Board of directors

Dec. 9, 2021
2021 budget contingency appropriation transfer

Dec. 9, 2021
2021 budget contingency appropriation transfer

Total not to exceed $5.8 million

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021 contingency budget</td>
<td>$ 28.0</td>
</tr>
<tr>
<td>Estimated transfer request for operating expenses</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Estimated transfer request for capital expenses</td>
<td>(0.8)</td>
</tr>
<tr>
<td>Contingency balance</td>
<td>$ 22.2</td>
</tr>
</tbody>
</table>

$ millions

Process

- After year end close, only the amount needed will be transferred
- Update in the management report at the February board meeting
Questions
Board of directors

Dec. 9, 2021
2022 Strategic Budget review and adoption

Dec. 9, 2021
Agenda

- Budget changes since public hearing
- Budget overview
- Adoption
Budget changes since public hearing

Changes incorporated into the budget

• Updates to fuel and purchased power
• Additional consulting expenses for an organized energy market
• Revised Craig Generating Station decommissioning costs
• Updates to capital projects
• Document updates
  • Reorganization
  • New table representing the change from proposed to final
## Budget changes since public hearing

<table>
<thead>
<tr>
<th>Category</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel ($4.9 million)</strong></td>
<td>- Rawhide Unit 1 coal price increase due to elevated market prices</td>
</tr>
<tr>
<td><strong>Operating expenses ($2.5 million)</strong></td>
<td>- Increases</td>
</tr>
<tr>
<td></td>
<td>- Consulting services for organized energy market ($2.2 million)</td>
</tr>
<tr>
<td></td>
<td>- O&amp;M wages due to changes to capital projects ($0.4 million)</td>
</tr>
<tr>
<td></td>
<td>- Decrease</td>
</tr>
<tr>
<td></td>
<td>- WAPA wheeling rates finalized ($0.1 million)</td>
</tr>
<tr>
<td><strong>Purchased power $0.4 million</strong></td>
<td>- WAPA CRSP rates finalized</td>
</tr>
<tr>
<td><strong>Capital additions $11 thousand</strong></td>
<td>- Increases</td>
</tr>
<tr>
<td></td>
<td>- Control network replacements - Rawhide ($0.4 million)</td>
</tr>
<tr>
<td></td>
<td>- Energy trading software ($0.4 million)</td>
</tr>
<tr>
<td></td>
<td>- SCADA and energy management system ($0.3 million)</td>
</tr>
<tr>
<td></td>
<td>- Decreases</td>
</tr>
<tr>
<td></td>
<td>- Enterprise resource planning software ($1.1 million)</td>
</tr>
<tr>
<td></td>
<td>- Transmission projects ($68 thousand)</td>
</tr>
<tr>
<td><strong>Accretion expense $1.1 million</strong></td>
<td>- GASB 62 board approved accounting policy</td>
</tr>
<tr>
<td></td>
<td>- Craig decommissioning study updated</td>
</tr>
<tr>
<td></td>
<td>- Impacts net income</td>
</tr>
<tr>
<td><strong>Overall results</strong></td>
<td>- Increase in operating expenses $7 million</td>
</tr>
<tr>
<td></td>
<td>- Decrease in capital additions $11 thousand</td>
</tr>
<tr>
<td></td>
<td>- Increase in contingency $1 million</td>
</tr>
<tr>
<td></td>
<td>- Decrease in accretion expense $1.1 million</td>
</tr>
</tbody>
</table>

favorable/(unfavorable) change
Budget changes - coal prices

- Increase due to
  - Primarily natural gas prices
  - Demand with an overall increase in burns
  - Low inventory levels
    - Coal producers scaled back reducing supply due to less demand and COVID-19
  - Saving coal for winter
  - Expect prices to normalize
  - Rawhide Unit 1 coal price
    - Weekly index price is a component
    - Price locking opportunities
    - Increase not as significant due to averaging

Increase from 2021 forecast to 2022 budget: 23%

Argus weekly coal price

Increase from 9/8 to 11/24
2022: 126%
2023: 32%

Rawhide Unit 1 coal price (delivered)

Increase from 2021 forecast to 2022 budget: 23%
Financial results

<table>
<thead>
<tr>
<th>Budget results ($ millions)</th>
<th>2022 budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>$ 263.2</td>
</tr>
<tr>
<td>Total expenditures</td>
<td>$ 256.4</td>
</tr>
<tr>
<td>Board contingency</td>
<td>$ 24.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic financial plan indicators</th>
<th>Target minimums</th>
<th>2022 budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income ($ millions)</td>
<td>3% of projected operating expenses*</td>
<td>$ 13.7</td>
</tr>
<tr>
<td>Fixed obligation charge coverage ratio</td>
<td>1.50x</td>
<td>2.03x</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>&lt; 50%</td>
<td>28%</td>
</tr>
<tr>
<td>Unrestricted days cash on hand</td>
<td>200</td>
<td>381</td>
</tr>
<tr>
<td>Rate increase</td>
<td>3.2%</td>
<td></td>
</tr>
</tbody>
</table>

* 3% of projected operating expenses for 2022 is $6.3 M.
## Highlights – 2022 Strategic Budget

**Strategic initiatives**
- Energy efficiency and program expansion
- Public engagement and communications
  - new strategic plan
  - electric vehicle microsite
- Resource planning
  - planning for new resources
  - DER
  - operational flexibility
- Organized energy market evaluation
- Infrastructure advancement
  - enterprise resource planning
  - control systems
  - airflow spoilers

**Core operations**
- Baseload and peaking generation, transmission
- PPAs for existing renewable resources & hydropower
- Predictive maintenance
- Proactive capital investments to maintain reliability, efficiency and environmental compliance

**Revenues $263.2 million**
- Increase in owner community loads
- Increase in sales for resale
- 3.2% rate increase

---

**Platte River’s core pillars**

- **Reliability**
- **Environmental responsibility**
- **Financial sustainability**

**Operating expenses and capital additions: $238.6 million**

---

**2022 budget for approval: $280.4 million**
Inside Information community survey
Dec. 9, 2021
Customer survey results

2021
Respondents

Response density

Residential

Commercial
Awareness and opinions
Aware Platte River owned by communities

- Yes: Residential 43%, Commercial 51%
- No: Residential 57%, Commercial 49%
### Opinion of Platte River

#### Residential

<table>
<thead>
<tr>
<th></th>
<th>Somewhat/very favorable</th>
<th>Not at all favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>50%</td>
<td>3%</td>
</tr>
<tr>
<td>2021</td>
<td>49%</td>
<td>5%</td>
</tr>
</tbody>
</table>

#### Commercial

<table>
<thead>
<tr>
<th></th>
<th>Somewhat/very favorable</th>
<th>Not at all favorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>51%</td>
<td>2%</td>
</tr>
<tr>
<td>2021</td>
<td>50%</td>
<td>5%</td>
</tr>
</tbody>
</table>

#### Average

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>7.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Commercial</td>
<td>7.3</td>
<td>7.0</td>
</tr>
</tbody>
</table>
Aware Platte River’s noncarbon energy goal

- Yes:
  - Residential: 34%
  - Commercial: 38%

- No:
  - Residential: 66%
  - Commercial: 62%
Measures supported to achieve noncarbon goals - residential

- **Switch to an electric vehicle**
  - Already have/use: 8%
  - Likely to: 29%
  - Support but not likely to: 42%
  - Don't support: 18%

- **Add rooftop solar**
  - Already have/use: 7%
  - Likely to: 28%
  - Support but not likely to: 57%
  - Don't support: 8%

- **Add energy storage (batteries)**
  - Already have/use: 2%
  - Likely to: 26%
  - Support but not likely to: 59%
  - Don't support: 13%

- **Use the Efficiency Works program**
  - Already have/use: 12%
  - Likely to: 40%
  - Support but not likely to: 37%
  - Don't support: 11%

- **Find other ways to make my home energy efficient**
  - Already have/use: 25%
  - Likely to: 60%
  - Support but not likely to: 13%
  - Don't support: 3%
Measures supported to achieve noncarbon goals – commercial

- **Switch to an electric vehicle for company use**
  - Already have/use: 8%
  - Likely to …: 22%
  - Support but not likely to …: 24%
  - Don't support: 46%

- **Add rooftop solar**
  - Already have/use: 7%
  - Likely to …: 27%
  - Support but not likely to …: 12%
  - Don't support: 53%

- **Add energy storage (batteries)**
  - Already have/use: 3%
  - Likely to …: 24%
  - Support but not likely to …: 15%
  - Don't support: 58%

- **Use the Efficiency Works program**
  - Already have/use: 17%
  - Likely to …: 37%
  - Support but not likely to …: 13%
  - Don't support: 34%

- **Find other ways to make this business energy efficient**
  - Already have/use: 5%
  - Likely to …: 28%
  - Support but not likely to …: 18%
  - Don't support: 49%
Trend of service characteristics importance - residential

- Low cost
- Reliable service
- Noncarbon resources

Average on 10-point scale:
- 2018: 8.0, 9.2, 7.7
- 2020: 7.8, 9.0, 7.4
- 2021: 8.3, 9.6, 7.1
Trend of service characteristics importance - commercial

Average on 10-point scale
Additional monthly amount willing to pay for energy from renewable resources - residential

- $5-$10 per month: 35% (2018), 32% (2021)
- $11-$20 per month: 16% (2018), 19% (2021)
- $21-$30 per month: 5% (2018), 7% (2021)
- More than $30/month: 4% (2018), 7% (2021)
- Not willing to pay more: 40% (2018), 36% (2021)
Additional monthly amount willing to pay for energy from renewable resources - commercial

- 1% to 5% per month: 29% in 2018, 24% in 2021
- 6% to 10% per month: 14% in 2018, 15% in 2021
- 11% to 20% per month: 4% in 2018, 6% in 2021
- More than 20% per month: 2% in 2018, 3% in 2021
- Not willing to pay more/unsure: 50% in 2018, 52% in 2021
Concerned about Rawhide workforce transition
Demographics
Demographics

Typical residential survey response
- Middle age
- Own (single family, detached) home
- Live in home with partner
- Highly educated
- Strong personal earnings
- May have moved to area in last 10 years

<table>
<thead>
<tr>
<th>Length of utility service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;30 years</td>
<td>15%</td>
</tr>
<tr>
<td>21 - 30 years</td>
<td>14%</td>
</tr>
<tr>
<td>11 - 20 years</td>
<td>20%</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>17%</td>
</tr>
<tr>
<td>1 - 5 years</td>
<td>27%</td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>7%</td>
</tr>
</tbody>
</table>
Firmographics

Typical business survey response

- 10 or fewer employees
- Annual revenue $500,000 or less
- Electricity is 15% or less of total expenditures for most businesses
Questions
Power market analysis update

Dec. 9, 2021
Agenda

• Historical timeline of western power markets
• Current landscape
• Short-term plan
• Long-term options
• Summary
Timeline of western markets

2000-2013
IndeGO, RTO West, Grid West, Desert Star, the Northwest Power Pool’s Market Assessment and Coordination Committee forms

2013
Mountain West Transmission Group (MWTG) coordination begins and issues a request for proposals

2014
CAISO Western Energy Imbalance Market (WEIM) starts

2018
PSCo withdraws from MWTG

2019
Platte River, PSCo*, Black Hills and CSU** announce intention to join WEIM

Q2 2021
SPP Western Energy Imbalance Services (WEIS) starts; CSU elects to join WEIS

Q4 2021
Platte River, PSCo*, Black Hills and CSU** announce intention to join WEIS

*Public Service Company of Colorado (PSCo)
**Colorado Springs Utilities (CSU)
Current landscape

PSCo balancing authority (BA)

- Consists of PSCo, Platte River, Black Hills and Colorado Springs Utilities (CSU)
- Parties are required to sign onto Western Joint Dispatch Agreement (WJDA) to join WEIS
- In May, CSU announced plans to join WAPA BA in order to join the SPP RTO West
  - Last month, CSU expressed interest in remaining in the PSCo BA if it joins WEIS
- PSCo BA charges include Schedule 16 for flex reserves
  - Purpose is to charge for capacity reserved to balance wind
  - Schedule 16 charges to Platte River are estimated to be $3.5M per year
  - Platte River has been working with PSCo to develop a flex reserve self-supply option which reduces flex reserve costs
Current landscape

Existing SPP Western Energy Imbalance System (WEIS)

- Consists of WAPA, Tri-State G&T, Basin Electric Power Cooperative, Municipal Energy Agency of Nebraska (MEAN), Wyoming Municipal Power Agency and Deseret Power Electric Cooperative
- WEIS is a real-time market similar to the current joint dispatch agreement in the PSCo BA
- In 2025, existing members plan to transition to SPP RTO West with the following capabilities
  - Two-day market including financially binding day-ahead and real-time markets
  - Co-optimization of ancillary services
  - Regional transmission planning
  - Day-ahead unit commitment and reliability assessment
  - Congestion hedging
Current landscape

Western Market Exploratory Group (WMEG)

• Includes several utilities across the western interconnect including Platte River, PSCo, Black Hills, Arizona Public Service, PacifiCorp, NV Energy, Idaho Power and Salt River Project

• Platte River is participating as WMEG may be a valid market option in the future

• Group discussions are focused on “long-term solutions to improve market efficiencies in the West”

• An RFP has been issued for consulting services to facilitate the development of a market

• Guiding principles of the group include the following
  • Must produce overall cost benefits
  • Resource adequacy as a reserve margin requirement
  • Centralized transmission planning
  • Governance based on open and inclusive stakeholder process
Forecasted western markets development

- **Q4 2021**: WMEG announced; PSCo BA participants sign WJDA
- **Q3 2022**: WMEG market design straw proposal due
- **Q2 2023**: PSCo BA joins SPP WEIS market
- **Q2 2025**: SPP launches RTO West

- **Q1 2022**: WMEG begins market design development
- **Q1 2023**: WMEG cost/benefit analysis due
Short-term plan

Stay with the PSCo BA to join SPP WEIS in spring 2023

- Contingent on resolving self-supply of flex reserves
- Alternative is to switch to the WAPA BA to participate in SPP WEIS
- Avoids overstretching resources
  - Staff is tackling several large projects in 2022
  - Moving to another BA while keeping other projects on time and within budget would be extremely difficult
Long-term options

Stay with PSCo BA and remain in WEIS after SPP RTO West goes live
- Preserves optionality to join SPP RTO West or other RTO that may develop
- Creates a market seam between WEIS and SPP RTO West
- PSCo and Black Hills do not plan to join SPP RTO West
- Does not provide a common transmission tariff or address transmission cost allocation risk

Move to WAPA BA and join SPP RTO West when it goes live, 2025 projection
- Eliminates transmission costs of $2.8M associated with the Spring Canyon wind farm
- Mitigates risk of an excessive transmission cost allocation
- Reduces requirements for flex reserve capacity to balance renewables

Join WMEG market solution
- Dependent on the final market construct
Summary

• Platte River will remain in the PSCo BA to participate in the SPP WEIS market
  • WEIS will go-live spring 2023
  • Staff will be focused on training and building new processes in preparation for market entry

• In 2022, Platte River will enter discussions with SPP to determine the value and risks associated with exiting the PSCo BA to join the SPP RTO West in 2025
  • Goal is to decide on SPP RTO West membership by Q3 2022
  • Electing to join before 2025 will allow Platte River to participate in market development

• Concurrently, Platte River will monitor WMEG market development
  • It will be many years before WMEG will be ready to go live
Questions
Board of directors

Dec. 9, 2021
Preview of board work session

Dec. 9, 2021
Agenda

• Planning process
• Board work session
• Next steps
Strategic planning process

- Draft workplan
- Conduct needs assessment / environmental scan
- Hold facilitated planning sessions, including **board work session**
- Engage stakeholders
- Draft strategic plan, including process for tracking and reporting
Board work session

• Where we are and how we got here
  • Achievements
  • Opportunities
  • Challenges

• Goal: to lay the foundation for understanding how best to move forward as one organization comprised of five utilities with sometimes competing priorities and different resources/programs
Next steps

- Finalize strategic planning timeline and workplan with consultant
- Consultant to gather background information
- Set board work session
Questions
Board of directors

Dec. 9, 2021
### October operational results

<table>
<thead>
<tr>
<th>Category</th>
<th>October variance</th>
<th>YTD variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal demand</td>
<td>(2.0%)</td>
<td>3.5%</td>
</tr>
<tr>
<td>Municipal energy</td>
<td>(1.0%)</td>
<td>5.2%</td>
</tr>
<tr>
<td>Baseload generation</td>
<td>94.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Wind generation</td>
<td>(7.9%)</td>
<td>(14.7%)</td>
</tr>
<tr>
<td>Solar generation</td>
<td>(14.0%)</td>
<td>(8.5%)</td>
</tr>
<tr>
<td>Surplus sales volume</td>
<td>(33.4%)</td>
<td>(9.5%)</td>
</tr>
<tr>
<td>Surplus sales price</td>
<td>63.6%</td>
<td>70.1%</td>
</tr>
<tr>
<td>Purchase volume</td>
<td>(59.7%)</td>
<td>(14.4%)</td>
</tr>
<tr>
<td>Purchase price</td>
<td>93.2%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Dispatch cost</td>
<td>13.7%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

**Variance key:** Favorable: ◆ >2% | Near budget: ◆ +/- 2% | Unfavorable: ■ <-2%
## Financial summary

<table>
<thead>
<tr>
<th>Category</th>
<th>October variance from budget ($ in millions)</th>
<th>Year to date variance from budget ($ in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$(1.0)</td>
<td>$18.6</td>
</tr>
<tr>
<td>Fixed obligation charge coverage</td>
<td>(.23x)</td>
<td>.83x</td>
</tr>
<tr>
<td>Revenues</td>
<td>---</td>
<td>$21.5</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>$(0.7)</td>
<td>$(1.5)</td>
</tr>
<tr>
<td>Capital additions</td>
<td>$1.2</td>
<td>$12.2</td>
</tr>
</tbody>
</table>

> 2% ● Favorable  | 2% to -2% ◆ At or near budget  | < -2% ■ Unfavorable
Board of directors

Dec. 9, 2021