DIRECT TESTIMONY OF JACOB TETLOW

On Behalf of Arizona Public Service Company

Docket No. E-01345A-25-0105

June 13, 2025

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.

A. My name is Jacob Tetlow. I am Executive Vice President of Non-Nuclear Operations and Chief Operating Officer at Arizona Public Service Company (APS or Company), and my business address is 400 N. 5th Street in Phoenix, Arizona.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND.

A. I earned a Bachelor of Science in Mechanical Engineering from Arizona State University and worked as an engineer and power plant supervisor prior to joining APS in 2001. During my years at APS, I have held various frontline and leadership positions, including Production Manager at the Company's Cholla Power Plant (Cholla), Director of Gas and Oil Generation, Director of Coal Generation, Director of Distribution Operations and Maintenance, General Manager of Transmission and Distribution Operations, Vice President of Transmission and Distribution Operations, and Senior Vice President of Operations (Non-Nuclear). I was named to my current position, Executive Vice President of Non-Nuclear Operations and Chief Operating Officer, in October 2024.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE ARIZONA CORPORATION COMMISSION (ACC OR COMMISSION)?

A. Yes. I provided testimony in several of the Company's rate cases, including APS's most recent 2022 Rate Case. I have also participated in numerous workshops, open meetings, and other proceedings at the Commission.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. My Direct Testimony supports the Company's Post-Test Year Plant (PTYP) request and APS's operations management. In light of the operational challenges facing APS's business, I will discuss infrastructure investments projected to be necessary for the Company to continue to provide safe, reliable, and affordable energy to its customers and communities.

II. SUMMARY

Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.

A. Providing safe, reliable, and affordable energy to customers is at the core of APS's mission. Whether inspecting boilers, turbines, or solar panels at APS's power plants, maintaining or upgrading the approximately 38,000 miles of transmission and distribution lines across APS's unique Arizona service territory, working to maintain cybersecurity against persistent threats of external attack, building new infrastructure to serve unprecedented growth, or any other critical function across the numerous communities the Company serves, APS operates and expands its grid safely and cost-effectively to ensure around the clock service to customers. From a day-to-day operations perspective, this is how APS powers opportunity for its Arizona customers.

In terms of how APS ensures the safety of its operations, the Company has numerous programs intended to ensure the safety of APS's customers, employees, and the communities where the Company operates. This is a top priority for APS, and based on the metrics APS uses to evaluate safety performance, the Company has been successful in maintaining a safe work environment.

As the Company works safely, both for its employees and the communities it serves, APS delivers consistently excellent service, including performance at, or better than, annual Edison Electric Institute's (EEI) top quartile reliability. This includes achieving top quartile System Average Interruption Duration Index (SAIDI) for eight out of the last ten years and System Average Interruption Frequency Index (SAIFI) performance nine out of the last ten years. Nonetheless, the Company remains vigilant as external challenges to reliability intensify. These challenges include increasing wildfire risks, impacting not only rural communities in the Arizona wilderness but also the growing wildland-urban interface, which is likely the greatest single risk impacting APS's business. In addition, APS is also managing several other reliability challenges in the form of cybersecurity threats to the systems the Company depends on to reliably operate critical infrastructure. The increasing intensity of extreme summertime heat is also placing additional stress on the grid. At the same time, APS is working to serve the unprecedented growth within the service territory, particularly from high load factor customers, such as data centers, which require large amounts of energy on an around-the-clock basis.

For these reasons, providing safe and reliable service requires APS to continue to invest in and maintain the energy grid, along with investment in APS's existing generation resources. I support APS's PTYP request, which includes investments anticipated to be placed into service between January 1, 2025, and December 31, 2025. These investments include ongoing maintenance and replacements for the Company's generation resources and infrastructure, enabling APS to continue meeting the needs of its customers, while also bringing advanced technology to its customers through programs designed to help serve a growing set of diverse electricity needs.

I also describe ongoing changes to two of APS's generating facilities, Palo Verde Generating Station (PVGS) and Cholla. My testimony includes a discussion on the anticipated ownership of previously leased portions of PVGS Unit 2, which will help secure vital long-term baseload generation for APS customers at a reasonable cost. Additionally, I discuss APS's request for a deferral for costs related to retiring Cholla, which ceased operating in March of 2025.

Finally, my testimony discusses the Power Purchase Agreements (PPAs) and fuel contracts and amendments that became effective January 1, 2023 through March 31, 2025. These agreements are critical to maintaining cost-effective and reliable service to APS's customers and were procured through robust procedures, including competitive bidding, ensuring that the resources used to serve ever-growing customer demand are the best fit, least cost resources.

III. SAFETY

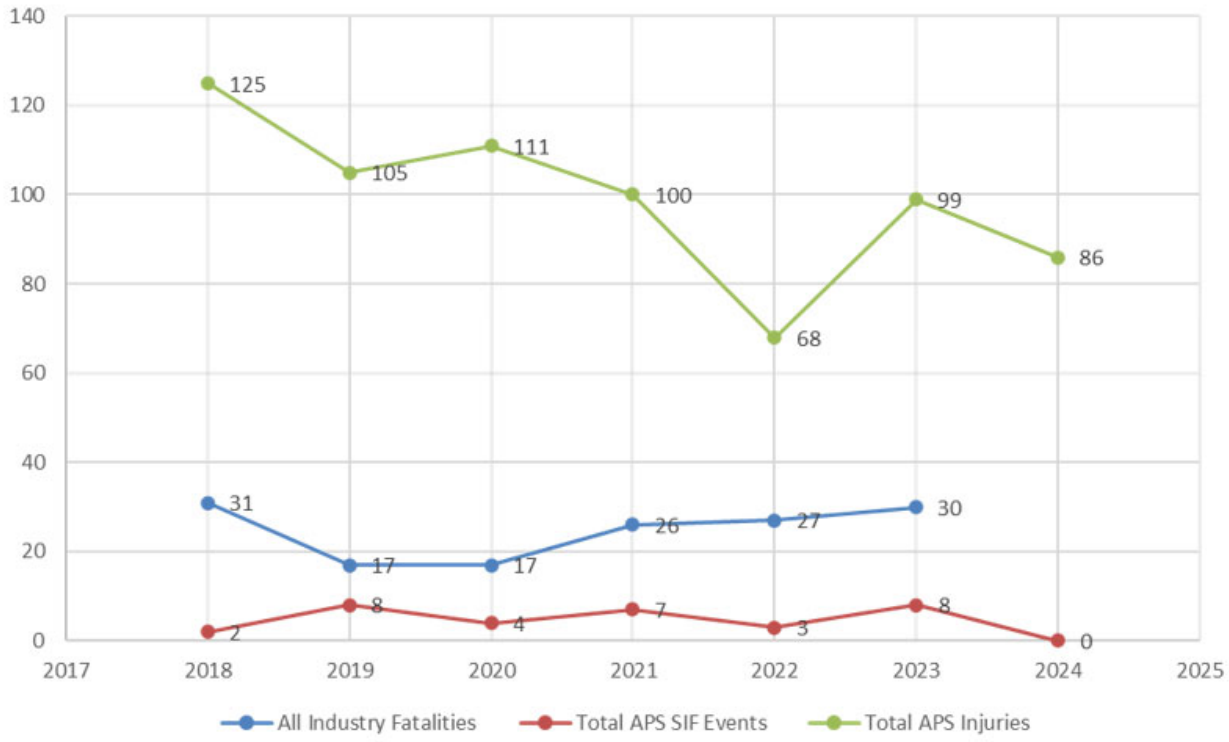
Q. PLEASE DESCRIBE APS'S COMMITMENT TO SAFETY.

A. Ensuring the protection of APS's employees, customers, and the communities where APS operates is the Company's number one priority. This commitment is reflected in APS's strong safety culture and its Integrated Safety Management System (ISMS), which emphasizes continuous training, education, and communication. ISMS ensures that safety is integrated into management practices and daily operations at every level of the organization. Employees participate in regular training programs that increase skill sets, improve crew safety, promote efficiency and planning, and familiarize field personnel with new equipment and procedures. The Company's safety-related programs and initiatives are founded on providing employees with the right training, tools, and overall environment to keep themselves, their team members, and the public safe at all times.

Q. HOW DOES THE COMPANY MEASURE ITS SUCCESS IN THIS SPACE?

A. The industry's best practice for measuring serious safety events, so as to ensure that employees are protected from life-altering or life-threatening injuries, is the number of Serious Injuries or Fatalities (SIFs). The SIF metric is the Company's most important safety metric that aims to prevent serious injuries by improving high-energy hazard recognition and implementing direct controls and risk-based decision making. Based on these metrics used to evaluate safety performance, the Company has seen continuous improvement in providing a safe work environment for APS's employees and the public.

Figure 1. *SIFs, Industry Fatalities, Total APS Injuries*



IV. RELIABILITY

Q. PLEASE PROVIDE AN OVERVIEW OF APS'S SERVICE TERRITORY AND ELECTRICITY TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE.

A. APS's service territory covers nearly 35,000 square miles, which means the Company provides reliable service across a vast swath of the state's tremendous diverse geography. To provide this service, APS uses infrastructure that includes:

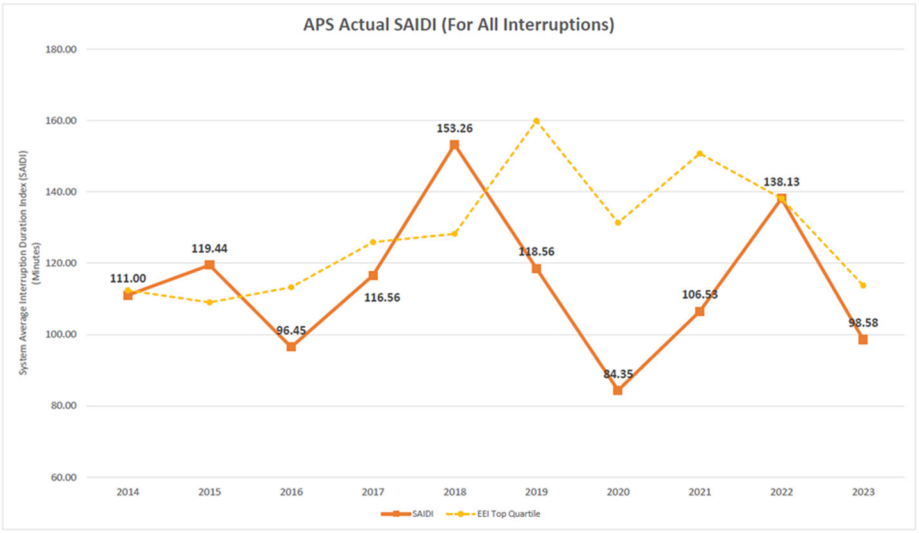
- Over 32,000 miles of distribution lines;
- Nearly 6,000 miles of transmission lines;
- 435 substations;
- More than 300,000 distribution transformers; and
- Close to 600,000 power poles and structures.

This infrastructure must be resilient to maintain reliable service in the face of regular threats posed by various extreme weather events, challenging terrain in both the Arizona wilderness and within congested urban settings, and the growing threat of wildfire, among other challenges. Despite these challenges, APS continually strives to ensure reliable service and meet customers' needs no matter where they arise.

Q. HOW DOES APS PERFORM WITH REGARD TO RELIABILITY?

A. APS consistently delivers at or better than annual EEI top quartile reliability. As shown in Figure 2, with regard to SAIDI, which measures the service interruption duration the average customer experiences, APS has achieved top quartile performance for eight out of the last ten years for which finalized data is available.

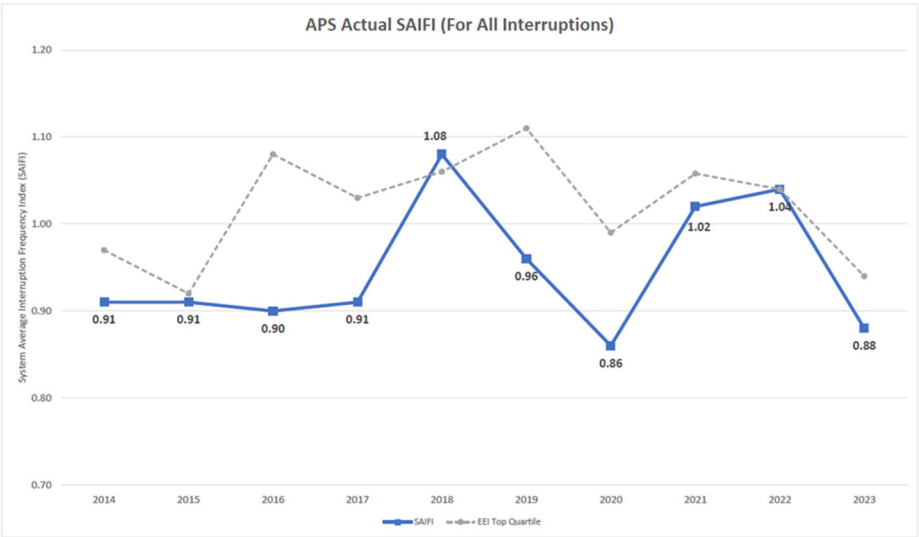
Figure 2. *SAIDI Ten Year Trend*



A lower number indicates better performance

With regard to SAIFI, a measurement of how often the average customer experiences an outage, APS has performed in the top quartile for nine out of the last ten years for which finalized data is available (*see* Figure 3 below).

Figure 3. *SAIFI Ten Year Trend*



A lower number indicates better performance

Additionally, APS was ranked in the top three among all United States utilities for "Perfect Power" at the end of 2024. This measure in the J.D. Power residential survey is defined as a customer not recalling any brief or sustained outages in the last three months.

Q. WHAT ARE SOME OF THE OPERATIONAL CHALLENGES APS IS FACING IN THE NEAR TERM?

A. Below are some of the most significant challenges the Company is working to address. To successfully meet these challenges and provide the high level of reliability APS's customers expect, the rate relief sought in this Application is necessary:

- Continued wildfire risk due to declining forest health and the hot and dry weather conditions in Arizona, which is increasing compared to previous decades. Arizona experiences an average of 1,500 to 2,000 wildfires per year, and the number of large wildfires in APS's territory has more than tripled over the past twenty years as compared to the previous twenty.
- More active and sophisticated cybersecurity threats. Currently, utilities face a broad array of threats aimed at exploiting vulnerabilities in the electric utility industry and disrupting systems and facilities necessary to operate the grid.
- Extreme heat and prolonged high temperatures. In 2024, Phoenix, Arizona experienced 61 days at or above 110 degrees and 113 consecutive days with temperatures at or above 100 degrees. These conditions place tremendous strain on the infrastructure customers depend on to keep the lights on and the air conditioning flowing during dangerous heat conditions.
- Unprecedented load growth driven by changing energy usage and an increase in new customers, including high load factor customers like manufacturers and data centers. APS's peak demand reached 8,200 MW in 2024, and the Company anticipates peak demand growing to over 10,000 MW by 2031.
- At the same time that APS must grow its fleet of generation resources and expand the grid to serve substantial load growth, the Company must also

invest in new infrastructure to replace aging assets that no longer provide the most cost-effective means to ensure reliable service.

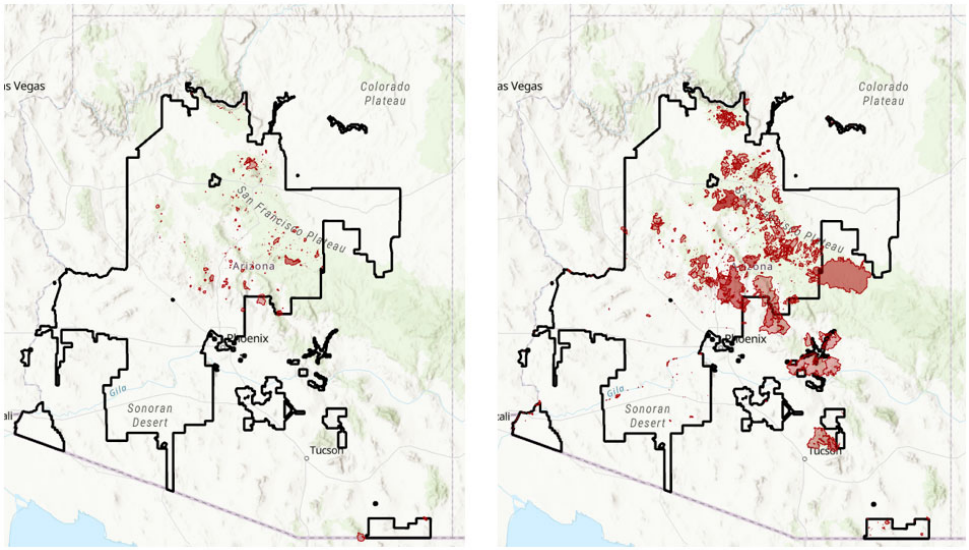
- As described further by APS witness Chris R. Bauer, costs of the goods and services necessary for the Company to provide the level of reliable service customers have come to expect have increased significantly since the test year in APS's previous rate case.
- Supply chain volatility continues to persist. Utilities are experiencing an environment of heightened fluctuations and disruptions with respect to the availability and scheduling for delivery of materials needed to ensure reliable and affordable energy.
- As described by APS witness Theodore N. Geisler, APS must compete with other utilities and industries to maintain a talented and skilled workforce within a tightening labor market.

Q. PLEASE DISCUSS ARIZONA'S WILDFIRE RISK.

A. Arizona continues to experience larger and more frequent wildfire events. Shorter, drier winters and longer, hotter summers are compounding the risks, along with extreme weather events, such as severe drought and strong wind gusts, combined with unhealthy and overgrown forests in Arizona. The growing population is another factor, as people are moving closer to Arizona's forests, which further expands APS's footprint into high fire risk areas. Between 1980-1999, there were 297 wildfires in APS's service territory — a striking contrast to the 1,064 wildfires that occurred in APS's service territory between 2000-2023 (*see* Figure 4).[1] Over the past 35 years, Arizona has experienced nine fires that exceeded 100,000 acres in size — more than half of those occurred within the last five years for which data is available.

[1] National Interagency Fire Center, https://data-nifc.opendata.arcgis.com/. NIFC data reflects fires greater than 100 acres in size in timber or 300 acres in size in grass.

Figure 4. *Large Wildfires in APS's Service Territory Between 1980-1999 (Left) and 2000-2023 (Right)*



Q. WHAT IS APS'S APPROACH TO WILDFIRE MITIGATION?

A. To reduce the risk posed by wildfires to its customers and communities, APS performs year-round preventative vegetation management and also executes its Comprehensive Wildfire Mitigation Plan (CWMP). The CWMP is aimed at preventing, mitigating, and responding to wildfires. The CWMP calls for creating a defensible space around poles with equipment on them to remove combustible fuels (*see* Figure 5), replacing wood poles with steel poles where appropriate, and installing fire mesh on wood poles — all of which reduce the likelihood of a pole burning. Inspections and vegetation management are also key components of APS's fire mitigation strategy. APS inspects every mile of line in high fire risk areas prior to fire season every year and performs the necessary repairs and maintenance to ensure its assets are in the best shape possible going into high fire risk season.

Figure 5. *Defensible Space Around Equipment that was Protected in Extreme Fire Conditions*

To prevent vegetation-related outages and wildfires, the Company uses best practices from the industry and focuses on year-round work to minimize wildfire risk and ensure reliable service to APS's customers. Vegetation that falls within utility right-of-way areas requires preventative maintenance to ensure that sufficient clearances exist between equipment and vegetation. These clearances not only help reduce the risk of wildfires, but also ensure safe access for inspection, repair, and maintenance of facilities. As part of this work, APS also conducts enhanced line patrols and removes at-risk hazard trees that are located outside of a right-of-way but have the potential to fall into a line, to ensure that APS's right-of-way areas are kept clear. The Company's corridors are so well maintained that in the 2025 Horton fire, firefighters used APS's corridors to anchor, flank, and help suppress the fire.

Q. WHAT INVESTMENTS HAS APS MADE TO MITIGATE FIRE RISK AND PROTECT COMMUNITIES?

A. As wildfire events have intensified, so have the costs to mitigate risks. APS invests over $110 million per year on improvements for combatting fire risks. The Company continues to invest in advanced fire modeling software that predicts how fire could travel and allows APS to model scenarios to understand the potential ramifications of a fire. APS recently improved its situational awareness by installing additional cameras and weather stations that will provide the Company with real-time readings, as opposed to getting information from public weather stations miles away. Furthermore, APS has deployed over 30 artificial intelligence smoke and fire detection cameras that send notifications to APS and other dispatch agencies when the cameras detect an ignition or smoke, which will improve wildfire mitigation response times.

Q. DOES APS'S FIRE MITIGATION STRATEGY INCLUDE PROTOCOLS TO RESPOND TO WILDFIRES?

A. Yes. APS coordinates with emergency management to support their efforts during a wildfire. This includes temporarily taking power lines out of service, when requested by fire officials to help keep first responders safe, working with on-scene personnel to determine necessary actions from APS, and assessing needs for system restoration. The Company also recently added a Public Safety Power Shutoff (PSPS) component to its wildfire mitigation program. PSPS is a mitigation tool APS can enact to temporarily shut off power to certain areas during high fire risk conditions (e.g., high winds, dry conditions, elevated temperatures) and reduce the likelihood of a live, downed wire or inadvertent spark starting or contributing to a wildfire. APS carefully evaluates the forecasted and current environmental conditions and compares those to thresholds specified in the PSPS protocols, that govern whether to shut off power in a given circumstance. While PSPS is only

triggered in the most severe circumstances, it is a critical tool for reducing wildfire risk.

Q. WHAT STEPS ARE BEING TAKEN TO PROTECT APS CUSTOMERS FROM CYBERSECURITY INCIDENTS?

A. APS's approach to protecting customers from the impacts of a cyberattack includes maintaining a heightened state of awareness of emerging security threats and having preventative and detective tools in place to mitigate and recover from threats. The Company's risk management plan implements a defense-in-depth approach to cybersecurity, which involves creating multiple layers of controls in an effort to reduce the likelihood of a successful cyberattack. APS's defense-in-depth cybersecurity strategy includes three main components:

- Awareness – Security is the responsibility of every employee. APS employees are the first line of defense for recognizing and responding to threats. Additionally, APS's security team continually tracks emerging threats to inform the Company's defenses, including making use of threat-intelligence sharing organizations, such as the Electricity Information Sharing & Analysis Center (E-ISAC);
- Defensive Posture – Cybersecurity risk management has been integrated into the Company's overall enterprise risk management. As such, APS continuously deploys technology to mitigate attacks and implements processes designed to manage the risk of a cyberattack; and
- Resiliency – Like all companies, APS is subject to attack by threat actors. The Company has developed processes and tools designed to identify, contain, eliminate, and recover from threats if they are able to circumvent APS's technology defenses.

Q. PLEASE DESCRIBE THE ANTICIPATED LOAD GROWTH AND HOW THAT GROWTH MAY IMPACT OPERATIONS.

A. Over the 140 years of APS's history, the Company has taken on a customer load base of roughly 8,000 MW. Until the economic decline of the late 2000's, APS's peak demand (i.e., the period when customers use the most energy) doubled approximately every 20 years. During this time, the driver of load growth was mainly customer growth, but also usage growth due to larger homes and more appliances for residential customers. Business expansion and more electrified equipment was another key driver.

Now, the key drivers of growth are shifting significantly and present a new challenge for planning and operations. Current drivers include unprecedented growth among data centers and large new manufacturing customers, such as semiconductors and their supply chain. Electric vehicle charging is another, though less significant, driver. In addition, since 2020, changes in weather patterns, including record-setting summer heat, higher overnight low temperatures, and decreased annual precipitation in APS's service territory, have resulted in increasing summer loads and peak demand. Such increases are significantly greater than the historical averages for APS and across the nation (*see* Figures 6, 7, and 8).

Figure 6. *Historical and Forecasted Peak Demand (MW)*[2]

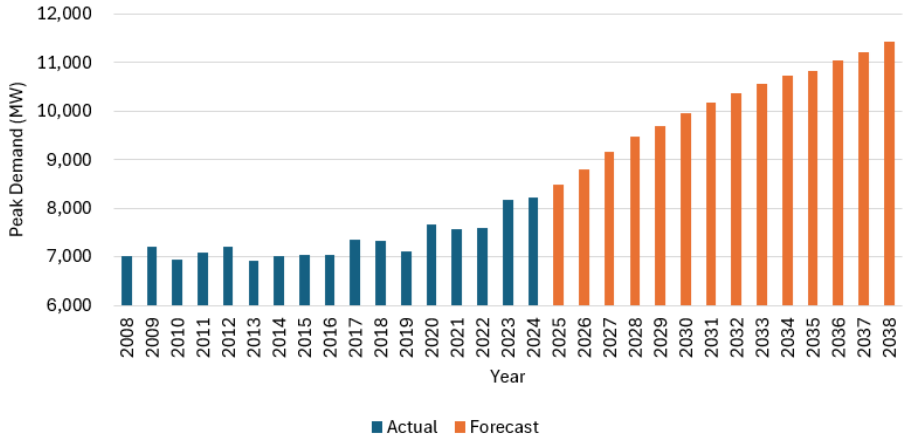


Figure 7. *Historical and Forecasted Sales (MWh)*[3]

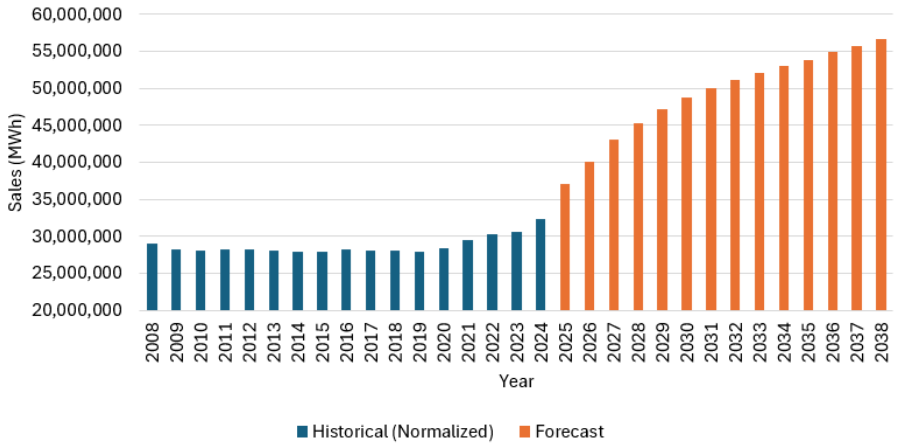
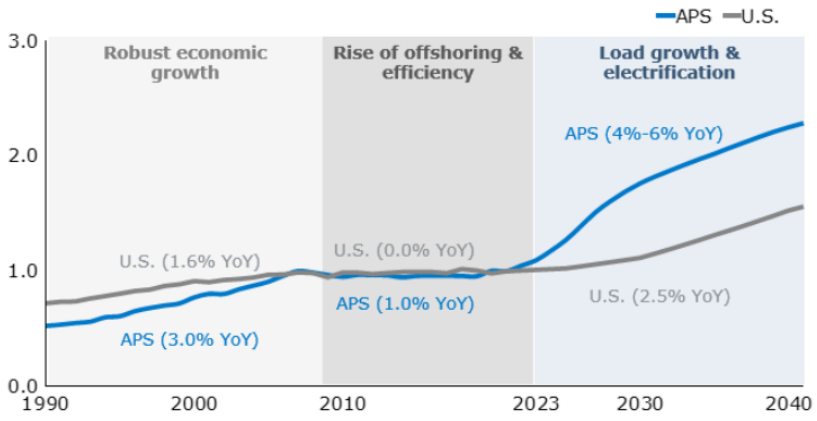


Figure 8. *APS and United States Annual Forecasted Load Growth*



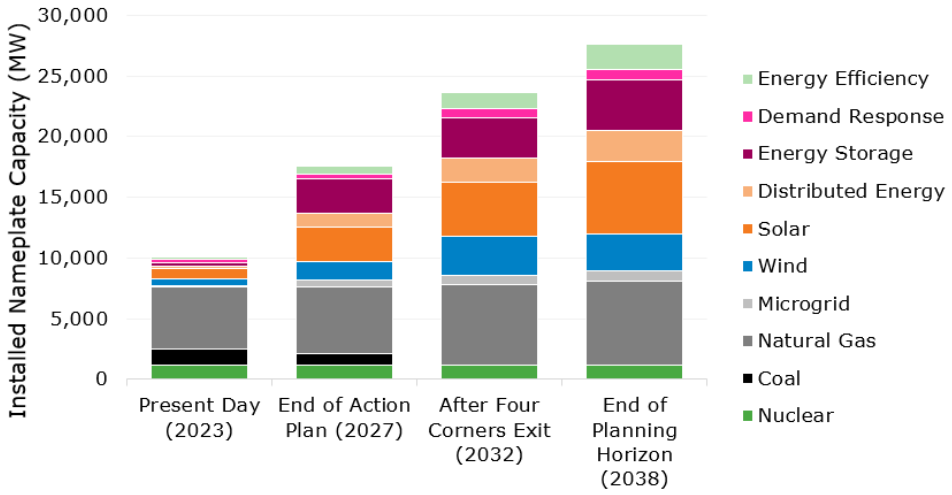
[2] The forecasted demand data was utilized during the development of APS's 2023 IRP.
[3] The forecasted sales data was utilized during the development of APS's 2023 IRP.

APS's 2023 Integrated Resource Plan (IRP) demonstrates a substantial increase to the Company's total load requirements throughout the entire IRP planning period of 2023-2038. Total load requirements not only include the anticipated peak demand, but also include reserve capacity (i.e., extra generation capacity) to ensure sufficient reliability is maintained under various unplanned system conditions. In 2031, APS's peak demand will exceed 10,000 MW and its total load requirement will grow to 12,811 MW, the amount equivalent to what it takes to serve more than 1.8 million Arizona homes. By 2038, APS's total load requirements are expected to increase to more than 14,800 MW of electricity. This amount of load growth requires significant levels of analysis, planning, coordination, and investment to ensure continued safety and reliability for APS's customers.

Q. HOW DOES APS PLAN TO SERVE THIS LOAD GROWTH?

A. An "all of the above" approach to resource planning is essential to providing reliable and cost-effective electricity for APS customers. APS's 2023 IRP calls for total installed capacity needs of more than 17,600 MW in 2027 and more than 27,600 MW in 2038, which can be seen in Figure 9. Total installed capacity exceeds the total load requirement, because it accounts for anticipated peak demand, the reserve capacity, and resource availability, such as when, nuclear and fossil generation plants are taken offline for planned maintenance or, in rare circumstances experience unexpected failures or derates that reduce expected output. Other generation resources, like solar or wind are intermittent, meaning they do not produce their full output consistently. Maintaining a portfolio that includes a balanced mix of diverse resources ensures system reliability and affordability by coupling low-cost renewable and energy storage resources with on-demand dispatchable power plants.

Figure 9. *2023 IRP Preferred Plan Total Installed Capacity*



APS is already hard at work procuring these resources. APS contracted 7,260 MW of new resources during its 2023 All-Source Request for Proposal (RFP), with the target in-service date for these resources being between June 1, 2026 and June 1, 2028. These resources will help APS meet anticipated load growth and changing customer load shapes, and facilitate a transition away from older, uneconomic resources. The development of these projects includes the buildup of support needed for the plants, including analyzing the best approach for connecting them to the grid.

Q. WHY IS A DIVERSE RESOURCE PORTFOLIO IMPORTANT TO APS?

A. Electric utilities in Arizona and many other parts of the country are experiencing rapid changes in how energy is consumed and produced. Demand is increasing due to economic growth, and utilities are seeing load shapes starting to reflect more "around the clock" demand needs. These changes are occurring while at the same time less economic resources are being taken out of service. To address the gap between demand and energy production, APS uses a diverse generation fleet that includes natural gas, nuclear, solar, wind, storage, and other resources. This variety of resources enables APS's generation fleet to be resilient against supply chain disruptions, weather patterns, and market conditions. Events impacting energy

supplies could involve a number of different factors, such as scarcity pricing in fuel, chemicals, water supplies, weather patterns, or other electricity generation inputs. Ensuring resource diversity provides a hedge against these and other events to preserve service reliability for customers.

Q. WHY IS APS REPLACING ITS AGING INFRASTRUCTURE AT THE SAME TIME THAT IT MUST EXPAND ITS DIVERSE PORTFOLIO OF RESOURCES?

A. While APS is increasing the capacity of its balanced and diverse portfolio of resources to serve a rapidly growing service territory, the Company must also manage its existing generation fleet to ensure it remains reliable and cost-effective. At a certain point, however — decades after initially starting to serve customers — power plants reach the end of their useful life and investing to maintain these resources is no longer cost-effective for customers.

Between this year and 2031, approximately 1,357 MW of coal-fired generation capacity owned by APS is planned to be replaced with new generation resources that can deliver an equivalent level of resource adequacy for APS's customers but at a lower cost than continuing to invest in aging infrastructure. As to each of the impacted facilities — Cholla in March of this year, Four Corners Power Plant (Four Corners) in 2031 — rather than fully decommission the infrastructure at each site, APS is planning to ensure that valuable assets are available for future use, including for the development of new generation resources (e.g., nuclear power or natural gas generation at the site of Cholla, and selling APS's Four Corners assets to the Navajo Nation). Nonetheless, given the paramount importance of maintaining reliability for APS customers, the future plans for replacing this infrastructure can shift depending on the availability of adequate resources to ensure a successful transition. As to Four Corners specifically, the Company will not exit from its

ownership at this plant in 2031 unless it can ensure resource adequacy for the APS customers.

Q. IS APS ALSO WORKING TO UPGRADE AND REPLACE AGING TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE WHILE EXPANDING THE GRID?

A. Yes. As part of the Company's work to ensure top-tier reliability for all APS customers, while balancing cost-considerations to maintain affordable rates, various programs are in place to proactively evaluate the Company's transmission and distribution infrastructure to determine the appropriate level of ongoing maintenance versus replacement of existing equipment that reaches the end of useful operations. In general, APS constantly evaluates the condition of its infrastructure based on its years in operation, costs of repair versus replacement, the time required for repair versus replacement (including any associated service outages), and feasibility of these options, among other considerations. The goal of these programs is to maintain a proactive posture in maintaining grid-related equipment and assets to ensure the highest level of reliability possible, given the cost of various options.

For example, the Company maintains sophisticated systems, such as Direxyon, to determine the best path forward for APS infrastructure, as between proactive replacements and continued maintenance. Examples of covered equipment include breakers, substation relays, and wood poles, among other assets. These systems help ensure that APS can get maximum value out of existing assets prior to being proactively replaced. Capital projects implemented by the Company also involve the replacement of aged infrastructure to ensure a resilient and reliable system, in particular throughout remote areas of APS's service territory where maintenance access is challenging and severe weather threats are persistent. Significant

upcoming projects in 2026 and 2027 include assets located near the Grand Canyon and services for the town of Bisbee. In each case across the Company's geographically diverse service territory, grid operations to maintain and, if necessary, replace APS's transmission and distribution infrastructure are a key aspect of ensuring highly reliable service at affordable rates for customers.

V. FUEL AND PURCHASED POWER

Q. PLEASE EXPLAIN HOW APS DETERMINES WHETHER NEW PPAS)ARE COST EFFECTIVE.

A. APS issues All-Source RFPs that are open to all technology types to ensure the most cost-effective and reliable solutions are selected to serve customers. The All-Source RFP identifies the resource need amounts and in-service dates, and any entity who registers for the third-party platform may submit a response to the request. The Company uses an independent monitor to support the administration and evaluation of responses to the All-Source RFP.

The All-Source RFP process may result in resources that are owned by the Company, owned by a third party where APS enters into a PPA, or a combination of both. To determine what projects are most economic for customers, APS performs a portfolio analysis, where shortlisted bids from the All-Source RFP are evaluated using an optimization tool that compares the shortlisted bids to determine which is the least-cost, best-fit resource to maintain reliability for customers.

Q. HOW DOES APS ENSURE THAT FUEL CONTRACTS ARE IN THE BEST INTEREST OF CUSTOMERS?

A. All fuel contracts stem from Resource Planning studies and follow the guidance of APS's latest IRP. The generation resources are procured under the All-Source RFP process to ensure a competitive market process that is monitored by an independent third party. Both the IRP and All-Source RFP analyses include the cost of fuel and

fuel transportation, where applicable. This ensures that resource and fuel procurement decisions are grounded in market dynamics and reflect the best interests of customers.

APS negotiates contractual terms and conditions with its counterparties to acquire the most cost-effective and reliable fuel supply to serve its customers. Before finalizing any fuel contract, APS follows established procedures specific to each fuel type, such as natural gas, to ensure cost-effectiveness. For instance, daily natural gas procurement involves comparing bids to the Intercontinental Exchange (ICE) trading platform to assess bids from various fuel suppliers. For gas transportation, APS competes through an open season bidding process that awards volumes based on the highest net present value (NPV) offer. At the time the coal contracts are signed, the Company performs a cost benefit analysis of the various coal sourcing options. In addition, long-term contracts are managed within the framework of the Company's Energy Risk Management process, which includes extensive internal reviews and approvals to assess the economic and reliability impacts of the agreements. Significant amendments to such existing agreements undergo rigorous evaluations, with reviews by numerous internal subject matter experts to ensure continued value to customers on a cost-benefit basis and alignment with APS's financial and operational objectives. APS maintains the documentation of all such cost-benefit analyses.

The prudency of nuclear fuel contracts is evaluated at the time of contracting using a process that evaluates competitive supplier offers and compares prices to the current spot or long-term market. Most nuclear fuel contracts are long-term contracts covering multiple years, and prices are dependent on the market in which the contracts were executed. Nuclear fuel goes through a number of processes to

prepare the raw uranium for use in a reactor. The APS contracted average unit price is less than the observable market prices for each of those processes. In some cases, such as fuel fabrication, the process is specific to each nuclear generating station and is not comparable across the marketplace. This process ensures that a rigorous cost-benefit analysis is performed for all such contracts and amendments for nuclear fuel.

Q. IS THE COMPANY SEEKING A PRUDENCY REVIEW OF NEW PPAS, FUEL CONTRACTS, AND AMENDMENTS?

A. Yes. Decision No. 78876 (March 16, 2023) states that prudence reviews of APS's new and amended fuel, transportation, and purchased power contracts will be conducted in future rate cases.[4] A list of contracts and other relevant information related to APS's procurement is provided as Attachment JT-01DR, and copies will be provided in the Company's response to its pre-filed discovery (Initial 1.49 and Initial 1.50). The contracts provided are those that became effective starting on January 1, 2023 through March 31, 2025. Applicable contracts that became effective prior to 2023 were reviewed for prudency in the Company's 2022 Rate Case.

VI. <u>POST-TEST YEAR PLANT</u>

Q. WHAT IS APS'S PTYP REQUEST IN THIS CASE?

A. APS is requesting $1.1 billion in total Company gross capital expenditures for the 12-month period ending December 31, 2025, which is the 12-month period immediately after the Test Year in this case (see Standard Filing Requirement (SFR) Schedule B-2, pages 1-2, columns 1-5, and Attachments JT-02DR, JT-03DR, JT-04DR, JT-05DR, and JT-06DR). In addition, APS will roll forward accumulated depreciation and taxes during the PTYP period, which reduces its

[4] *In re Fuel and Purchased Power Procurement Audit for Ariz. Pub. Serv. Co.,* Docket No. E-01345A-21-0056, Decision No. 78876 (Mar. 16, 2023) at 8.

PTYP request by approximately $796.8 million. Thus, APS is requesting $306.7 million be added to rate base. Largely, the investments that make up this request are focused on the following:

- Improving the customer experience with enhanced performance of APS's distribution management software application;
- Investing in reliability with APS's fire mitigation and grid hardening programs;
- Continuing top quartile reliability by performing necessary maintenance and replacements at APS's non-nuclear power plants;
- Ensuring reliable and affordable generation from PVGS; and
- Preparing for growth by providing customers with an additional 150 MW of battery energy storage to help serve peak demand.

It is projected that all assets in the Company's PTYP request will be serving customers prior to the anticipated rate effective date in this case. APS will update its request to reflect the actual cost for projects placed in-service during the 12-month PTYP period in subsequent rounds of responsive testimony.

In accordance with earlier decisions,[5] APS has ensured no growth-related plant is included in its request.

[5] *In re the Application of Ariz. Pub. Serv. Co. for a Hr'g to Determine the Fair Value of the Util. Prop. of the Co. for Ratemaking Purposes*, Docket No. E-01345A-16-0036, Decision No. 76295 (Aug. 18, 2017); *In re Application of Ariz. Pub. Serv. Co. for a Hr'g to Determine the Fair Value of the Util. Prop. of the Co. for Ratemaking Purposes*, Docket No. E-01345A-19-0236, Decision No. 78317 (Nov. 9, 2021); *In re Application of Ariz. Pub. Serv. Co. for a Hr'g to Determine the Fair Value of the Util. Prop. of the Co. for Ratemaking Purposes*, Docket No. E-01345A-22-0144, Decision No. 79293 (Mar. 5, 2024).

Q. PLEASE EXPLAIN APS'S PROCESS FOR REMOVING GROWTH-RELATED PLANT FROM PTYP.

A. When identifying capital projects to include in PTYP, the Company includes capital spending aimed at constructing, replacing, or upgrading APS's system that is necessary to serve customers reliably. These projects and programs are identified internally based on engineering analysis and system needs.

Other capital spending is driven by customer-initiated projects. The process to design and execute on these projects requires the customer to complete a Project Initiation Request (PIR). Customers initiating a PIR are either new to APS's network or are requesting additional capacity. Being that these customers are in APS's service territory, the Company is obligated to serve their requests. However, these types of projects represent growth and are excluded from the Company's PTYP request. As such, in developing the list of PTYP projects for which APS is requesting recovery in this rate case, APS reviewed the projects in detail to ensure that none were driven by a PIR that facilitates customer growth.

Q. PLEASE DESCRIBE THE INVESTMENTS THAT HAVE BEEN INCLUDED IN APS'S PROPOSED PTYP.

A. The various projects included in PTYP are summarized by category below.

A. *Information Technology / Facilities*

Q. WHAT CAPITAL EXPENDITURES ARE INCLUDED IN PTYP RELATED TO INFORMATION TECHNOLOGY AND FACILITIES?

A. The Company requests a total of $184.9 million in IT & facilities capital expenditures. These IT investments are essential to improving the resilience, performance, and efficiency of APS's operations, enabling the Company to deliver superior service to its customers while also fostering innovation and cost-effectiveness. APS is investing $13.3 million in the ServiceNow platform to further

automate and optimize routine business tasks. ServiceNow is used by IT teams for managing various tasks such as IT work, incidents, defects, project management, change management, digital portfolio management, vulnerability response, business continuity, and service requests (like laptops, phones, support, or data inquiries). This initiative will expand ServiceNow's capabilities across multiple enterprise functions, which will improve operational efficiency, reduce manual processes, and foster automation, helping APS deliver faster and more reliable service to customers.

IT-related investments also include $30.7 million for the Application Sustainability Program, which represents APS's ongoing commitment to maintaining and upgrading critical application systems. This investment will ensure that software applications like the Advanced Distribution Management System (ADMS), the software platform responsible for optimized performance of the distribution grid and automated outage restoration, remain up to date and secure. By investing in necessary upgrades, APS will continue to improve the performance and sustainability of its infrastructure, directly supporting more reliable energy delivery and enhanced service to customers.

B. *Nuclear Generation*

Q. WHAT CAPITAL EXPENDITURES ARE INCLUDED IN PTYP RELATED TO NUCLEAR GENERATION?

A. The Company requests a total of $44.8 million in nuclear generation capital expenditures. PVGS is the second largest power producer in the United States, generating more than 32 million mWh of clean and carbon-free energy annually. The PTYP investments in this category reflect new plant, plant improvements, and asset replacements that ensure the continued safe and reliable operation of this power plant, including $11 million for projects aimed at improving physical

security and cybersecurity at the plant. For example, the Security Access Control Computer Replacement project will replace systems that control the plant's access control system, video assessment system, and cyber intrusion detection systems, all of which facilitate daily security activities and compliance with Nuclear Regulatory Commission (NRC) regulations. The current IT systems associated with plant security are becoming out of date and obsolete, necessitating replacement. Coupled with changes in NRC regulations, IT systems associated with plant security need to be replaced to ensure compliance and maintain secure, safe operations at PVGS.

Also included in this category is $11.1 million for a two-way radio system replacement. The PVGS two-way radio system is required for both emergency and day-to-day radio communications, but the current equipment is becoming obsolete and must be replaced. The new system will improve audio clarity and has extended range and advanced capabilities like encryption and data transmission.

C. *Distribution*

Q. WHAT CAPITAL EXPENDITURES ARE INCLUDED IN PTYP RELATED TO DISTRIBUTION?

A. The Company requests a total of $248.8 million in distribution capital expenditures. This category includes about $40.4 million for various programs and projects related to fire mitigation and grid hardening. These investments include improvements to high fire risk distribution feeders, such as upgrading existing fuses with expulsion-limiting fuses as well as overhead reconductoring and overhead to underground conversion in unique situations and as needed to eliminate spark-to-ground situations. These projects also involve performing necessary capital-level repairs and replacements in high fire risk areas prior to fire season, such as replacing damaged poles with steel poles or sturdier wooden poles

wrapped in fire mesh (*see* Figure 10), which reduces the chances of ignition and, therefore, the risk of wildfires.

Figure 10. *Wooden Poles Wrapped in Fire Mesh*

Another distribution investment includes capital related to the Highway Relocation Program, which implements capital projects to relocate or extend APS assets and service facilities in connection with urban development projects. This program will support projects for 16 public development agencies in Arizona in 2025, with a total of $14 million in distribution capital investments. These agencies are adding local infrastructure, such as sewer and drainage to accommodate their urban development and improving road conditions by widening roads. These projects also facilitate the addition of traffic controls and streetlights to support public safety objectives.

D. *Non-Nuclear Generation*

Q. WHAT CAPITAL EXPENDITURES ARE INCLUDED IN PTYP RELATED TO NON-NUCLEAR GENERATION?

A. The Company will invest a total of $360.6 million in non-nuclear generation capital expenditures in 2025. This category includes $19.8 million for the gas turbine rotor replacement in Unit 2 at Redhawk Power Plant (Redhawk). Over time, gas turbine rotors need to be replaced to avoid severe degradation that can result in catastrophic unit failure. Replacing the Redhawk Unit 2 rotor at this time drastically reduces the risk of failure that would otherwise result in expansive unit damage and downtime. This project, therefore, ensures APS customers can rely on a dependable 200 MW of energy from Redhawk Unit 2 for many years to come.

Also included is $51.6 million for adding a second Makeup Water Surge Pond (MWSP) at Redhawk. The West MWSP stores water used for plant cooling, fire protection, and other plant water systems. With the addition of a second MWSP, critical redundancy is provided that will enable continued operation of Redhawk during liner maintenance and other periods when the current MWSP is not in operation, ensuring the availability of this fully dispatchable 1,100 MW resource during periods of critical grid need.

E. *Energy Storage*

Q. WHAT CAPITAL EXPENDITURES ARE INCLUDED IN PTYP RELATED TO ENERGY STORAGE?

A. The Energy Storage investment includes the Agave Battery Energy Storage System (BESS), which is expected to cost approximately $264.3 million. Battery energy storage facilities allow the Company to take advantage of excess solar output by charging the battery during the middle of the day and deploying the battery in the evening when solar is no longer performing at peak capacity. In this case, the

existing Agave Solar plant will be retrofitted with a 150 MW BESS that will serve APS customers during peak demand hours (*see* Figure 11). The Agave BESS supports customer affordability by utilizing land and facilities already owned by APS. As described by Mr. Chris Bauer, this project is eligible for a federal tax credit of approximately $71.4 million. To reduce the financial impacts to customers, APS proposes to amortize the credit over five years as reflected in the Company's Energy Storage Post-Test Year Plant Additions pro forma (SFR Schedule C-2, Column X).

Figure 11. *Agave BESS Storage*

VII. PALO VERDE GENERATING STATION

Q. WHAT MAKES PVGS CRITICAL TO APS OPERATIONS?

A. PVGS is foundational to APS's ability to provide its customers with reliable and affordable energy. With an operating capacity of nearly 4,000 MW — enough to provide power for more than four million people—the plant continuously produces a predictable amount of baseload energy. As the only nuclear resource in the

Company's diverse generation fleet, PVGS remains essential to APS and its customers.

PVGS also provides significant economic benefits to Arizona. The plant has 2,200 full-time employees, and over 900 to 1,000 additional contractors are employed during the planned refueling and maintenance outages that take place twice per year. PVGS is the largest single commercial taxpayer in Arizona and provides an annual economic impact of more than $2 billion to the state. This includes taxes, employee salaries, material and service purchases, and numerous other economic impacts. For example, every year PVGS purchases more than $120 million in products and services from more than 1,200 Arizona businesses. Given the many benefits of PVGS and the age of the facility, APS plans to continue operating the plant beyond its current license.

Q. PLEASE DESCRIBE THE ANTICIPATED PURCHASE OF ADDITIONAL INTEREST IN PVGS UNIT 2.

A. APS owns 29.1% of Units 1 and 3 and 17% of Unit 2. APS also leases 12.1% of Unit 2, which results in a 29.1% combined ownership and leasehold interest in that unit. As described further by APS witness Elizabeth A. Blankenship, the Company's current lease agreements on Unit 2 require APS to exercise one of the following options at the end of the lease term in 2033: 1) purchase the leased interests at the fair market value at the time of expiration, 2) extend the leases for up to only two additional years, or 3) return the leased interests to the lessor trust entities. Earlier this year, however, APS was presented with an opportunity that would allow the Company to purchase 7% of its leased interest in Unit 2 and terminate the lease agreements for that 7% interest in 2025. This would result in APS owning 24% of Unit 2 and reducing its leased interest to 5.1%.

Q. WHEN DOES APS EXPECT THE TRANSACTION TO BE COMPLETED?

A. APS anticipates signing a Purchase and Sale Agreement in June and anticipates closing on the sale in the fourth quarter of 2025 upon receiving Federal Energy Regulatory Commission (FERC) approval of the transaction. When the Commission authorized the initiation of the original sale leaseback financing in 1986, the Commission provided pre-approval for APS's eventual ownership acquisition of the Unit 2 interests subject to the sale leaseback. [6]

Q. HOW DOES THE PURCHASE OF THE ADDITIONAL INTEREST IN UNIT 2 IMPACT APS CUSTOMERS?

A. APS's increased ownership stake in Unit 2 is expected to provide customer benefits by securing baseload generation long-term for APS customers at a reasonable cost. This type of generation is particularly well suited to serving high load factor customers, like data centers and large new manufacturers, as they typically have consistent power demands around-the-clock throughout the year — similar to the production of a nuclear facility.

As previously discussed, if APS does not purchase the additional interest associated with the leases on Unit 2 in 2025, there are three alternative scenarios that could take place when the lease expires in 2033. The first scenario involves APS exercising the option to purchase the additional interest at the fair market value at that time. Due to the large increase in data center demand, it is likely that the market value in 2033 will be vastly higher than today. The second scenario involves APS extending the leases for only up to two additional years. The third alternative involves APS returning the leased interest to the lessor trust entities.

[6] *In re Application of Ariz. Pub. Serv. Co. for an Order re Transactions and Agreements related to Unit 2 of Palo Verde Nuclear Generating Station, et al.,* Docket No. E-1345-86-105, Decision No. 55120 (Jul. 24, 1986) at 10 (authorizing the Company to "repurchase all or any portion of the Unit 2 facilities").

Should APS not pursue this purchase and exercise the "return" option in 2033, the Company would be required to procure a much larger portfolio of resources to backfill the lost capacity and energy currently provided by this 7% interest in PVGS Unit 2, which is equivalent to 91.98 MW of Unit 2 Net Rated Power..

Since the cost per kW to purchase the additional Unit 2 interest in 2025 is competitive compared to the currently forecasted pricing of new nuclear and other baseload resources today, this purchase in 2025 is cost-effective for APS's customers. Moreover, while there is no absolute certainty of the fair market value for this resource in 2033, all available information today suggests that such value will increase dramatically by 2033. As such, exercising this option to purchase the additional interest now creates a high-value hedge against substantially increased pricing for a critical asset in the future. As such, this transaction is expected to create significant customer savings over both near- and long-term horizons.

VIII. CHOLLA POWER PLANT

Q. PLEASE DESCRIBE THE FEDERAL REQUIREMENTS TO CEASE OPERATIONS AT CHOLLA.

A. Given the requirements of United States Environmental Protection Agency (EPA) regulations finalized in 2017, the Company was required to cease burning coal at Cholla by April 30, 2025 (actual plant generation operations ended on March 17, 2025, based on economic dispatch and available fuel supplies). However, the costs necessary to remediate coal combustion residual (CCR) management units at the plant are increasing significantly due to circumstances beyond APS's control. In May 2024, the EPA finalized changes to its regulations governing CCR management units, including those at Cholla.[7] The changes to the CCR regulations

[7] *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments*, 89 Fed. Reg. 38950 (May 8, 2024).

significantly expanded the scope of required CCR remediation activities related to groundwater monitoring, corrective action, and disposal unit closure obligations. Complying with the changes to these CCR regulations will significantly increase the costs associated with the cessation of coal-fired operations at the plant, with the Company's latest estimates demonstrating the need for an additional $169.2 million for Units 1 and 3.

As discussed in more detail in Ms. Blankenship's Direct Testimony, the Company filed a request to defer the costs associated with the EPA CCR requirements, which is currently pending before the Commission. Specifically, the Cholla application requests the deferral of all non-fuel costs associated with APS's ownership, operation, and maintenance of the remaining units at Cholla and all costs arising from the cessation of coal-fired operations at the plant, including CCR remediation and disposal unit closure. Ms. Blankenship discusses APS's request to recover these costs as part of this rate case.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

ARIZONA PUBLIC SERVICE COMPANY
Fuel Contracts and Amendments

Counterparty	Effective Date	Contract Type
Natural Gas		
El Paso Natural Gas Pipeline, LLC	1/1/2023	Extension of legacy transportation.
El Paso Natural Gas Pipeline, LLC	1/1/2024	Extension of legacy transportation.
El Paso Natural Gas Pipeline, LLC	1/1/2025	Extension of legacy transportation in the Phoenix area.
El Paso Natural Gas Pipeline, LLC	1/1/2025	Extension of legacy transportation in the Yuma area.
North Baja Pipeline, LLC	3/13/2025	Extension of legacy transportation in the Ehrenberg area.
North Baja Pipeline, LLC	3/13/2025	Extension of legacy transportation in the Yuma area.
Fuel Oil		
Sellers Petroleum	4/14/2023	Local area fuel delivery.
Sellers Petroleum	5/30/2024	Local area fuel delivery.
Coal		
Uranium		
WMC Energy B.V.	6/7/2024	Uranium purchase.
Uranium Energy	10/9/2024	Uranium purchase.
Urenco Enrichment	12/10/2024	Uranium enrichment services.

ARIZONA PUBLIC SERVICE COMPANY

Power Purchase Agreements

Unit Name	Capacity (MW)	Effective Date	Term	Contract Type - Technology
Yuma	70 Solar & 67 BESS	5/19/2023	20	Capacity - PVS (Solar + Storage) PPA
Chevelon Butte Wind Farm 1	238	6/1/2023	20	Energy - Wind PPA
Mesquite & BESS Solar 5	60 Solar & 60 BESS	6/1/2023	20	Capacity - PVS (Solar + Storage) PPA
Agua Fria	200 MW BESS only	6/1/2023		Termination of Capacity - BESS PPA
Novo	14 MW	6/10/2023	10	Amended and restated Biomass agreement
NA	46 MW	6/15/2023	2	Purchase from SRP
Chevelon Butte Wind Farm 2	216	4/29/2024	20	Energy - Wind PPA
West Wing 1	80	4/29/2024	20	Capacity - BESS PPA
Sun Streams 3	215 Solar & 215 BESS	6/10/2024	20	Capacity - PVS (Solar + Storage) PPA
El Sol	WSPP Agreements	8/1/2024	20	Capacity - BESS PPA
Sun Streams 4	300 Solar & 300 BESS	2/28/2025	20	Capacity - PVS (Solar + Storage) PPA
Amendments to Existing Tolling Agreements				
Griffith Energy Tolling Agreement				
South Point Energy Center Tolling Agreement				
WSPP Agreements				
Powerex Corp.				
Vitol Inc.				
Rainbow Energy Marketing Corporation				
Calpine Energy Services				
Mercuria Energy America				
Tenaska Power Services				
Public Service Company of New Mexico				
EDF Trading North America				
Central Arizona Water Conservation District				

INFORMATION TECHNOLOGY / FACILITIES POST-TEST YEAR PLANT ADDITIONS

Line No.	Project Name	Purpose	Estimated In-Service Date	Project Cost at January 31, 2025	Projected Costs to Close	Total Projected Costs
1	Data Analytics	Provide dynamic predictive risk and asset failure models to facilitate data driven decisions for maintenance, inspection, capital planning, and replacement.	2025 - Q3	$ 1,194,438	$ 1,194,253	$ 2,388,691
2	Application Sustainability	Support and maintain application upgrades needed to ensure software is kept up to date.	2025 - Q4	$ 17,597,578	$ 13,143,303	$ 30,740,881
3	Corporate Modifications	Support modification and renovation projects to reconfigure and remodel of work spaces to accommodate business needs.	2025 - Q2	$ 1,956,282	$ 539,583	$ 2,495,865
4	Facilities Run Maintain-Building	Planned predictive replacements of foundations, walls, roofs, ceilings, stairs, floor coverings, windows, plumbing and fixtures, built-ins, office lighting, conventional doors and partitions, decorations, and modular trailer buildings	2025 - Q4	$ 885,665	$ 7,061,656	$ 7,947,321
5	Facilities Run Maintain-HVAC	Planned predictive replacements of HVAC (heating, ventilation, and air conditioning) equipment/components	2025 - Q4	$ 105,758	$ 1,916,034	$ 2,021,792
6	aps.com Security Improvements	Enhance the security and resilience of the aps.com website against malicious bot attacks.	2025 - Q2	$ -	$ 80,859	$ 80,859
7	Audio Visual (AV) Sustainability Project	Update or add conference room audio visual equipment and workstation IT peripherals at APS facilities.	2025 - Q2	$ -	$ 267,727	$ 267,727
8	High Bill Analyzer	Implement a new product that enables the Customer Experience Center to serve high bill calls from customers.	2025 - Q2	$ -	$ 900,313	$ 900,313
9	CHQ Electrical Infrastructure	Replace electrical infrastructure replacement for Life, Fire & Safety systems per City of Phoenix code compliance	2025 - Q4	$ -	$ 1,191,637	$ 1,191,637
10	Client Applications	Ensures Windows workstation operating systems and back office applications are kept secure at a supported level while adding functionality to improve business productivity	2025 - Q3	$ -	$ 630,153	$ 630,153
11	Compute	Compute program projects drive the modernization of Identity & Access Management, Virtual Compute Infrastructure, and server lifecycle management. These efforts strengthen IT security, enhance system reliability, and support business continuity at APS.	2025 - Q4	$ 546	$ 4,210,860	$ 4,211,406
12	Customer Lifecycle Construction Project	Improve the business process of receiving and managing construction requests from customers.	2025 - Q2	$ 2,034,113	$ 1,453,071	$ 3,487,184
13	Consumer App Redesign	Rewrite the aps.com mobile app on the ReactNative framework.	2025 - Q2	$ -	$ 842,303	$ 842,303
14	Microsoft Dynamics Real Time Journeys Upgrade	Replacement of current Microsoft Dynamics 365 Outbound Marketing application.	2025 - Q3	$ -	$ 2,924,332	$ 2,924,332
15	Customer Outage Notifications	Enhance Outage Communications to improve the overall outage experience for APS Residential and Business customers while improving internal system and process efficiencies.	2025 - Q2	$ -	$ 461,456	$ 461,456
16	Data Center Tools Upgrades	Automate Data Center health metrics, management, and upgrades of facilities management toolsets.	2025 - Q2	$ -	$ 159,075	$ 159,075
17	Dallas Security Software Access Control System Replacement	Enterprise-wide replacement of Dallas Security Software Access Control System.	2025 - Q3	$ -	$ 794,395	$ 794,395
18	Deer Valley N1 and N2 Uninterruptiple Power System Replacement	Uninterruptible Power System replacement for Deer Valley buildings N1 and N2	2025 - Q4	$ 1,372,301	$ 1,014,096	$ 2,386,397
19	Enterprise Asset Management System	Enterprise Asset Management System project to improve business functionality on applications including but not limited to Maximo, Zycus, Site Work Management Ssystem, Business Intelligence/Reporting, and Beeline	2025 - Q3	$ -	$ 3,138,542	$ 3,138,542
20	Electric Vehicle (EV) Charging	Provide adequate Electric Vehicle (EV) charging infrastructure for all employees onsite statewide.	2025 - Q3	$ 1,638,095	$ 1,060,586	$ 2,698,681
21	Four Corners SO2 Clean & Maintenance Building 69 Roof Replacement	Full roof replacement of the SO2 Clean & Maintenance Building 69	2025 - Q2	$ (1,274)	$ 256,306	$ 255,032
22	Generation Monitoring & Diagnostics Center	Create models and implement a Monitoring and Diagnostics center.	2025 - Q3	$ -	$ 997,726	$ 997,726
23	Transportation Shop Equipment	Replacement of shop lifts used to perform under the hood work.	2025 - Q3	$ -	$ 670,577	$ 670,577
24	Lease Buyouts on Equipment	Purchase of APS vehicles at the end of their lease term.	2025 - Q4	$ 42,191	$ 2,849,483	$ 2,891,674
25	License Renewal	Renewal of hardware and software licenses related to design, construction, backup server, enhanced aps.com search engine capabilities and customer experience management.	2025 - Q4	$ -	$ 31,608,388	$ 31,608,388
26	Information Security & Compliance Obsolescence	The replacement of outdated, unsupported, and/or no longer effective systems. The purpose of the Security Program is to ensure the critical systems we rely on are functional, supported and operational.	2025 - Q4	$ -	$ 405,355	$ 405,355
27	ITRON Upgrade	Upgrade ITRON Field Service Collection software and hardware. ITRON supports APS' non-AMI meters statewide by gathering meter reads/interval data, and providing meter events, status, and instrumentation data.	2025 - Q4	$ -	$ 784,212	$ 784,212
28	Job Control Platform Upgrade	Job Control lifecycle application upgrade and RHEL 9 server upgrade, alert automation, and re-architecture for dedicated Test and Dev environments.	2025 - Q4	$ -	$ 403,246	$ 403,246
29	Local Area Network	Replace end of line/non-scalable routers, decommission Corporate Security and Smart Grid firewalls.	2025 - Q2	$ -	$ 6,021,248	$ 6,021,248

NOTE: There may be variances in displayed values due to rounding.

INFORMATION TECHNOLOGY FACILITIES
POST-TEST YEAR PLANT ADDITIONS

30	Maximo Platform Upgrade	Transition the Company onto Maximo Application Suite version 9 from the Company's current version of Maximo 7.6.1.2.	2025 - Q3	$ -	$ 14,209,899	$ 14,209,899
31	Modernize Email Security	Evaluate and implement best practice configurations for securing on-premise exchange, mailhub, domain protection, advance phishing protection and email security.	2025 - Q2	$ -	$ 547,263	$ 547,263
32	Monitoring Systems	Employ advanced monitoring systems to ensure reliable business operations and avoid IT system outages.	2025 - Q3	$ -	$ 502,458	$ 502,458
33	Organized Market Transformation	Support APS's participation in organized energy markets and programs (EIM, new day ahead markets, WRAP).	2025 - Q2	$ 1,552,530	$ 1,261,135	$ 2,813,665
34	Laptop Purchase Program	Buyout expiring leased computers and move to a purchase model.	2025 - Q4	$ -	$ 4,757,035	$ 4,757,035
35	Physical Security System Program	Replace Physical Security hardware for video recorders, cameras, intrusion detection, and call/false alarm reduction.	2025 - Q1	$ -	$ 172,692	$ 172,692
36	Physical Security Upgrade	Upgrade gate access hardware at Deer Valley.	2025 - Q1	$ -	$ 67,060	$ 67,060
37	Power Purchase Agreement Implementations	Integrate systems to enable dispatch of seven new power purchase agreement facilities.	2025 - Q4	$ 1,713,351	$ 2,240,458	$ 3,953,809
38	Bill Redesign & System Enhancements	Enhance Customer Care and Billing (CC&B), aps.com and associated integrations to provide new bill functionality.	2025 - Q3	$ (1,045)	$ 1,659,348	$ 1,658,303
39	Redhawk ABB Upgrade	Upgrade of the ABB Symphony Plus at Redhawk Power Plant.	2025 - Q4	$ -	$ 1,526,768	$ 1,526,768
40	ServiceNow	Upgrade ServiceNow's capabilities across multiple enterprise functions to improve operational efficiency, reduce manual processes, and foster automation, helping APS deliver faster and more reliable service to customers.	2025 - Q4	$ 2,205,320	$ 11,093,839	$ 13,299,159
41	Storage Disks	Additional disks for organic data growth, memory & central processing unit (CPU) to improve performance, and manage and protect data	2025 - Q4	$ -	$ 4,630,147	$ 4,630,147
42	Distribution Communications Upgrades	Implement, replace, or upgrade communication infrastructure to support Distribution Advanced Grid Technology Power Quality and Reliability programs, including Fire Mitigation plans.	2025 - Q1	$ 4,000,405	$ 81,052	$ 4,081,457
43	Unified Communications Program	Replace the equipment servicing the Enterprise Voice and Wireless infrastructure.	2025 - Q2	$ 1,251,994	$ 1,006,726	$ 2,258,720
44	User Access Validation Replacement	Replacement system for Critical Infrastructure Protection (CIP)-required review and validation of physical and electronic access to High and Medium CIP cites	2025 - Q2	$ -	$ 104,621	$ 104,621
45	Wide Area Network	Provide increased bandwidth for statewide licensed microwave communications installations. Replacements for serial multiplexers and microwave radio and supporting power systems.	2025 - Q4	$ 6,574,878	$ 2,663,836	$ 9,238,714
46	Advanced Distribution Monitoring System Exporter Enhancements	Update Advanced Distribution Management System-Geopgraphic Information System Exporter tool to account for changes in business operations since 2019.	2025 - Q2	$ 788,817	$ 870,912	$ 1,659,729
47	Application Programming Interface (API) Connect Upgrade	Upgrade API Connect, which integrates multiple work management applications together.	2025 - Q4	$ -	$ 504,756	$ 504,756
48	Customer Experience Program - 2024	Customer Experience improvements to improve customer and employee experience.	2025 - Q1	$ 2,699,139	$ 990,880	$ 3,690,019
49	Customer Experience Upgrade Projects	Technology solution to improve customer experience by communicating with customers in a more timely manner through the method of their preference.	2025 - Q4	$ -	$ 1,273,720	$ 1,273,720
50	C&I Level 2 Charging	Provide Level 2 equipment and/or infrastructure for EV charging for workplace, fleet and multi-family.	2025 - Q1	$ 26,225	$ -	$ 26,225
51	Electric Vehicle (EV) Charger Rebuild	Perform corrective maintenance for EV chargers	2025 - Q4	$ -	$ 89,741	$ 89,741
52	Trailing Costs for Projects in Service Prior to December 31, 2024	Includes multiple projects that went into service prior to December 31, 2024, but have trailing charges that extend into the post-Test Year period		$ 29,104	$ -	$ 29,104
53	**Total Information Technology and Facilities**			**$ 47,666,411**	**$ 137,235,121**	**$ 184,901,532**

NOTE: There may be variances in displayed values due to rounding.

NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

Line No.	Project Name	Purpose	Estimated In-Service Date	Project Cost at January 31, 2025	Projected Costs to Close	Total Projected Costs
1	Plant 2-Way Radio Replacement	The Site's two-way radio system required for Emergency communication and day-to-day radio communication is analog and obsolete, and must be replaced with digital, which is currently the industry standard. The scope of this project includes detailed engineering, installation of a new digital radio core, antennas, repeaters, acquisition of over 600 radio sets also including condition assessments for Uninterrupted Power Supply/Battery Back-up, HVAC and Fire protection systems, Fiber network and Physical & Cyber Security controls.	2025 - Q1	$ 11,142,318	$ -	$ 11,142,318
2	Water Reclamation Facility 1st Stage Thickener Life Extension	Refurbish degraded Thickener structural, mechanical, electrical and associated components to bring back to original condition.	2025 - Q4	$ -	$ 8,705	$ 8,705
3	Emergency Response Facility Data Acquisition and Display System (ERFDADS) Upgrade	Upgrade the ERFDADS, currently facing obsolescence issues, and that might prevent the system from performing its design functions if not addressed in a timely manner.	2025 - Q4	$ 30,402	$ -	$ 30,402
4	Spray Pond Piping Replacement	Replace the Essential Spray Pond piping in all three units.	2025 - Q1	$ 1,265,768	$ -	$ 1,265,768
5	Balance of Plant (BOP) Engineered Safety Features Actuation System (ESFAS) Cabinet Replacement in Common Unit CK4	Reverse engineer the existing BOP ESFAS system with current components and techniques. All modules in the BOP ESFAS cabinet will be replaced.	2025 - Q2	$ 111,868	$ -	$ 111,868
6	Security Access Control Computer Replacement	Upgrade/replace the hardware and software systems that control the Site's perimeter security systems, to add functionality and capacity to the current system that is operating at maximum capacity.	2025 - Q3	$ 5,217,972	$ -	$ 5,217,972
7	Refurbish Cooling Tower Valve Pits	The cooling tower valve pits require structural and mechanical refurbishment. Consideration is being given to relocate the LV22 control valve and line above ground.	2025 - Q2	$ 211,190	$ -	$ 211,190
8	Private Branch Exchange (PBX) Retirement	Replace the existing Nortel Meridian 1 Time Division Multiplexer (TDM) with a PBX Telephone System to ensure reliable communications during plant startup, operation, shutdown, and maintenance under normal and emergency conditions. The TDM is an obsolete, legacy gateway which is beyond the manufacturer support period.	2025 - Q1	$ 421,054	$ -	$ 421,054
9	Turbine Building Lighting Phase 2	Replace the remaining existing obsolete fixtures located in the Unit 1 Valve Services Shop and Atmospheric Dump Valve (ADV) Areas, Unit 2 Computer Analyst Room, Electrical Shop and offices, and Unit 3 office areas with LED lighting fixtures.	2025 - Q3	$ 33,057	$ -	$ 33,057
10	10 CFR §50.69 Alternative Procedures Implementation	Ensures compliance with 10 CFR §50.69, including changes to station programs and processes and funding alternative treatment efforts. This approach ensures that workers will be able to consistently and correctly perform work tasks related to implementation of alternative treatments and the processes that support these efforts. Providing funding to support groups contributing to alternative treatment efforts will ensure that quality work is performed in a timely manner to support maximum savings and efficiency gains for the station. The assets that will be affected are 1) new procedures to establish the infrastructure for §50.69 Alternative Treatments, 2) existing procedures that are impacted by the new process will be revised, and 3) Alternative Treatment Plans will be attached to the impacted components in the Site Work Management System (SWMS).	2025 - Q1	$ 306,142	$ -	$ 306,142
11	Domestic Water System Piping Replacement	Install the pressure relief valves and/or a surge tank, to minimize the potential for leakage failures.	2025 - Q4	$ 515,680	$ -	$ 515,680
12	Construction Power Replacement	Substations and other electrical components in the electrical power loop that delivers off-site power to certain buildings and structures are degraded. The scope of this project is to replace those degraded substations and electrical components and to replace outside power with site-produced power.	2025 - Q4	$ 56,567	$ -	$ 56,567
13	Balance of Plant (BOP) Engineered Safety Features Actuation System (ESFAS) Cabinet Replacement for Unit 3	Reverse engineer the existing BOP ESFAS system with current components and techniques. All modules in the BOP ESFAS cabinet will be replaced.	2025 - Q4	$ 133,600	$ -	$ 133,600
14	Water Resources Admin Building Remodel	Replace degraded or obsolete electrical, HVAC, and plumbing system components and upgrade bathrooms, showers, breakrooms, conference rooms, hallways, mechanical, plumbing, and electrical systems.	2025 - Q3	$ 551,026	$ -	$ 551,026
15	Balance of Plant (BOP) Engineered Safety Features Actuation System (ESFAS) Cabinet Replacement for Simulator A	Reverse engineer the existing BOP ESFAS system with current components and techniques. All modules in the BOP ESFAS cabinet will be replaced.	2025 - Q2	$ 190,919	$ -	$ 190,919
16	Security Strategy Efficiency Improvement	Implementation of security related equipment, fencing and barriers, security technology & computer equipment to improve PVGS Security defense posture. Physical and and electronic components to improve efficiencies to meet regulatory requirements.	2025 - Q4	$ 4,231,939	$ -	$ 4,231,939
17	Sentinel Upgrade	Sentinel is a Radiation Production software tool that needs to be upgraded as it is no longer supported.	2025 - Q1	$ 180,847	$ -	$ 180,847
18	E-Field Obsolescence Replacement	The Security E-Field Detection System will be upgraded to resolve hardware end of life obsolescence issues.	2025 - Q2	$ 416,455	$ -	$ 416,455

NOTE: There may be variances in displayed values due to rounding.

NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

19	Valve Replacements Unit 1	Replacement of valves to protect plant equipment and increase equipment availability.	2025 - Q1	$ 5,941	$ -	$ 5,941
20	Switchgear Condition Monitoring U1 NBNS02	Incorporate vibration sensors and Motor Current Signature Analysis sensors on select equipment.	2025 - Q2	$ 66,619	$ 94,015	$ 160,634
21	Lube Lab Software Replacement	The Lube Lab Software needs to be updated	2025 - Q3	$ 51,500	$ -	$ 51,500
22	Impressed Current Cathodic Protection Unit 1 Essential Spray Ponds	Installation of cathodic protection in the above-grade portion of the Essential Spray Pond reinforced concrete walls.	2025 - Q4	$ 13,709	$ 940,148	$ 953,857
23	Impressed Current Cathodic Protection Unit 3 Essential Spray Ponds	Installation of cathodic protection in the above-grade portion of the Essential Spray Pond reinforced concrete walls.	2025 - Q4	$ 1,059,833	$ -	$ 1,059,833
24	Normal Chiller Replacement Unit 3	Replacement of all small Normal Chillers with a "Chiller Farm" Modular Chiller Plant. Current Chillers are obsolete and no longer supported by the vendor.	2025 - Q4	$ 3,581,427	$ -	$ 3,581,427
25	Instrumentation & Controls Unit 3	Throughout the year, various instrumentation, controls, and electrical equipment are used/replaced throughout the site. Examples of this include annunciators, capacitators, control systems, fuses, receivers, transmitters, etc.	2025 - Q1	$ 22,029	$ -	$ 22,029
26	Cyber Security Digital Asset Protection System Upgrades	Regulatory requirements to upgrade the digital asset protection system	2025 - Q4	$ 875,472	$ 539,715	$ 1,415,187
27	Site Work Management System Forms Phase 1	Migration of old Oracle Form based screens in SWMS to interactive web technology – Phase 1	2025 - Q1	$ 112,144	$ -	$ 112,144
28	Digital Strategic Modernization Program (SMP) Phase 2 Unit 2	The Strategic Modernization Program (SMP) will replace several plant control systems, both analog and digital with newly designed and upgraded equipment. The intention of this upgrade is to address obsolescence, remove single point vulnerabilities where practical, improve Human-Machines interfaces, and minimize spare part inventories.	2025 - Q1	$ 28,709	$ -	$ 28,709
29	Data Analytics	At present, production of many of the site metrics is manual, cumbersome, and time-consuming. The scope of this project is to automate gathering and reporting (including analysis) of data used in site metrics to improve management information available to Senior Management and reduce labor hours.	2025 - Q1	$ 73,565	$ -	$ 73,565
30	Water Resources Tools & Equipment	Various tools and equipment are used throughout the site for repair work, testing, and other general uses to deliver high quality of work. The scope of this project is for the purchase and replacement of site tools and equipment.	2025 - Q1	$ 114,968	$ -	$ 114,968
31	Water Resources Instrumentation & Controls Equipment Replacement	Replacement of various instrumentation, controls, and electrical equipment throughout the Water Resources Facility.	2025 - Q1	$ 60,195	$ -	$ 60,195
32	Water Resources Valve Replacements	Replacements of valves/valve internals are required due to degradation/failure. At Water Resources, valves are treated as run to failure components, and replaced when this occurs.	2025 - Q1	$ 93,257	$ -	$ 93,257
33	Small Scale Water Resources Projects 2024	To maintain continuous operation at Palo Verde Water Resources, there are a number of small projects that go on throughout the year. Examples of this includes expansion joint replacements, or cathodic protection anode bed replacements. The scope of this project includes RUC qualifying, minor projects at Water Resources.	2025 - Q1	$ 8,764	$ -	$ 8,764
34	Motor Current Signature Analysis (MCSA)	Incorporate vibration sensors and Motor Current Signature Analysis sensors on select equipment	2025 - Q4	$ 59,877	$ -	$ 59,877
35	Cathodic Protection	Ongoing replacement of failed anodes and support devices employed in the Cathodic Protection System.	2025 - Q1	$ 303,249	$ -	$ 303,249
36	Digital Strategic Modernization Program (SMP) Phase 2 Simulator B	The Strategic Modernization Program (SMP) will replace several plant control systems, both analog and digital with newly designed and upgraded equipment. The intention of this upgrade is to address obsolescence, remove single point vulnerabilities where practical, improve Human-Machines interfaces, and minimize spare part inventories.	2025 - Q2	$ 166,053	$ -	$ 166,053
37	Site Tools & Equipment	Purchase and replace old tools and equipment that are unreliable and obsolete with improved and safer models of tools.	2025 - Q1	$ 584,656	$ -	$ 584,656
38	Security Tools & Equipment	Purchase and replacement of unreliable and obsolete Security tools and equipment for search trains, facilities, firing range, officer gear, etc.	2025 - Q1	$ 105,203	$ -	$ 105,203
39	Accelerant Site Fundamentals Phase 2	Provide accelerant 'PLANT' suite to incorporate 80 additional training modules.	2025 - Q4	$ 131,396	$ 564,089	$ 695,485
40	Nuclear Fuels Management Software	Replace Shufflework with MARLA software. This Interactive Special Nuclear Material (SNM) tool is part of the long-term strategy for reduction of human performance error-prone and/or repetitive activities.	2025 - Q2	$ 27,702	$ -	$ 27,702
41	Horizontal Pumping System Pumps Replacement	Replace the two remaining carbon steel Pumping Station pumps at Pumping Station NP02A/B with stainless steel pumps.	2025 - Q4	$ 209,986	$ 237,823	$ 447,809
42	Digital Strategic Modernization Program (SMP) Phase 3 Simulator A	The Strategic Modernization Program (SMP) will replace several plant control systems, both analog and digital with newly designed and upgraded equipment. The intention of this upgrade is to address obsolescence, remove single point vulnerabilities where practical, improve Human-Machines interfaces, and minimize spare part inventories.	2025 - Q3	$ 5,316	$ 321,043	$ 326,359
43	Facility Building A Remodel	Building A level 2 is being remodeled to fix plumbing issues, HVAC equipment, lightings, and replace furniture.	2025 - Q4	$ -	$ 2,437,421	$ 2,437,421

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NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

44	Facility Building Outage Service Building Unit 2 Remodel	The Outage Support Building is greater than 30 years old and is in need of new mechanical, plumbing, and electrical systems. Additionally, the current configuration does not allow for sufficienct Class B storage, general shop storage, and work space for breaker and relay maintenance.	2025 - Q1	$ 277,333	$ -	$ 277,333
45	HVAC Replacement Simulators A & B	Replace failed/failing HVAC units in the A & B Simulators to keep work areas habitable.	2025 - Q1	$ 380,231	$ -	$ 380,231
46	HVAC REPLACEMENTS Operations Computer Systems	Replace failed/failing HVAC units in the operations computer system to keep work areas habitable.	2025 - Q1	$ 133,462	$ -	$ 133,462
47	Coater Spray Booth	Installation of an enclosed painting booth for large projects coating activities such as Circulation Water/Spray Pond and other large spools. Coaters are able perform Q-class coatings without open-air environmental challenges.	2025 - Q4	$ 95,007	$ 105,157	$ 200,164
48	Add Non-Segregated Bus to NB-1772	Add Non-Segregated Bus to the NB-1772 Modification to include replacing the bare 500 MCM Cable feeder with non segregated bus. Replace Bushings on thop of 13.8kV switch gear xEENANS03 & xENANS04.	2025 - Q2	$ 50,731	$ -	$ 50,731
49	Core Protection Calculator	Replace the core protection calculator that calculates the specified acceptable fuel design limit in the safety protection system	2025 - Q4	$ 6,356	$ -	$ 6,356
50	Pressurizer Heater Replacement	Replace the pressurizer heater that is nearing end of useful life.	2025 - Q1	$ 22,290	$ -	$ 22,290
51	Digitizing Nuclear Records	Purchase three Nextscan machines to support digital converstion	2025 - Q1	$ 88,025	$ -	$ 88,025
52	Auto Electronic Defibrillators Replacement	Replace auto electronic defibrillators	2025 - Q1	$ 36,211	$ -	$ 36,211
53	Motor Replacements Unit 1	Replacement of Motors to prevent unplanned outages.	2025 - Q2	$ -	$ 28,901	$ 28,901
54	Motor Replacements Unit 3	Replacement of Motors to prevent unplanned outages.	2025 - Q4	$ -	$ 28,901	$ 28,901
55	Motor Replacements Unit 2	Replacement of Motors to prevent unplanned outages.	2025 - Q4	$ -	$ 17,410	$ 17,410
56	Valve Replacements Unit 2	Replacement of valves both emergently and per the long-range Plan with the purpose of protecting plant equipment and increasing equipment availability.	2025 - Q4	$ 20,324	$ -	$ 20,324
57	Circulating Water System Pipeline Replacement 2025	The Circulating Water System Piping consists of piping from the Circulating Water Pumps to the Main Condenser and the Main Condenser to the Main Cooling Towers. It also includes the pipelines conveying blow down from the Circulatin Water System to the Evap Ponds. This project takes a proactive approach to addressing known degraded condition and repairs pipe based off of inspection results	2025 - Q4	$ -	$ 1,173,792	$ 1,173,792
58	Small Scale Water Resources Projects 2025	To maintain continuous operation at Palo Verde Water Resources, there are a number of small projects that go on throughout the year. Examples of this includes expansion joint replacements, or cathodic protection anode bed replacements. The scope of this project includes Retirement Unit Catalog qualifying, minor projects at Water Resources.	2025 - Q4	$ -	$ 104,461	$ 104,461
59	Small Scale Modifications 2025	To maintain continuous operation at Palo Verde, there are a number of small projects that go on throughout the year. Modifications are limited in scope and is primarily a single discipline design change involving minor additions, deletions, or changes to system, structures of components. The majority of Minor Modifications are identified due to Industrial Safety concerns, as well as material obsolescence.	2025 - Q4	$ -	$ 57,454	$ 57,454
60	Cooling Towers Life Extension Unit 1	Replacement of structural components in the cooling towers to improve their operational efficiency, structural integrity, and extend their lives.	2025 - Q2	$ 58,664	$ 3,524,163	$ 3,582,827
61	Ovation Heater Drain Control	Replace the controllers for A & B Heater Drain Tank Normal Level Control Valves as a standalone modification ahead of the rest of the Extraction Drain system.	2025 - Q4	$ -	$ 87,051	$ 87,051
62	Stator Cooling Temperature Controller	Repair vulnerability found in the Stator Cooling Water Temperature Controller to mitigate a significant loss or reduction in stator cooling water flow through the cooler.	2025 - Q4	$ -	$ 41,784	$ 41,784
63	Motor Replacements Unit 1 & 3	Replacement of Unit 1 and 3 Motors to prevent unplanned outages.	2025 - Q4	$ -	$ 34,472	$ 34,472
64	Valve Replacements Unit 1	Replacement of valves both emergently and per the Long-Range Plan with the purpose of protecting plant equipment and increasing equipment availability.	2025 - Q4	$ 31,588	$ -	$ 31,588
65	Reactor Coolant Pressurizer Nozzle	The TE-101 pressurizer nozzle will be entirely removed and substituted with a novel alloy 690 nozzle and weld material in order to rectify the through wall leak in the reactor coolant system. This substitution will reinstate the integrity of the reactor coolant system, minimize the likelihood of future leakage at this nozzle, and facilitate obtaining approval from the Nuclear Regultory Commission to recommence operations.	2025 - Q2	$ 94,525	$ -	$ 94,525
66	Stainless Steel Process Water Pump 2025	Purchase, replacement and testing of new complete 5-Stage Pump With Liqui-seal upgraded material (high quality stainless steel) along with subbase plate.	2025 - Q4	$ -	$ 125,353	$ 125,353
67	Trailing Costs for Projects in Service Prior to December 31, 2024	Includes multiple projects that went into service prior to December 31, 2024, but have trailing charges that extend into the post-Test Year period		$ 204,804		$ 204,804
68	**Total Nuclear Generation**			**$ 34,277,925**	**$ 10,471,858**	**$ 44,749,783**

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DISTRIBUTION
POST-TEST YEAR PLANT ADDITIONS

Line No.	Project Name	Purpose	Estimated In-Service Date	Project Cost at January 31, 2025	Projected Costs to Close	Total Projected Costs
1	Unplanned Emergency	Maintain and/or restore distribution system operations.	2025 - Q4	$ 4,169,841	$ 16,048,083	$ 20,217,924
2	Network Protectors	Replace end-of-life network equipment that provides redundant feeds to critical customers such as hospitals.	2025 - Q4	$ 920,094	$ 5,773,377	$ 6,693,470
3	Highway Relocation- Distribution	To comply with requirements driven by governmental agencies.	2025 - Q4	$ 7,332,149	$ 6,628,664	$ 13,960,813
4	Underground Cable Replacement-Planned	Install underground cable in conduit so that moisture and rocks will not damage the cables.	2025 - Q2	$ 268,940	$ -	$ 268,940
5	Underground Cable Replacement-Unplanned	Replace direct buried cable with cable in a conduit system to reduce power outages.	2025 - Q4	$ 5,929,388	$ 32,914,811	$ 38,844,199
6	Aged Conductor Replacement	Install modern protection devices to protect legacy small wire from damage/burning down during fault conditions and reconductor small wire and backbone sections where necessary.	2025 - Q1	$ 551,218	$ -	$ 551,218
7	Aged Relay Replacement	Replacement of electromechanical relays past their useful life.	2025 - Q4	$ (37,338)	$ 797,109	$ 759,771
8	Advanced Grid Technology (AGT)	Install technologies and tools to modernize the electric grid, promote customer choice, and support a sustainable energy future for Arizona.	2025 - Q4	$ -	$ 551,133	$ 551,133
9	Advanced Grid Technology (AGT) Power Quality	Improve feeder reliability by installing automated devices (supervisory capacitor banks, voltage regulators, and Micatu sensors) to support operations and control processes.	2025 - Q4	$ 2,454	$ 651,338	$ 653,793
10	Advanced Metering Infrastructure (AMI) Communication Infrastructure	Replace metering devices that use deprecated 2G/3G cellular networks or proprietary mesh networks which are expected to become unavailable/insufficient for business function over time. Enhance metering capabilities for initiatives such as voltage polling and outage notification.	2025 - Q4	$ 2,716,782	$ 3,516,705	$ 6,233,487
11	Programmatic Pole Attachment Work	Remove secondary conductor from trees and transfer to a secondary pole.	2025 - Q4	$ 672,423	$ 311,968	$ 984,390
12	Capitalized Tools	Provide tools for field employees in order to work efficiently and safely.	2025 - Q4	$ 2,552,305	$ 352,080	$ 2,904,384
13	Distribution Land Right-of-Way Renewals	Renew contractual agreements to Distribution rights-of-way leases that are due to expire.	2025 - Q4	$ 6,766	$ 893,346	$ 900,112
14	Grant: New Substation UG Network T&C only	Remove the networks feeders from Lincoln St West and serve them from Grant Substation. The 12kV bus ties need to be closed to balance the loads on the feeders and the transformers.	2025 - Q3	$ 8,531,557	$ 2,851,187	$ 11,382,744
15	Vista: Build New Feeder VS 05 and OH Feeder Tie (SUB)	The purpose of this project is to increase the rating of existing feeders at Vista and also offloading highly loaded transformer and feeders by creating new ties. One of the current feeders (VS 13) is forecasted to 100% of 11.2 MVA capacity rating by 2024. Another feeder (VS 04) is forecasted to 96% of its 13 MVA capacity rating by 2024. And finally the transformer (VS 11) is forecasted to 93% of its 41.7 capacity MVA rating by 2024.	2025 - Q2	$ 552,688	$ 1,847,451	$ 2,400,140
16	West Park: Upgrade Sub Transformers (SUB)	The objective of this project is to mitigate an 103% transformer overload (T1866) condition on by 2025. As West Park substation electrical design is a double breaker double bus configuration both station units must be upgraded, sequentially the sister transformer (T1867) will also increase in capacity by 2025.	2025 - Q2	$ 5,316,445	$ 3,703,678	$ 9,020,123
17	McMicken New Feeder MCM05 (SUB)	Offload transformer (MCM11), and two feeders (MCM09,13).	2025 - Q2	$ 135,663	$ 950,646	$ 1,086,309
18	Hearn New Feeder Tie HE09-HE04 (UG)	To offload feeder (HE04).	2025 - Q2	$ 70,412	$ 727,009	$ 797,421
19	Bunker Peak New Feeder BUP06 (SUB)	To offload feeder (MCM10).	2025 - Q2	$ 53,114	$ 3,426,437	$ 3,479,552
20	Celeborn: Add new 3rd feeder (SUB)	The objective of this project is to mitigate a 93% high condition on CEL23 by installing a new feeder at the sub and pulling 1100 cable feeder circuit to offload CEL23. Build feeder tie to CEL23 and CEL24. Move 6MW of load.	2025 - Q2	$ 78,394	$ -	$ 78,394
21	Cave Creek Balance phases oh Fdr02 - OH	Long radial single-phase runs are causing overloads at two sections (103% and 108%) and another area with primary voltage < 114V.	2025 - Q2	$ 84,424	$ -	$ 84,424
22	Hub West: Upgrade Sub (Sub Xfmr)	Provide a 69/12kV substation source, with the transformer overloaded at 250%.	2025 - Q1	$ 344,229	$ 2,355,767	$ 2,699,996
23	WSC202 Replacement (UG)	Relocate a switch cabinet WSC202 and extended feeder underground to the new location due to proximity to recently widened Yuma Rd. Relocation to help mitigate vehicle interference and ensure safety and reliability risk.	2025 - Q1	$ 153,104	$ 390,504	$ 543,608
24	Fire Mitigation	Insall SCADA reclosers and SCADA upgrades to existing reclosers on high-fire risk distribution feeders based on the outcome of feeder protection studies.	2025 - Q4	$ 3,727,591	$ 13,778,314	$ 17,505,905
25	Grid Hardening	Grid improvement projects on high fire risk distribution feeders. Examples of these improvements include, overhead reconductoring, large quantities of wood pole replacements, and overhead to underground conversion work to eliminate overhead primary conductor.	2025 - Q4	$ 61,603	$ 5,635,330	$ 5,696,934
26	Fire Mitigation Patrol Relpacements	Corrective maintance work in areas where there is potential to cause a system to ground event in high fire risk areas	2025 - Q4	$ 263,231	$ 2,087,623	$ 2,350,854
27	Fire Mitigation Pole Replacements	Replace wooden poles to mitigate public hazards on high risk feeders and harden distribution system in high-fire risk areas.	2025 - Q4	$ 94,549	$ 8,350,493	$ 8,445,042

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DISTRIBUTION
POST-TEST YEAR PLANT ADDITIONS

28	Fire Mitigation Weather Station	Installation of Fire Mitigation AI cameras and weather stations as well as customer experience improvements related to Public Safety Power Shutoff customer notifications.	2025 - Q4	$ (1,370,222)	$ 7,433,878	$ 6,063,655
29	Evans Churchill Substation	Install 69kV Gas Insulated Switchgear (GIS), substation transformers, capacitor banks and control equipment to improve capacity, reduce safety hazards and improve reliability.	2025 - Q4	$ 17,515,936	$ 1,057,623	$ 18,573,559
30	Overhead Planned Replacements	Replace damaged, defective or failed equipment needing replacement as noted during annual Distribution Line Patrols.	2025 - Q4	$ 3,360,777	$ 13,627,323	$ 16,988,100
31	Capital Non-AMI Meters	Maintain Non-AMI meter inventory.	2025 - Q4	$ 45,185	$ 166,667	$ 211,851
32	Wood Pole Replacements	Replace poles with less than 10 years of remaining life to reduce distribution outages due to downed distribution poles and mitigate public hazards.	2025 - Q4	$ 644,197	$ 2,057,961	$ 2,702,158
33	Saguaro: Rebuild Feeder Line-(OH Line)	The objective of this project is to mitigate an overload condition to accommodate new residential Pulte Red Rock subdivision load.	2025 - Q3	$ -	$ 1,646,093	$ 1,646,093
34	Service Replacements	Install service/secondary cable in conduit so that moisture and rocks will not damage the cables.	2025 - Q4	$ 786,119	$ 6,890,670	$ 7,676,789
35	Storm Restoration - Lines	Restore distribution system equipment damaged during storms.	2025 - Q4	$ 256,315	$ 878,770	$ 1,135,084
36	Streetlights and Dusk to Dawn	Provide streetlight and dusk to dawn services to customers.	2025 - Q4	$ 720,831	$ 5,953,155	$ 6,673,986
37	Substation Aged Equipment Replacements	Replace aged, end-of-life assets to ensure a reliable system.	2025 - Q4	$ 2,334,932	$ 5,651,648	$ 7,986,580
38	Orchard - Waldrip Line (12kV Underground)	Move the 12kV line underground to maintain safe clearances for the new double 69kV/double 12kV line from Orchard to Waldrip.	2025 - Q4	$ -	$ 667,702	$ 667,702
39	Watson to Tuthill Rebuild: Tuthill (SUBS)	Purpose is to upgrade the disconnect switches, jumpers, and line relay to prevent overload.	2025 - Q2	$ 5,779	$ -	$ 5,779
40	Underground Cabinet Replacement	Replace switching cabinets with broken latches or holes to reduce safety hazards.	2025 - Q4	$ 1,268,423	$ 2,701,296	$ 3,969,718
41	Underground Transformer Replacement	Replace damaged transformers to eliminate environmental and safety hazards.	2025 - Q4	$ 2,475,604	$ 12,050,143	$ 14,525,746
42	Pole Relocation	This project is to utilized for customer or private parties that request relocations or conversions where there are no conflicts. There is no municipality involvement on these jobs, and they should be 100% reimbursable.	2025 - Q2	$ 17,677	$ -	$ 17,677
43	Fire Mitigation SCADA Deployment	Deployment of Supervisory Control and Data Acquisition (SCADA) for Fire Mitigation	2025 - Q1	$ 140,891	$ -	$ 140,891
44	Pole Replacement Eloy	The purpose of this project is to replace the rusted elements on poles in Eloy.	2025 - Q1	$ 28,951	$ -	$ 28,951
45	Fire Mitigation Energy Fuse Upgrades	Upgrade the existing overhead fuses on high-fire risk feeders to expulsion-limiting fuses.	2025 - Q4	$ 369,109	$ -	$ 369,109
46	Trailing Costs for Projects in Service Prior to December 31, 2024	Includes multiple projects that went into service prior to December 31, 2024, but have trailing charges that extend into the post-Test Year period		$ 315,544	$ -	$ 315,544
47	**Total Distribution**			**$ 73,152,528**	**$ 175,325,981**	**$ 248,794,053**

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NON-NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

Line No.	Project Name	Purpose	Estimated In-Service Date	Project Cost at January 31, 2025	Projected Costs to Close	Total Projected Costs
1	Motors / Pumps / Valves	Execute both scheduled and emergent motor, pump, and valve replacement projects across the fossil fleet.	2025 - Q4	$ 10,081,740	$ 19,043,810	$ 29,125,550
2	Catalyst	Execute both scheduled and emergent catalyst replacement projects across the fossil fleet.	2025 - Q1	$ 166,088	$ 707,485	$ 873,573
3	Electrical Systems	Execute both scheduled and emergent breaker replacement projects across the fossil fleet.	2025 - Q4	$ 4,242,789	$ 8,942,109	$ 13,184,898
4	Air Compressors	Ensure the timely replacement of air compressors in the fossil generation fleet to ensure unit reliability.	2025 - Q2	$ 839,405	$ 1,691,419	$ 2,530,824
5	Water Systems/Membranes	Execute both scheduled and emergent water process system, water piping systems, and replacement reverse osmosis membrane projects across the fossil fleet.	2025 - Q4	$ 3,384,073	$ 5,424,832	$ 8,808,905
6	Outage Discovery	Emergent capital replacements that can only be identified by visual inspection during plant outages.	2025 - Q2	$ 8,653,277	$ 3,008,638	$ 11,661,915
7	Generation Document Management Portal (GDMP) Creation	Improve management and execution of new and retrofit projects through improved project team engagement and delivering project team members, including managers, engineers, stakeholders, and suppliers, a centralized platform for seamless project collaboration and control of project transmittals, submittals, requests for information. and change orders, affording improved project execution in accordance with project scope, cost, and schedule.	2025 - Q4	$ -	$ 1,919,627	$ 1,919,627
8	Enterprise Project Management System (EPMS) Software Changes	Improve the functionality of the Enterprise Project Management System project planning and management tool in its alignment with current business process and practice, from a project's conceptualization through a project's closeout.	2025 - Q4	$ 93,756	$ -	$ 93,756
9	Douglas Fire Detection System	Maintain compliance with the National Fire Alarm Code by installing fire alarm detection systems in the following three areas: battery enclosure, fuel oil handling building, and exciter enclosure.	2025 - Q2	$ 28,604	$ 89,943	$ 118,547
10	Four Corners Bottom Ash Clinker Grinder Replacement	Maintain unit reliability by replacing the bottom ash clinker grinders. The existing clinker grinders are approaching the end of serviceable life. Completing this project will ensure the consistent and reliable removal of bottom ash from the boiler.	2025 - Q2	$ 713	$ 9,387	$ 10,099
11	Four Corners Miscellaneous Lagging & Insulation Replacement - 2025	Maintain a safe plant work environment by eliminating potential hazards that exist when lagging and insulation are loose or deteriorating and therefore not maintaining surface temperature requirements.	2025 - Q4	$ 1,485	$ 429,360	$ 430,845
12	Four Corners Lime Feed Header Replacement	Replace lime feed header to maintain environmental compliance with the Title V Permit. Existing lime slurry feed piping between the lime slurry feed pumps to the absorber has deteriorated significantly due to thermal and grit issues.	2025 - Q1	$ 577,593	$ -	$ 577,593
13	Four Corners Grinding Zone and Gear Drive Replacements - 2025	Maintain full load unit reliability by installing a new like-kind pulverizer grinding zone components and gear drive components as emergent failures or immediate need occurs throughout the 2025 calendar year. An itemized list of replacements will be provided in Q2 2026.	2025 - Q4	$ -	$ 2,504,602	$ 2,504,602
14	Four Corners Fly Ash Transport System Replacement - Phase 2	Replace existing pipe to allow fly ash to be consistently transferred from the baghouse to the surge bins as necessary to avoid a reportable environmental incident and maintain environmental compliance with the Title V Permit.	2025 - Q1	$ 293,351	$ 539,338	$ 832,689
15	Four Corners Vehicle Lease Buyouts - 2025	Capital funds will be used to buy-out the vehicle at the end of the 5-year lease contract as need occurs throughout the 2025 calendar year.	2025 - Q3	$ -	$ 21,468	$ 21,468
16	Four Corners Fan Outlet Damper Replacement	Replace dampers to maintain unit reliability and to maintain compliance with NFPA 85 requirements regarding properly functioning boiler air dampers.	2025 - Q1	$ 567,346	$ 389,841	$ 957,187
17	Four Corners 4160V Switchgear Potential Transformer Replacement	Maintain unit reliability by installing new snubbers and by replacing the existing bus potential transformers with like-kind replacements for the Unit 4 and Unit 5 4160V switchgear. Adding snubbers to the main and reserve feeder breakers will help protect equipment from dangerous inrush current.	2025 - Q2	$ 240,936	$ (55,869)	$ 185,067
18	Four Corners Waste Slurry Pump Replacement	Maintain unit reliability by replacing the waste slurry pumps. Due to the corrosive nature of the waste slurry and sump environment, the existing slurry pumps are approaching end of useful life.	2025 - Q2	$ 218,121	$ 1,443,778	$ 1,661,899
19	Four Corners Lime Feed Pump Replacement	Replace lime feed pumps to maintain unit reliability and compliance with the Title V requirements for SO2 Removal Rate. Existing pumps are approaching end of useful life.	2025 - Q2	$ 508,589	$ 924,471	$ 1,433,060
20	Four Corners Pulverizer Hot Air Dampers Replacement	Maintain unit reliability by replacing pulverizer hot air dampers. The pulverizer hot and cold air dampers no longer operate normally having reached the end of their serviceable life and must be manually forced open by Operations.	2025 - Q1	$ 136,797	$ 655,679	$ 792,475
21	Four Corners Stack Inlet Expansion Joint Replacement	Replace Unit 5 stack inlet expansion joint because the expansion joint reached the end of serviceable life.	2025 - Q1	$ -	$ 115,927	$ 115,927
22	Four Corners Boiler Feed Pump Overhaul	Maintain unit reliability by overhauling the Unit 4 boiler feed pumps, which were last rebuilt in 2010.	2025 - Q1	$ 152,188	$ 2,034,941	$ 2,187,129
23	Four Corners Fly Ash Blower Replacement	Maintain unit reliability by replacing the fly ash blowers and motors to ensure efficient and dependable removal of fly ash. The existing blowers have been rebuilt multiple times and are obsolete.	2025 - Q1	$ 427,701	$ 1,279,583	$ 1,707,283
24	Four Corners Local Area Network Upgrades	Replacement of the corporate network switches will reduce failure of end-of-life devices and expand connectivity to the areas, impoving the performance of daily required activities.	2025 - Q2	$ -	$ 570,442	$ 570,442
25	Four Corners River Station Pump Replacement	The River Station pump equipment is original and is nearing end of its serviceable life. The programmable logic controller is obsolete and requires replacement.	2025 - Q2	$ 1,888,246	$ 2,257,544	$ 4,145,789
26	Four Corners Northwest Baghouse Booster Fan Blade Liner	Replace the blade liners to prevent unplanned outages or load reduction in the event of a booster fan failure.	2025 - Q1	$ 591,472	$ 661,916	$ 1,253,387

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NON-NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

27	Four Corners Southwest Baghouse Booster Fan Blade Liner	Replace the blade liners to prevent unplanned outages or load reduction in the event of a booster fan failure.	2025 - Q1	$ 586,091	$ 670,832	$ 1,256,924
28	Four Corners Northeast Baghouse Booster Fan Blade Liner	Replace the blade liners to prevent unplanned outages or load reduction in the event of a booster fan failure.	2025 - Q1	$ 422,361	$ 852,652	$ 1,275,013
29	Four Corners Southeast Baghouse Booster Fan Blade Liner	Replace the blade liners to prevent unplanned outages or load reduction in the event of a booster fan failure.	2025 - Q1	$ 575,680	$ 679,671	$ 1,255,351
30	Four Corners River Station Rockfall Mitigation	Installing embankment fencing near the River Station to prevent any potential concrete apron material from falling into the river.	2025 - Q2	$ 713	$ 283,147	$ 283,860
31	Four Corners Boiler Nose Replacement	Replace boiler nose to reduce the risk of forced outages. The boiler nose has experienced sootblower and ash erosion, resulting in tube leaks.	2025 - Q1	$ 2,965,478	$ 2,253,698	$ 5,219,176
32	Four Corners Admin Building Corporate Local Area Network Upgrades	Legacy communications infrastructure is at end of support life. The new devices will provide additional reliability and resiliency to the network. The new devices allow the network to maintain current code levels and protect against security vulnerabilities.	2025 - Q4	$ -	$ 125,230	$ 125,230
33	Four Corners GMIS Software License Renewal	License renewal for Integ SaaS license necessary for the Generation Information Management System.	2025 - Q3	$ -	$ 71,560	$ 71,560
34	Four Corners Enterprise Asset Management System	Renew license for Enterprise Asset Management Software system.	2025 - Q4	$ -	$ 210,387	$ 210,387
35	Four Corners Circulating Water Pump Replacement	The Unit 5 North circulating water pump is nearing the end of its serviceable life and replacement is required.	2025 - Q2	$ 418,516	$ 1,748,617	$ 2,167,133
36	Four Corners Economizer Front Wall Stringer Tube Assembly Replacement	Replace economizer stringer assemblies to reduce back pass tube leaks, decrease forced outage frequency, and reduce costs from repairing economizer leaks.	2025 - Q1	$ 391,332	$ 644,840	$ 1,036,172
37	Four Corners Local Area Network (LAN) Reliability Infrastructure Upgrades	Upgrade LAN infrastructure as legacy communications infrastructure is at end of life. The new devices will provide additional reliability and resiliency to the network and will maintain current code levels and protect against security vulnerabilities.	2025 - Q4	$ -	$ 91,642	$ 91,642
38	Four Corners Baghouse Turning Vane Replacement	Maintain unit reliability and compliance with the Title V Permit by replacing the baghouse turning vanes and preventing fugitive flue gas emissions to the atmosphere. The current turning vanes have reached the end of their serviceable like.	2025 - Q1	$ 2,977,328	$ 4,155,020	$ 7,132,349
39	Four Corners High-Pressure, Intermediate-Pressure, Low-Pressure Turbine Major Overhaul	Overhaul of high-pressure, intermediate-pressure, low-pressure turbine to ensure output efficiency and continued reliable operation.	2025 - Q2	$ 24,354,216	$ 15,096,783	$ 39,450,999
40	Four Corners Air Preheater (APH) Basket Replacement	Replace APH baskets to ensure proper heat rate and to prevent load curtailment and/or unit outage.	2025 - Q1	$ 3,308,575	$ 2,940,263	$ 6,248,838
41	Four Corners Coal Sampler Elevator Replacement	Replace coal sampler elevator as the current elevator is reaching the end of its serviceable life.	2025 - Q1	$ 917,738	$ 15,168	$ 932,907
42	Four Corners Convection Pass Water Tube Replacement Unit 4	Replace convection pass water tube to eliminate internal cracking and external wall thinning.	2025 - Q1	$ 4,848,513	$ 2,541,960	$ 7,390,473
43	Four Corners Convection Pass Water Tube Replacement Unit 5	Replace convection pass water tube to eliminate internal cracking and external wall thinning.	2025 - Q1	$ 544,506	$ -	$ 544,506
44	Plant Tools	Ensure the timely replacement of plant tools in the Fossil Generation Fleet to maintain unit reliability.	2025 - Q4	$ 17,845	$ 356,778	$ 374,623
45	Expansion Joints	Execute both scheduled and emergent expansion joint replacement projects across the fossil fleet.	2025 - Q4	$ 942,428	$ 5,410,386	$ 6,352,814
46	Seasonal Readiness/Heat Trace	Execute both scheduled and emergent heat trace replacement projects across the fossil fleet.	2025 - Q1	$ 1,203,917	$ 1,035,559	$ 2,239,476
47	Filters	Execute both scheduled and emergent fabric filter bag replacement projects across the fossil fleet.	2025 - Q2	$ 156,352	$ 3,399,549	$ 3,555,902
48	Coal Handling	Maintain unit reliability by executing scheduled and emergent coal handling and pulverizer equipment replacement and upgrades.	2025 - Q4	$ 143,022	$ 776,154	$ 919,176
49	Inverter & Panel Replacement - 2025	Ensure reliability of renewable energy fleet by replacing inverter parts and solar panels.	2025 - Q4	$ -	$ 2,271,748	$ 2,271,748
50	Ocotillo Compressor and Turbine Rotor Replacement, Major Overhaul	Replace compressor and turbine rotor due to cracks in the rotor and the condition of the compressor blades.	2025 - Q2	$ 3,558,828	$ 3,015,126	$ 6,573,954
51	Ocotillo Combustion Turbine 3 Long-Term Service Agreement	Procure parts and/or services neededing replacement. Parts include fuel nozzles, combustion baskets, transition pieces, turbine blades, etc.	2025 - Q4	$ 128,903	$ 2,206,094	$ 2,334,998
52	Ocotillo Combustion Turbine4 Long-Term Service Agreement	Procure parts and/or services neededing replacement. Parts include fuel nozzles, combustion baskets, transition pieces, turbine blades, etc.	2025 - Q4	$ 36,339	$ 2,309,168	$ 2,345,507
53	Ocotillo Combustion Turbine 7 Long-Term Service Agreement	Procure parts and/or services neededing replacement. Parts include fuel nozzles, combustion baskets, transition pieces, turbine blades, etc.	2025 - Q4	$ 63,393	$ 2,259,253	$ 2,322,646
54	Ocotillo Combustion Turbine 5 Long-Term Service Agreement	Procure parts and/or services neededing replacement. Parts include fuel nozzles, combustion baskets, transition pieces, turbine blades, etc.	2025 - Q4	$ 126,333	$ 2,202,460	$ 2,328,793
55	Ocotillo Combustion Turbine 6 Long-Term Service Agreement	Procure parts and/or services neededing replacement. Parts include fuel nozzles, combustion baskets, transition pieces, turbine blades, etc.	2025 - Q4	$ -	$ 2,333,085	$ 2,333,085

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NON-NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

56	Ocotillo Main Turbine Terminal Box & Auxiliary Skid Terminal Box Cabinet Cooling System Replacements	Replace main turbine terminal box and auxiliary skid terminal box cabinet cooling systems to decrease the risk of cooling failure and increase the efficiency of site cooling.	2025 - Q4	$ 128,499	$ 1,328,971	$ 1,457,471
57	Ocotillo Install New Chiller Loop Air & Dirt Separator	Install new chiller loop and dirt separator to ensure availability of chilled water to the turbine air inlet.	2025 - Q4	$ 11,200	$ 1,871,146	$ 1,882,346
58	Ocotillo Purchase Spare Power Turbine for Ocotillo LMS100 Gas Turbines	Purchase a spare power turbine to ensure availability of the LMS100 units at Ocotillo. The industry has been seeing a higher amount of power turbine failures, leading to unit unavailability.	2025 - Q3	$ 3,105,097	$ 4,627,033	$ 7,732,129
59	Redhawk Install Cooling Tower Level Transmitters Unit 2	Replace the level transmitters and create a new control logic on the Unit 1 cooling tower to mitigate potential outage situations.	2025 - Q1	$ 124,532	$ 185,476	$ 310,008
60	Redhawk Second Makeup Water Pond	Install a second makeup water surge pond to prevent outages during the relining of the current makeup water pond.	2025 - Q2	$ 49,021,517	$ 2,567,751	$ 51,589,268
61	Redhawk 2A Gas Turbine Rotor Replacement	Replace the 2A gas turbine rotor per original equipment manufacturer recommendation due to accumulated run hours and replacement of Unit 1B and Unit 2B in 2018 and 2019.	2025 - Q1	$ 27,557,677	$ (7,777,926)	$ 19,779,751
62	Redhawk East Brine Concentrator Surge Pond	Create a new brine concentrator surge pond to allow for increased storage and redundancy when the zero liquid discharge is down, enabling the unit to stay online by controlling cooling tower conductivity when zero liquid discharge is out of service or the current pond is out of service for relining or leaks.	2025 - Q1	$ 8,102,255	$ 872,695	$ 8,974,951
63	Redhawk Heat Recovery Steam Generator Sample Chiller	The current chillers are reaching obsolescence and must be replaced. Operation of the analyzers with water that is warmer than recommended could lead to premature analyzer failure. Results are also less accurate with the warmer sample streams.	2025 - Q1	$ 603,204	$ 661,948	$ 1,265,152
64	Redhawk Replace ABB Controller Card BRC and GE HMI	Replace ABB controller cards as the current models are approaching the end of their lifes.	2025 - Q1	$ 114,180	$ 267,166	$ 381,346
65	Redhawk Zero Liquid Discharge Deaerator Replacement	Replace zero liquid discharge deaerator to ensure efficient system operation. The current health of the deaerator and subsequent operation has dictated the need for replacement.	2025 - Q4	$ 147,390	$ 328,630	$ 476,019
66	Redhawk Install Serveron Gas Monitoring on Generator Stepup Transformer	The Serveron gas monitoring system will report the health of the generator step-up transformer to the TOAN system to display any changes in the transformer oil chemistry, thereby alerting the plant of any operational anomalies that have occurred with the transformer operations.	2025 - Q4	$ -	$ 156,069	$ 156,069
67	Redhawk Replace 1A/B Exhaust Thermowells and Thermocouples	The existing thermocouples need to be replaced with the newest thermocouple to ensure unit reliability and lessen the risk of component failure	2025 - Q4	$ -	$ 372,226	$ 372,226
68	Redhawk Firewater Pipe & Valve Replacement	Replace firewater loop components to ensure compliance with NFPA 25.	2025 - Q3	$ 2,098,009	$ 4,278,269	$ 6,376,278
69	Redhawk Zero Liquid Discharge Control Room Replacement	Construct a new control room for the zero liquid discharge operator to work from as the metal wall siding of the current control room is deteriorating due to age and allows for pest/mice intrusion.	2025 - Q4	$ 172,485	$ 1,625,708	$ 1,798,193
70	Redhawk 2A Major and 2B Hot Gas Path Overhaul	Replace turbine components in accordance with the contractually scheduled overhauls in order to ensure reliable and safe operation of the Unit 2A and 2B Gas Turbines.	2025 - Q1	$ 22,922,626	$ (3,617,194)	$ 19,305,432
71	Saguaro Replacement of Terminal Boards & Input/Output Cards	Replace terminal boards and input/output cards as obsolescence of legacy card components is approaching.	2025 - Q4	$ 98,400	$ 122,674	$ 221,074
72	Sundance High Pressure Compressor Blade Replacement	Replace components per original equipment manufacturer recommendations.	2025 - Q2	$ 1,784,060	$ 1,781,389	$ 3,565,449
73	Sundance Turbine Removal Tools Storage Area	Construct new turbing removal tools storage area to ensure efficient maintenance activities at the site. Access to the current warehouse is limited to forklifts and monsoon rains create muddy and unstable for outdoor racking.	2025 - Q2	$ 221,351	$ 1,312,208	$ 1,533,559
74	Sundance Distributed Control System (DCS) Module Communication Replacement	Replace DCS module as the existing ABB fiber loop communication modules and power conditioning units are reaching the end of life and are no longer supported by ABB.	2025 - Q4	$ 245,607	$ 954,174	$ 1,199,781
75	Sundance Asphalt Replacement	Replace degraded pavement throughout the site. Asphalt must be removed, subbase improved, and new asphalt installed to properly restore the roads. Concrete scuppers will be installed in locations to carry water across the road to prevent future degradation of new asphalt.	2025 - Q2	$ 31,617	$ 1,498,218	$ 1,529,835
76	West Phoenix Replace Gas Regulator Station Feeding	Maintain unit reliability by replacing aging components. The outlet block valves on the station are hard to turn which may inhibit a quick fuel isolation in the event of an emergency. The existing Y strainers are not adequate and allow solid and liquid contaminants to enter the fuel gas system. Internal pipe inspection has revealed corrosion and debris entering the regulators creating erosion within the regulators and necessitating excessive maintenance.	2025 - Q4	$ 256,475	$ 895,230	$ 1,151,705
77	West Phoenix Cooling Tower Apron Installation	Install aprons and associated drainage and sump systems to ensure continued compliance with the site Aquifer Protection Permit regarding plant process water discharge.	2025 - Q2	$ 1,737,900	$ 618,256	$ 2,356,156
78	West PhoenixRight of Way License Payment 2025 thru 2026	Right-of-Way license payment required for West Phoenix.	2025 - Q1	$ -	$ 18,742	$ 18,742
79	West Phoenix Replacement of Combustion Components (Fuel Nozzles, Liners, Transition Pieces)	Maintain unit reliability of Combined Cycle 3 by replacing the liners and transition pieces.	2025 - Q4	$ -	$ 1,036,660	$ 1,036,660
80	West Phoenix Combined Cycle 4 Automate Amine Skid Control	Maintain reliability of the unit by enabling automatic control of the boiler chemistry injection pumps on the skid.	2025 - Q1	$ 215,215	$ 304,237	$ 519,452

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NON-NUCLEAR GENERATION
POST-TEST YEAR PLANT ADDITIONS

81	West Phoenix Steam Turbine Uninterruptable Power Supply Battery Replacement	Ensure reliability of the unit by replacing the uninterruptable power supply battery bank as the current bank cannot maintain proper voltage.	2025 - Q4	$ 1,891	$ 98,776	$ 100,666
82	West Phoenix Combined Cycle 2 Sump Pump Level Control	Refurbish the existing sum and replace one existing float level instrument with new guided wave radar level and local level control system. This system shall reuse the existing sump pumps MCC buckets and existing relay motor control.	2025 - Q4	$ 2,202	$ 111,990	$ 114,192
83	West Phoenix Combined Cycle 3 Sump Pump Level Control	Refurbish the existing sum and replace one existing float level instrument with new guided wave radar level and local level control system. This system shall reuse the existing sump pumps MCC buckets and existing relay motor control.	2025 - Q4	$ 1,308	$ 115,530	$ 116,838
84	West Phoenix Combustion Turbine 5A Long Term Maintenance Parts - 2025	Acquire replacement parts from the Original Equipment Manufacturer (OEM) as necessary to ensure quick and efficient repairs for reliability purposes.	2025 - Q4	$ 108,806	$ 2,009,735	$ 2,118,541
85	West Phoenix Combustion Turbine 5B Long Term Maintenance Parts - 2025	Acquire replacement parts from the Original Equipment Manufacturer (OEM) as necessary to ensure quick and efficient repairs for reliability purposes.	2025 - Q4	$ 167,586	$ 1,946,926	$ 2,114,512
86	Yucca Chiller Outer Air Louver Replacement	Replace louvers to ensure chiller efficiency and availability. The existing louvers have worn and are near the end of their life on the new tower, installed in 2021.	2025 - Q1	$ -	$ 173,641	$ 173,641
87	Yucca Relay Life Cycle Replacement	The electro-mechanical relays are no longer supported by the manufacturer and in the event of a failure, the parts will not be readily available.	2025 - Q1	$ 671,939	$ 666,699	$ 1,338,638
88	Yucca Unit 3 Generator Step-Up Transformer Replacement	Maintain reliability of the unit by replacing the generator stepup transformer. The current generator step-up transformer pre-test results show a degraded condition with high power factor on the windings.	2025 - Q2	$ 923,674	$ 1,896,323	$ 2,819,998
89	Yucca Potable Water System Replacement	Install service water piping to combustion turbines 1, 2, 3, and 4 that are fed from the existing raw water tank. A clean and safe potable water source for plant operations is required per OSHA 1910.141.	2025 - Q1	$ 6,833,898	$ 109,044	$ 6,942,942
90	Yucca Cardox Controls Replacement Unit 3	Maintain compliance with NFPA 850-7.7.4 Fire Protection by replacing Cardox controls. The cardox control modules are obsolete. Further degradation and/or loss of a control module will make the Cardox System inoperable.	2025 - Q1	$ 114,837	$ 906,310	$ 1,021,148
91	Yucca Cardox Controls Replacement Unit 4	Maintain compliance with NFPA 850-7.7.4 Fire Protection by replacing Cardox controls. The cardox control modules are obsolete. Further degradation and/or loss of a control module will make the Cardox System inoperable.	2025 - Q4	$ 30,937	$ 986,886	$ 1,017,823
92	Fossil Reliability	Critical part replacements made during outage season that are not known until inspections are completed or unit is forced to be offline. For example, in March 2025, major components of the turbines at Yucca Units 5 and 6 were replaced as part of this program.	2025 - Q1	$ 17,980	$ -	$ 17,980
93	Solar Communities Program	Complete final installations for Solar Communities Program. These projects were planned prior to November 2024, but the Company was not able to finish the projects until 2025.	2025 - Q4	$ 6,875,607	$ 3,048,407	$ 9,924,015
94	Solar Maintenance	Inverter replacements and corrective maintenance for APS owned solar systems.	2025 - Q4	$ -	$ 967,303	$ 967,303
95	Trailing Costs for Projects in Service Prior to December 31, 2024	Includes multiple projects that went into service prior to December 31, 2024, but have trailing charges that extend into the post-Test Year period		$ 507,926		$ 507,926
96	**Total Non-nuclear Generation**			**$216,740,563**	**$ 143,894,430**	**$ 360,634,992**

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ENERGY STORAGE
POST-TEST YEAR PLANT ADDITIONS

Line No.	Project Name	Purpose	Estimated In-Service Date	Project Cost at January 31, 2025	Projected Costs to Close	Total Projected Costs
1	Agave Battery Energy Storage System (BESS)	Add 150MW of battery energy storage capacity to the existing Agave Solar site.	2025 - Q4	$ 129,540,155	$ 134,805,259	$ 264,345,414
2	**Total Energy Storage**			**$ 129,540,155**	**$ 134,805,259**	**$ 264,345,414**

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