

LOS ALAMOS

Board of Public Utilities

County Council Briefing

Cornell Wright, Chair

September 20, 2022

Board Members



<u>Member</u>	<u>Position</u>	<u>Term Ends</u>
Stephen McLin	Member	2023
Stephen J Tobin	Vice Chair	2024
Eric Stromberg	Member	2025
Cornell Wright	Chair	2026
Charlie Nakhleh	Member	2027

Senior Management



Philo S. Shelton, III
–
Utilities Manager

Deputy Utilities Managers



James Alarid
–
Engineering
Division



Jordan Garcia
–
Power
Production



Stephen
Marez
–
Electric
Distribution



Jack
Richardson
–
Gas Water
and Sewer
Services



Heather
Garcia
–
Finance and
Administration

Safety Employee of the Quarter



Jonathan Gonzales
FY22 Q4

Trainee,
Wastewater
Treatment Division



Erwin Lopez
FY22 Q3

Engineering Aide,
Gas, Water & Sewer
Division



James Suazo
FY22 Q2

Journeyman
Lineman, Electric
Distribution Division



Charles Lopez
FY22 Q1

Trainee,
Wastewater
Treatment Division

About DPU

SERVICE AREA	TOTAL FY23 AUTHORIZED BUDGET	NUMBER OF EMPLOYEES
Population: 19,330 Area 109.2 sq. miles	\$90,025,957	Full-time: 97 Limited: 1 Vacancies: 9
RECORD PEAK DEMAND	AVERAGE NUMBER OF CUSTOMERS	TOTAL VALUE OF ASSETS
Elec: 93 MW (2018) Gas: 9,688 DTH (1998) Water: 1.7 Billion gal (1998)	Elec: 8,701 Natural gas: 7,472 Water: 6,954 Wastewater: 6,954	\$218,745,230 Elec: \$91.2 million Natural gas: \$16.0 million Water: \$73.2 million Wastewater: \$38.2 million

Assets: \$219 Million

ELECTRIC	NATURAL GAS	WATER
<p><u>Production:</u></p> <ul style="list-style-type: none"> • El Vado (8.9MW—RE) • Abiquiu (17MW—RE) • Uniper 15 year PPA (15 MW-RE) • Uniper 2.75 year PPA (25 MW) • Laramie River entitlement (10MW—coal) • WAPA entitlement (1MW—RE) • Utility-scale PV landfill (1MW—RE) <p>*RE=Renewable Energy</p> <p><u>Distribution:</u></p> <ul style="list-style-type: none"> • 3 Substations • 236 mi. Distribution lines (66% underground; 34% overhead) • 2,387 Utility poles • 2,010 Transformers • 9,000+ Meters 	<ul style="list-style-type: none"> • 2 Entry border stations • 18 Pressure Reg. stations • 128 mi. Distribution lines • 83 mi. Delivery lines • 7,000+ Meters <p style="text-align: center;">WASTEWATER</p> <p><u>Collection</u></p> <ul style="list-style-type: none"> • 118 mi. Collection mains • 45 mi. Delivery lines • 27 Lift stations • 2,620 Manholes <p><u>Treatment</u></p> <ul style="list-style-type: none"> • LA Treatment plant • WR Treatment plant • 1 Bio-solids composting facility 	<p><u>Production:</u></p> <ul style="list-style-type: none"> • 13 Production wells • 25 Tanks • 17 Pumping stations • 30 million gal. of storage • 4 Disinfection facilities • 1 Pressure Reg. station • 45 mi. Transmission lines <p><u>Distribution:</u></p> <ul style="list-style-type: none"> • 118 mi. Distribution lines • 64 Pressure Reg. Valves • 7,000+ Meters <p><u>Non-Potable:</u></p> <ul style="list-style-type: none"> • LA Canyon Dam • Ski Hill catchments • 6 Tanks/Reservoirs/Ponds • 4 Pressure Reg. stations • 14 mi. Transmission lines • 2 mi. Distribution lines

2023 Challenges

- Costs – significant increases for contracting and materials
- Staffing – competition with LANL for skills
- Lead times for equipment and materials
- Understanding CFPP cost projection
- Reduced hydroelectric output due to drought

2023 Focus Areas

- CFPP – Class 3 Project Cost Estimate
 - Continued participation vs. Off-ramp
- IRP Implementation
 - Comprehensive review of available resources
 - Important to make a broadly based selection
- Electrical Coordination Agreement (ECA)
 - Target 6/2023 for tentative agreement
 - Effective 7/1/2025
- Electric Rates & Rate Design

Electric Distribution

- Pole integrity and strength testing
 - Pole repair / replacement in progress
- Tree trimming program in progress
- WR WWTP transformer installed
- Many residential installations
 - Gold Street, Canyon Walk, El Mirador, The Bluffs, The Hills, Arkansas
- Two Level 3 EV charging stations approved
 - WR Visitor Center, LA Municipal building
 - Regular commercial charging rates for users
 - Site preparation started
- Switch and transformer upgrades continue
 - Significant cost and schedule impacts

Temporary Generator

- During Cerro Pelado fire threat
- Risk of electrical grid failure
- Backup power for Rendija Canyon water wells
- UAMPS loan
 - 1.5 MW
 - Diesel powered
- Not utilized ☺



Power Production

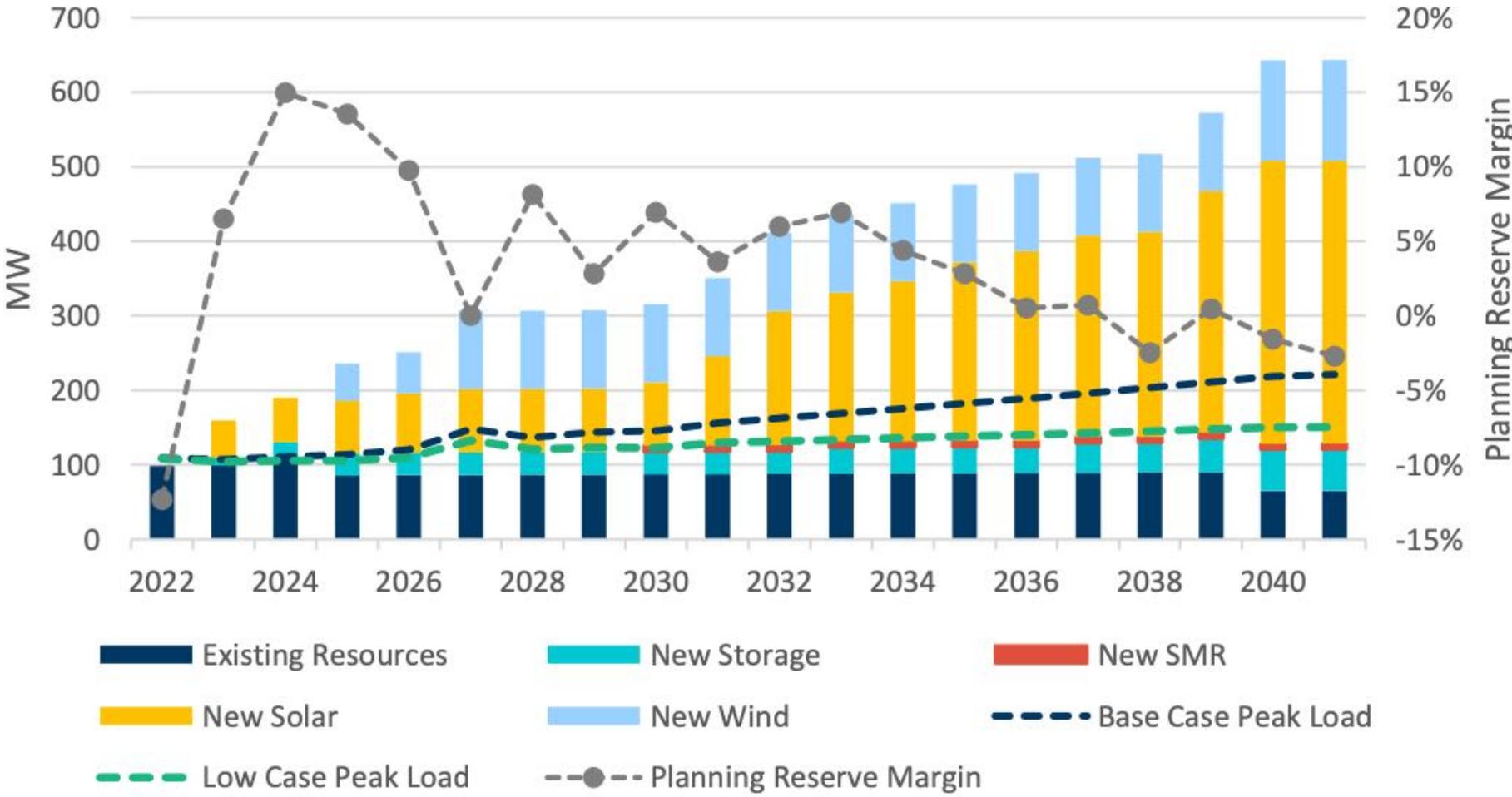
- San Juan retirement pushed to 9/30/2022
- Uniper PPA 15 MW, 15 year started 1/1/2022
- Uniper PPA 25 MW, 2.75 year start 10/1/2022
- ECA renewal negotiation
- El Vado dam restoration project
 - No power generation 2022 – 2023
 - Main transformer needs replacement, on order
- Entered Energy Imbalance Market (EIM)
- IRP preferred options investigation underway
 - CFPP is a major part, fall 2022 off-ramp vs. commitment is soon

Integrated Resource Plan (IRP)

- Completed June 2022
- 20 year horizon, 5 year action plan
- Analysis of:
 - Existing resource (LAC & LANL)
 - Load forecast
 - Technology trends
 - Projected capital and operating costs
 - Model of Western Area power market
- Focus on trade-offs among:
 - Cost, Sustainability, Risks, Operational Exposure, Reliability and Diversification
- Produces recommended portfolio
 - And, recommends a positive reserve margin

IRP Preferred Resource Plan

Exhibit 4: Preferred Resource Plan Resources, LAPP Peak Load, and PRM



Note – wind and solar are installed peak capacities, need to apply capacity factor

Carbon Free Power Project



- Utah Associated Municipal Power Systems (UAMPS) plans to build and operate a Small Modular Reactor (SMR) power station at the Idaho National Laboratory
- Plan is for 6 modules, resulting in target \$58/MWh (2020 dollars)
- BPU and Council approved remaining with the project at the same \$M 1.26 commitment level, with reduced subscription
- LA Subscription can increase with overall project subscription
- Next contractual off-ramp is expected September 2022 at the class 3 project cost estimate
- NRC directed issuance of final certification for NuScale SMR design
- Combined Operating License Application (COLA) under development
- Site geotechnical investigations (borings) underway
- Risks include:
 - Achieving full subscription
 - Economic Competitiveness Test results and its reliability
 - NRC approval of Combined Operating License Application
 - Continued DOE support (subject to appropriations)
- Benefits include power that is:
 - Projected to be affordable
 - Firm, dispatchable, carbon-free

Gas

- Rate increased for meter and fixed service charge
 - Effective 10/1/2022, 2023, 2024 & 2025
 - Approximately 8%, 8%, 8% and 5%
 - Variable commodity rate unchanged
 - Needed to cover costs and maintain reserve
 - Inflation and supply chain shortages have increased costs
- Gas system SCADA contract awarded
 - Gas border station monitoring
 - Over pressure protection
 - Preparation has begun

Water

- Pajarito Well no. 4 returned to service
- Pajarito Well no. 2 motor has failed
- Otowi Wells nos. 2 & 4 Motor Control Center upgrade
- Otowi Well no. 1 online in September
 - Drilled 20 years ago, never brought online
- Replacement project
 - Final site work is nearing completion
- Barranca Mesa tank no. 2 painting approved
 - Not yet bid
 - Expected start spring 2023

Wastewater

- New WR WWTP construction underway
- Lift station and manhole SCADA proceeding
- Tertiary filtering being added to LA WWTP
 - Improves usability of non-potable water
- Expanding compost site
 - Handle bio-solids from WR WWTRP
- Bayo Canyon lift station elimination project

White Rock Water Resources Recovery Facility

- Replace the White Rock Wastewater Treatment Plant
- Existing plant in service since mid-60's
 - Past useful life
- All effluent (300 kgal/day) will be class 1A non-potable water
- Design completed by Bohannon Huston March 2021
- Original estimated cost M\$ 18.1
- Contracted for M\$ 25.3 December 2021
- First major indication of COVID and inflation driven cost increases
- Cost financed, 0.01% loan being pursued
- Construction underway



LARES* Task Force

- LARES has ended with 47 recommendations
- BPU, in consultation with DPU, is categorizing all 47 and acting on some.

Category	Count
Needs Further Discussion	20
Beyond the Scope of BPU/DPU Responsibilities	27
Accepted, will consider implementing in the future	0
Accepted, implementation in progress	0
Accepted, implementation is complete	0
Total	47

* LARES = Los Alamos Resilience, Energy and Sustainability

FY 2022 Capital Improvement Plan



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