MECA Update

June 20, 2018  | Fort Benton, MT

Jody Sundsted
SVP and UGP Regional Manager
Hydrology Missouri River Basin
Fort Peck peaked on April 19 at 141% of the normal
Fort Peck to Garrison peaked on April 15 at 137% of the normal
Missouri River Mainstem System
Annual Runoff above Sioux City, IA

Historic Drought Periods

Year


Million Acre-Feet

0 10 20 30 40 50 60 70


Historic Drought Periods

10% 25% 50% 75% 90%

34.5 MAF 16.1 19.3 30.6 24.6

Western Area Power Administration
System Storage
June 1st Forecast

Storage in Million Acre-Feet

Top Exclusive Flood Control – 72.4 maf
Base Exclusive Flood Control – 67.7 maf
Upper basic
Lower basic
Actual
Base Flood Control – 56.1 maf
Navigation Preclude – 31 maf

2017 2018 2019
Mainstem System Generation

Million MWhs

1967-2017

June 1, 2018 Forecast
Missouri River Mainstem System
Forecasted Energy Generation

Energy in GWh

Actual  Forecast  □ 1967-2017

Basic: 13,000 GWh
UGP Resource Pool
2021 New Customer Resource Pool

- **2021 New Customer Resource Pool**
  - Pool Size
    - Up to 1 percent – approximately up to 20 MW
  - Carry forward Post-2010 Final Procedures
    - This means the same procedures as the last resource pool
    - Streamline the public process with 3 Federal Register notices
  - Public Process to began May 29, 2018 – ends July 30, 2018
Pick-Sloan Rates
# New Rates (Effective Jan. 1, 2018)

<table>
<thead>
<tr>
<th>Firm Power Service</th>
<th>Current Rates Effective January 1, 2017</th>
<th>Proposed Rates Effective January 1, 2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-SMBP-ED Revenue Requirement</td>
<td>$282.7 million</td>
<td>$230.1 million*</td>
<td>-19%</td>
</tr>
<tr>
<td>P-SMBP-ED Composite Rate</td>
<td>28.25 mills/kWh</td>
<td>24.00 mills/kWh</td>
<td>-15%</td>
</tr>
<tr>
<td>Firm Capacity</td>
<td>$6.50 kW-month</td>
<td>$5.25 kW-month</td>
<td>-19%</td>
</tr>
<tr>
<td>Firm Energy</td>
<td>16.18 mills/kWh</td>
<td>13.27 mills/kWh</td>
<td>-18%</td>
</tr>
<tr>
<td>Firm Peaking Capacity</td>
<td>$5.85 kW-month</td>
<td>$4.75 kW-month</td>
<td>-19%</td>
</tr>
<tr>
<td>Firm Peaking Energy&lt;sup&gt;1/&lt;/sup&gt;</td>
<td>16.18 mills/kWh</td>
<td>13.27 mills/kWh</td>
<td>-18%</td>
</tr>
</tbody>
</table>
Projection of Pick-Sloan Composite Rate

Assumptions:
- Median water
- O&M inflated 3% per year on Work Plan data
- Investments average $90M per year

August 10, 2017
UGP SPP Activity
SPP Energy Market Results

- **FY2016**
  - Bought ~$26M
  - Sold ~$10M

- **FY2017**
  - Bought ~$29M
  - Sold ~$37M
  - **Net** increase in revenues over FY16 of $24M

- **FY2018 thru May**  
  - Bought ~$15M
  - Sold ~$20M
  - **Net** increase in revenues over same period in FY17 of ~$25M

- **FY2017 thru May**
  - Bought ~$29M
  - Sold ~$9M
Value in all we do

Enduring value for customers and the nation in the 21st century

- Supporting our customers with industry developments
- Improving organizational alignment
- Complying with regulatory drivers
- Re-investing in assets
- Hardening against physical and cyber threats
2018/2019 PPW budget status

- 2018 & 2019: Reduced offsetting collections
- No short-term impacts
- Unobligated balances are essential
- Impact of sustained constraints
- Congressional report due June 23
Cost containment

CPI projects: $2,734,766  
ex: CRSP MC Office Space Reduction

WAPA Strategic Initiatives: $29,298,980  
ex: OFCO Automated Self-Service Invoicing Tool

Just Do It projects: $23,232,957  
ex: SN Streamlined Real-Time Forced Outage

WAPA cost savings and avoidance: $55,000,000+ as of March 31, 2018
Washington D.C. update

• Change from Deputy Secretary to Assistant Secretary of Electricity
• Inland Waterways Trust Fund
  • Not included in House version of Water Resources Development Act of 2018
  • Impact would depend on when power receipts are collected
  • Also would affect SEPA & SWPA
Asset Management 2.0

Reliability Centered Maintenance
Maintenance established a process for collecting data points to monitor and report

<table>
<thead>
<tr>
<th>Region</th>
<th>RCM %</th>
<th>2-Yr. Trend</th>
<th>RCM Ratio</th>
<th>2-Yr. Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAPA</td>
<td>95.4%</td>
<td></td>
<td>10</td>
<td></td>
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<tr>
<td>RMR</td>
<td>94.0%</td>
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<tr>
<td>UGP</td>
<td>98.4%</td>
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<tr>
<td>DSW</td>
<td>91.4%</td>
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<td>7</td>
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<tr>
<td>SNR</td>
<td>94.8%</td>
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<td>24</td>
<td></td>
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</tbody>
</table>
Critical equipment resilience

• Assessing four options for transformer sparing strategy
• HILF events only
• Ongoing customer communications
• Expect decision shortly
Physical security

- Continue to improve security posture
- 319 substation assessments completed FY 2017
- 75 second-round assessments to be completed in 2018
- 18 complete as of Q2
**The Source**

- **ANNUAL REPORTS**
  Find annual reports and statistical appendices for the current and past few years.

- **BUDGET ALLOCATION**
  Find WAPA and regional fact sheets and 10-year planning information. Content will be updated yearly.

- **BY THE NUMBERS**
  Searchable index created to increase transparency about WAPA’s power systems. Content updated yearly.

- **CUSTOMER NEWS**
  Get updates, alerts, and news on topics of interest to customers.

- **KEY TOPICS**
  Access key topics affecting WAPA’s mission or service.

- **PRESENTATIONS & SPEECHES**
  Discussions between our CEO, Senior Executive team, and customers.
Transparency

• Expanding available data
  – 10-year history
  – Includes expenditures
  – Narrative to explain increases/decreases
  – How-to guide to help navigate data

• Worked in partnership with customers
Change brings challenges

- Intermittent resources
- Variable hydro production
- More customer-side resources
- Changing markets
Key takeaways

Focus on value and business excellence. Be aware of industry trends and changes. Continue delivering on mission.