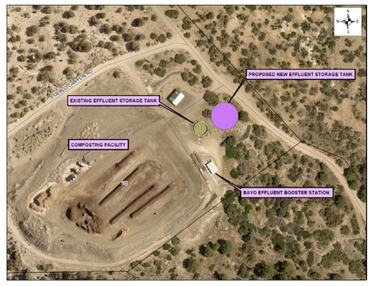
Budget: $2,727,000 (DWSRL)
Schedule: Summer/Fall 2023




## PAJARITO ROAD/TA-50 WATERLINE REPLACEMENT

DOE/NNSA has requested relocation of an existing 16" water transmission line to facilitate construction of planned facilities. The waterline will be relocated from vacant land south of Pajarito Road into the road corridor. The work will be funded by DOE/NNSA.

Budget: $1,210,485 (DOE/NNSA)
Schedule: Summer 2023




## BAYO BOOSTER STATION TANK (PHASE II)

In Phase II of the project to construct a new 833,000 gallon non-potable water tank at the Bayo Booster Station, the storage will be expanded from 182,000 gallons to 1,015,000 gallons. This will allow the non-potable system to capture flows normally discharged to the environment and increase the amount of non-potable water that can be conveyed for irrigation.

Budget: $950,000 (Water Trust Bd)
$1,979,880 (CWSRL)
Schedule: Spring/Summer 2023

## LA RESERVOIR ROAD STABILIZATION

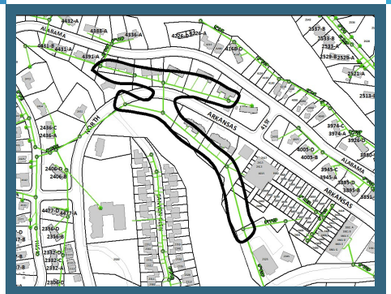
A River Stewardship Program (RSP) grant, sponsored by the New Mexico Environment Department, funds this restoration of the LA Canyon watershed both upstream and downstream of the LA reservoir. Stabilizing the watershed, using bio-engineering techniques, will enable the County to successfully stabilize the road and protect the pipeline & electric conduit between the Ice Rink Road and the reservoir.

Budget: $300,000 (NMRSP)
Schedule: FY2023-24

## TANK PIPING UPGRADES (PHASE II)

Miscellaneous valves and piping adjacent to existing tanks throughout the water production system require replacement after decades of being in service. The valves will be replaced by WP staff and supported by contractors as needed depending on the complexity of the work. These improvements will add to the reliability of the system.

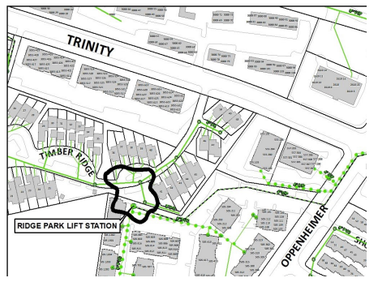
Budget: $450,000
Schedule: Year-Round 2023



## ARKANSAS AREA BACKYARD SEWER RENEWAL & REPLACEMENT

The sewer mains along Arkansas Ave. are located in residents' backyards. The sewers are vitrified clay pipe installed in the 1950s. Due to the location the lines, they are regularly blocked and damaged by roots. They are extremely difficult to access for maintainance and repair. The lines will be assessed, and repairs and replacement of the problem areas will be performed.

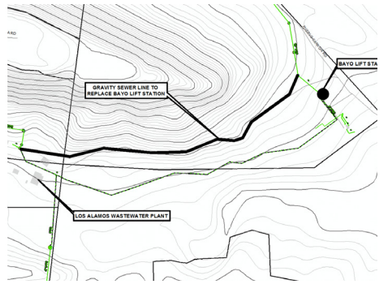
Budget: $269,000
Schedule: Summer 2023




## RIDGE PARK SEWER LIFT STATION ELIMINATION

The existing Ridge Park lift station is becoming unreliable and requires a major rehabilitation. This project will eliminate the lift station by constructing a new gravity line to route sewage to the existing gravity system in the adjacent Timber Ridge Street.

Budget: $300,000
Schedule: Spring 2023




## BAYO LIFT STATION ELIMINATION PIPELINE

The Bayo Lift Station pumps sewage from all of Barranca Mesa to the Los Alamos WWTP. This represents about 20% of the sewage treated at the WWTP. The lift station needs major upgrades and will be replaced by a gravity sewer line rather than repaired, eliminating the cost and risk associated with pumping the sewage.

Budget: $1,200,000 (CWSRF)
Schedule: Spring & Summer 2023

## COMPOSTING IMPROVEMENTS (PHASE II)

The composting facility will be expanded to accommodate additional sludge processed from the new White Rock WRRF. The area is required to have an impervious liner to prevent the migration of contaminants into the groundwater. Also, the compost drainage area must be graded to drain to a detention pond with no offsite discharge. Future phase will include installing a hardened non-wear surface in the processing area.

Budget: $743,000
Schedule: Spring 2023

The Overhead Distribution System Replacement Project addresses infrastructure that is more than half a century old and past its useful life. This year-round project targets areas identified in DPU's Asset Management Program.

# Sustainable Los Alamos

**Water & Energy Conservation**

Induction cooking is upon us. In July, the Induction Cooktop Loaner Program began providing DPU customers a different cooking experience. To date, nearly 40 households have experimented with the induction cooktops. Nearly 100 names are on the list, which means the wait time is until February/March. Perhaps you saw a toast demonstration on our half-a-pan at the ScienceFest, the County Fair or a Farmer's Market. While there is still plenty of time to decide if you want to participate (sign up at ladpu.com/cooktop-signup), we are working to expand the avenues by which cooktops will be available so watch for those as well.

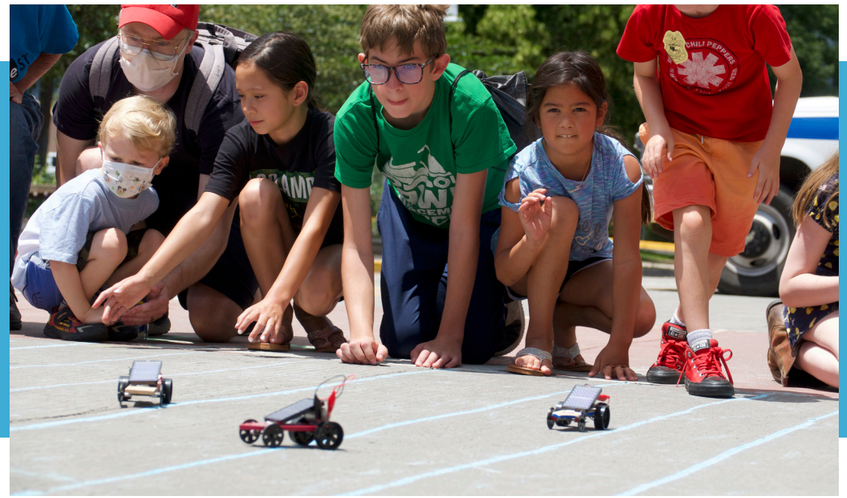
PEEC hosted the Electric Vehicle Show and held a solar car race at Discovery Day during ScienceFest. While the clouds moved in right at race time, several hundred people still stopped by during the Electric Vehicle Show.

> "This is an awesome program. I would have never really considered induction before trying it. Thank you."
>
> *~ Induction Cooktop Loaner Program Participant*

We are looking at options to have efficient technologies available for public demonstration and we've completed several facility tours for consideration to install such household items as a full-size induction stove, a heat pump water heater and a heat pump dryer.

The Water and Energy Conservation Plan was approved by BPU on August 17. The full plan can be found at ladpu.com/ConsPlan. Be on the lookout for public input opportunities in the next six months.

Seasonal and relevant inserts are going out with your utility bill. The following have been included: Stay Cool (July); Induction Cooktop Loaner Program (delayed by printer until July); Thermostats (August); Dishwashers (September). Reach out to Abbey if there is a topic you'd like to learn more about. If you don't get a physical bill, check out https://ladpu.com/inserts to see all of the valuable information and to sign up to receive inserts by email.



Youngsters get ready to race their solar cars at the Electric Car Show in July.

## Induction Cooktop Loaner Program by the Numbers

# of Q2 followup survey responses

**15**

# currently cooking with gas

**10**

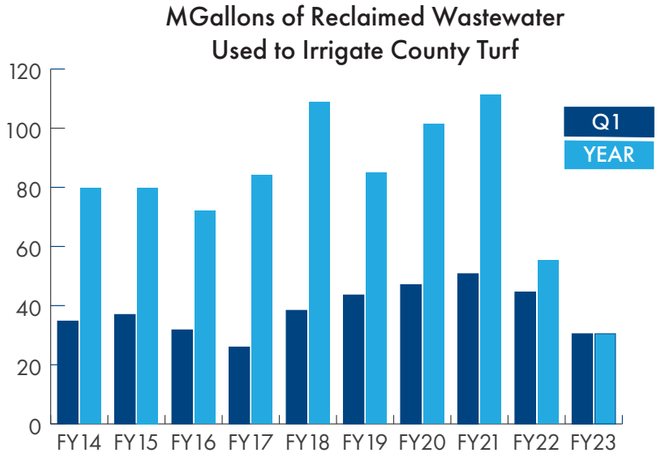
# reporting induction cooktop unit cooked better than gas units

**6**

**Reclaimed Wastewater**

Reclaimed wastewater use for the first quarter of FY2023 totaled 30.5 million gallons. With an unexpectedly wet summer, less of this water was needed for irrigation than in the first quarter of most fiscal years. FY17 was the only year in the past decade when less reclaimed wastewater was used in Q1.

Quarters 1 and 4 are typically the time of year when the largest quantities of reclaimed wastewater are utilized, coinciding with the peak irrigation seasons of spring and summer. Treated wastewater from the wastewater treatment plants in both Los Alamos and White Rock is a great substitute for ground water to meet the County's demand to irrigate parks, ballfields and the golf course. It is also an integral part of the DPU conservation plan. DPU is in the process of improving the quality of its effluent to a class 1A standard--the highest standard possible--through the installation of a filtration system at the Los Alamos plant and the replacement of the White Rock plant with a new water resource recovery facility. Other capital improvement plan projects, such as this year's Bayo Booster Station Tank project, will expand and increase storage capacity to permit the irrigation of other turf areas in the community.



# Natural Gas Rates

## Fluctuations

Natural gas prices are mainly a function of market supply and demand, which causes fluctuations. Multiple factors 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.

**Pass-Through Cost of Gas/Therm**

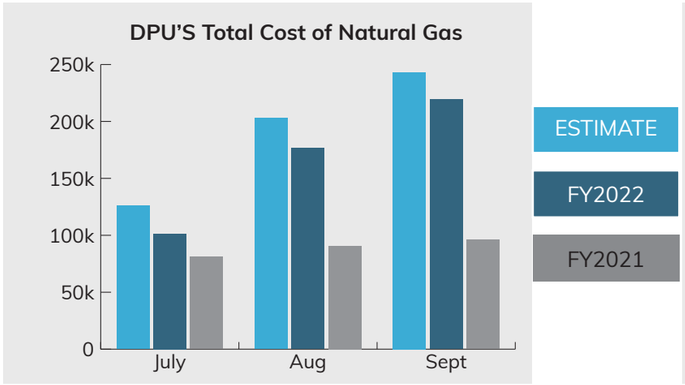
| | Residential | | Non-Residential | |
|---|---|---|---|---|
| Mo/Year | DPU | NMGC* | DPU | NMGC* |
| Sept 2022 | $0.99 | $1.46 | $0.99 | $1.11 |
| Aug 2022 | $0.99 | $1.51 | $0.99 | $1.15 |
| July 2022 | $0.39 | $1.37 | $0.39 | $1.02 |
| **Avg price** | **$0.79** | **$1.45** | **$0.79** | **$1.09** |

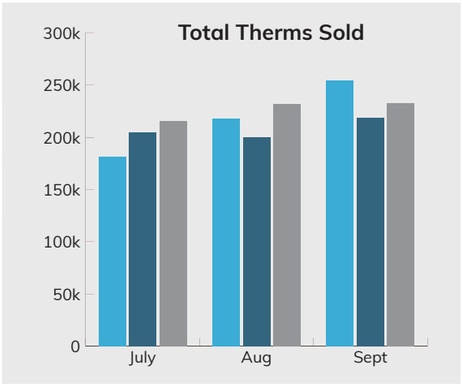
*New Mexico Gas Co. source: nmgco.com/en/cost_of_gas

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 $0.48 per therm was lower than NMGC.

| San Juan Index/MMBTU | | | Total Cost of Gas for Q1 | | | Total Therms Sold for Q1 | | |
|---|---|---|---|---|---|---|---|---|
| | 2022 | 2021 | | 2022 | 2021 | | 2022 | 2021 |
| Sept: | $8.75 | $3.77 | Sept: | $219,259 | $96,139 | Sept: | 218,731 | 233,056 |
| Aug: | $8.48 | $3.90 | Aug: | $176,650 | $90,637 | Aug: | 200,110 | 232,094 |
| July: | $6.15 | $3.48 | July: | $101,286 | $80,945 | July: | 204,536 | 215,931 |
| | | | **Total:** | **$497,195** | **$267,721** | **Total:** | **623,377** | **681,081** |






## Pass-Through Model

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/DPUGas-RateSchedule.

**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

RESIDENTIAL EXAMPLE:
7A Customer used 30 therms in September 2022
$9.50 + [($0.23 + $0.99) x 30) =

**$46.10**

COMMERCIAL EXAMPLE:
7E Customer used 120 therms in September 2022
$28.50 + [($0.23 + $0.99) x 120) =

**$174.90**

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 & Year | Schedule | Projected Variable Cost of Gas | Adjust Prior Month Estimate | Total Pass-Through Cost of Gas/Therm |
|---|---|---|---|---|
| July 2022 | ALL | $0.69 | ($0.30) | **$0.39** |
| Aug 2022 | ALL | $0.93 | $0.06 | **$0.99** |
| Sept 2022 | ALL | $0.95 | $0.04 | **$0.99** |

# Finance & Administration

## HEATHER GARCIA
DEPUTY UTILITY MANAGER

Bachelor of Business Administration
Master of Business Administration

Memberships:
Nat'l Public Employer Labor Relations Assn.
Government Finance Officers Association

### In a nutshell...

**Finance and Administration Division Overview**

The Finance and Admin division has been busy in Quarter 1 with many endeavors to improve communication with customers and the financial well-being of the utility. Rate adjustments were passed in ordinances for the gas, water production and water distribution utilities. In addition to rate changes, staff worked closely with NMED to secure a lower interest rate loan through the Clean Water State Revolving Loan Fund for the White Rock Water Resource Reclamation Facility (WRRF) replacement. This is expected to save the utility between $6 million and $8 million dollars over the life of the loan. Staff is currently working to refinance the previous loan for the WRRF at a lower interest rate as well.

Staff has also been working with Tyler Munis to implement the MyCivic 311 functionalities and mobile app. These applications will provide an additional outlet for residents to report issues and receive follow-up on questions or concerns. These applications are anticipated to be available for customers by the end of November. Also completed in quarter 1 of FY2023 were year-end closeout activities and carryover requests for FY2022 budgets to be added to FY2023.

Staff continues to work with customers to meet all winter moratorium requirements. Winter moratorium will start on November 15 and run until March 15 of 2023. The utility assistance program continues to remain healthy due to generous donations from ratepayers. Current balance as of the end of Q1 is $25,683. More information on our Utility Assistance Program (UAP) can be found on the DPU pages of the county website.

Recently, staff assisted with the County Finance Division on audit reporting for FY2022. The audit will be completed



# OVERALL PERFORMANCE: Q1

**FY2023 Financial Status - Unaudited**

| | | Electric | Gas | Water | Wastewater | Total |
|---|---|---|---|---|---|---|
| OPERATING REVENUES | Utility sales and service | $16,855,958 | $676,963 | $2,459,498 | $1,491,889 | $21,484,308 |
| | Miscellaneous Revenue | 45,588 | - | 738,887 | - | 784,475 |
| | **Total Operating Revenue** | **16,901,546** | **676,963** | **3,198,385** | **1,491,889** | **22,268,783** |
| OPERATING EXPENSES | Employee salaries and benefits | $1,621,532 | $174,319 | $354,343 | $311,533 | $2,461,727 |
| | Contractual services | 14,378,898 | 755,375 | 2,032,384 | 3,070,103 | 20,236,759 |
| | Materials and supplies | 125,256 | 9,754 | 72,183 | 58,008 | 265,201 |
| | Depreciation and amortization | - | - | - | - | - |
| | Special closure costs | 18,950 | - | - | - | 18,950 |
| | Other | 152,584 | 4,671 | 33,218 | 21,437 | 211,910 |
| | **Net Operating Expenditures** | **16,297,219** | **944,120** | **2,492,128** | **3,461,081** | **23,194,547** |
| | NET INCOME | **$604,327** | **$(267,157)** | **$706,257** | **$(1,969,191)** | **$(925,764)** |

in quarter 2 of FY2023. Finance and Admin is preparing for the upcoming FY2024 budget cycle, which will begin in December and January, with presentations to BPU in February and March.

**Overall Budget Performance**

Sales in the first quarter for electric, water and wastewater continue to be lower than forecasted sales. This trend has been seen for these utilities for the past few years. However, revenues have been increasing in the first quarter over past years due to increased efforts in collections and clean up of past due amounts accumulated through the COVID moratorium. Total utility revenues for services for Q1 FY2023 was $3.1 million over FY2022 and $3.8 million over FY2021 for the same time period. This is largely in part to sales of wholesale electric and wholesale water to DOE and Kirtland. Sales in these categories were up 30% for Q1 of FY2023. Wholesale sales account for 64% of total sales revenues for the year so far.

Expenditures for the first quarter of FY2023 are up 85% in the electric utility due to increases in purchased power, the shutdown of the San Juan Generating Station, and the CGTG unit at LANL being inoperable. These expenditures are included in operational expenses, which make up 73% of total expenditures for the quarter. Increases in expenditures in the wastewater fund are due to the construction of the WWTF in White Rock, which started this past spring. Construction expenses make up 21% of total expenditures for the beginning of FY2023. Maintenance expenses make up for 5% of total expenditures. These types of activities are largely affected by the continued delays in supply

# Finance & Administration (continued)

chains and labor shortages.

DPU net revenues for quarter 1 of FY2023 were a total loss of approximately ($926,000), including all expenses. This is mainly in part to the increase in expenses for the WWTF in the wastewater fund, which saw a loss of ($1,969,191). This project is financed and was planned in FY2022 budgets and carried over to FY2023 budgets. Electric and water funds experienced a net gain in quarter 1, while gas showed a loss. This is likely due to fluctuations in gas rates that continued through the summer. Due to the structure of the pass-through rate, these impacts take months to recover from but are expected to normalize in the next quarter.

## REVENUE BY SOURCE: Q1

| SOURCE | Q1 FY23 | Q1 FY22 | Q1 FY21 |
|---|---|---|---|
| Wholesale (DOE) | $9,305,782 | $8,078,203 | $6,659,521 |
| Wholesale (Other) | 4,415,734 | $2,415,038 | 2,608,095 |
| Residential | 5,051,149 | $5,120,245 | 5,666,607 |
| Commercial | 1,738,547 | $1,583,187 | 1,643,265 |
| Educational Sales | 250,932 | $197,816 | 192,208 |
| Municipal | 611,462 | $717,255 | 552,284 |
| Nonpotable | 47,345 | $128,180 | 133,093 |
| Other | 63,357 | $75,738 | 175,296 |
| TOTAL | $21,484,308 | $18,315,661 | $17,630,369 |

### Electric Operations

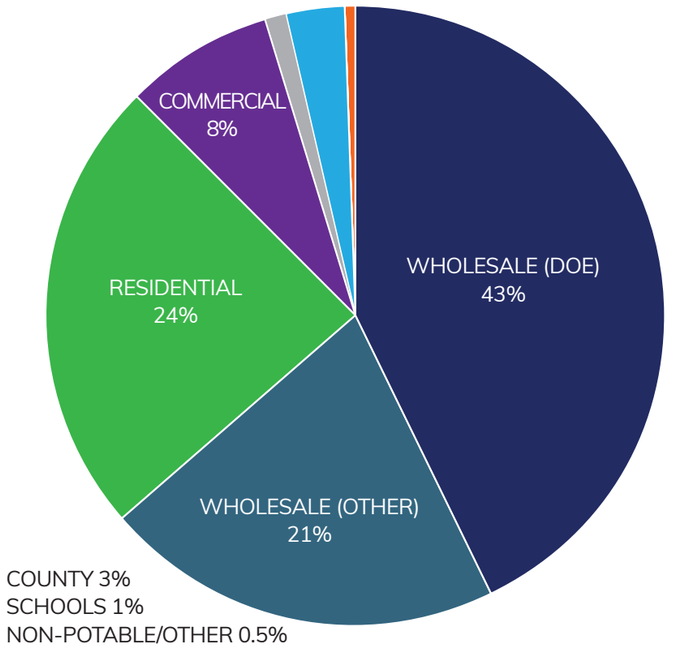
Retail sales were 12% below the budgeted 32,579,545 kWh and sales to DOE were 17% below the budgeted 136,632,437 kWh. Overall commodity sales for all customers were 16% below forecasted sales.

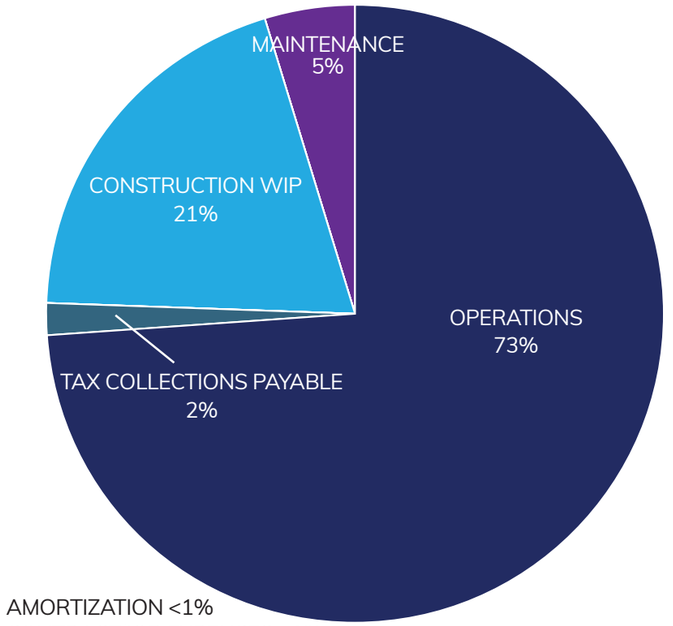
In electric distribution, the first quarter closed with net operating revenues of just over $703,000, which is 49% of the total annual budgeted income for FY2023. This can be attributed to lower overall expenses in maintenance and capital activities due to supply chain delays. With 25% of the year passed, 31% of the budget was expended in the first three months. Power costs continue to be higher than in past years, and LAC cost of power for the quarter was $62.34 per kWh, just below the budget projection of $65.356. Previous years saw cost of power per

## EXPENSE BY TYPE: Q1

| | Q1 FY23 | | Q1 FY22 | | Q1 FY21 | |
|---|---|---|---|---|---|---|
| | Budget | Spent | Budget | Spent | Budget | Spent |
| Electric | 53,173,184 | 16,297,219 | 54,834,147 | 8,770,477 | 57,880,010 | 9,957,026 |
| Gas | 8,683,302 | 944,120 | 8,706,462 | 890,917 | 10,129,727 | 482,477 |
| Water | 28,840,518 | 2,492,128 | 23,048,335 | 2,485,297 | 25,551,212 | 1,246,356 |
| Wastewater | 33,329,603 | 3,461,081 | 10,096,107 | 992,580 | 22,139,137 | 685,355 |
| TOTAL | $124,026,606 | $23,194,547 | $96,685,051 | $13,139,271 | $115,700,086 | $12,371,214 |






kWh around $40 to $50 per kWh. Capital expenditures totaled almost $99,000, which is only about 15% of the $650,000 budgeted for FY2023.

The first quarter of FY2023 yielded a total net income gain of more than $604,000 for electric distribution. A net income loss of ($2,616,104) is forecasted for the year, which includes the profit transfer and budget revisions for carryovers from FY2022. As the department moves forward with planned maintenance activities and capital projects, we could see that early net revenue gain dissipate over the year to match budget projections more closely.

### Gas Operations

Gas sales in the first quarter were 1.5% higher than budgeted for the period, with total sales of 623,377 therms as compared to the forecasted 614,368 therms. Net cash flow from operations posted a gain of $5,514, with capital expenditures totaling $272,672 for Q1.

Cost of purchased gas continues to fluctuate due to market conditions. Prices for natural gas are expected to be high this winter. Lower prices are typical for the first part of the year, but as seen earlier in calendar year 2021 and throughout calendar year 2022, several factors can create fluctuations in the prices of gas. Q1 cost-of-gas expenditures equate to 6% of the total budget for FY2023. It is expected that as demand for gas increases through the winter, costs will increase and be more in line with budgets.

For FY2023, an operating income gain of almost $76,000 is forecasted for gas operations with a budgeted profit transfer of $345,845. Capital expenditures are budgeted at $375,000 for the fiscal year.

# Finance & Administration (continued)

A negative net cash flow of ($1,778,732) is budgeted, funded from existing fund balance which includes carryovers from FY2022. For the first three months of FY2023, a net revenue loss of ($267,157) was experienced, or 15% of the total FY2023 forecasted loss.

**Water Operations**

At just under 254,000 kgal, retail water sales were lower than Q1 budget estimates of about 276,000, a decrease of 8%. Total retail sales for Q1 were almost 8% more than the first quarter of FY2022 because sales to wholesale customers were up, however, residential consumption was down 25% and education sales were 54% less than FY2022. Wholesale water sales to LANL—95,398 kgal—were 9% less than budgeted, which is an improvement over FY2022 for the same timeframe. Sales in FY2023 for the first quarter were 32% lower than estimated. While it may be premature, it appears that the effects of the COVID Pandemic have subsided some with water consumption and irrigation practices steadily returning to normal. Combined total sales in thousands of gallons for both retail and DOE were 8% lower than budgeted for the quarter.

Net cash flow from water operations was over $1.5 million for the quarter. Capital projects funded through sales totaling $1,950,000 were budgeted in the water fund for the year, with almost $836,000 expended as of September 30, yielding total water net revenues of more than $706,000 for the quarter. Water Production's budget includes grant and loan funded projects totaling $10.4 million, which will only be expended if those funding sources are realized.

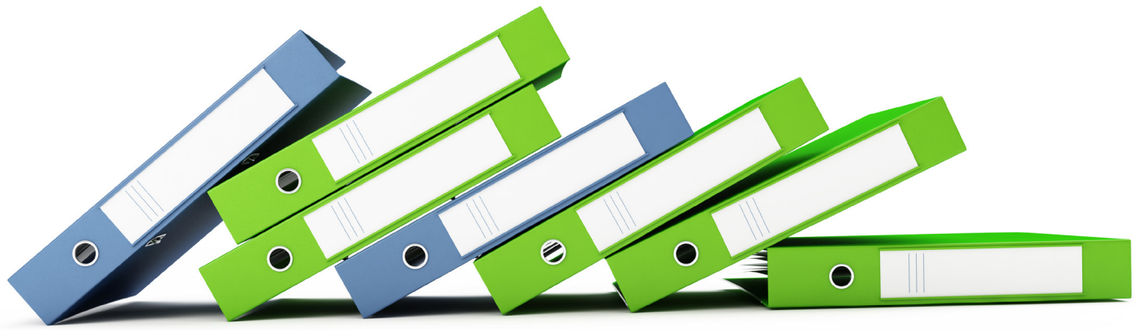
For the full fiscal year, water operations' budgeted operating cash flow is $806,058 which results in budgeted net negative cash flow of ($1,143,942), after forecasted capital expenditures, funded through existing fund balance. Budget carryovers from FY2022 exceed $11.7 million, which are largely funded through grants and loans. Once planned capital projects pick up, early net revenue gains should return to closer projections for FY2023.

**Wastewater Operations**

While total treated wastewater was almost 95,000 kgal, it was still 17% less than forecasted. Cash flow from operations was $607,000 for the first three months of FY2023. Almost $2.6 million has been spent on capital expenditures to date this fiscal year, resulting in a net sewer revenue loss of ($1,969,191). These capital expenditures are for the WRRF construction project in White Rock. Expenditures for FY2023 will continue to increase until the project is completed. The total budget for this project is $30 million, which was carried over from FY2022.

Total FY2023 wastewater operations' budgeted operating cash flow is $1.3 million. In total, more than $2.2 million in capital expenditures is budgeted, which include $1.2 million of grant and loan funded projects. This creates a net change to the fund of $1,043,000, resulting in a projected net income gain of more than $271,000 for the year. After budget adjustments for carryovers, an anticipated net income loss of ($29,138,034) is expected and will be funded out of cash reserves.

# Financial Operations



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



## CURRENT DEBT PROFILE: Q1

**Net System Revenue of the Joint Utility System**

| YEAR | Total Senior Debt Service | Total Subordinate Debt Service | Total Super Subordinate Debt Service | Total Debt Service | Total Revenue | Total Debt Service Coverage Ratio |
|---|---|---|---|---|---|---|
| 2022 | $1,253,863 | $750,295 | $590,462 | $2,594,619 | $8,860,597 | 3.41 |
| 2023 | 1,254,372 | 762,759 | 608,990 | 2,626,121 | 13,862,066 | 5.28 |
| 2024 | 1,239,579 | 1,060,891 | 2,398,768 | 4,699,238 | 7,698,950 | 1.64 |
| 2025 | 1,223,138 | 969,626 | 2,398,766 | 4,591,530 | 7,839,896 | 1.71 |
| 2026 | 1,210,048 | 970,677 | 2,398,763 | 4,579,488 | 7,621,283 | 1.66 |
| 2027 | 1,189,720 | 966,261 | 2,398,762 | 4,554,742 | 11,914,137 | 2.62 |
| 2028 | 1,177,264 | 969,161 | 2,395,417 | 4,541,842 | 20,071,384 | 4.42 |
| 2029 | 1,152,072 | 966,341 | 2,391,225 | 4,509,638 | 14,692,405 | 3.26 |
| 2030 | 1,129,752 | 967,981 | 2,391,224 | 4,488,957 | 13,206,694 | 2.94 |
| 2031 | | 963,901 | 2,381,083 | 3,344,984 | 11,588,963 | 3.46 |
| 2032 | | 962,919 | 2,365,297 | 3,328,216 | 8,577,408 | 2.58 |
| 2033 | | 966,166 | 2,326,433 | 3,292,599 | 8,577,408 | 2.61 |
| 2034 | | 963,451 | 2,326,434 | 3,289,885 | 8,577,408 | 2.61 |
| 2035 | | 329,966 | 2,326,434 | 2,656,400 | 8,577,408 | 3.23 |
| 2036 | | 329,966 | 1,837,291 | 2,167,256 | 8,577,408 | 3.96 |
| 2037 | | 329,966 | 1,827,557 | 2,157,523 | 8,577,408 | 3.98 |
| 2038 | | 329,967 | 1,827,555 | 2,157,522 | 8,577,408 | 3.98 |
| 2039 | | 329,966 | 1,824,783 | 2,154,748 | 8,577,408 | 3.98 |
| 2040 | | 329,966 | 1,824,783 | 2,154,748 | 8,577,408 | 3.98 |
| 2041 | | 329,966 | 1,824,783 | 2,154,749 | 8,577,408 | 3.98 |
| 2042 | | 329,966 | 1,808,310 | 2,138,275 | 8,577,408 | 4.01 |
| 2043 | | 329,966 | 1,789,779 | 2,119,744 | 8,577,408 | 4.05 |
| 2044 | | 329,966 | | 329,966 | 8,577,408 | 25.99 |
| 2045 | | 329,966 | | 329,966 | 8,577,408 | 25.99 |
| 2046 | | 329,966 | | 329,966 | 8,577,408 | 25.99 |
| 2047 | | 329,966 | | 329,966 | 8,577,408 | 25.99 |
| 2048 | | 329,965 | | 329,965 | 8,577,408 | 25.99 |
| 2049 | | | | | 8,577,408 | |
| TOTAL | $10,829,808 | $16,859,950 | $44,262,897 | $71,952,655 | $271,749,718 | |

# Financial Operations (continued)

## ELECTRIC OPERATIONS: Q1

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **UNIT SALES: KILOWATT HOURS** | | | | | |
| Total retail sales | $28,762,875 | | | | $28,762,875 |
| Budgeted sales | 32,579,545 | | | | 32,579,545 |
| Retail sales variance (KWh) | (3,816,670) | | | | (3,816,670) |
| Sales to NNSA | 114,040,589 | | | | 114,040,589 |
| Budgeted sales to NNSA | 136,632,437 | | | | 136,632,437 |
| NNSA sales variance (KWh) | (22,591,848) | | | | (22,591,848) |
| Other Wholesale Sales | 1,948,324 | | | | 1,948,324 |
| Budgeted Other Wholesale Sales | 2,516,285 | | | | 2,516,285 |
| Variance | (567,961) | | | | (567,961) |
| Total actual KWh sales | 142,803,464 | | | | 142,803,464 |
| Total budgeted sales | 169,211,982 | | | | 169,211,982 |
| Total sales variance (KWh) | (26,408,518) | | | | (26,408,518) |
| **FINANCIAL RESULTS** | | | | | |
| Total Electric Distribution Revenues | 3,842,440 | | | | 3,842,440 |
| ED Other Revenues | (123,038) | | | | (123,038) |
| Electric Production Expenditures | 14,522,227 | | | | 14,522,227 |
| Electric Production Revenues | 12,729,146 | | | | 12,729,146 |
| Net Cost Of Power to ED | 1,793,081 | | | | 1,793,081 |
| Other Elec. Distr. Operating Expense | 1,223,063 | | | | 1,223,063 |
| Total ED Operating Expenses | 3,016,144 | | | | 3,016,144 |
| Net ED Operating Revenue | 703,257 | | | | 703,257 |
| ED Capital Expenditures | 98,930 | | | | 98,930 |
| Net ED Total Revenue | 604,327 | | | | 604,327 |
| **BUDGETED** | | | | | |
| Budgeted Operating Income(Loss) | | | | | 1,440,433 |
| Budgeted Capital Expenditures | | | | | (650,000) |
| Profit Transfer | | | | | (654,033) |
| Budgeted Net ED Income(Loss) | | | | | 136,400 |
| Budget Adjustments* | | | | | (2,752,504) |
| **Adj. Budgeted Net ED Income(Loss)** | | | | | **($2,616,104)** |

## NATURAL GAS OPERATIONS: Q1

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **UNIT SALES: THERMS (100,000 BTU)** | | | | | |
| Total sales | $623,377 | | | | $623,377 |
| Budgeted sales | 614,368 | | | | 614,368 |
| Retail sales variance (therms) | 9,008 | | | | 9,008 |
| **FINANCIAL RESULTS** | | | | | |
| Gas distribution revenues | 748,415 | | | | 748,415 |
| Gas other revenues | (71,452) | | | | (71,452) |
| Gas distribution operating expenses | 671,449 | | | | 671,449 |
| Net Gas operating revenues | 5,514 | | | | 5,514 |
| Gas distrib. capital expenditures | 272,672 | | | | 272,672 |
| Net Gas Revenue | (267,157) | | | | (267,157) |
| **BUDGETED** | | | | | |
| Budgeted Operating Income(Loss) | | | | | 75,911 |
| Budgeted Capital Expenditures | | | | | (375,000) |
| Profit Transfer | | | | | (345,845) |
| Budgeted Net Gas Income(Loss) | | | | | (644,934) |
| Budget Adjustments* | | | | | (1,133,498) |
| **Adj. Budgeted Net Gas Income(Loss)** | | | | | **($1,778,432)** |

*This category includes carryforward project amounts, encumbrance rollovers and Board/Council approved budget adjustments.

# Financial Operations (continued)

## WATER OPERATIONS: Q1

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **UNIT SALES: THOUSAND GALLONS** | | | | | |
| Wholesale sales to LANL | $95,398 | | | | $95,398 |
| Budgeted wholesale sales | 105,149 | | | | 105,149 |
| Retail sales | 253,693 | | | | 253,693 |
| Budgeted retail sales | 275,814 | | | | 275,814 |
| Total sales | 349,091 | | | | 349,091 |
| Total budgeted sales | 380,963 | | | | 380,963 |
| Total Sales Variance | (31,872) | | | | (31,872) |
| **FINANCIAL RESULTS** | | | | | |
| Wholesale revenues | 1,295,486 | | | | 1,295,486 |
| Retail revenues | 1,902,899 | | | | 1,902,899 |
| Other revenues | - | | | | - |
| Total water revenues | 3,198,385 | | | | 3,198,385 |
| Water prod. operating expenses | 655,112 | | | | 655,112 |
| Water dist. operating expenses | 1,001,323 | | | | 1,001,323 |
| Total water operating expenses | 1,656,435 | | | | 1,656,435 |
| Net water operating revenues | 1,541,950 | | | | 1,541,950 |
| Water production capital | 815,224 | | | | 815,224 |
| Water distribution capital | 20,470 | | | | 20,470 |
| Total capital expenditures | 835,693 | | | | 835,693 |
| Net water revenues | 706,257 | | | | 706,257 |
| **BUDGETED** | | | | | |
| Budgeted Operating Income(Loss) | | | | | 806,058 |
| Budgeted Capital Expenditures | | | | | (10,417,365) |
| Budgeted Grant/Loan/GF Transfers | | | | | 8,467,365 |
| Budgeted Net Water Income(Loss) | | | | | (1,143,942) |
| Budget Adjustments* | | | | | (11,734,269) |
| **Adj. Budgeted Net Water Income(Loss)** | | | | | **($12,878,211)** |

## WASTEWATER OPERATIONS: Q1

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **UNIT SALES: THOUSAND GALLONS** | | | | | |
| Total treated | $94,957 | | | | $94,957 |
| Budget treated | 114,658 | | | | 114,658 |
| Variance (thousands of gallons) | (19,701) | | | | (19,701) |
| **FINANCIAL RESULTS** | | | | | |
| Sewer revenues | 1,581,724 | | | | 1,581,724 |
| Sewer misc. revenues | (89,835) | | | | (89,835) |
| Sewer operating expenses | 885,060 | | | | 885,060 |
| Net Sewer operating revenues | 606,830 | | | | 606,830 |
| Sewer capital expenditures | 2,576,020 | | | | 2,576,020 |
| Net Sewer Revenue | ($1,969,191) | | | | ($1,969,191) |
| **BUDGETED** | | | | | |
| Budgeted Operating Income(Loss) | | | | | 1,314,234 |
| Budgeted Capital Expenditures | | | | | (2,243,000) |
| Budgeted Grant/Loan/GF Transfers | | | | | 1,200,000 |
| Budgeted Net Wastewater Income(Loss) | | | | | 271,234 |
| Budget Adjustments* | | | | | (29,409,268) |
| **Adj. Budgeted Net Wastewater Income(Loss)** | | | | | **($29,138,034)** |

*This category includes carryforward project amounts, encumbrance rollovers and Board/Council approved budget adjustments.

# Electric Consumption

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| Residential | $1,835,393 | | | | $1,835,393 |
| Private Area Lights | 3,339 | | | | 3,339 |
| Commercial | 1,215,147 | | | | 1,215,147 |
| Municipal | 405,925 | | | | 405,925 |
| Water Production | 140,024 | | | | 140,024 |
| Educational | 165,660 | | | | 165,660 |
| Pole Rentals | - | | | | - |
| Misc/Backcharges | 76,952 | | | | 76,952 |
| TOTAL | $3,842,440 | | | | $3,842,440 |
| **SALES (KWh)** | | | | | |
| Residential | 15,112,440 | | | | 15,112,440 |
| Private Area Lights | 9,354 | | | | 9,354 |
| Commercial | 9,978,121 | | | | 9,978,121 |
| Municipal | 2,602,281 | | | | 2,602,281 |
| Water Production | 1,948,324 | | | | 1,948,324 |
| Educational | 1,060,679 | | | | 1,060,679 |
| TOTAL | 30,711,199 | | | | 30,711,199 |
| **BILLED LOCATIONS (average)** | | | | | |
| Residential | 7,523 | | | | 7,523 |
| Commercial | 615 | | | | 615 |
| Municipal | 156 | | | | 156 |
| Educational | 50 | | | | 50 |
| TOTAL | 8,345 | | | | 8,345 |
| **REVENUE/KWH (average)** | | | | | |
| Residential | $0.1214 | | | | $0.1214 |
| Private Area Lights | $0.3570 | | | | $0.3570 |
| Commercial | $0.1218 | | | | $0.1218 |
| Municipal | $0.1560 | | | | $0.1560 |
| Water Production | $0.0719 | | | | $0.0719 |
| Eductational | $0.1562 | | | | $0.1562 |
| AVERAGE | $0.1226 | | | | $0.1226 |
| **LOSS CALCULATION** | | | | | |
| Power Recv'd, KWh | 29,638,585 | | | | 29,638,585 |
| PV Power Rec'd, KWh | - | | | | - |
| Qtrly Losses <gains., KWh | (1,072,614) | | | | (1,072,614) |
| % Qtrly Losses <gains> | -3.62% | | | | -3.62% |
| CUMULATIVE LOSSES <gains> | -3.62% | | | | -3.62% |



# Natural Gas Consumption

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| Residential | $476,252 | | | | $476,252 |
| Commercial | 159,768 | | | | 159,768 |
| TA-3 Sales | - | | | | - |
| Municipal | 13,925 | | | | 13,925 |
| Water Production | 71,452 | | | | 71,452 |
| Educational | 7,556 | | | | 7,556 |
| Misc/Backcharges | 19,462 | | | | 19,462 |
| TOTAL | $748,415 | | | | $748,415 |
| **SALES (Therms)** | | | | | |
| Residential | 370,802 | | | | 370,802 |
| Commercial | 142,105 | | | | 142,105 |
| TA-3 Sales | - | | | | - |
| Municipal | 15,271 | | | | 15,271 |
| Water Production | 88,402 | | | | 88,402 |
| Educational | 6,797 | | | | 6,797 |
| TOTAL | 623,377 | | | | 623,377 |
| **BILLED LOCATIONS (average)** | | | | | |
| Residential | 6,886 | | | | 6,886 |
| Commercial | 361 | | | | 361 |
| Municipal | 43 | | | | 43 |
| Educational | 20 | | | | 20 |
| TOTAL | 7,310 | | | | 7,310 |
| **REVENUE/THERM (average)** | | | | | |
| Residential | $1.2844 | | | | $1.2844 |
| Commercial | $1.1243 | | | | $1.1243 |
| TA-3 | - | | | | - |
| Municipal | $0.9119 | | | | $0.9119 |
| Water Production | $0.8083 | | | | $0.8083 |
| Educational | $1.1117 | | | | $1.1117 |
| AVERAGE | $1.1694 | | | | $1.1694 |
| **LOSS CALCULATION** | | | | | |
| Gas Recv'd, therms | 648,100 | | | | 648,100 |
| Qtrly Losses <gains>, therms | 24,723 | | | | 24,723 |
| % Qtrly Losses <gains> | 3.81% | | | | 3.81% |
| CUMULATIVE LOSSES <gains> | 3.81% | | | | 3.81% |

# Water Consumption

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| Residential | $1,430,086 | | | | $1,430,086 |
| Commercial | 181,159 | | | | 181,159 |
| Municipal | 191,612 | | | | 191,612 |
| Educational | 77,716 | | | | 77,716 |
| Misc/Backcharges | 22,324 | | | | 22,324 |
| TOTAL | $1,902,899 | | | | $1,902,899 |
| **SALES, KGAL** | | | | | |
| Residential | 186,351 | | | | 186,351 |
| Commercial | 25,790 | | | | 25,790 |
| Municipal | 30,003 | | | | 30,003 |
| Educational | 11,549 | | | | 11,549 |
| TOTAL | 253,693 | | | | 253,693 |
| **BILLED LOCATIONS (AVERAGE)** | | | | | |
| Residential | 6,408 | | | | 6,408 |
| Commercial | 283 | | | | 283 |
| Municipal | 84 | | | | 84 |
| Educational | 22 | | | | 22 |
| TOTAL | 6,797 | | | | 6,797 |
| **REVENUE PER KGAL (AVERAGE)** | | | | | |
| Residential | $7.6742 | | | | $7.6742 |
| Commercial | $7.0244 | | | | $7.0244 |
| Municipal | $6.3865 | | | | $6.3865 |
| Educational | $6.7293 | | | | $6.7293 |
| AVERAGE | $7.4128 | | | | $7.4128 |
| **LOSS CALCULATION** | | | | | |
| Water Recv'd, Kgal | 264,731 | | | | 264,731 |
| Qtrly Losses, Kgal | 11,038 | | | | 11,038 |
| % Qtrly Losses | 4.17% | | | | 4.17% |
| CUMULATIVE LOSSES <gains> | 4.17% | | | | 4.17% |



# Wastewater Consumption

| Unaudited Financial Status - FY2023 | Q1 | Q2 | Q3 | Q4 | YTD |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| All Retail | $1,491,889 | | | | $1,491,889 |
| Municipal/Effluent** | 89,835 | | | | 89,835 |
| Misc/Backcharges | - | | | | - |
| TOTAL | $1,581,724 | | | | $1,581,724 |
| **SEWER TREATED, KGAL** | | | | | |
| **Los Alamos** | 67,883 | | | | 67,883 |
| White Rock | 27,074 | | | | 27,074 |
| TOTAL TREATED | 94,957 | | | | 94,957 |
| **REVENUE PER KGAL TREATED** | $16.66 | | | | $16.66 |

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

# Abbreviations Used in DPU Reports

| | |
|---|---|
| ACFR | Annual Comprehensive Financial Report |
| AMI | Automated Metering Infrastructure |
| APPA | American Public Power Association |
| ATC | Around the Clock |
| BGAL | Billions of Gallons |
| BPU | Board of Public Utilities |
| CFPP | Carbon Free Power Project |
| CGTG | Combustion Gas Turbine Generator |
| COLA | Combined Operating License Application |
| DG | Distributed Generation |
| DOE | Department of Energy |
| DOT | Department of Transportation |
| DPU | Department of Public Utilities |
| DW | Water Distribution |
| ECA | Electric Coordination Agreement |
| ECT | Economic Competitive Test |
| ED | Electric Distribution |
| EIA | Energy Information Administration |
| EP | Electric Production |
| EV | Electric Vehicle |
| FERC | Federal Energy Regulatory Commission |
| FER | Future Energy Resources Committee |
| FY | Fiscal Year |
| GA | Gas Distribution |
| GPCD | Gallons Per Capita Daily |
| GWS | Gas, Water, & Sewer Division* |
| IA | Interagency Agreement |
| KGAL | Thousands of Gallons |
| KWH | Kilowatt Hours |
| LAC | Los Alamos County |
| LAFD | Los Alamos Fire Department |
| LANL | Los Alamos National Laboratory |
| LAPP | Los Alamos Power Pool |
| LARES | Los Alamos Resiliency, Energy & Sustainability Task Force |
| LCOE | Levelized Cost of Energy |
| MCC | Motor Control Center |
| MGAL | Millions of Gallons |
| MWH | Megawatt Hours |
| NEDA | Next Exit Date Amendment |
| NMGC | New Mexico Gas Company |
| NMMEAA | New Mexico Municipal Energy Acquisition Authority |
| NNSA | National Nuclear Security Administration |
| NP | Non-Potable |
| NPV | Net Present Value |
| O&M | Operations & Maintenance |
| OW | Otowi Well |
| PEEC | Pajarito Environmental Education Center |
| PHMSA | Pipeline & Hazardous Materials Safety Admin |
| PPA | Power Purchase Agreement |
| PV | Photovoltaic |
| RFP | Request for Proposals |
| SCADA | Supervisory Control and Data Acquisition |
| SCBA | Self-Contained Breathing Apparatus |
| SLS | Sewer Lift Station |
| UAP | Utility Assistance Program |
| UAMPS | Utah Associated Municipal Power Systems |
| UM | Utility Manager |
| USBR | United States Bureau of Reclamation |
| USFS | United States Forest Service |
| WAPA | Western Area Power Administration |
| WC | Wastewater Collection |
| WP | Water Production |
| WRRF | Water Resource Reclamation Facility |
| WT | Wastewater Treatment |
| WWTP | Wastewater Treatment Plant |

*Sewer = Wastewater Collection

LOS ALAMOS
Department of Public Utilities

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# FY2023 Q1 REPORT

**JUL1 thru SEP30 / 2022**

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