Reflect, Recharge, Resolve

Tracey A. LeBeau
Administrator and CEO

Annual Customer Meeting
Dec. 6, 2021
Agenda overview

- Administrator remarks
- 10-year capital plan
- Markets update, including Organizational Approach to Markets
- Bipartisan Infrastructure Law
- Break-out sessions
FY 2021 accomplishments

- Marketed 21,916 GWh of hydropower
- Provided 22,500 MWh of emergency energy to SPP
- Saved or avoided $114 million through CPI
- Implemented Modern Workplace
- Evaluated fully integrated market membership
- Educated a new Administration
- Refreshed mission and vision

- Integrated Lidar scans into engineering software
- Completed WECC audit
- Concluded drone pilot project
- Joined real-time markets for four regions; selected RT market for DSW
- Formalized Human Performance Improvement & Just Culture program
- Initiated third craft leadership development program
- Held fourth leadership summit
- Achieved 0.3 recordable incident rate
- Increased leadership development opportunities
- Advanced inclusion and diversity
- Named one of the best places to work in government
FY 2022 theme

REFLECT
• Mission and vision
• Core Values
• Transparency commitments
• Recent successes
• 45-year anniversary

RECHARGE
• New strategic plan
• Future work environment
• Renew our connections & collaborative partnerships

RESOLVE
• Define our future
• Solve today’s challenges
• Evaluate opportunities
• Make best decisions for regions, customers, WAPA and our mission
Touchstone priorities

- Strengthening partnerships
  - Rate stability
  - Grid reliability and resilience
  - Transparency and collaboration
- Organizational resilience
  - Workforce of the future
  - Safe and inclusive organizational culture
Developing WAPA’s new strategic plan

• Resuming the planned strategic refresh started last year with refreshed mission and vision.
• Goal to have new plan in place by the end of 2022.
• This strategic plan will take us through 2030.

We are WAPA

Mission
Safely provide reliable, cost-based hydropower and transmission to our customers and the communities we serve.

Vision
Empowering communities, securing a resilient energy future.
Received $500M reimbursable funding for purchase power and wheeling expenses.

Figure chosen based on denied authority for $400M in PPW over past four fiscal years’ budget requests and to cover $100M costs incurred during February polar vortex.

Use limited to current PPW funding authorized by annual appropriations.

Not vehicle for long-term drought recovery.
Justice40 initiative

• DOE plan to deliver 40% of the overall benefits of climate investments to disadvantaged communities and inform equitable research, development, and deployment.

• WAPA serves about 500 disadvantaged communities via preference power customers.

• Working with DOE to determine how we can track the benefits WAPA provides and what more we can do to support these communities.
Senior Leadership Team
New Members
Bart Barnhart
Senior Vice President and Rocky Mountain Regional Manager
Lloyd Linke
Senior Vice President and Upper Great Plains Regional Manager
Jack Murray
Senior Vice President and Desert Southwest Regional Manager, Acting
Cheryl Reese
Director, HR Shared Service Center
Kerry Whitford
Chief Strategy Officer
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The Decade Ahead
WAPA 10-Year Capital Plan FY22-31

Michael D. Peterson
Senior VP and Chief Financial Officer

Annual Customer Meeting
Dec. 6, 2021
Financial topics and agenda

Finance and budget updates

• FY21 – Annual report posted to The Source, commercial reporting & external audit (KPMG) are on track
• FY22 – Year of the continuing resolution? Maybe.
• FY23 – WAPA’s budget submission approved by DOE, under review by OMB, embargoed until released
• FY24 – 10-Year capital plan finalized, development of labor and discretionary budgets underway

10-year capital plan agenda

• Summary of capital process changes
• 10-year plan results
• Appropriations update
• Partnership
• Reference (region/customer perspective)
## Summary of capital process changes year over year

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>TAP Goal</strong></td>
<td>Program and budget Integration</td>
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<td></td>
<td>Total Capital Committee (TCC) standup</td>
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<td>Total Resource Planning (TRP) standup</td>
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<tr>
<td><strong>Evaluation</strong></td>
<td>Project class</td>
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<tr>
<td></td>
<td>Project type</td>
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<tr>
<td></td>
<td>Rate impact</td>
</tr>
<tr>
<td><strong>Feasibility assessment</strong></td>
<td>Execution &gt;15%</td>
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<tr>
<td></td>
<td>Cash flow limitations</td>
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<td></td>
<td>Labor limitations (Design, Procurement, etc.)</td>
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<tr>
<td><strong>Project funding</strong></td>
<td>Appropriation target</td>
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<tr>
<td></td>
<td>Alternative financing coordination</td>
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<tr>
<td><strong>Metrics of new plan</strong></td>
<td>Rate window is 3% lower than prior year rate window</td>
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<tr>
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<td>Rate window is 36% above historical actuals</td>
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<td>Rate window is 21% above expectation</td>
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10-year capital plan
- trend analysis, historic execution and budget outlook

Total Capital Program
Rate Impacting Only (CROM & CRBPMF)

Annual Growth Rate (CAGR): +0.5%
10-year capital plan
- by category and by region

by category
- Transmission Lines, 43%
- Substations, 35%
- Mobile & Heavy Equipment, 7%
- Comm Systems, 5%
- Information Technology, 5%
- Buildings and Programmatic, 4%
- Aviation, 1%

by region
- UGP, 30%
- DSW, 23%
- SNR, 22%
- RMR, 14%
- CRSP, 6%
- WAPA-Wide, 5%
10-year capital plan
- by category

Annual Growth Rate (CAGR):

- -$13.7M / -1.5% per year
- +$1.2M / +1.6% per year
- -$0.8M / -4.2% per year
- -$0.3M / -0.2% per year
- +$1.6M / +1.2% per year
- -$4.4M / -3.6% per year
- -$8.0M / -1.1% per year
- -$24.2M / -1.1% per year
10-year capital plan
- by region

Annual Growth Rate (CAGR):
- SNR -$7.0M / -1.5% per year
- UGP -$0.4M / -0.1% per year
- RMR -$11.7M / -3.4% per year
- DSW +$4.3M / +1.0% per year
- CRSP -$8.9M / -5.2% per year
- WW -$0.5M / -0.5% per year
- Total -$24.2M / -1.1% per year
10-year capital plan
- FY24 funding source
Appropriations
- *Important factors*

**Challenges**
- Pressure on appropriation levels likely to continue
- Rising capital financing needs from generating agencies likely to persist
- Constraints of customer cash flows likely to increase

**Risks**
- Diminished reliability, resilience and efficiency
- Reduced asset life due to underfunded lifecycle management
- Compromised cyber and physical security
Appropriations
- by class

FY24 Investments
- Replacements, 60%
- Upgrades & Additions, 37%
- Construction, 4%

Bar chart showing appropriations by class for FY 2022 to FY 2026:
- FY 2022: $250 million (Replacements $150, Upgrades & Additions $100, Construction $0)
- FY 2023: $350 million (Replacements $200, Upgrades & Additions $100, Construction $50)
- FY 2024: $150 million (Replacements $75, Upgrades & Additions $75, Construction $0)
- FY 2025: $150 million (Replacements $75, Upgrades & Additions $75, Construction $0)
- FY 2026: $150 million (Replacements $75, Upgrades & Additions $75, Construction $0)
Partnership
- preserving the value of our resource base over the long cycle.

• Capital plan alignment & continuity
• Stable funding mechanisms
  • Appropriations: non-reimbursable
  • Appropriations: reimbursable
  • Alternative & customer funding
• Rate stability & predictability
• Reliability
• Transparency
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SLIDES FOR REFERENCE ONLY

(Region/Customer Perspective)
CRSP
10-Year Capital Plan

Invests $126M in transmission system, FY22-FY31
• Decrease of $89M from FY21-30 plan
DSW
10-Year Capital Plan

Invests $466M in transmission system, FY22-FY31
• Increase of $43M from FY21-30 plan
RMR 10-Year Capital Plan

Invests $284M in transmission system, FY22-FY31
• Decrease of $117M from FY21-30 plan
SNR
10-Year Capital Plan

Invests $434M in transmission system, FY22-FY31
• Decrease of $70M from FY21-30 plan

San Luis
($307M)
UGP
10-Year Capital Plan

Invests $590M in transmission system, FY22-FY31

- Decrease of $4M from FY21-30 plan
Headquarters (WAPA-Wide) 10-Year Capital Plan

Invests $92M in transmission system, FY22-FY31
  • Decrease of $5M from FY21-30 plan
Work for Others
10-Year Capital Plan

In addition to WAPA investment of $2B, another $302M in reimbursable Work for Others (WFO) is planned

**Key Projects**

- **Beale AFB Interconnect (SNR)**
  - $45.1M total
  - FY22 $43.3M, FY23-24 $1.9M
- **COTP Sub Replacements (SNR)**
  - $112.9M total
  - FY22 $3.3M, FY23 $4.5M, FY24 $12.4M, FY25-31 $92.6M)
- **Creston-Maryville (UGP)**
  - $10M total
  - FY22 $9.4M, FY23 $617K)
- **North Bend Switch Station (UGP)**
  - $10.7M total
  - FY22 $9.7M, FY23 $1M)
Organizational Approach to Markets

Rodney Bailey
Senior Power Marketing Advisor

Annual Customer Meeting
Dec. 6, 2021
What is OAM?

WAPA’s Organizational Approach to Markets

• An internal initiative
  • Evaluates improvements to support operation in different markets
  • Increases our efficiency in serving our customers

Why?

• Prepare for markets
• Create efficiencies
• Build a stronger, skilled WAPA
OAM Categories

Realignments/reorganization
- EMMO/Settlements
- Operations/BA
- Power billing

Standard Processes
- Business processes
- Job aids
- Desk tasks

Standard Tools
- Common Tool for settlements
- Common Tool for EMMO
- Common Tool for Ops
Three Core Teams
EMMO, Power Operations, Settlements make recommendations to PMMC and PSOC

Evaluated scenarios for organizational readiness for markets that included how to internally respond to current and anticipated changes in energy markets participation, with consideration of organizational structure and IT tools

Efforts included data gathering, benchmarking, analyses, and 120+pages report
With PMMC and PSOC review and support
OAM decision memo
2018 accomplishments

- Aligned EMMO and Settlements functions under Power Marketing consistently across WAPA
- Set up one Reliability Desk + Transmission Scheduling in Upper Great Plains region
- Reduced transmission scheduling to one desk in Rocky Mountain
- Confirmed DOE provides 24x7 cybersecurity protection service
- Confirmed Real-Time Engineer position descriptions
- Updated Power Marketing subcommittee team charters to include market coordination, stakeholder engagement, and collaboration on market initiatives
2019 accomplishments

Report on BA Service Optimization
Recommended ideas for improving WACM and WALC Balancing Authority operations that can be implemented within the next five years.

Define Power Billing
Clearly defined power billing processes and consistent aligned of functions and tasks within Settlements and Finance.

Build EMMO Knowledge Management structure
Built a SharePoint for common EMMO work broken out by category for employees that also serves as a knowledge resource for future employees.
2020-2021 accomplishments

CRSP, RMR, UGP West
Implemented SPP’s new WEIS Energy Imbalance Market.

SNR
Implemented CAISO’s EIM Energy Imbalance Market.

DSW
Completed Energy Imbalance Market gap and benefit studies with Customer and made the decision to join the CAISO’s EIM.
Moving forward

• Each Region is unique
• Made great accomplishments the last 4 years
• Assumptions from 2017 have changed
• Evaluate efficiencies as Regions enter Markets

Questions?
In an evolving and transforming electric utility industry, WAPA will continue to evaluate, enhance and improve the services it provides to preference power and transmission customers.

**Outcome**: The value of WAPA’s cost-based power, transmission and related services is enhanced in a transforming industry.

**Prepare for Markets**: Position WAPA for regional energy market participation by effectively managing industry changes surrounding WAPA’s footprint while ensuring system reliability and alignment with WAPA’s cost-effectiveness principles.
Prepare for markets

Major Milestones – FY22 Update

- RC Transition to SPP Complete
- SNR EIM Implementation Complete
- DSW EI Study Complete
- Decision for DSW EIM
- CRSP, RMR, UGP West RTO decision
- If Decision to pursue SPP RTO CRSP, RMR, UGP West RTO Implementation

2020
- RC Transition to SPP

2021
- WACM, WAUW WEIS Implementation Complete

2022
- DSW decision

2023
- Implement DSW decision

Evolution of Services

Mutually Beneficial Partnerships

45
Summary

- Continue to evaluate changes in the industry
- Make decision that are best for WAPA and our Customers
- One size does not fit all

Questions?
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Infrastructure Investment and Jobs Act

Dionne Thompson
Senior VP and Assistant Administrator for Corporate Liaison

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Infrastructure Investment and Jobs Act of 2021

• Signed into law on November 15, 2021. Public Law No. 117-58
• $500 million for WAPA purchase power and wheeling
• Supports grid infrastructure resilience and reliability by preventing outages and enhancing the grid
  • Sets up matching grants to eligible entities, including TOs and Generators, as well as States and Tribes which may in turn provide to eligible entities
  • Includes a small utility set aside
• Creates a $2.5 B Transmission Facilitation Program and Fund at DOE
  • Construct new or replace existing transmission lines, or increase capacity
  • Does not impact WAPA TIP applications or projects
• Includes provision on hydropower incentives, dam safety, and grants for broadband deployment
• DOE is evaluating the provisions in the bill and developing guidance on the implementation of what’s in the bill for DOE and stakeholders
  • DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver For American Workers, Families and Usher in the Clean Energy Future | Department of Energy
Strategic Planning Breakout Sessions

Kerry Whitford
Chief Strategy Officer

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Mission and Vision

Refresh (Complete)

Assessment and Analysis
Research and data gathering
Survey (internal and external)
Employee focus groups
Senior manager interviews
Council and functional area workshops
External stakeholder interviews
Data analysis

Strategy Formulation
Senior analysis and formulation of WAPA strategy – define value proposition, validate mission and vision, define critical pathways, strategic objectives, enterprise level risks, performance measures and targets

Action Oriented Plans
Organizational alignment
Develop action-oriented plans
Resource allocation

Phase 1 (Complete)
Phase 2 (Active)
Phase 3 (Future)
Breakout questions

• What do you see as the biggest threats to the industry in the coming years?
• What opportunities are on the horizon for the industry?
• As you think about the evolution of the industry, where are WAPA’s potential greatest vulnerabilities to providing reliable, cost-based hydropower and transmission services?
• To meet evolving challenges and seize opportunities, what are the most important things WAPA should keep doing, do better or start doing? How can we work together to achieve our mutual goals?
Adverse Conditions
Breakout Sessions

Lloyd Linke
Senior VP and UGP Regional Manager

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Breakout questions

• As a customer what do you see as the most current adverse condition that could impact the hydropower resources?

• What opportunities do WAPA and its customers have to work together to mitigate issues related to current adverse conditions?

• Thinking of the adverse conditions we have listed in the first question, what do you see as potential vulnerabilities with the risk to WAPA’s reduced ability to deliver hydropower in the event of an extreme adverse condition?

• What role do you see WAPA playing given your concerns about the immediate adverse conditions we face?
Q&A Session
Meeting close out

Kevin Howard
Executive VP and Chief Operating Officer
Thank you for attending
Western Area Power Administration
Annual Customer Meeting