BP-20 Rate Case Workshop: Revenue Requirement

July 25, 2018
Overview

- Issues, Assumptions & Updates
- Financial Statements
Issues, Assumption & Updates

Topics
Display of RCD Transactions
Lease Accounting
Transmission Depreciation & Amortization Expense
Leverage Policy
Capital Financing Assumptions
Transmission Replacements
Other Transmission Refinements
Follow-Up on LGIA Impacts
Direct Display of RCD Transactions

- RCD transactions were indirectly included in BP-16 and BP-18.
  - BPA was concerned that it would be committed to a large Treasury payment in the event the RCD refinancing did not occur.
  - The effect of RCD transactions was calculated and included in the revenue requirement, the “RCD Effect.”
  - The RCD Effect forces the revenue requirement to the same total as if the RCD transactions had been forecast.

<table>
<thead>
<tr>
<th>Calculating the RCD Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>($000s)</td>
</tr>
<tr>
<td>1 Non-Federal Debt Service</td>
</tr>
<tr>
<td>2 Depreciation</td>
</tr>
<tr>
<td>3 Amortization</td>
</tr>
<tr>
<td>4 Federal Net Interest</td>
</tr>
<tr>
<td>6 Total</td>
</tr>
</tbody>
</table>
Direct Display of RCD Transactions, continued

- Staff propose to directly display any projected RCD transactions in the rate case.
  - Staff propose to bifurcate the Treasury payment. The base payment is the one that BPA commits to in the rate case. This is the payment that counts for a Treasury payment miss. On top of this would be a conditional payment that would only occur if the RCD transactions occur.
  - BPA and EN have a long history of successfully completing refinancings.
  - BPA and EN have significant experience with lines of credit in the event that we are not able to get to market exactly when desired.

- Directly displaying the RCD transactions produces the same total revenue requirement as the current indirect method.

- Impact on BP-20: Minimal at this point. The only RCD transaction anticipated today is a 2020 refinancing to repay of a line of credit expected to be issued in 2019. No RCD2 transactions have been approved although there are discussions underway.
Direct Display of RCD Transactions, continued

- The use of the RCD Effect resulted in rate case forecasts that looked nothing like operating year forecasts or actual results.
- Directly displaying RCD transactions in the revenue requirement will make rate case forecasts more comparable to the operating year.

<table>
<thead>
<tr>
<th>Operating Revenues</th>
<th>Rate Case</th>
<th>Rate Case w/ Explicit RCD Display</th>
<th>SOY Budget</th>
<th>Current EOY Forecast</th>
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</thead>
<tbody>
<tr>
<td>Gross Sales (excluding bookout adjustment)</td>
<td>$2,592,707</td>
<td>$2,592,707</td>
<td>$2,603,397</td>
<td>$2,610,751</td>
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<tr>
<td>Subtotal Power System Generation Resources</td>
<td>1,234,066</td>
<td>1,234,066</td>
<td>1,237,481</td>
<td>1,224,363</td>
</tr>
<tr>
<td>Other Income, Expenses &amp; Adjustments</td>
<td>(128,728)</td>
<td>(10,000)</td>
<td>(10,000)</td>
<td>(4,199)</td>
</tr>
<tr>
<td>Non-Federal Debt Service</td>
<td>490,552</td>
<td>250,530</td>
<td>258,344</td>
<td>256,091</td>
</tr>
<tr>
<td>Depreciation &amp; Amortization</td>
<td>230,898</td>
<td>230,888</td>
<td>230,888</td>
<td>226,339</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>2,533,417</td>
<td>2,412,113</td>
<td>2,425,931</td>
<td>2,411,299</td>
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<tr>
<td>Net Operating Revenues (Expenses)</td>
<td>293,995</td>
<td>415,299</td>
<td>417,233</td>
<td>430,099</td>
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<tr>
<td>Interest Expense and (Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest Expense</td>
<td>105,435</td>
<td>99,502</td>
<td>85,763</td>
<td>89,608</td>
</tr>
<tr>
<td>AFUDC</td>
<td>(8,379)</td>
<td>(8,379)</td>
<td>(9,420)</td>
<td>(12,580)</td>
</tr>
<tr>
<td>Interest Income</td>
<td>(1,483)</td>
<td>(1,988)</td>
<td>(520)</td>
<td>(592)</td>
</tr>
<tr>
<td>Net Interest Expense (Income)</td>
<td>95,572</td>
<td>89,134</td>
<td>75,823</td>
<td>76,436</td>
</tr>
<tr>
<td>Net Revenues (Expenses)</td>
<td>198,423</td>
<td>326,165</td>
<td>341,411</td>
<td>353,663</td>
</tr>
</tbody>
</table>
Lease Accounting

• FASB lease accounting standards will be changing effective FY 2020 which causes BPA to reassess all contracts that could be impacted by the standard. This includes:
  – All Energy Northwest debt
  – Other power-related non-federal debt (Northern Wasco & Cowlitz Falls)
  – Transmission leases

• There will likely be significant changes to where and how these costs appear in financial statements. The changes would be to where costs are mapped on the income statement and statement of cash flows.

• Final decisions have not been made but should be in place by the Initial Proposal.
Impact on Power Non-Federal Debt

• Power’s non-federal debt probably will look like federal debt in the financial statements.
  – Interest will be included in the non-federal interest line of the Net Interest calculation.
  – Principal payments will appear in the statement of cash flows.
  – A new amortization expense will appear on the income statement. Amortization will be calculated on a straight-line basis:
    • CGS will be over the remaining life of the license, December 31, 2043.
    • Project 1 & 3 regulatory asset amortization period not yet determined. We used 2044 for this workshop.
    • Northern Wasco will be through 2025 when the debt is fully repaid.
    • Cowlitz Falls will be through 2032 when the debt is fully repaid.

• The Minimum Required Net Revenues (MRNR) calculation will be affected.
  – Non-federal amortization expense and the non-federal principal payments will be included in the MRNR calculation.
  – There will probably be MRNR in all years.

• The revenue requirement should not be any higher because of the change to the accounting treatment.
Impact on Power Non-Federal Debt, continued

• Changing the mapping does not affect total costs, in red, which remain the same in both scenarios.

<table>
<thead>
<tr>
<th></th>
<th>Current Accounting</th>
<th>Potential Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2022</td>
</tr>
<tr>
<td>1 Non-Federal Debt Service</td>
<td>491,467</td>
<td>Amortization Expense (NEW) 244,136</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Composed of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>WNP 1 Interest</td>
<td>39,322</td>
</tr>
<tr>
<td>5</td>
<td>CGS Interest*</td>
<td>139,281</td>
</tr>
<tr>
<td>6</td>
<td>WNP 3 Interest</td>
<td>45,530</td>
</tr>
<tr>
<td>7</td>
<td>N. Wasco Interest</td>
<td>355</td>
</tr>
<tr>
<td>8</td>
<td>Cowlitz Falls Interest</td>
<td>3,280</td>
</tr>
<tr>
<td>9</td>
<td>Total Interest</td>
<td>227,769</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>WNP 1 Principal</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>CGS Principal</td>
<td>256,660</td>
</tr>
<tr>
<td>13</td>
<td>WNP 3 Principal</td>
<td>1,425</td>
</tr>
<tr>
<td>14</td>
<td>N. Wasco Principal</td>
<td>1,593</td>
</tr>
<tr>
<td>15</td>
<td>Cowlitz Falls Principal</td>
<td>4,020</td>
</tr>
<tr>
<td>16</td>
<td>Total Principal</td>
<td>263,698</td>
</tr>
</tbody>
</table>

* Includes interest or principal on fuel, net of TVA revenues

^ Does not include repayment of EN lines of credit which are already included in the MRNR calculation
Impact on Transmission Leases

<table>
<thead>
<tr>
<th>Income Statement Effects</th>
<th>Finance Lease</th>
<th>Operating Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmatic Expenses</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>X</td>
<td>In Review</td>
</tr>
<tr>
<td>Depreciation</td>
<td>X</td>
<td>In Review</td>
</tr>
<tr>
<td>Minimum Required Net Revenues (MRNR)*</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Included in the calculation of MRNR, as a use of cash

- Updated categorization of leases expected under the new standard
  - Expecting to see a shift between the finance and operating lease categories, with an increased number of finance leases currently anticipated.
- Treatment of finance leases is expected to remain the same, with potential modifications to operating leases
  - Operating leases have historically been part of the respective programmatic expense line items.
  - Per the lease guidance, balance sheet changes will occur to recognize operating leases as assets and liabilities, which will be reduced over time on the accounting records as the principal payments are made. The effect of this treatment on depreciation within the income statement is still under review. However, as the asset is reduced by principal, currently do not anticipate an added depreciation expense.
  - Income statement geography changes may occur to account for the operating leases. Reviewing whether the interest that currently resides in programmatic expenses may be split into a separate line item.
Transmission Depreciation & Amortization Expense

• Transmission depreciation expense is increasing
  – BPA is using a new depreciation study. Depreciation studies are performed every 5-6 years.
  – Depreciation rates are higher primarily because of higher net cost of retirement.
  – Enhancements occurred to the depreciation forecast calculations to be inclusive of all applicable FERC accounts, based on the updated depreciation study.
  – Combining the new depreciation study with updated plant results in a $46 million/year increase to transmission depreciation expense.

• Transmission amortization expense is increasing
  – BPA terminated the South of Allston (SOA) project in 2017. Approximately $130 million was spent on the project.
  – The administrator chose to treat the SOA spending as a regulatory asset and amortize it over five years, beginning in BP-20, at $26 million/year. The spending had been on planning studies which have a 2-5 year life.
Leverage Policy

- The leverage policy record of decision (ROD) is not expected until later this summer. The comment period was extended until August 2, 2018.
- No decisions have been made about how the policy will affect BP-20.
  - There was never an expectation that it would affect power.
  - For transmission, the policy includes a phase-in period for BP-20. Interpretation of that clause is open for comment.
  - Current revenue requirements do not include the application of the policy in BP-20.
- The IPR workshop included initial estimates of the ending BP-18 and ending BP-20 debt to asset ratios, shown below. These estimates will change as variables are updated for the Initial Proposal.

<table>
<thead>
<tr>
<th></th>
<th>BP-18</th>
<th>BP-20</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>93.35%</td>
<td>91.44%</td>
<td>-1.91%</td>
</tr>
<tr>
<td>Transmission</td>
<td>81.49%</td>
<td>82.55%</td>
<td>1.06%</td>
</tr>
</tbody>
</table>
Capital Financing Assumptions

• Power:
  – Prepay funds are expected to be fully expended in 2020 to finance hydro capital investments. The last $82 million had been used to accelerate the savings of the RCD refinancings.
  – All other federal capital investments are financed with federal debt.

• Transmission:
  – Projected federal investments are financed with federal debt (75%) or lease purchase funds (25%).
  – The reserve financing assumption of $15 million/year has been removed. The use of reserves is governed by the Financial Reserves Policy.

• Deferred Borrowing:
  – Deferred borrowing represents cash used to pay for capital investments before funds are borrowed from the treasury.
  – BPA usually carries a large deferred borrowing balance during the operating year.
  – In rate cases, it is assumed that all deferred borrowing is converted to debt.
  – In BP-20, it will be assumed that a deferred borrowing balance will be carried until the end of the rate period at which point it will be converted to debt.
  – This will reduce interest expense during the rate period because the treasury bonds will not be issued until the last month of the rate period.
Transmission Replacements

- Staff propose a much simplified methodology for forecasting Transmission replacement capital investments in the repayment period.
- In calculating level debt service over the 35-year repayment period, the repayment model includes assumptions about capital investments over the repayment period.
- The current method is an actuarial approach. It is very complex and difficult to explain and understand. It uses Iowa Curves and the Handy-Whitman Index to calculate a stream of future investments based on BPA's historical investments. Replacements are calculated by FERC account for the major components of the FCRTS.
- The proposed approach is based on the IPR capital forecast, most of which is a replacement program.
- This is consistent with how replacements are determined on the Power side.
- This approach is much simpler and easier to reproduce.
- Replacements, under either approach, are not a driver in repayment results.
Other Transmission Refinements

• California Oregon Intertie (COI) credits
  – Scheduled to be repaid by the end of BP-18 and associated MRNR calculation was removed for BP-20.

• Ancillary Services plant forecasting update
  – Implemented methodology to utilize the forecast by FERC account and split based on the historic ratio of Ancillary Services and General Plant within the account. This provides a proxy for future expectations of plant investment, based on historic actuals.

• LGIA modeling refinements
  – Model updates occurred to improve tracking of historic and forecast LGIA investment for depreciation and investment base purposes.
Follow-Up on LGIA Impacts

- **Revenue requirement tests:**
  1. Forecast of total revenues must be at least equal to total expenses. (Non-negative net revenues)
  2. Cash from proposed rates must be sufficient to ensure repayment of debt. (Non-negative cash flow)

- **Meeting the tests:**
  - In developing revenue requirements, the initial assumption is that revenues match expenses exactly, thereby meeting the first test.
  - For the cash flow analysis, if the non-cash revenues and expenses are less than the cash requirements (debt repayment), minimum required net revenue (MRNR) is added, which serves as a net revenue target.

- **LGIA non-cash effects:**
  - Increase to Revenues: Although revenues are recognized from the sales to the generators, these are non-cash as BPA is providing billing credits to repay the contributions to construction.
  - Increase to Depreciation Expense: With the increase in assets, there is increased depreciation, which is a non-cash expense.
  - Increase to Interest Expense: Interest accrues on the funds provided for construction, which is a non-cash expense as the interest is repaid through billing credits.
Follow-Up on LGIA Impacts, continued

Within the cash flow statement, each of the LGIA non-cash line items impact the Cash from Current Operations:

<table>
<thead>
<tr>
<th>Non-Cash Effects</th>
<th>Effect on Cash from Current Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase to Revenues</td>
<td>Reduction to Cash</td>
</tr>
<tr>
<td>Increase to Depreciation Expense</td>
<td>Increase to Cash</td>
</tr>
<tr>
<td>Increase to Interest Expense</td>
<td>Increase to Cash</td>
</tr>
<tr>
<td>Net Effect:</td>
<td>Negative Cash Flow</td>
</tr>
</tbody>
</table>

- **LGIA MRNR:**
  - When the non-cash line items result in negative cash flow, LGIA MRNR is added in order to meet the cash flow test.
Financial Statements

Topics

Power Financial Statements
Transmission Financial Statements
Caveat

- The following tables include repayment modeling results revised since the IPR capital-related cost presentation.
- We continue to assess ways to bring down costs further.
- The Initial Proposal will incorporate all modeling updates as well as final decisions on the issues discussed earlier (e.g. lease accounting treatment).
# Power Income Statement

<table>
<thead>
<tr>
<th>(S000s)</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 OPERATING EXPENSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 POWER SYSTEM GENERATION RESOURCES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 OPERATING GENERATION RESOURCES</td>
<td>703,445</td>
<td>759,192</td>
</tr>
<tr>
<td>4 OPERATING GENERATION SETTLEMENT PAYMENTS</td>
<td>22,997</td>
<td>22,997</td>
</tr>
<tr>
<td>5 NON-OPERATING GENERATION</td>
<td>1,631</td>
<td>1,531</td>
</tr>
<tr>
<td>6 CONTRACTED POWER PURCHASES*</td>
<td>3,100</td>
<td>3,100</td>
</tr>
<tr>
<td>7 AUGMENTATION POWER PURCHASES*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 EXCHANGES &amp; SETTLEMENTS*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 RENEWABLE GENERATION</td>
<td>36,523</td>
<td>34,869</td>
</tr>
<tr>
<td>10 GENERATION CONSERVATION</td>
<td>121,530</td>
<td>121,644</td>
</tr>
<tr>
<td>11 POWER NON-GENERATION OPERATIONS</td>
<td>84,348</td>
<td>86,367</td>
</tr>
<tr>
<td>12 PS TRANSMISSION ACQUISITION AND ANCILLARY SERVICES*</td>
<td>202,512</td>
<td>197,788</td>
</tr>
<tr>
<td>13 F&amp;W/USEF&amp;W/PLANNING COUNCIL</td>
<td>291,789</td>
<td>292,004</td>
</tr>
<tr>
<td>14 GENERAL AND ADMINISTRATIVE/SHARED SERVICES</td>
<td>78,836</td>
<td>79,916</td>
</tr>
<tr>
<td>15 OTHER INCOME, EXPENSES AND ADJUSTMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 NON-FEDERAL DEBT SERVICE</td>
<td>335,757</td>
<td>491,467</td>
</tr>
<tr>
<td>17 DEPRECIATION</td>
<td>139,221</td>
<td>141,185</td>
</tr>
<tr>
<td>18 AMORTIZATION</td>
<td>86,651</td>
<td>88,840</td>
</tr>
<tr>
<td>19 TOTAL OPERATING EXPENSES</td>
<td>2,108,339</td>
<td>2,320,899</td>
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<tr>
<td><strong>INTEREST EXPENSE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 INTEREST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 APPROPRIATED FUNDS</td>
<td>55,777</td>
<td>55,376</td>
</tr>
<tr>
<td>23 CAPITALIZATION ADJUSTMENT</td>
<td>(45,937)</td>
<td>(45,937)</td>
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<tr>
<td>24 BONDS ISSUED TO U.S. TREASURY</td>
<td>61,584</td>
<td>71,519</td>
</tr>
<tr>
<td>25 AMORTIZATION OF CAPITALIZED BOND PREMIUMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 NON-FEDERAL INTEREST</td>
<td>9,826</td>
<td>8,863</td>
</tr>
<tr>
<td>27 ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION</td>
<td>(13,413)</td>
<td>(14,083)</td>
</tr>
<tr>
<td>28 INTEREST CREDIT ON CASH RESERVES</td>
<td>(1,918)</td>
<td>(2,747)</td>
</tr>
<tr>
<td>29 NET INTEREST EXPENSE</td>
<td>65,919</td>
<td>72,991</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td>2,174,259</td>
<td>2,393,890</td>
</tr>
<tr>
<td>30 MINIMUM REQUIRED NET REVENUE</td>
<td>196,670</td>
<td>70,968</td>
</tr>
<tr>
<td>31 PLANNED NET REVENUE FOR RISK</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>32 PLANNED NET REVENUE, TOTAL (34+35)</td>
<td>236,670</td>
<td>110,968</td>
</tr>
<tr>
<td>33 TOTAL REVENUE REQUIREMENT</td>
<td>2,410,929</td>
<td>2,504,858</td>
</tr>
</tbody>
</table>

* Costs determined in rate case
## Power Statement of Cash Flows

<table>
<thead>
<tr>
<th>Description</th>
<th>A ($000s)</th>
<th>B ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH FROM OPERATING ACTIVITIES</strong></td>
<td>196,670</td>
<td>70,968</td>
</tr>
<tr>
<td><strong>MINIMUM REQUIRED NET REVENUE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NON-CASH ITEMS:</strong></td>
<td>9,826</td>
<td>8,863</td>
</tr>
<tr>
<td><strong>NON-FEDERAL INTEREST</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DEPRECIATION AND AMORTIZATION</strong></td>
<td>225,872</td>
<td>230,025</td>
</tr>
<tr>
<td><strong>NON-CASH EXPENSES</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>DSR REFINANCING FREE-UP</strong></td>
<td>16,590</td>
<td>-</td>
</tr>
<tr>
<td><strong>AMORTIZATION OF CAPITALIZED BOND PREMIUMS</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>CAPITALIZATION ADJUSTMENT</strong></td>
<td>(45,937)</td>
<td>(45,937)</td>
</tr>
<tr>
<td><strong>NON-CASH REVENUES</strong></td>
<td>(30,600)</td>
<td>(30,600)</td>
</tr>
<tr>
<td><strong>CASH PROVIDED BY OPERATING ACTIVITIES</strong></td>
<td>372,421</td>
<td>233,318</td>
</tr>
<tr>
<td><strong>CASH FROM INVESTMENT ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INVESTMENT IN:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>UTILITY PLANT (INCLUDING AFUDC)</strong></td>
<td>(293,470)</td>
<td>(316,349)</td>
</tr>
<tr>
<td><strong>ENERGY EFFICIENCY</strong></td>
<td>(47,266)</td>
<td></td>
</tr>
<tr>
<td><strong>FISH &amp; WILDLIFE</strong></td>
<td>(47,266)</td>
<td>(47,266)</td>
</tr>
<tr>
<td><strong>CASH USED FOR INVESTMENT ACTIVITIES</strong></td>
<td>(340,736)</td>
<td>(363,615)</td>
</tr>
<tr>
<td><strong>CASH FROM BORROWING AND APPROPRIATIONS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INCREASE IN BONDS ISSUED TO U.S. TREASURY</strong></td>
<td>226,940</td>
<td>327,479</td>
</tr>
<tr>
<td><strong>REPAYMENT OF BONDS ISSUED TO U.S. TREASURY</strong></td>
<td>(139,100)</td>
<td>(218,571)</td>
</tr>
<tr>
<td><strong>INCREASE IN FEDERAL CONSTRUCTION APPROPRIATIONS</strong></td>
<td>31,796</td>
<td>36,136</td>
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<td><strong>TOTAL ANNUAL INCREASE (DECREASE) IN CASH</strong></td>
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1/ Minimum required net revenues are added to ensure sufficient cash flow is available to repay the federal investment.
### Power Comparison to BP-18

For comparability, this excludes power purchases and residential exchange costs calculated in BP-18.

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<th>Current Acctg</th>
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<td>731,319</td>
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<td>1,581</td>
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<td>3,100</td>
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<td>7 AUGMENTATION POWER PURCHASES*</td>
<td></td>
<td></td>
<td></td>
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<td>8 EXCHANGES &amp; SETTLEMENTS*</td>
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<td>9 RENEWABLE GENERATION</td>
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<td>85,357</td>
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<td>200,150</td>
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<td>291,897</td>
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<td>87,745</td>
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<td>2,214,619</td>
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</tr>
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<td>22 INTEREST</td>
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<td>(45,937)</td>
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<td>66,552</td>
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<td>-</td>
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<td>27 NON-FEDERAL INTEREST</td>
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<td>9,344</td>
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<td>(13,748)</td>
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<td>29 INTEREST CREDIT ON CASH RESERVES</td>
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<td>(2,332)</td>
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<td>30 NET INTEREST EXPENSE</td>
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<td>69,455</td>
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<td>32 TOTAL EXPENSES</td>
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<td>2,284,074</td>
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<tr>
<td>34 MINIMUM REQUIRED NET REVENUE</td>
<td>144,118</td>
<td>133,819</td>
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<td>35 PLANNED NET REVENUE FOR RISK</td>
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<td>40,000</td>
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<tr>
<td>36 PLANNED NET REVENUE, TOTAL (34+35)</td>
<td>164,118</td>
<td>173,819</td>
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<td>37</td>
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<td>38 TOTAL REVENUE REQUIREMENT</td>
<td>2,479,445</td>
<td>2,457,893</td>
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* Costs determined in rate case
# Transmission Income Statement

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<tr>
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<th>A</th>
<th>B</th>
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<tr>
<td>OPERATING EXPENSES</td>
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<td>2021</td>
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<td>1 TRANSMISSION OPERATIONS</td>
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<td>163,878</td>
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<td>59,733</td>
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<td>174,666</td>
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<td>136,726</td>
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<td>6 BPA INTERNAL SUPPORT</td>
<td>93,326</td>
<td>94,705</td>
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<td>OTHER INCOME, EXPENSES &amp; ADJUSTMENTS</td>
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<td>-</td>
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<tr>
<td>DEPRECIATION &amp; AMORTIZATION</td>
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<td>354,952</td>
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<tr>
<td>TOTAL OPERATING EXPENSES</td>
<td>973,710</td>
<td>984,659</td>
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<thead>
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<td>FEDERAL APPROPRIATIONS</td>
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<td>CAPITALIZATION ADJUSTMENT</td>
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<tr>
<td>ON LONG-TERM DEBT</td>
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<tr>
<td>AMORTIZATION OF CAPITALIZED BOND PREMIUMS</td>
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<td>DEBT SERVICE REASSIGNMENT INTEREST</td>
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<td>NON-FEDERAL INTEREST (INCL CUSTOMER FUNDED)</td>
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<td>AFUDC</td>
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<td>INTEREST INCOME</td>
<td>(5,107)</td>
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<td>NET INTEREST EXPENSE</td>
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</table>

| TOTAL EXPENSES | 1,151,242 | 1,174,717 |

| MINIMUM REQUIRED NET REVENUE | 1,402 | 3,301 |
| PLANNED NET REVENUES FOR RISK | - | - |
| TOTAL PLANNED NET REVENUE | 1,402 | 3,301 |

| TOTAL REVENUE REQUIREMENT | 1,152,643 | 1,178,019 |

July 25, 2018

Pre-Decisional. For Discussion Purposes Only.
### Transmission Cash Flow Statement

<table>
<thead>
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<th>(000’s)</th>
<th>A</th>
<th>B</th>
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<tr>
<td></td>
<td>2020</td>
<td>2021</td>
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<td><strong>1</strong> CASH FROM CURRENT OPERATIONS:</td>
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<td>3,301</td>
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<td>3 DRAWDOWN OF CASH RESERVES FOR CAPITAL FUNDING</td>
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<td><strong>4</strong> EXPENSES NOT REQUIRING CASH:</td>
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<td>5 DEPRECIATION &amp; AMORTIZATION</td>
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<td>354,952</td>
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<td>3,700</td>
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<td>559</td>
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<td>8 CAPITALIZATION ADJUSTMENT</td>
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<td>(18,968)</td>
</tr>
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<td><strong>9</strong> NON-CASH REVENUES</td>
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<td>(18,252)</td>
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<td>(3,410)</td>
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<td><strong>14</strong> CASH USED FOR CAPITAL INVESTMENTS:</td>
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<td><strong>15</strong> INVESTMENT IN:</td>
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<td>16 UTILITY PLANT</td>
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<td>(482,550)</td>
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<td><strong>18</strong></td>
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<tr>
<td><strong>19</strong> CASH FROM TREASURY BORROWING AND APPROPRIATIONS:</td>
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<td>20 INCREASE IN LONG-TERM DEBT</td>
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<td>482,550</td>
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<td>(20,571)</td>
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<td>(79,543)</td>
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<td>(221,715)</td>
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<td>(53)</td>
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<td><strong>25</strong> CASH FROM TREASURY BORROWING AND APPROPRIATIONS</td>
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<tr>
<td><strong>27</strong> ANNUAL INCREASE (DECREASE) IN CASH</td>
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<td>-</td>
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<tr>
<td><strong>28</strong> PLANNED NET REVENUES FOR RISK</td>
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<td>-</td>
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<tr>
<td><strong>29</strong> TOTAL ANNUAL INCREASE (DECREASE) IN CASH</td>
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Transmission Comparison to BP-18

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<td>BP-18 Average</td>
<td>BP-20 Average</td>
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<td>166,365</td>
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<td>7 OTHER INCOME, EXPENSES &amp; ADJUSTMENTS</td>
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<td>(18,968)</td>
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<td>15 ON LONG-TERM DEBT</td>
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<td>27 TOTAL REVENUE REQUIREMENT</td>
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July 25, 2018    Pre-Decisional. For Discussion Purposes Only.
Financial Disclosure

This information was publicly available on July 24, 2018, and contains information not sourced directly from BPA financial statements.