

Financial Plan Refresh

Public Workshop February 23, 2022



Objective & Agenda

- Today's Objective: Discuss depreciation and revenue financing, i.e. the "double recovery" issue.
- Agenda
 - Comments January 26th Workshop
 - Depreciation & Revenue Financing
 - BPA's Position
 - Mechanics of Rate Setting
 - Business Line Illustrations
 - Recap
 - Next Steps

January 26th Comments

January 26th Comments Review

- BPA received 8 submissions of comments and feedback related to materials shared at the Jan. 26 public workshop.
- Parties included: NRU, AWEC, MSR, NIPPC, Powerex, Snohomish, and 2 sets of group comments from:
 - Avangrid, Avista, Idaho Power, PacifiCorp, PGE, and PSE
 - Avista, MSR, PacifiCorp, PGE, and PSE
- Comments covered the full spectrum from solid support to solid opposition.
- BPA is still working on written responses; responses to the comments will available at bpa.gov. We intend to further discuss at the next workshop in March.

January 26th Comments Review - Summary

- Supportive comments: general support of BPA's refresh of the Financial Plan, our principles and desire to move away from 100% debt financing.
- Concerns surrounding revenue financing: rate impact, intergenerational equity.
- Comments and requests, such as:
 - Request for more insight on the goals we outlined, in particular the 60% leverage target.
 - Stress test the framework.
 - Consider use of actuals rather than forecasted financial information in the calculations for revenue financing.
- Rates methodology concerns:
 - Question the "higher of" methodology.
 - Depreciation of revenue financed assets, and whether "double recovery" results.

Depreciation and Revenue Financed Assets

Issue Raised by Customers

- There is a perception by some customers that including revenue financing and depreciation of revenue financed assets in rates amounts to charging customers twice for the same thing, i.e. "double recovery".
- BPA committed to discussing this issue in the BP-22 rate settlement. Today's
 workshop is intended to meet that commitment, with follow up, as needed.
- Today's presentation will share our position that double recovery is not an issue and the mechanics of how the "higher of" concept plays out in rate setting.

BPA's Perspective

- Double recovery implies that we are charging for the same cost twice.
- Depreciation and revenue financing represent different costs. The costs have a relationship, but in the end are not the same.
 - Depreciation = loss of value of an asset, sometimes thought of as the consumption or use of an asset
 - Revenue financing = construction of an asset
- How revenue financing is recognized is a matter of timing.
 - Depreciation is how capital investments are recognized on the income statement
 - Revenue financing is recognized on the statement of cash flows
- BPA pays construction financing costs sooner than the asset's useful life.
 - Depreciation is spread over the average useful life of an asset.
 - Revenue financing, like debt financing, has a shorter timeframe.
- BPA sees paying for capital investments and increasing debt repayment as synonymous.
- BPA rates adjust over time, sometimes within a rate period, taking into account any gain or loss that may occur.

Focusing on the Trees or the Forest

- BPA's early days Focus on the Trees
 - Cost recovery and repayment was assessed on a project by project basis.
- Post-1963 Focus on the Forest
 - In the late 1950's, BPA was moving away from a project by project cost recovery demonstration.
 - BPA implemented the "single basin" concept in 1963 which allowed for the revenues of all the projects to be used to recover the costs of all of the projects. This produced lower, more stable costs over time.
 - It no longer mattered when exactly project debt was repaid (or even if debt ever existed) because the costs and revenues are assessed collectively. The focus is on the total system.
 - This view was central to the Congressional view of future "surplus revenues" (Third Power plant Act Hearings, 1965) which would be available for other purposes, i.e. financing capital projects & eliminating reliance on Federal debt.

Industry Practice

- BPA's approach to rate making is unique.
 - BPA uses the "higher of" approach, the higher of accrued expenses vs cash needs.
 - Virtually all others set rates based on one or the other.
- Investor owned utilities generally do not have explicit adders for revenue financing.
 - Capital investments are financed with a mix of debt and equity, often a preference for 50/50.
 - Depreciation expense is included, which increases the revenue requirement. Accumulated depreciation is applied to reduce the net plant in service on which the IOU receives a return, moderating the return on assets.
 - Contributions in Aid of Construction (CIAC) are deducted from the rate base.

Industry Practice Continued

- Public utilities have differing approaches to revenue financing:
 - Most have a cash-based revenue requirement so revenue financing is explicit and depreciation is not included.
 - Some include depreciation in the revenue requirement which serves as a source of cash for capital investments. This is often thought of as funding replacements. There are no offsets to depreciation for cash financed assets.
 - Some include a rate of return on net plant which serves as a source of cash for capital investments, thought of as an inflation adjustment for plant replacement. There are no offsets to depreciation for cash financed assets.

Rates Setting - "Higher Of" Concept

- Recall the two tests described in the October workshop:
 - Test 1: Income Statement perspective revenues must be sufficient to recover expenses, includes depreciation.
 - Do not set rates to operate at a net loss.
 - Test 2: Statement of Cash Flows perspective revenues must be high enough to meet cash needs; includes debt repayment, revenue financing, risk.
 - Do not set rates at levels requiring BPA to defer Treasury payments.

Rates Setting - "Higher Of" Concept

- The need to meet both tests is embedded in BPA's interpretation of its statutory requirements to set rates to recover its costs and to ensure the repayment of the Federal investment.
 - "... studies were prepared comparing estimated revenues in each of the fiscal years 1950 to 1955, inclusive, with (a) estimated financial requirements pursuant to the payout provisions [i.e. debt repayment] of the applicable laws and policies, and (b) cost computed in accordance with the Federal Power Commission System of Accounts." 1949 Annual Report
 - "The cost accounts include depreciation expense based on estimated service lives of the facilities, but the payout accounts provide for amortization of the construction costs." 1950 Columbia Basin Project Report on the Repayment of Construction Costs and Operating Expenses
 - "... the repayment obligation of the power operation exceeds "cost" as measured in accordance with generally accepted electric utility depreciation cost accounting." 1960 Annual Report

Rates Setting -- "Higher Of" Concept

- The tests are not additive. "Higher of" does not mean 1 + 2. It is either 1 or 2.
 - Whichever test is higher will determine the revenue requirement.
 - If Test 2 is higher, the difference between the tests becomes minimum required net revenues (MRNR).
 MRNR is a cash requirement added to the Income Statement to ensure that revenues will be sufficient to meet cash flow needs. It is a net revenue target that must be reached in order to ensure adequate cash flow.
 - If Test 1 is higher, the difference between the tests is cash available for other purposes. That is, the
 Income Statement perspective is expected to produce more revenues than necessary to meet cash
 flow needs. BPA's current practice is to use this cash flow to pay down additional debt. BPA has also
 used it to build reserves for risk mitigation (WP-96 rate case).

Cash-Based Revenue Requirements

Transmission Cash Based Revenue Requirement

	2022	2023
1 Program Expenses	615,633	623,509
2 Net Interest	156,316	160,593
3 Debt & Capital Needs	371,220	375,330
Total Cash Based Revenue		
4 Requirement	1,143,169	1,159,432
5 Accrual Based View	1,143,169	1,159,432
6 Difference	-	-

Power Cash Based Revenue Requirement

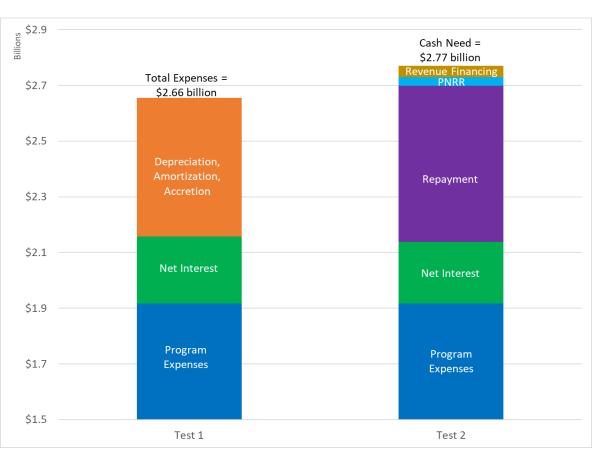
	2022	2023
1 Program Expenses	1,917,179	1,931,748
2 Net Interest	220,461	213,203
3 Debt & Capital Needs	631,893	646,073
Total Cash Based Revenue		
4 Requirement	2,769,533	2,791,024
5 Accrual Based View	2,769,533	2,791,024
6 Difference	-	-

- When MRNR is present, a cash based revenue requirement (line 4) produces the same total as the published revenue requirement in the rate case. (line 5)
- From this perspective, rates are being set to meet cash flow needs.
- The presence of MRNR in the published revenue requirements means that Test 2, cash flow needs, determines the revenue requirement. Accrued expenses, Test 1, are also being recovered; not in addition to cash flow needs, but because cash flow needs are greater.

Business Line Expectations

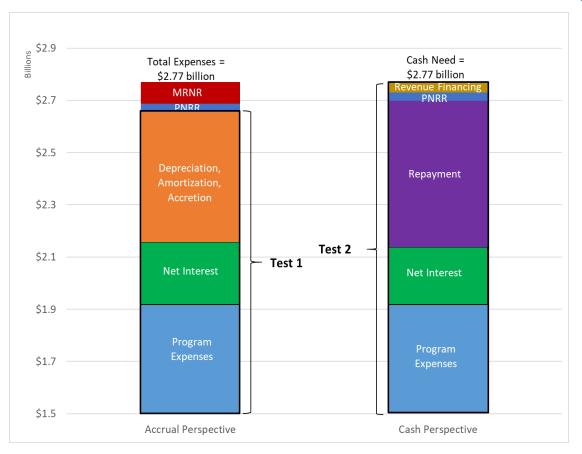
- Since BPA repays debt sooner than the assets' useful life, one might expect cash flow needs (Test 2) to regularly be higher than accrued expenses (Test 1).
- For Power, we expect the revenue requirement to include MRNR because Test 2 is higher than Test 1.
- Transmission, however, is more complicated.
 - Initially it looks as if Test 1 is higher than Test 2.
 - Once leverage needs are considered, Test 2 may become the driver.

Power Illustration – Initial Assessment



- This is the initial assessment of which is greater, Test 1 or Test 2.
- Test 2 is larger, so it will drive the revenue requirement.
- By meeting Test 2, Test 1 will also be met.
- The long term expectation for Power is that Test 2, cash needs, will be the revenue requirement driver.
- Note: even without PNRR and revenue financing, Test 2 would determine the revenue requirement.

Power Illustration – Making Adjustments

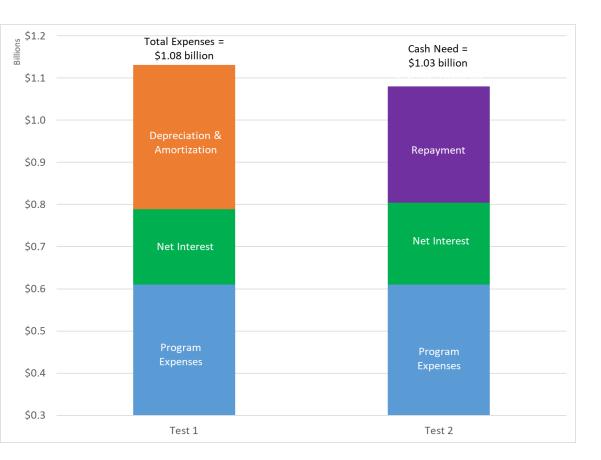


- The income statement presentation in the revenue requirement changes to ensure the necessary cash is available.
- MRNR and Planned Net Revenues for Risk (PNRR) are added as costs, representing the net revenues needed to ensure cash flows are adequate.
- The resulting cash-driven revenue requirement total is not accrued expenses + cash needs. Instead, the income statement includes an incremental amount to ensure the total revenue requirement satisfies both the accrual and cash needs.

Transmission & Hardwiring

- Transmission's revenue requirement development is more complex.
- Initially, Test 1 (Income Statement) appears to be the driver for Transmission. This means
 that there is positive cash flow and that reserves would grow without any action. To avoid
 building reserves, we increase repayment to consume the available cash flow -- known as
 "hardwiring", which results in added debt repayment with no rate impact. The process
 does not stop here.
- Attempting to achieve a specific leverage target and net neutral borrower status means that Test 2 will become the driver.
 - The capital financing proposal requires sizeable amounts of revenues to finance capital projects.
 These amounts are greater than the available cash flow produced by Test 1.
 - MRNR will be needed to ensure there is sufficient cash flow. This means that rates will be set to meet cash needs, Test 2.
 - Our analysis for the capital financing proposal incorporated our current practice of hardwiring.

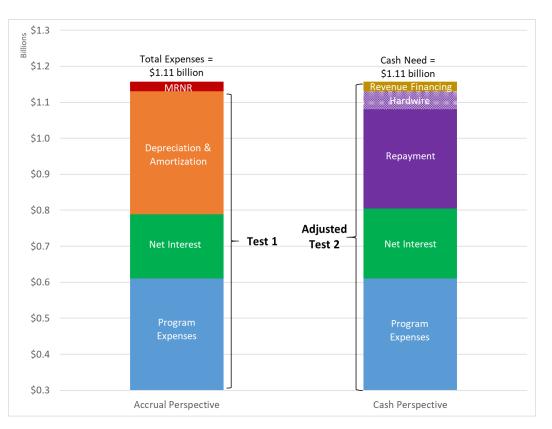
Transmission Illustration – Initial Assessment



- This is the initial assessment of which is greater, Test 1 or Test 2.
- Test 1 is larger at this point, so repayment will be increased (hardwiring) to match the cash flows.

Example = FY21 from BP20 since the Leverage Policy triggered and was applied. The amount of the hardwire is for illustration purposes only.

Transmission Illustration – Making Adjustments



- Repayment increases because of the hardwire. Test 2 is now equal to Test 1.
- At this point, the Leverage Policy is considered, which added \$26.4M per year of revenue financing. Test 2 is now the driver.
- MRNR is added to the income statement so that Test 1 now equals Test 2.
- If BPA did not hardwire, the amount of revenue financing needed to achieve the leverage target would have increased by the hardwire amount.
- That is, Transmission's revenue requirement would be set to recover its cash flow needs, including the cash necessary to reduce Transmission's leverage to 60% and achieve net neutral borrower status. This amount would be sufficient to also meet Transmission's accrual needs.

Conclusion

- BPA does not believe that it is double-counting.
 - The "higher of" approach sets the revenue requirement at a level sufficient to meet BPA's needs from either an accrual or cash perspective.
 - Cash needs for financing (revenue financing or debt) and depreciation are different costs that are not additive. Both generate cash that is used to repay debt or revenue finance capital.
 - BPA's cost recovery framework is a closed loop system all revenues are applied to cover BPA's costs; BPA does not pay dividends to a separate entity.
 - Costs above or below expectations increase or decrease reserves. Under the Financial Reserves
 Policy, increased or decreased reserves may result in an action that could increase or decrease rates.
- As long as BPA has debt outstanding, cash generated for depreciation or repayment obligations is used to repay debt in alignment with BPA's financial plan.
- BPA is not inclined to make an offset to depreciation of revenue financed assets.
 - If Test 1 is the driver, an offset is self-defeating, taking us away from the goals outlined at the January 26th workshop.
 - If Test 2 is the driver, an offset would have no net impact.

Next Steps

- Please submit written feedback to <u>communications@bpa.gov</u> by March 9th with "Financial Plan Refresh" in the subject line.
- Next workshop is on March 9th. Topics include:
 - Capital Metrics.
 - Comments review, as needed.