

March 20, 2018 Leverage & Financial Reserves Policy Questions & Responses

General

Comment #1, #2, #3, #4, #5: [SCL, PPC, NRU]

#1 City Light requests that BPA add more time to consider the options, costs, and benefits of its proposed policies before making any decisions. We recognize BPA would like to have decisions on its financial policies in time to add to revenue requirements for the BP-20 rate period, however, these policies will have long-lasting impacts, and require thorough evaluation. BPA could make decisions on the financial policies at the same time it concludes the pre-rate case workshops. This would allow customers to assess all proposals and changes and the subsequent results to Power and Transmission costs and rates.

#2 At the same time, BPA is proposing the leverage and financial reserves policies. BPA is also proposing some changes, including the Strategic Plan, Financial Plan, Transmission Business Model, and Grid Modernization. Individually and collectively, these new proposals will affect annual spending, capital spending, and revenue requirements. City Light requests that BPA prepare a comprehensive assessment of all proposals for customers so that they can make an informed decision.

#3 PPC appreciates the opportunity to provide these initial comments and requests for further analysis. These are based on the workshop material on implementation of BPA's 2018 Financial Plan presented to date. As a general matter, PPC appreciates the responsiveness so far from BPA staff in providing additional information and analysis in response to customer and stakeholder requests.

In addition to comments and questions regarding specific policy areas, we have some concerns regarding the timeline and sequencing of decisions on these financial topics. The policy proposals in question have significant and long-lasting impacts. It is difficult at this time to evaluate the proposals as a cohesive whole.

Our understanding is that BPA plans to memorialize its policy decisions on the Financial Plan as part of one or more Records of Decision in June. Given the importance of these issues, additional time should be taken over the summer if it is necessary to ensure the best possible outcomes for both BPA and customers.

Thank you for your consideration of these comments. Please do not hesitate to contact PPC staff to seek follow up information or any clarifications.

#4 It goes without saying that BPA's finances are complex and multi-faceted. While it can be appealing to isolate issues into their own processes, we must consider all issues collectively and holistically. This is challenging to do when topics are discussed in a staggered manner (e.g., Leverage Policy and Financial Reserves Policy (FRP) Phase-in now, Access to Capital next, IPR after that, concluding with the rate case which brings everything together). Therefore, NRU proposes that BPA adopt a Power Rate Target Policy to provide an avenue through which the agency can comprehensively consider the ultimate rate impact to customers (the

combination of the Tier 1 rate, Spill Surcharge FRP Surcharge, CRAC, etc), and take actions necessary to keep Power cost competitive.

#5 NRU appreciates BPA staff's engagement with us in this process to explore different ideas and look forward to continuing to work with BPA to refine these proposals. To the extent this requires additional time or comment periods, we ask the agency to provide this. It is important for us to develop well-vetted and thoughtful policies that address the agency's and customers' needs both in the short and long term.

BPA Response to Comments #1, 2, 3, 4, 5: BPA recognizes that there are a number of workshops and efforts currently taking place to implement the Strategic and Financial plans as well as to prepare for the upcoming BP-20 rate case. The Financial Reserves and Leverage policies are focused on fundamental financial health objectives that BPA is seeking to achieve to ensure the long-term ability of BPA to meet its statutory objectives. The upcoming rate case will provide an opportunity to see the collective effects of the financial decisions being made during this summer. However, the specific rate case decisions are not expected to change the fundamental goals and methods of achieving these long term financial health objectives. Thus, at this time, BPA intends to publish its proposed final financial policies at or near the end of June, consistent with its original timeline. While this is our current plan, BPA is not precluding the possibility of providing additional time for stakeholders to review the final policies and provide additional comments regarding other alternatives or areas that warrant more feedback, including additional time to consider the policies in a cohesive whole with other financial decisions being made this summer. BPA will inform parties prior to the publication of the final proposals if it decides to modify the current schedule or provide additional opportunities for comment.

FINANCIAL RESERVES POLICY

Comment #6: [SCL] City Light is concerned about BPA Power's sustained and unplanned decline in financial reserves for risk. City Light supports BPA making prudent changes to ensure adequate financial reserves.

City Light requests that BPA do more analysis investigating the causes of the decline in BPA Power's financial reserves. The results of this analysis should support the development of solutions appropriate to those causes.

BPA Response to Comment #6: Thank you for your comment. As stated in section 6.2.5 of the BP-18 Administrator's Final ROD, BP-18-A-04, the decline in total BPA financial reserves is primarily due to market forces over which BPA has no control, and which can vary widely after rates have been set. Slides 18 and 19 of the June 15, 2016 workshop presentation on BPA financial reserves shows the levels of financial reserves over time and the relationship between actual net secondary revenue relative to rate case net secondary revenue and power reserves for risk cash flow.

(<https://www.bpa.gov/Finance/FinancialPublicProcesses/AccessstoCapital/June%2015%20BPA%20Reserves%20Workshop%203.pdf>).

Comment #7: [SCL] The BP-18 rates include a \$20 million/yr. cost for Planned Net Revenues for Risk (PNRR) to non-Slice customers that BPA could remove in future rate cases. City Light requests that BPA compare all financial reserve policy options to a change from \$0 PNRR or whatever it will be called in the future.

BPA Response to Comment #7: A "\$0 PNRR" scenario is included in the analysis provided at the March 20th meetings and in the "FRP at Risk Model" and "BP-18 FRP Analysis model". This scenario is referred to in the materials as both "Pre-BP18" and "BP-16 SQ" and represents \$0 in PNRR and a CRAC threshold at \$0 with 100% recovery for the first \$100 million, 50% after, up to a \$300 million maximum.

Slide 11 of the March 20th FRP presentation shows the costs and probabilities: see page two of "Financial Reserves Policy model updates and analysis summary" (<https://www.bpa.gov/Finance/FinancialPublicProcesses/Financial-Reserves-Leverage/frpdocs/Financial%20Reserves%20Policy%20model%20updates%20and%20analysis%20summary.pdf>) for a table that can be used to compare this scenario with the others that have been analyzed.

Comment #8: [SCL] City Light thanks BPA for providing the spreadsheets used to calculate some of the reserve surcharge scenarios and agreeing to perform a backcast. City Light requests that BPA provide additional information about the inputs, particularly natural gas prices and power market prices.

BPA Response to Comment #8: The two published models use different input data sets.

The BP-18 FRP Analysis Model: This model was developed during the BP-18 initial proposal to analyze FRP alternatives. We have retained the same core inputs to the model for our post-BP-18 analysis in order to allow us to compare results back to the FRP options that were discussed during the BP-18 rate case. This model uses the BP-16 Final Study risk analysis as the basis for the annual cash flow distributions. The input distributions of 3200 games of prices for FY 16 and 17 were shifted up or down so that the average cash flow across the 3200 games in each year was \$0. For more information on the specific natural gas prices and power market prices used to create the BP-16 risk distribution, see Tables 2 and 3 (pp 99 & 100) of the "Power Risk and Market Price Study," BP-16-FS-BPA-04 (<https://www.bpa.gov/Finance/RateCases/BP-16/BP16%20Final%20Proposal/BP-16-FS-BPA-04%20Power%20Risk%20and%20Market%20Price%20Study.pdf>). The FRP model does not assume any inflation or other changes to the distributions over the 10-year time horizon.

The FRP atRisk Model: This model was developed for this FRP Phase In process and uses the @Risk Excel add-in for statistical analysis. This model uses the BP-18 Final Study risk analysis for FY19 as the basis for the annual cash flow distributions. The input distribution of 3200 games from BP-18 was shifted up or down so that the average cash flow was \$0. The input values were then transformed into a parametric distribution using @Risk's distribution fitting function, and the resulting distribution was truncated at the 1st and 99th percentile in order to prevent it from generating extreme values in the tails (without this truncation, the parametric distribution could produce values approaching infinity). The parameters for the distribution can

be seen on the “Source NR Dist FY19” tab of the model. For more information on the natural gas prices and power market prices used to create the FY 19 risk distribution, see Table 1, Table 4, Figure 6, and Figure 8 (pp 33, 38-39, 45, and 47) of the “Power Market Price Study and Documentation,” BP-18-FS-BPA-04 (<https://www.bpa.gov/Finance/RateCases/BP-18/bp18/Final%20Proposal/BP-18-FS-BPA-04%20Power%20Market%20Price%20Study%20and%20Documentation.pdf>). The @Risk model does not assume any inflation or other changes to the distributions over the 18-year time horizon.

Comment #9: [WPAG] Proposal to Increase Surcharge to \$40 Million/Year. In its adoption of the FRP in the BP-18 Final Record of Decision, BPA decided to phase-in the lower threshold for Power Services by including \$20 million in Planned Net Revenue for Risk (“PNRR”) in Power rates each year until the lower FRP threshold for Power is met. Under the proposed financial reserves surcharge, BPA would double the annual amount included in Power rates for purposes of meeting the lower threshold to \$40 million.

We do not believe that BPA has presented a sufficient business case to justify this change. Indeed, just the opposite. The main reason BPA adopted the FRP was to maintain its credit rating based on the assumption that it would become increasingly reliant on non-federal borrowing in the future and, therefore, if its credit rating were to be downgraded it would see harmful increases in its non-federal borrowing costs. However, the most recent information provided by BPA indicates that it expects to use substantially less non-federal borrowing in the future than what it projected in the BP-18 rate case. For example, BPA is now indicating that it will lease finance only 25 percent of its Transmission capital program compared to the 50 percent it projected in the rate case. In addition, BPA is also projecting substantially less refinancing of regional cooperation debt than what it was projecting in the rate case for the period from 2018 to 2027. Together these factors indicate that the impact of a credit rating downgrade would be less than what BPA projected and relied upon when adopting the FRP.

For instance, whereas BPA was projecting that a credit downgrade would increase Power’s borrowing costs by an average of approximately \$16.1 million/year from 2018 to 2027, under BPA’s new non-federal borrowing assumptions, the projected average has decreased to approximately \$9.2 million/year for the same time period. This downward trend indicates that the business case for BPA’s inclusion of \$20 million in Power rates for FRP purposes is itself deteriorating and that its proposal to increase that amount to \$40 million is unsupportable from a cost benefit perspective and, therefore, unjustifiable.

BPA Response to Comment #9: Thank you for your comment. BPA considers this a general comment, but would like to clarify the assumptions included in the BP-18 rate case. The lease-purchase funding assumption for Transmission capital expenditures for the BP-18 Final Proposal was 50% for years 2018-2019 and then 25% for years 2020 and beyond. More generally, the basis for adopting the Financial Reserves Policy and its thresholds, including the basis for holding 60 days cash for each business line, has been previously established in the BP-18 Record of Decision. The purpose of this process is to establish a phase-in methodology for reaching the lower threshold for Power Services. As explained in detail in the BP-18 Record

of Decision, establishing a Financial Reserves Policy that sets forth minimum and maximum levels of financial reserves for each business line would serve multiple objectives, including credit rating support, liquidity, rate stability, and equity. See BP-18 Administrator's Final Record of Decision, BP-18-A-04, at 210. In addition, BPA has previously addressed WPAG's concerns with developing a Financial Reserves Policy based solely on a cost benefit analysis in the BP-18 ROD. *Id.* at § 6.6.6.2.

In addition, BPA notes that the model WPAG relied upon to make this statement assumes no additional refinancing for Power Services non-federal debt beyond 2020. Considerations regarding the amount of lease-purchase funding and regional cooperation debt refinancings/extensions, which is out of scope of the Financial Reserves Policy, will be discussed as part of the Access to Capital – 10 year financing plan workshop scheduled for May 22.

LEVERAGE POLICY

Comment #10: [M-S-R] Rate Impacts: The potential rate impacts of the Leverage Policy are unclear, but appear to be substantial. Some of the materials provided to date could be interpreted as the Leverage policy imposing a 40% Transmission rate increase, and a potential Power rate increase of 15%. Specifically, BPA's response to comment #28 states: "Full revenue financing of sustain investments in BP-20 equate to roughly \$312 million for Power and \$394 million for Transmission." The CIR sustain versus Expand worksheet indicates those amounts are for 2020 alone (subject to requested clarification, below). Using a ballpark revenue requirement of \$1 billion for Transmission and \$2.3 billion for Power, that appears to result in a 40% rate increase for Transmission and a 15% increase for Power. BPA's March 20 presentation indicated that, depending on which tool is applied, the rate increase would be either 14% or 7% for the first two years, followed by a 2-3% rate increase (Slide 10). It is not clear if these increases are independent of any other cost increases that would result in increased Transmission rates. M-S-R is interested in further clarification of the potential rate impact of the various proposals.

BPA Response to Comment #10: BPA's response to comment #28 was not intended to be a proposal. It was simply a response to a request for what Power and Transmission's approximate BP-20 Sustain program spending levels were assumed to be. BPA is not proposing to revenue finance 100% of each business units sustain programs. Included in the Transmission Scenario 3 table on slide 10 of the March 20 presentation is a row titled "% Cost Change". This row represents the percentage change in the rate period average revenue requirement from one rate period to the next and does not represent a rate increase analysis. The "% Cost Change" represents the increased cost solely due to the policy actions and is independent of any other cost increases that could occur. The BP-20 cost change increase of 13.3% is due to assumed additional revenue financing to hold the debt-to-asset ratio flat from the end of BP-18 to the end of BP-20. The BP-22 cost change increase of 4.4% is also due to assumed revenue financing to hold the ratio flat from the end of BP-20 to the end of BP-22 and is relative to the total cost in BP-20.

Comment #11: [AWEC] In AWEC's experience, investor-owned utilities uniformly include capitalized fish and wildlife investments, such as fish passages and relicensing costs, in rate base, and regularly earn a return on these assets. It would be difficult to argue that those sorts of fish and wildlife investments do not have any value, and therefore, should be summarily excluded from rate base of investor-owned utilities. Indeed, if those fish and wildlife investments are not made, a utility will not be able to continue operating the hydro facility.

As has been noted in the past, AWEC is concerned with the overall cost of BPA's Fish and Wildlife Program. Notwithstanding, AWEC also recognizes there is value that is provided to the region associated with keeping our rivers clean and healthy, and ensuring that hydro facilities are able to continue to operate. While the cost of the program may be high and it may be difficult to quantify its value, AWEC believes that some value associated with the Fish and Wildlife program may be appropriately considered when evaluating the leverage ratio on the power side. Or, in the alternative, if those assets do not have value, then it might be appropriate

to separately consider the repayment obligations associated with those investments, outside of the leverage calculation in the power business line.

BPA Response to Comment #11: AWEC is correct in noting that fish passage facilities at hydro projects are commonly considered part of the facility and thus the asset base of the utility. BPA does the same with passage improvements at Corps of Engineers and Bureau of Reclamation hydro facilities and Federally-owned fish hatcheries. This includes things such as the Corps of Engineers' Columbia River Fish Mitigation (CRFM) program and the Lower Snake Comp Plan hatcheries. These investments are capitalized and considered part of the asset base of the FCRPS and are therefore included in the asset component of the ratio calculation.

In contrast, utilities do not commonly treat as an asset spending on non-utility owned facilities that do not have a direct economic benefit to the utility. BPA's capital spending in support of its direct fish and wildlife program falls into this category. These funds are provided to third-parties who then the acquire assets, such as land acquisition, conservation easements, habitat improvements, and screens on irrigation canals. These assets are not Federally-owned and, therefore, are not part of the hydro projects. This spending would normally be considered an annual expense. However, rather than expense the annual spending, BPA's administrators have chosen to use regulatory accounting for this spending and treat it as a capital investment, commonly called a regulatory asset. This treatment allows BPA to issue long-term debt (i.e. Treasury bonds) to pay for the investments. This type of spending is not part of BPA's asset base and therefore not included in the asset component of the ratio calculation.

Comment #12: [NWPCC] Transmission Scenario 3 (Page 10 of handout) would be the most fiscally prudent option of those presented to address the need to sustain and expand the transmission system. I realize that to keep the debt-to-asset ratio in Transmission from exceeding approximately 80 percent it will require a corresponding increase in transmission rates. What level of debt repayment, revenue financing, and responsible reductions in capital outlay would result in a debt/asset ratio of 75 percent and what rate adjustment would be necessary to be at that level in 2028?

BPA Response to Comment #12: Based on BPA's last rate filing, BP-18 , Transmission would need to pay close to \$1 billion more then currently scheduled by 2028 in order to reduce the debt to asset ratio to 75%. In the April 20th public meeting, BPA will present scenarios that reduce Transmission capital outlays and reach suggest debt-to-asset ratio targets, these scenarios will include estimated debt repayment, capital reduction and rate impacts.

Comment #13: [NWPCC] The Debt for Nuclear Project 1 has been restructured so that only a minor principle payment of approximately \$1.3 million will be made between now and 2022. The current agreement with Energy Northwest is to pay off the remaining Project obligation of approximately \$795 million (July 30, 2017) by 2028. Under the leverage proposal BPA ultimately adopts, what portion of this obligation will be repaid by 2028?

Likewise, it is now my understanding that soon there will be a refinancing of the debt service for Nuclear Project 3 that will also limit principle repayment for this obligation to approximately \$1.3 million between now and 2022. The current agreement with Energy Northwest is to pay off this

obligation of approximately \$1.011 billion (July 30, 2017) by 2028. Under the leverage proposal BPA ultimately adopts, what portion of this obligation will be repaid by 2028?

BPA Response to Comment #13: The leverage policy proposal does not distinguish what debt will be repaid and does not change the term limits agreed to with Energy Northwest (2028 for projects 1&3 and 2044 for CGS). With or without the leverage policy and barring any change in the agreed term limits with Energy Northwest, the plan is to repay all of project 1 and 3 debt by 2028.

Comment #14: [NWPCC] Both Nuclear Projects 1 and 3 never produced an asset for the public, only a liability that had to be repaid. It has been 35 years since construction was terminated on both projects. Under the current proposal significant additional principle reduction of the remaining liability will not occur until almost 40 years after construction was terminated. If this debt is extended beyond 2028 then it will be more than 45 years to retire this liability. The current standard for amortization of a power asset is 50 years. I do not know what the standard should be for a debt that has never been an asset to the system. I realize that a case can be made that the deferral of principle payments on Projects 1 and 3 debt to enable the early repayment of other debt puts into question whether the remaining debt on Projects 1 and 3 should be attributable to those Projects or whether it has become a line of credit for BPA. When does BPA/ Energy Northwest plan to retire this liability?

BPA Response to Comment #14: EN debt is viewed by BPA as Regional Cooperation Debt that provides valuable tax-exempt debt capacity for the Region, which, when integrated with BPA's other debt liabilities, has been used to, and can continue to, provide short- and long-term benefits to the Region while meeting other debt management goals such as BPA's overall debt burden. All Project 1 and 3 debt currently matures and is planned to be repaid by 2028 and all of CGS debt matures and is planned to be repaid by 2044. The Leverage Policy proposal does not distinguish between debt types. BPA is hosting a public workshop on May 22nd to develop its 10-year capital financing plan. In this process we plan to review all available sources of capital financing, including U.S. Treasury Borrowing Authority, additional revenue financing, lease-purchase, and discuss the possibilities for extending Energy Northwest Regional Cooperation Debt as a source of capital financing. We are planning to evaluate all options looking at cost and certainty, and ultimately develop a 10 year capital financing plan using a combination of financing tools.

Comment #15: [NWPCC] Nuclear Project 2, the Columbia Generating Station, has an outstanding debt liability of approximately \$3.489 billion (July 1, 2017). This debt substantially increased beyond forecasts in 2012 when Energy Northwest incurred debt of approximately \$748 million for the Depleted Uranium Enrichment Program. Like all nuclear power plants, CGS will require significant ongoing capital improvements over the next 10 years. CGS's license was recently extended through 2043 and this was the basis for extending the debt liability for CGS through 2044. BPA's agreement with Energy Northwest requires the debt associated with the CGS to be retired by 2044. It appears under the Regional Cooperative Debt agreement BPA and Energy Northwest will refund and reissue some of the debt outstanding for CGS to reduce principle payments between now and 2020. Does BPA anticipate retiring all debt associated

with CGS by 2044? Is there any portion of Energy Northwest's debt liabilities for CGS that are not the liabilities of BPA?

BPA Response to Comment #15: All CGS debt currently matures by 2044 and is planned to be repaid by 2044. EN and BPA have agreed not to issue CGS debt beyond 2044 at this time. Yes, all of Energy Northwest's debt liabilities for CGS are BPA liabilities.

Comment #16: [NWPCC] The debt for CGS has largely been going in one direction... up. A recent publication by BPA indicated that Energy Northwest will debt finance capital improvements vs revenue finance the improvements for the foreseeable future. What does BPA believe the outstanding debt for CGS will be in 2028? And at that level of debt does it anticipate having adequate revenue to retire the debt by 2044?

BPA Response to Comment #16: All CGS debt repayment is currently placed prior to 2044 and therefore BPA would recover the costs of retiring that debt by 2044. The current capital improvement spending from 2020 to 2028 to be funded with debt is expected to be approximately \$815 million. Based on the additional capital expenditures and debt currently placed, \$2.7 billion in CGS debt will be outstanding in 2028.