L S ALAM S Board of Public Utilities

Presentation to County Council

Robert Gibson, Chair July 23, 2024

Board Members







<u>Member</u>	<u>Position</u>	<u>Term Ends</u>
Robert Gibson	Chair	2028
Eric Stromberg	Vice Chair	2025
Steve Tobin	Member	2024
Matt Heavner	Member	2026
Charlie Nakhleh	Member	2027



Senior Management



Philo S. Shelton, III – Utilities Manager

Deputy Utility Managers



James Alarid – Engineering Division



Ben Olbrich – Electric

Production



Stephen Marez

Electric Distribution



Clay Moseley – Gas, Water and Sewer Services



Karen Kendall

Finance and Administration

Department Staffing is Stable

- Safety Record few issues
- Staffing essentially fully staffed
- Turnover reduced to normal levels, primarily retirements
- Experience improving; near normal levels overall; GWS inexperienced

Recent Activity and Where We Are Today

DPU is a Big Enterprise

- Four utilities: electricity, natural gas, water, and wastewater services (including DOE/LANL)
- Employees: 108 FTEs
- Budget: \$101M/yr
- Assets: \$217M

Improvements to the Wastewater System Continue

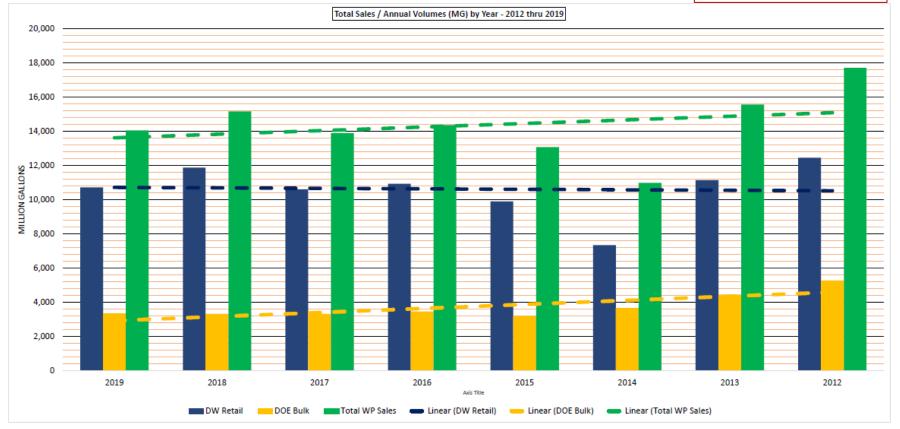
- No unusual maintenance or operations issues
- White Rock Water Resource Reclamation Facility (WR-WRRF) to be complete in August – we will be in compliance
- All WR effluent (Class 1A) available for reuse
- Upgrades to LA WWTP
- Bayo Lift Station elimination in progress



Water Use is Declining

- Chromium Plume Migration
- Quemazon Valve Leaks Replacing all similar bolts

NOTE: Chart will be updated with info for 2020 to present.



The Natural Gas System is Stable

- No unusual maintenance or operational issues
- Commodity Costs stabilized for now
- Modest rate increases programmed
- The prior increases were planned at 3% in FY2025 and 2% in FY26.
- Proposed increase is 5.5% for FY25 and again for FY26

Cost of Gas per Therm Sold			
\$3.80			
\$3.60			
\$3.40			
\$3.20			
\$3.00			
\$2.80			
\$2.60			
\$2.40			
\$2.20			
\$2.00			
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\$0.20 \$-			
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	Jan-14 Mar-14 Jul-14 Jul-14 Jul-14 Sep-14 Jan-15 Sep-15 Jan-15 Jan-15 Sep-17 Jul-17 Jan-17 Jul-17 Sep-17 Jan-17 Jul-17 Jan-17 Jul-17 Sep-17 Jan-12 Jul-17 Jan-12 Jul-17 Jan-12 Jul-17 Jan-12 Jul-12 Jan-12 Jul-12 Jan-22 Jul-20 Ju	Jan-23 Mar-23 May-23 Jul-23 Sep-23 Nov-23 Jan-24 Mar-24 May-24	
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Electric Production Transition is Bumpy

- Abiquiu outage for 75 days and estimated loss of 9610 MWh of generation
- El Vado inoperable through 2026? for dam refacing
- Uniper defaulted contract terminated; Mercuria replacement in place
- Carbon Free Power Project (CFPP) abandoned
- Foxtail Flats 170 MW solar; 320 MWh battery; scheduled for 2026

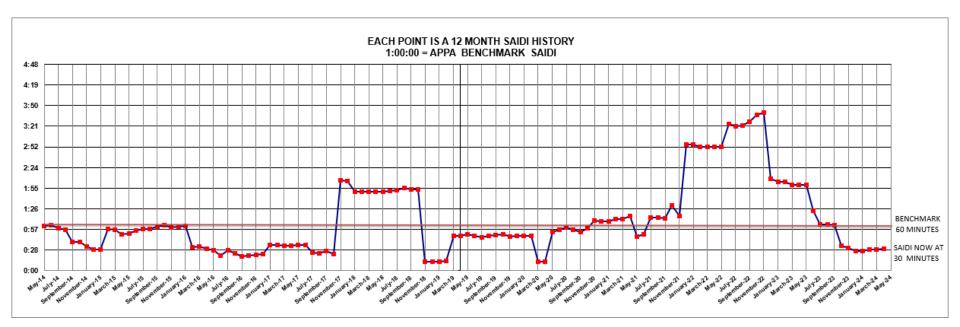
(Many eggs in that basket; watch closely.)

Electric Distribution

- No unusual maintenance or operations issues
- SAIDI = 30 minutes
- Los Alamos Switch Station (LASS) on-line in calendar year
 2024 doubles townsite circuits
- Most frequent reliability problem:
 - Direct-bury underground cable
 - Accelerated 10-year replacement program initiated in fiscal year 2024
- Seeking new, more flexible billing software possible time-of-use rates

Electric Distribution - Reliability

System Average Interruption Duration Index (SAIDI) = yearly average customer outage time



Most Recent 10 Years

Challenges Going Forward



- Keep lights on gas, water, wastewater flowing as/where intended
- Otherwise strategic issues are primarily electric

Achieving Carbon-Neutral Supply

Requires new/diverse sources:

- Nuclear?
- More PV? (San I?)
- Storage?
- Geothermal?
- Other?

New & Increased Demands

EV charging will require more supply and new distribution

- How much supply?
- Where (chargers and distribution system lines)?
- Policies, pricing, & payment
- Study this FY (Sust. Coord + DPU + PW)



New & Increased Demands

Building electrification will require changes to every occupied building

- Cooking Conversion to induction stovetops
- Hot Water Solar or heat pump water heaters (not quite on market)
- Space Conversion to heat pumps (starting to happen)
- Reduce building artificial heat needs
 - New Construction -- Compact architectures/solar heat
 - New & Remodeled -- Reduce leakage: better insulation, windows, doors
- Education, encouragement, & support vs. mandates & subsidies



New & Increased Demands



New Electric Distribution System Required (DPU Study in FY25)

- Near-term upgrades in context of long-term design
- Stay ahead of demand for both EVs and buildings
- Anticipate costs

Summary

DPU is in good shape presently with decarbonization challenges ahead

- Safety, personnel, budgets stable
- Wastewater, water, sewer, electric systems operating nominally
- Seeking new, diverse carbon-free electrical resources
- EV charging & building electrification will require new supply and distribution – being studied now
- Building artificial heat needs MUST be reduced

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Board of Public Utilities bpu@lacnm.us

Philo Shelton, Utilities Manager philo.Shelton@lacnm.us 505-662-8148

Questions?