Strengthening Financial Health
Capital Financing Workshop

May 22, 2018
9am-12pm
BPA Rates Hearing Room, 1201 Lloyd Blvd, Suite 200
Portland OR
Phone Bridge: 415-527-5035

WebEx: [Join the meeting](#)
Meeting Number: 902 948 122
Meeting Password: SXYpqHgE
Agenda

• Review the Financial Plan and the 10-Year Capital Financing goal

• Defining the Access to Capital Financing Challenge

• Review “All of the Above” Identified Individual Options

•Potential Combination Solutions
Financial Plan and the 10-Year Capital Financing Goal
Financial Health Objectives

COST MANAGEMENT
Maintain low rates; enhance asset value and reliability

DEBT UTILIZATION
Reduce interest expense; maintain financial flexibility

DEBT CAPACITY
Maintain access to secure and low-cost debt financing

LIQUIDITY
Maintain financial reserves for solvency and stability
THE THREE KEY FINANCIAL HEALTH OBJECTIVES ARE:

<table>
<thead>
<tr>
<th>Financial Health Objective</th>
<th>Purpose</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Management Discipline:</td>
<td>Lowest possible rates</td>
<td>Rate-period change in program costs</td>
</tr>
<tr>
<td>• Program Costs</td>
<td>Maintain value and reliability of assets</td>
<td>Leading industry-standard asset management</td>
</tr>
<tr>
<td>• Capital Investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Resiliency:</td>
<td>Solvency and stability</td>
<td>Days cash on hand and Treasury payment probability</td>
</tr>
<tr>
<td>• Liquidity</td>
<td>Low interest expense and financial flexibility</td>
<td>Debt-to-asset ratio</td>
</tr>
<tr>
<td>• Debt Utilization</td>
<td>Secure and low-cost debt financing available to fund capital program</td>
<td>Remaining borrowing authority</td>
</tr>
<tr>
<td>• Debt Capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent financial health assessment</td>
<td>Maintain high investment-grade credit ratings</td>
<td>Credit rating</td>
</tr>
</tbody>
</table>
Financial Health Priorities

• Cost Management Discipline

• Financial Resiliency
  – Liquidity
    • Increase Power reserves to minimum 60 days cash on hand, maintain Transmission and Agency financial reserves at minimum 60 days cash on hand.
    • Maintain a minimum of 95% Treasury payment probability when setting Power and Transmission rates.
    • Repurpose excess Transmission reserves as the Agency attains a healthy level.
  – Debt Utilization (Leverage)
    • Decrease debt-to-asset ratio from 90% to 75%-85% by 2028, longer-term goal of 60%-70%.
    • Would require the Transmission business line to increase the amount of planned debt repayment or revenue financing.
  – Debt Capacity
    • Source remaining debt as needed to fund the capital program, within leverage goals
    • Maintain $1.5 billion in available borrowing authority.
Strategic Plan Debt Capacity Objective

• “...needs are met on a rolling 10-year basis...”

• “…intends to preserve $1.5 billion of available borrowing authority...”

• “…look beyond its traditional financing sources and consider ‘all of the above’ capital financing strategy...”

• “Each possible source of additional capital has its limitations, and BPA will evaluate them within the context of their cost, certainty and impacts on other stated financial health goals.”
Defining the Access to Capital Financing Challenge
The Leverage Policy preferred scenario stabilizes the federal borrowing challenge but does not satisfy the $1.5 billion of access to borrowing authority objective in the Strategic and Financial Plans.

Key critical dates for remaining available borrowing authority
- $1.5b remaining – 2021
- $750m remaining – 2023
- $0 remaining – 2027

Current capital assumptions used in modeling
- Power: BP-18
- Transmission: BP-20 pre-IPR capital guidance
“All of the Above”
Identified Individual Options
“All of the Above” Strategy

Financial Plan

– Legislative action
  • Additional borrowing authority
  • Authority to issue debt directly to capital markets

– Current available U.S. Treasury borrowing authority
– Reserve financing
– Lease-Purchase program
– Revenue financing
– Regional Cooperation Debt program (RCD)

Other Options not mentioned in the Financial Plan

– Reduce planned capital spending levels
– Non-federal Transmission asset ownership with BPA entering into Capacity Leases
### Estimated Cost Comparison by Source

<table>
<thead>
<tr>
<th>Source</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasury borrowing authority</td>
<td>2.8%</td>
</tr>
<tr>
<td>Reserve Financing</td>
<td>No Interest Rate</td>
</tr>
<tr>
<td>Lease Purchase</td>
<td>3.6% &amp; Auxiliary Fees</td>
</tr>
<tr>
<td>Revenue Financing</td>
<td>No Interest Rate</td>
</tr>
<tr>
<td>Energy Northwest (RCD)</td>
<td>2.7% - 3.6%</td>
</tr>
<tr>
<td>Power Prepays</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

*Interest rates are based on a recent 2-month average.*
Legislative Solutions

• Additional borrowing authority
  – Congress first authorized BPA to borrow from U.S. Treasury (borrowing authority) when it passed the Transmission System Act in 1974.
  – Further increases to BPA’s borrowing authority would require Congress to enact new legislation authorizing the increase.
    • New borrowing authority would “score” if enacted during the 10 year budget window creating procedure hurdles.
    • Actual voting to enact such new authority would be considered a “discretionary” budget action and be subject to budget “pay as you go” (“pay-go”) points of order unless these rules are suspended.
  – The President would have to sign any legislation into Federal law.

• Direct market access
  – As with additional borrowing authority, Congress would have to enact legislation changing to BPA’s authorities to allow BPA to directly sell securities in the private market.
  – Federal law would also have to be changed to allow a higher level of overall debt for BPA.
  – Like additional borrowing authority, direct market access would score and, therefore, encounter the same procedural hurdles described above.
  – The President would also have to sign this legislation into Federal law.
  – BPA statutes since 1974 reflect long-standing U.S. Treasury policy that BPA is its customer and should not directly access financial.
Reserve Policy

Existing Reserve Policy Framework

- 60 days cash on hand* lower threshold for each business line
- 120 days cash on hand* upper threshold for each business line
- 90 days cash on hand* upper threshold for the Agency
- Business line and the Agency need to be above upper thresholds before a possible Reserves Distribution Clause (RDC) is triggered to repurpose financial reserves

* Includes Deferred Borrowing

Legend

- FY2017 Reserves for Risk
- Previous policy
- Deadband, no action
- CRAC

Pre-decisional; For Discussion Purposes Only
Potential Reserves Availability for Use

The graph and table above display potential values without regard to risk factors.

- The Reserves Distribution Clause is not expected to trigger until 2022.
  - In the event of an RDC, funds may be used for other high-value business line-specific purposes including, but not limited to, debt retirement, incremental capital investment or rate reduction.

*Annual amounts based on BP-18 Final Proposal and BPA draft Financial Reserves phase-in proposal
Lease-Purchase

• Goal is to Lease-Purchase as many Transmission projects as possible however, the forecast assumption is 25% of capital spending due to program constraints.

• Constraints of the program include
  – Funding is only available for Transmission capital assets in Oregon, Washington, and Idaho.
  – Assets must be physical plant (fixtures, no land or access roads).
  – Title/ownership of assets must transfer directly to third party owner (no sale lease-backs).
  – BPA must be able to relay access rights to assets to third party owner (no assets at foreign owned sites).

• Estimated costs of the program
  – Utilizes approximately 8.5 FTE spread over 26 people.
  – Approximately $500k per year in third party operating costs.
  – Requires additional processes and procedures for both internally and contracted construction work that adds additional costs not included above.
Additional Revenue Financing

• Revenue financing increases the revenue requirement to generate sufficient additional funds to pay for some or all of the expected capital spending within a rate period.

• This is in addition to the amount of cash required to cover all other costs included in the Revenue Requirement.

• In the context of the 10-Year Capital Financing Plan this revenue financing would be in addition to the level required under the Leverage Policy preferred scenario.
Revenue Financing Scenarios

BPA misses the $1.5 billion borrowing authority availability objective in 2030 by $1.6 billion after including the benefits of the Leverage Policy preferred scenario.

- Key critical dates for remaining available borrowing authority
  - $1.5b remaining – 2021
  - $750m remaining – 2023
  - $0 remaining – 2027
Potential Revenue Financing Scenarios

In 2030, BPA misses the $1.5 billion target by $1.6 billion.

<table>
<thead>
<tr>
<th>(millions)</th>
<th>50/50</th>
<th>Percent of Future Capital Spend</th>
<th>Net Use of Borrowing Authority</th>
<th>Net Use of Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>$800</td>
<td>$736</td>
<td>$1,296</td>
<td>$0</td>
</tr>
<tr>
<td>Transmission</td>
<td>$800</td>
<td>$864</td>
<td>$304</td>
<td>$1,600</td>
</tr>
<tr>
<td>Total Shortage</td>
<td>$1,600</td>
<td>$1,600</td>
<td>$1,600</td>
<td>$1,600</td>
</tr>
</tbody>
</table>

**Impact on leverage ratio in 2030**

<table>
<thead>
<tr>
<th></th>
<th>Power</th>
<th>Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>72%</td>
<td>66%</td>
</tr>
<tr>
<td>Transmission</td>
<td>72%</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td>69%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Pre-decisional; For Discussion Purposes Only
RCD Program Potential

- Under current net billing agreements:
  - BPA expects to send almost $8.2 billion to Energy Northwest through 2030.
  - This includes funding for principal, interest, fuel, and O&M.

- These funds could be repurposed for borrowing capacity through the RCD program.
  - This would require approval from the Energy Northwest’s Board to extend Project 1 and 3 debt beyond 2028.

- The ability to finance through Energy Northwest is finite.
  - Once a payment is made to Energy Northwest for any funding requirement noted above, it cannot be repurposed to fund capital at a later date.

- The actual amounts repurposed would be driven by and fluctuate based on:
  - Capital needs as determined through the public IPR process.
  - Available capital sources as presented in the 10-Year Capital Financing Plan public workshop.
RCD Opportunities

• **Extend** the use of the current RCD program that is set to expire in 2020.
  - Principal debt maturing associated with Project 1, Columbia Generating Station, and Project 3.

• **Expand** the RCD program to include other Energy Northwest obligations.
  - Other funding sources that BPA is obligated to send to Energy Northwest cover fuel costs, interest expense, and O&M.
  - Risk mitigation and flexibility for changes in future capital requirements.
  - The maximum maturity date will influence the value of this tool.

• Currently modeled to have a final maturity of 2044 however a maturity date past 2044 would allow further repayment optimization.

• Repurposed funds would be utilized dollar for dollar to reduce outstanding debt.
## RCD Financing Sources and Uses

### Sources

<table>
<thead>
<tr>
<th>(millions)</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extend</td>
<td>$0</td>
<td>$319</td>
<td>$337</td>
<td>$337</td>
<td>$316</td>
<td>$375</td>
<td>$400</td>
<td>$368</td>
<td>$397</td>
<td>$84</td>
<td>$129</td>
<td>$3,062</td>
</tr>
<tr>
<td>Expand</td>
<td>$561</td>
<td>$582</td>
<td>$534</td>
<td>$489</td>
<td>$490</td>
<td>$457</td>
<td>$420</td>
<td>$444</td>
<td>$384</td>
<td>$413</td>
<td>$360</td>
<td>$5,134</td>
</tr>
<tr>
<td>Total</td>
<td>$561</td>
<td>$901</td>
<td>$871</td>
<td>$826</td>
<td>$806</td>
<td>$832</td>
<td>$820</td>
<td>$812</td>
<td>$781</td>
<td>$497</td>
<td>$489</td>
<td>$8,196</td>
</tr>
</tbody>
</table>

### Uses

<table>
<thead>
<tr>
<th></th>
<th>Extend</th>
<th>Expand</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-Year Financing Plan</td>
<td>$1,633 - $3,062</td>
<td>$0</td>
</tr>
<tr>
<td>Lease-Purchase program (future only)</td>
<td>$0</td>
<td>$1,360</td>
</tr>
<tr>
<td>Changes in capital/excess capacity</td>
<td>$0 - $1,429</td>
<td>$3,774</td>
</tr>
<tr>
<td>Total</td>
<td>$3,062</td>
<td>$5,134</td>
</tr>
</tbody>
</table>

Note: Does not include the EN 2018 C/D transaction.
Access to Capital Challenge

Forecast assumes all RCD debt is paid off by 2044

Remaining Borrowing Authority

Agency Debt to Asset Ratio *

* The forecast Debt to Asset Ratio may vary from results presented in the Leverage Policy workshops as assumptions are updated over time.

There would be no adverse impact to the debt ratio as BPA would make the commitment to pay down federal debt dollar for dollar.
Leverage Ratios

Forecast assumes all RCD debt is paid off by 2044

Power *

Transmission *

* The forecast Debt to Asset Ratio may vary from results presented in the Leverage Policy workshops as assumptions are updated over time.
Non-Federal Asset Ownership

• Areas of consideration
  – Location of asset to be built
    • “Pancake” rates
    • Access to land
  – Agreement structure
    • Financing lease versus capacity agreement
    • Asset ownership
      – Preference for complete foreign ownership for life of asset
    • Operations and maintenance
      – Operationally responsible
      – Financially responsible
  – Risks
    • Credit risk of foreign owner
    • Cost risk and stability
      – Not to exceed agreements
      – Known escalations for O&M
  – Impact on financial objectives
    • Debt-to-asset ratio
    • Borrowing authority
    • Cost management
Changes in Capital Levels

- With the current assumptions, the Capital Financing Challenge is $1.6 billion to meet the 10-year target.
- Final capital spending will be determined through the public IPR process.
- Changes in capital spending levels will impact the 10-year Access to Capital plan.
- Actual Access to Capital challenge may change due to repayment results.

**Forecast Capital Spending**

- **Power**: $4.4 billion
- **Transmission**: $5.5 billion
- **Agency**: $9.9 billion

**Access to Capital Challenge**

- **Plus 20%**
- **Plus 10%**
- **Less 10%**
- **Less 20%**

Current capital assumptions used in modeling:
- Power: BP-18
- Transmission: BP-20 pre-IPR capital guidance

Pre-decisional; For Discussion Purposes Only
## Summary of Potential Tools

<table>
<thead>
<tr>
<th>Financing Tool</th>
<th>Estimated Cost</th>
<th>Certainty</th>
<th>Impact on other financial health goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>New borrowing authority</td>
<td>2.8%</td>
<td>Congressional approval required</td>
<td>Objective to retain $1.5b available</td>
</tr>
<tr>
<td>Reserve financing</td>
<td>No interest rate</td>
<td>Constrained by Reserve Policy</td>
<td>Not available until targets in Reserve Policy are met</td>
</tr>
<tr>
<td>Lease-Purchase</td>
<td>Transmission only</td>
<td>Forecast target of 25%</td>
<td>Would preserve borrowing authority</td>
</tr>
<tr>
<td>Revenue financing</td>
<td>No interest rate</td>
<td>Availability in BP-20 uncertain</td>
<td>Would improve the debt to asset ratio</td>
</tr>
<tr>
<td>RCD</td>
<td>2.7% - 3.6%</td>
<td>Requires Energy Northwest Board agreement, constrained by maximum maturity and availability of extend and expand options</td>
<td>Would be within the constraints of the Leverage Policy</td>
</tr>
<tr>
<td>Non-federal asset ownership</td>
<td>Negotiated</td>
<td>Unknown</td>
<td>Would preserve borrowing authority</td>
</tr>
<tr>
<td>Capital Spending reductions</td>
<td>Determined through IPR public process</td>
<td>Determined through IPR public process</td>
<td>Would preserve borrowing authority</td>
</tr>
</tbody>
</table>
Potential Combination Solutions
Extension – RCD Only

1. Full Extension ($3.1 billion)
   - Satisfies the 10-year financing goal
   - Maintains full flexibility
   - Defers future discussions on
     - Non-federal asset ownership
     - Revenue financing amounts between Power and Transmission

2. Minimal Extension ($1.6 billion)
   - Satisfies the 10-year financing goal
   - Does not provide for changes in capital levels
   - Defers future discussions on
     - Non-federal asset ownership
     - Revenue financing amounts between Power and Transmission
Expansion – RCD Only

3. **Full Expansion ($5.1 billion)**
   - Assumes extension and 10-year financing goal have been satisfied
   - Eliminates Lease-Purchase program if the maximum maturity is post-2044
   - Helps cost management efforts due to lower costs than the Lease-Purchase program
   - Defers future discussions on
     - Non-federal asset ownership
     - Revenue Financing amounts between Power and Transmission

4. **Minimal Expansion ($1.4 billion)**
   - Assumes extension and 10-year financing goal have been satisfied
   - Mitigates future Lease-Purchase program execution risk if the maximum maturity is post-2044
   - Helps cost management efforts due to lower costs than the Lease-Purchase program
   - Defers future discussions on
     - Non-federal asset ownership
     - Revenue financing amounts between Power and Transmission
Combination of Available Tools

5. **Evenly distribute $1.6 billion challenge between available tools**

- RCD ~$533 million by 2030
- Capital Reductions ~$533 million by 2030 +/- actual capital numbers set in BP-20 IPR
- Additional revenue financing ~$533 million by 2030

6. **RCD + Capital Constraints + Additional Revenue Financing**

- RCD amount would fluctuate up or down based on the level of revenue financing approved to maintain $1.5 billion of borrowing authority
- Future capital reduction of 10-20% ~$1 - 2 billion by 2030 +/- actual capital numbers set in BP-20 IPR
- Revenue finance remaining shortage to meet the 10-year Capital Plan
Combination of Available Tools cont.

7. *RCD + Capital Constraints*

- Future capital reduction of 10-20% ~$1 - 2 billion by 2030 +/- actual capital numbers set in IPR
- RCD ~$0 - 650 million approval to maintain $1.5 billion of borrowing authority

8. *Capital Constraints + Additional Revenue Financing*

- Future capital reduction of 10-20% ~$1 - 2 billion by 2030 +/- actual capital numbers set in IPR
- Revenue finance ~$0 - 650 million by 2030

9. *Other*
Considerations and Constraints

• Capital spending forecasts are uncertain

• Revenue financing and capital levels
  – Realistic Level (achievable and sustainable)
    • Revenue Financing
    • Capital Reductions
  – Shaping
    • Front Loaded
    • Evenly spread
    • Back Loaded
  – Implementation
    • BP-20
    • BP-22
Preferred Scenario

• *Hybrid of Scenario 2 - RCD Minimal extension* ($1.6 billion)

  – Additional extensions of RCD principal maturing through 2025 with a maximum maturity date of 2044

  – Actual amount and final year will fluctuate to maintain $1.5 billion of available borrowing authority based on:
    • Actual capital spend
    • Other available tools under consideration
      – Customer non-federal financing – level would decrease
      – Lease-Purchase actuals – level would increase or decrease
      – Revised capital forecast – level would increase or decrease
      – Additional revenue financing – level would decrease

• Implementation would require support and approval from the Energy Northwest Board
Summary

- The leverage policy stabilizes the Access to Capital Challenge but does not mitigate it.

- Current forecasts reflect the need of approximately $1.6 billion of additional sources of capital to achieve the 10-year objective.

- Long-term sources of capital will be needed without maximum maturity dates to provide planning flexibility.

- As described in the Strategic and Financial Plans, BPA is considering “all of the above” in developing a capital financing strategy.

- All financing tools are being evaluated based on cost, likelihood, and interdependence with other financial health goals.

- Appropriate capital spending levels will be determined through the public IPR process.

- Capital financing tools will be informed by the IPR results.

- BPA continues to explore both Extend and Expand options under the Regional Cooperation Debt program.
Next Steps

• Comment period open through July 13.
  – Submit comments via email to:
    BPAFinance@bpa.gov

• BPA is seeking input on potential financing sources including, but not limited to:
  – RCD Support
    • Extend and/or Expand
    • Amount
  – Combination of tools
    • Considering described constraints
  – Possible alternative sources of financing

• Continue to discuss potential RCD scenarios with Energy Northwest leading to a July decision

• Potential early August workshop on other alternatives to achieve the 10-year goal.
Helpful Links

- BPA 2018-2023 Strategic Plan
  - https://www.bpa.gov/StrategicPlan/Pages/Strategic-Plan.aspx

- BPA 2018 Financial Plan
  - https://www.bpa.gov/StrategicPlan/Pages/Strategic-Plan.aspx

- 2018 Integrated Program Review
Financial Disclosure

This information was publicly available on May 22, 2018 and contains information not sourced directly from BPA financial statements.