Today’s agenda

- Upper Great Plains Region Update
  Lloyd Linke, SVP and UGP Regional Manager
  Lori Frisk, VP of Power Marketing for UGP

- Rocky Mountain Region Update
  Bart Barnhart, SVP and RM Regional Manager
  Dave Neumayer, VP of Power Marketing for RM

- Washington Update
  Dionne Thompson, Assistant Administrator for Corporate Liaison

- Financial Briefing
  Michael Peterson, SVP and Chief Financial Officer
Upper Great Plains Region Update

Lloyd Linke – SVP and Regional Manager
Lori Frisk – VP of Power Marketing
Lloyd Linke
Senior Vice President and Upper Great Plains Regional Manager
PS-ED
Hydro/Gen Outlook
Missouri River Mainstem System
Forecasted Energy Generation - 2021

Energy in GWh

Upper Basic: 8,700 GWh
Basic: 8,700 GWh
Lower Basic: 8,700 GWh
Mainstem System Generation Million Megawatt Hours

Bar chart showing the generation in million megawatt hours from 1997 to 2021. The forecast for September 1, 2021, is included.
Drought Update

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for September 16 - December 31, 2021
Released September 16

Author:
Adam Hartman
NOAA/NWS/NCEP/Climate Prediction Center

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

http://go.usa.gov/3e273
PS-ED
Rates Outlook
Rate Approaches

• Power Repayment Study (PRS)
  • Study solves for deficit

• Drought Adder
  • Not anticipated at this time
  • Decision in October

• Rate Process
  • January 2022 start process for 2023 Rate
Draft Schedule for 2022 Rate Process

<table>
<thead>
<tr>
<th>Jan 2022</th>
<th>Apr 2022</th>
<th>Jul 2022</th>
<th>Oct 2022</th>
<th>Jan 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Process</td>
<td>Federal Register Notice</td>
<td>Information Forums</td>
<td>Final FRN Rate</td>
<td>Final Rate 30 Day Notice</td>
</tr>
<tr>
<td>Informal Meetings</td>
<td>Comment Forums</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Firm Power Customer Notification Schedule

- **Feb-Mar**: Finalize annual PRS. Determine if Base/Adder needs adjustment via formal rate adj
- **Early Summer**: Preliminary review of Drought Adder-Notify Customer of estimated change
- **Sept-2nd Review of Drought Adder**: Notify Cust of Drought Adder Change eff Jan
- **October**: Notify Cust of Drought Adder Change eff Jan
- **New Rate Effective Jan 1**
Questions?
Contact me + follow WAPA

Lori Frisk
605.882.7580
frisk@wapa.gov

wapa.gov

@westernareapowr

Western-area-power-administration

WesternAreaPower1

westernareapower

wapa.gov

Ft Peck, COE
Rocky Mountain Region Update

Bart Barnhart – SVP and Regional Manager
Dave Neumayer – VP of Power Marketing

September 28, 2021
Bart Barnhart
Senior Vice President and Rocky Mountain Regional Manager
PS-ED & LAP Hydro/Gen Outlook
Drought Update

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for September 16 - December 31, 2021
Released September 16

Author:
Adam Hartman
NOAA/NWS/NCEP/Climate Prediction Center

http://go.usa.gov/3eZ73
LAP Inflow totals this year and 30-year average LAP Inflow totals (end of Aug. 2021)
LAP Storage totals this year and 30-year average LAP Storage totals (end of Aug. 2021)

LAP Storage in thousands of acre-feet

- Storage Totals
- 30-Yr Avg Storage Totals
LAP 2025
Marketing Plan Activities
LAP 2025 Power Marketing Initiative (2025 PMI) Resource Pool Plans

• 2025 PMI provides for 3 resource pools
  o Oct 1, 2024 (FY 2025 resource pool)
  o Oct 1, 2034
  o Oct 1, 2044

• WAPA began the process of implementing the 2025 Resource Pool:
  o May withdraw up to 1% (approximately 6.9 MW of capacity in summer season and 6.1 MW in winter season) of the LAP long-term firm hydroelectric resource available October 1, 2024, for new preference customers
2025 Resource Pool

• Published the Federal Register Notice announcing the 2025 Resource Pool criteria and call for applications – September 20, 2021

• Virtual public information forum – 1:00pm – 3:00pm October 6, 2021

• Receipt of written applications and completed Applicant Profile Data forms due November 15, 2021

• Proposal and Final FRN in 2022 will follow

• Allocations of power to eligible new preference entities effective October 1, 2024
2025 PMI - FES Contracts

- 122 of 124 Contracts Executed for 2025 LAP FES Allocations
- Preparing for the implementation of the 2025 LAP FES contracts
- Several changes needed for 2025 contracts for all customers:
  - Update Exhibit Revisions to account for Resource Pool withdrawal and revised allocations
  - Update/Revise the Scheduling, Accounting, and Billing Procedures
  - Update WAPA-wide Creditworthiness procedures to current revision
2025 PMI – FES Contracts (cont.)

• Need to make additional changes/updates for specific groups:
  o East Side Delivery Arrangements
  o Tribal Benefit Crediting Arrangements
  o For entities under WAPA’s NITS with PSCo, need to determine if we will continue this arrangement
  o For entities that have assigned their contracts to other entities need to implement new assignments
  o Power Interference Agreements

• Myriad of non-FES agreements with September 30, 2024, expiration date – need to determine if still needed/put new agreements in place
LAP Rates Outlook
(LAP FES)
LAP FES Rate Update

• LAP Firm Electric Service Rate Schedule L-F11 became effective January 1, 2018
  o Drought Adder reduced to zero
  o LAP Composite Rate reduced 14% to 31.44 mills/kWh
    ▪ Since 2015, rate decreased 24% from high of 41.42 mills/kWh
  o Effective through December 31, 2022

• 2022 Rates
  o No rate adjustment for LAP Base Rate
  o Monitoring Drought Adder
    ▪ Preliminary notification letters sent to customers on June 11th
      ➢ review resulted in no estimated change
    ▪ Final notification letters to be sent next month
LAP FES Rate Update (cont.)

Along with UGP, initiate LAP rate adjustment process ~January 2022 to have new 5-year rates in place for January 2023

- Pick-Sloan Western Division Component
- Fry-Ark Component
  - The preliminary FY21 study indicates an overall estimated increase of $3.5M (~1.7 mills/kWh impact to LAP). Waiting on FY21 actuals to be audited and included in the study.
SPP RTO Update
SPP RTO Expansion – Who?

Current West side Entities Exploring SPP Membership:

• WAPA-RMR
• WAPA-CRSP
• WAPA-UGP
• Tri-State G&T
• Basin Electric (with WMPA)
• Municipal Energy Association of Nebraska
• Deseret
• Colorado Springs Utilities*

*CSU decided in May 2021 to move back to the WACM BA and join the WEIS market (April 2022 start). This was significant as they are now 26% of this RTO West group as measured by energy.

Other Entities Possible?
SPP RTO Expansion – The History

• October 14, 2020, RMR and UGP committed to evaluating the SPP RTO (along with Tri-State, Basin, MEAN, Deseret)
• April 9, 2021, CRSP committed to evaluating the SPP RTO
• May 27, 2021, CSU committed to evaluating the SPP RTO
• Since January - Weekly meetings with SPP
  o Went over entire tariff, bylaws, and membership agreement (SPP governing documents)
  o Discussed in depth identified issues/needs to expand SPP into the West
• July 27, 2021: SPP Board approved terms and conditions document that summarizes what would be required to expand SPP into the West
SPP RTO Expansion – Terms

- Minimal changes to SPP tariff envisioned
  - Terms to handle DC ties
  - Threshold of transmission definition 100kV+ rather than 60kV+ (5 factor test may still allow lower voltage)
  - Drive out transmission rate for West at average West zonal rate rather than lowest exit zone rate
  - Organizational groups to consider East/West diversity
  - Strategic Planning Committee (SPC) expanded to add one Transmission Owning Member and one Transmission Using Member
SPP RTO Expansion – Current Focus

• DC Tie terms
  • Cost allocation of DC Tie ATRR
  • Revenue allocation due to having two reference busses

• Commitment Agreement
  • Allocation of stranded costs if party withdraws
  • Allocation of stranded costs if effort fails
  • Allocation of added costs if effort is delayed
SPP RTO Expansion - Timetable

• October Goal – SPP Board to consider DC tie terms
• WAPA Process:
  o Potential FRN proposing WAPA expands membership with RMR and CRSP into SPP
  o Comment period
  o Decision to move forward, or end effort
• April 2022: Potential West side parties sign SPP Commitment Agreement
• October 2022: SPP files tariff modifications with FERC
• March 1, 2024: SPP expands across West footprint
Questions?
Dionne Thompson
Assistant Administrator for Corporate Liaison
Michael D. Peterson
Senior Vice President and Chief Financial Officer
Agenda for Financial Briefing Topics

Purchase Power & Wheeling
• Overview & Financing Authorities
• Funding Issues
• Budget Actions & Progress

Infrastructure Investment & Jobs Act
• 3 Forms of support sought:
  ❏ Drought Relief
  ❏ Structural Resolution
  ✓ Near-term Funding
• FAQ’s regarding WAPA’s $500M reimbursable funding in Senate-approved draft, House action pending

Targeted reserve balances strategy
• Review Methodology
• Update Calculation
• FY 2022: Reserves afford financial stability and continuity of operations
Purchase Power & Wheeling (PPW) Overview

Essential to WAPA’s mission to market and deliver power

- Enables WAPA to meet its contractual obligations whenever real-time generation is insufficient
- Financed through Use of Receipt Authority and/or alternative financing
- All PPW costs incurred must be recovered, with interest when the repayment period extends beyond 1 year
- PPW program funds may only be used for PPW activities
- Reimbursability establishes net zero budget scoring

- [2019 DOE report to Congress](#)
PPW Financing Authorities

A. Use of Receipt Authority
   • Credited as offsetting collections

B. Alternative Financing
   • Net Billing and reimbursable

C. Revolving Fund (CRSP & Ft. Peck)

D. Emergency Fund
   • Up to $500k without OMB approval
   • Unlimited with OMB approval
   • Recovered from the Reclamation Fund
   • Repayment by customers within one year from when costs are incurred
PPW Funding Issues

• Congress has been limiting PPW funding levels due to CBO scoring
• PPW Reserves at 53%
• Direction to transfer cash from revolving fund
• Drought and other supply/demand impacts

*2022 Enacted based on HEWD markup and recent CBO scoring
# Attributes of PPW Funding Authorities

<table>
<thead>
<tr>
<th>Various PPW authorities and attributes</th>
<th>CROM PPW Receipt Authority</th>
<th>CRSP Revolving Authority</th>
<th>$500M Reimbursable Appropriation</th>
<th>Authority to Capitalize PPW Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduces the <strong>near-term</strong> risk of rate spikes resulting from emergency funding</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Reduces the <strong>long-term</strong> risk of rate spikes resulting from emergency funding</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Provides sustainable funding during adverse conditions (i.e.: negative net revenues)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Avoids annual scoring challenges</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Delivers $0 net budget impact to Treasury</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Requires full recovery of costs incurred, with interest accruing on repayments &gt;1 year</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Budget Actions & Progress

**FY 2022 Budget**
- WAPA appealed for an incremental $93M in PPW receipt authority due to Polar Vortex and extreme conditions
- Appeal was denied, Appropriators directed WAPA to seek funding from Infrastructure Investment & Jobs Act
- PPW Receipt Authority Markup ($170M House vs $316M Senate)

**Infrastructure Investment & Jobs Act**
- WAPA engaged Congressional Offices seeking drought relief, structural resolution and or near-term funding
  - Drought Relief
  - Authority to Capitalize PPW Costs Incurred, payable to Treasury over 10-years
  - PPW funding for FY 2022 and 2023
- WAPA was advised near-term funding was the only suitable request for the legislative vehicle
- $500M in reimbursable funding for WAPA's PPW program was included in the Senate approved bill

**FY 2023 Budget**
- WAPA submitted FY 2023 budget request which included funding for all of WAPA's operations
- By policy, specifics of the submission remain embargoed until DOE has approved WAPA's budget levels to be submitted to Congress

**Future Legislative Requests**
- Drought relief
- Pending items requiring funding/resolution
Infrastructure Investment & Jobs Act

What it does:

✓ Provides $500M in reimbursable appropriations for PPW costs incurred
✓ Provides immediate build up of depleted PPW reserves
✓ Provides funding for CROM and CRBPMF
✓ Reduces emphasis on receipt authority in the near-term
✓ Buys WAPA time to manage through drought and/or other adverse conditions
✓ Link to PPW FAQs posted on The Source

What it doesn’t do:

☐ Provide long-term, sustainable funding source for PPW
☐ Provide drought relief on a non-reimbursable basis
Authority to Capitalize PPW Costs Incurred

Issue: Uncertain Funding for Purchase Power and Wheeling (PPW)

- PPW reserves at 53% of target and declining due to drought conditions
- Inability to fully restore reserves under existing authorities
  - FY 2023 PPW receipt authority limitations prevents replenishment
  - Emergency funding mechanism not a solution due to limited capital access ($500K) and maximum 1-year repayment term
- CBO will likely score FY 2023 PPW request by $100M
  - FY 2023 request is insufficient to rebuild reserve at requested level
  - May also be insufficient to cover PPW needs during drought
- Drought in the West threatens the majority of WAPA's footprint
  - Colorado River Storage Project currently running deficit as drought persists
  - Fund will be depleted by end of FY 2023
- WAPA has the support of its customers to secure a sustainable funding source to meet its PPW needs, but currently lacks sufficient authority

Solution Requested: Authority to Capitalize PPW costs incurred over 10 years:

- Sustainable funding for PPW expenses, which have historically averaged $250M per year, to ensure reliability during adverse conditions
- Moderates financial volatility of rate spikes to non-profit customers and communities
- Avoids annual PPW scoring challenges which increase likelihood of underfunding
- Delivers net-zero budget impact to Treasury — all amounts expended will be recovered from ratepayers within the current year, or capitalized and recovered within 10 years with interest (no change from existing full-cost recovery mandate for PPW)
PPW Reserve Balances Strategy

PPW Program is highly variable
- Energy market conditions
- Generation and transmission system constraints
- Reservoir storage levels and drought conditions
- Downstream flow restrictions (flooding, environmental activities, health/safety, irrigation, recreation, navigation)

Balances provide sufficient cash on hand to respond to adverse conditions
- PPW strategy – retain 3 years estimated funding during drought
- CROM Target - $393M
- CRBPMF Target - $85M
Targeted PPW Reserve Balances Methodology

Formula established in 2016

• Highest 3-year cumulative actual amount of net energy needed to meet Pick-Sloan Program’s contractual energy obligations
• Net energy price/MWh set at a mid-point energy price between the price of energy paid for purchasing energy during the actual drought period, and the current on-peak energy prices.
• Included an estimated offset for the Pick-Sloan drought rate adder
• Total calculation provides for all WAPA CROM

Refresh options/considerations

• Updating market price point
  • Does not require update to Strategy
  • Adds between $41M (FY 2020) to $522M (FY 2021) to reserve
  • Subject to change
• Revisiting shortfall estimates
• Stacking CROM systems onto Pick-Sloan
  • Requires update to Strategy
  • Adds $123M to reserve ($393M vs $516M)

<table>
<thead>
<tr>
<th></th>
<th>$ in thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>3yr Quantity Shortfall (MWH)</td>
<td>13,727</td>
</tr>
<tr>
<td>Mid Point Energy Price ($MWH)</td>
<td></td>
</tr>
<tr>
<td>Price paid during drought period</td>
<td>46</td>
</tr>
<tr>
<td>Current pricing (at time of $393M)</td>
<td>20</td>
</tr>
<tr>
<td>Midpoing energy Price</td>
<td>33</td>
</tr>
<tr>
<td>Gross Reserve mitigation</td>
<td>$ 452,991</td>
</tr>
<tr>
<td>Less Drought Adder capability</td>
<td>(60,000)</td>
</tr>
<tr>
<td><strong>Current PPW RESERVE</strong></td>
<td><strong>$ 392,991</strong></td>
</tr>
</tbody>
</table>
Thank you for your time.