

APPA PMA Task Force

WESTERN AREA POWER ADMINISTRATION



Administrator panel

February 26, 2019

Washington D.C.

Introduction to yourself and share Mark's regrets

We are regularly affected by changes and events in the industry that have little direct connection to keeping the lights on.

We believe our future will be one of unprecedented connectedness with each other and with seemingly distant and irrelevant events.

Through the changes, we remain committed to ensuring the value of WAPA for our customers and the nation.

Part of that commitment is investing in a connected energy future to preserve and strengthen our value to customers, our neighbors and the nation for years to come.

We are investing in this connected energy future by being

- agile
- integrated
- responsive
- engaged
- resilient

Today, I will share some of the accomplishments we have enjoyed this past year and our plan for the near future.



Accomplishments

- Marketed 27,308 GWh of energy or 106 percent of average.
- About 80 percent of customers experiencing stable or decreased rates.
 - 50 percent experiencing stable rates for two consecutive years after two years of rate decreases.
 - 20 percent experiencing stable rates for 10 years.
 - About 7.5 percent of customers received 13-percent midyear rate decrease thanks to negotiations with Reclamation to reduce Central Valley customers' repayment obligations by \$10 million.
- Hydropower from Hoover Dam reached 58 new allottees this year, 23 of which are Native American tribes.
- Participation in Southwest Power Pool and surplus generation sales led to \$42 million in additional net revenues.
- Welcomed newest hydroelectric facility into Salt Lake City Area/Integrated Projects.
 - Olmsted is WAPA's 57th hydropower plant in its portfolio.
- Responded in the wake of natural disasters to restore power as quickly as possible to communities, including supporting our customers who were significantly impacted by the Carr Fire in Northern California.
 - By working with the Bureau of Reclamation this included continuing to serve the communities of Redding California and Trinity County energized through some extremely



challenging conditions. This included creating a Trinity PUD island connected directly to a northern California hydro unit.

- Expanded “The Source” website to provide a decade’s worth of financial and operational information. Site is updated annually.
 - Recently posted FY 2018 information as we promised.
- Protected the environment:
 - Two endangered Colorado River fish species are proposed for downlisting to threatened.
 - A Utah plant was removed from the endangered species list entirely.
- Selected new reliability coordinators to take over for Peak RC by the end of the year.
 - SPP: RM, CRSP, UGP-West, DSW
 - CAISO: SN sub-balancing authority
- We are actively participating in conversations about where the energy industry is going to make sure we are ready. These issues include changes in the:
 - Way we operate the transmission system with new regulations & technology.
 - Spread of markets into the Western Interconnection
 - Technology, both that directly impact the grid and the technology that needs the grid.
 - Physical security and cybersecurity.



- Refreshed our core values to reaffirm our commitment to customers and mission.
- Convened meetings and symposiums to share leading practices in cybersecurity and physical security.

Planning ahead

In late January, we released our updated Tactical Action Plan, which shares our activities and priorities for the next two to three years under Strategic Roadmap 2024.

Direction to employees is to remain budget and staff neutral as we continue to:

- Mature our programs
- Prepare for the future and
- Improve our performance

The 2019 Tactical Action Plan is organized into four Strategic Target Areas:

- First is **Mission-Critical Customer Services in an Evolving Industry**. In this Target Area, we are preparing for markets externally and internally.
 - Despite indefinite postponement of Mountain West Transmission Group, we still believe markets are coming to the West.
 - We continue to work with our neighbors and customers to
 - Realize balancing authority and transmission efficiencies
 - Reduce cost shifts within WAPA to join a market and



- Seize opportunities to reduce or eliminate barriers for the next attempt at membership.
 - We are also preparing internally so our people, resources, processes, systems and technology are ready for a shift to markets or similar entities.
 - WAPA evaluates benefits, costs, risks and opportunities associated with market-related developments on a region-by-region and case-by-case basis to ensure we continue to deliver the most value for our customers.
- Under **Grid Resilience** we are focused on protecting our assets from physical and cyberattacks and improving the agency's ability to respond and recover from emergencies.
 - In 2018, cybersecurity tools identified more than 10,000 individual cases of suspicious activity on our system.
 - Firewalls are pinged nearly 200,000 times per day.
 - This year, Physical Security intends to complete a multiyear project involving more than 400 physical security assessments.
 - Security is a massive (and costly) undertaking and is imperative.
 - Optimizing on interdependencies between cybersecurity, physical security and asset management to invest wisely in protective measures where they make the most sense and prioritize risk and criticality.
 - Working with customers, neighbors, partners, security experts and other executive agencies to share leading practices, lessons learned and effective risk mitigation strategies.



- Through **Asset Management 2.0**, we will add new asset classes to our database and use the data to better forecast and develop our annual budgets and 10-year capital plans.
 - Completed input and analysis of transmission lines, transformers and breakers.
 - Next assets include station batteries, current transformers, capacitive voltage transformers and IT network equipment.
 - Goal in the next few years is to get valuable AM data to more people that can use it to inform business decisions.
 - Soliciting customer feedback about how AM data is used in regional capital planning decisions is an essential part of the process.

- In the **People and Organization** Target Area, we seek to recruit, retain, train and develop a high-performing workforce and leadership cadre dedicated to WAPA's mission and supporting customers now and in the future.

There are a few other initiatives I want to highlight specifically:

Battery storage

- We want to work with our customers to identify opportunities to interconnect transmission-scale battery storage to WAPA's system.
- We seek to take advantage of the benefits it would offer, including balancing load, increasing resource diversity and managing the variability of water.
- We have zero interest in owning this storage asset, just like we have zero interest in owning a wind or solar farm, but



want to support and facilitate connecting storage to the grid to benefit our customers and operations.

- Fiber
 - WAPA has about 5,200 miles of fiber optic lines to communicate remotely with substations.
 - The fiber is not being used to its maximum potential currently.
 - As stated under American Broadband Initiative, we will develop a feasibility assessment plan in April to determine if excess fiber capacity can be leased to customers and broadband service providers.
 - We will work with customers to identify potential partnerships and mutual benefits.
 - We expect to complete the assessments by the end of the year.
- Finally, we are working with DOE to identify opportunities to incorporate artificial intelligence into suitable business operations.

Conclusion

As we head into the energy frontier, we envision a future more connected than ever before.

We are investing in this connected energy future by being

- Agile
- Integrated
- Responsive
- Engaged



- Resilient

WAPA is not looking to be on the leading edge of these changes and new technologies, but we cannot afford to be left to obscurity.

Success for WAPA requires close collaboration and mutually beneficial partnerships with customers to ensure our ability to supply premier power and transmission services at the lowest cost consistent with sound business principles well into the future.

