March 2, 2018 Leverage & Financial Reserves Policy Comments & Responses

These responses are made to further continue conversation around BPA's proposed Leverage and Financial Reserves Policies. BPA's responses are not final determinations on these matters, and may be revised throughout this public process based on best available information. Additional comments will be addressed in the slideshow presentation at the upcoming March 20 workshop.

GENERAL

Comment #1: [Avista and PSE] The timeline at page 3 of the Presentation does not allow adequate time for BPA to adequately develop and explore these issues with its customers. BPA should adopt a process and schedule that allow customers to provide meaningful, informed input and that allows BPA to adopt a reasoned explanation for any BPA Financial Reserves Policy phase-in implementation that it adopts. Such schedule should allow time for consideration, for example, of any interactions or interdependencies between any BPA leverage policy and the Financial Reserves Policy phase-in implementation.

BPA Response to Comment #1: The timeline has been changed to extend the time to submit comments after the March 20 workshop to April 6. BPA has also moved the last workshop to April 20 and the public comment period will run through May 11. These changes add an additional two weeks to the schedule to allow more time for discussion and feedback.

Comment #2: [Cowlitz] To achieve the 10-year target, Cowlitz recommends that BPA focus on cost containment across the enterprise and supports the use of other tools such as prepayment of high interest debt with revenue from rates, revenue financing of some capital programs and selective reduction of some capital investments where other creative options to meet anticipated service levels are possible. To the extent possible, BPA should focus on tools that limit upward pressure on rates leaving increased revenue options as a last resort to ensure targets are met.

BPA Response to Comment #2: Cost management is the primary focus of BPA's financial plan and central to the strategic plan. This objective includes two parts – the first to keep program spending at or below the rate of inflation and the second to manage the lifecycle costs and value of assets. BPA is actively pursuing these measures through the 2018 Integrated Program Review Process kicking off in June.

BPA will be conducting workshops starting in late May to develop a 10-year capital-financing plan that will consider the cost and certainty of different financial instruments to meet capital needs. These workshops will include looking beyond BPA's traditional financing sources to create an "all of the above" strategy. More details can be found on page 13 of the financial plan.

Comment #3: [Emerald] Second, while we certainly understand BPA's interest in achieving greater financial stability, we also hope BPA sees that customers have the same need. Under the current Regional Dialogue contract terms, BPA's preference customers must essentially "hold our breath" every two years to learn what the rate increase impact will be. This dynamic makes it very difficult to plan our business and invest for the future. We'd propose that as BPA updates its own financial policies, it also considers doing something to allow its customers greater stability. A long-term rate target commitment would be a good place to start. We suggest BPA target a number of 4-5% for every two-year period during the remainder of the contract. As results come in above or below expectations, BPA could leverage its newly strengthened financial reserves to help cover the difference. We believe this represents a reasonable compromise and would greatly appreciate removing this random outcome from our own long-term financial plans.

BPA Response to Comment #3: Thank you for your comment. BPA's competitive market position is an important component in BPA's overall financial and strategic planning, central to that is BPA's cost structure. In BPA's financial and strategic plans, a primary objective is to keep program spending at or below the rate of inflation between now and 2028. This objective is focused on the bottom line, BPA's rates, as well as demonstrating to BPA customers and stakeholders that it is running a sound and disciplined business. Within this firm cost constraint, BPA will pursue meeting financial resiliency objectives related to building financial reserves and reducing leverage. Specific rate targets encompassing all factors are not within the scope of the Financial Reserves Policy or Leverage Policy.

Comment #4: [SCL] Holding IPR cost increases to general price inflation or less addresses only about half of Power and Transmission costs. To be successful, BPA will need to evaluate all factors that affect costs and rates. In many cases, BPA can and should have influence, such as BPA staffing, capital and operating spending at the federal dams and Energy Northwest, fish and wildlife spending to mitigate the harmful effects of the federal dams, and others. In areas where BPA cannot have such control, such as natural gas prices or interest rates, City Light encourages BPA to focus more effort on understanding the fundamentals and taking additional hedging and risk control actions.

BPA Response to Comment #4: Thank you for your comment. BPA considers this a general comment not in need of a specific response. We note, though, that BPA actively seeks opportunities to enhance its revenues and minimize its market risk.

Comment #5: [NW Council]: It's important that BPA keep the maximum term (2028) set by Energy Northwest for retirement of the bonds for Projects 1 and 3. While the true underlying debt may only be partially tied to the failed projects, the fact that debt is still outstanding after 35+ years for projects where there was no underlying asset value is very hard to explain.

BPA Response to Comment #5: Thank you for your comment. Generally, BPA is viewing leverage as the balance of total debt to revenue producing assets without regard for specific types of assets or debt. Projects 1 &3 are not revenue producing assets therefore they are not included as an asset in the debt-to-asset ratio calculation, however the calculation captures total debt, therefore any outstanding debt related to these projects is included. Thus the asset side of the equation only allows for revenue producing assets while the debt side of the equation accounts for all debt regardless of its original purpose. These topics may receive additional discussion in public workshop(s) BPA is hosting in the spring/summer of 2018 on BPA's 10-year capital financing plan.

Comment #6: [NW Council] The Finance Plan calls for implementing a well-defined strategic asset management system. Hopefully this system could generate cost savings that would reduce the level of debt BPA would incur in the future.

BPA Response to Comment #6: The cost-management objective under the goal of strengthening financial health is a primary focus of BPA's new strategic plan. This objective includes two parts – the first to keep program spending at or below the rate of inflation and the second to manage the lifecycle costs and value of assets. BPA is actively pursuing these measures through the 2018 Integrated Program Review Process kicking off in June.

Financial Reserves Policy

Comment #7: [Cowlitz] Cowlitz has concerns with the FRP surcharge approach: 1. Power customers are likely to experience a CRAC for FY19 and quite possibly spill surcharges for as much as $40M annually could begin this summer. Adding another $40M surcharge (acknowledging that $20M PNRR goes away) puts a great upward pressure on rates at a time when BPA is struggling to remain competitive with wholesale power prices.

BPA Response to Comment #7: Please see **BPA Response to Comment #3** regarding a closely related question and please follow up if additional information or response is needed.

Comment #8: [M-S-R] With regard to financial reserves, will either the "additional repayment of debt" or "revenue financing of capital projects" tools allow for use of the roughly $250 million in Transmission reserves above its upper threshold? In other words, will an allowance be made for Transmission to use the excess reserves even if Power is not above its threshold for purposes of promoting the deleveraging goals? If not, what was the intended reference to use of financial reserves in the five year strategic plan? M-S-R notes that Transmission's reserves were projected to decline in 2018, but are now projected to grow by 10%. At a minimum, those excess revenues should be allowed to be used to offset the rate pressures associated with the Leverage Policy.

BPA Response to Comment #8: No. The Leverage Policy will not supersede the Financial Reserves Policy (FRP). If Transmission and the Agency reach the reserves levels necessary to trigger an RDC, then Transmission reserves will be available for investment in high-value business line-specific purposes, including repaying additional debt (which would fall under the Leverage Policy), funding additional capital spending or rate relief. The reference to reserves in the 5 year strategic plan was in regards to a tool that BPA has used historically to fund a small portion of its capital investments. Acknowledging this tool may be available again in the future within the requirements of the FRP.

Comment #9: [SCL] What factors have changed since the BP-18 testimony on financial reserves and final proposal, when BPA felt collecting $20 million/yr in non-Slice costs was adequate, and now?

BPA Response to Comment #9: $20 million was an interim solution, not the final policy solution. BPA stated in the closing documents that BPA would pursue in public workshops accelerating the pace in which the 60 days cash minimum threshold was reached. "While I am adopting the Financial Reserves Policy in this decision, I have left some implementation features open for further development, including how to phase in the lower threshold for Power's financial reserves and how to best leverage financial reserves to manage long-term wholesale market price exposure and promote greater rate stability. I believe that the region will be best served by focusing on these elements in future processes, such as the upcoming long-term strategic planning discussions and BP-20 Rate Case workshops." The surcharge phase-in proposal is in line with the BP-18 decision. See Administrator's Final Record of Decision, BP-18-A-04, Section 6.6.4.3.1 (Phase-in of Power Service's CRAC Threshold); Financial Reserves Policy, Section 4 (Implementation)

Comment #10: PPC In the BP-18 rate case, BPA staff provided an analysis of the cost impact of a credit downgrade for each business line for the agency as a whole. Could BPA update or conduct a similar analysis for the 10 year period starting with the BP-20 rate period?

BPA Response to Comment #10: Yes, please see provided attachment. One difference between the two analyses, in the prior analysis is that BPA assumed a much larger Regional Cooperation Debt program through 2024, the updated analysis based on the final proposal only assumed a Regional Cooperation Debt program through 2020.

LEVERAGE POLICY

Comment #11: [M-S-R] The FOCUS 2028 base case projected Transmission rate increases of 39% by 2028, and Power rate increases of roughly 29% by 2028. The FOCUS 2028 analysis also noted the borrowing constraints and need to accelerate debt repayment. Is the cost of the Leverage Proposal baked into the FOCUS 2028 Transmission rate projections? If not, can BPA provide projected rate impacts of meeting the Leverage Policy target?

BPA Response to Comment #11: There was no Leverage Policy in place at the time of the Focus 2028 process in 2016. As a result, leverage was not a driver of the rate analysis that occurred in the long term reference case. Instead, the long term reference case assumed that BPA would take actions to ensure $750 million of borrowing authority. This resulted in significantly higher debt repayment. Debt-to-asset ratios by business line were not calculated in that process. The leverage policy presentation presented on March 20th will contain preliminary rough estimates of revenue requirement impacts as a result of the leverage policy.

Comment #12: [M-S-R] BPA's Strategic Plan indicated it would use an all-of-the-above effort to reduce its debt-asset ratio, including "revenues, financial reserves, third-party leases, additional Treasury borrowing authority, authority to issue debt directly to capital markets, and funds that are freed up by working with Energy Northwest to refinance Regional Cooperation Debt." The tools presented in the March 2 workshop do not appear to match the Strategic Plan.

BPA Response to Comment #12: BPA's statement in the strategic plan about an all of the above strategy was in reference to its capital financing sources, that is its debt capacity, because BPA's primary source of debt capacity, US Treasury borrowing authority, is running out very soon and it will likely require a combination of sources to meet capital funding requirements going forward. However, related to the debt-to-asset ratio, BPA and customers are evaluating options and tools for meeting leverage policy goals and in that sense now is the time to explore all options.

Comment #13: [M-S-R] Is it correct that all types of debt, regardless of source, are included in BPA's leverage calculations?

BPA Response to Comment #13: The leverage calculation includes all Federal and nonfederal debt, as defined by GAAP reported in the FCRPS annual report. Footnote 7 in the 9/30/17 annual report categorizes FCRPS debt into the following categories:

- Nonfederal Debt
    - Nonfederal generation (CGS and Cowlitz Falls)
    - Terminated nonfederal projects (WNP 1, WNP 3, Northern Wasco Hydro Project)
    - Lease purchase (Capital leases, NIFC, NIFCSW COI)
    - Other capital leases
    - Prepay
- Federal Debt
    - Borrowing from US Treasury
    - Appropriations
    - Appropriations not yet scheduled
- Debt Service Reassignment (DSR)

Comment #14: [M-S-R] How, if at all, is the $750 million borrowing facility accounted for in BPA's calculation of leverage and access to capital?

BPA Response to Comment #14: Since the $750 million Treasury Facility is a line of credit and only becomes a debt obligation when BPA uses it, it would be counted in the leverage calculation only if there is an outstanding balance at the end of the fiscal year.

Comment #15: [M-S-R] Slide 14 appears to show an average agency level of capital investment of $800 million per year over the next nine years, $600 million of which is for sustain projects, and $200 million of which is for expansion projects. Is the above a correct interpretation of BPA's capital spending projections?

BPA Response to Comment #15: Yes, this is based on 2016 IPR/CIR. New projections will be developed in the upcoming IPR meetings.

Comment #16: [M-S-R] Are the spending levels on slide 14 the basis for the projected leverage levels shown on slide 10?

BPA Response to Comment #16: Yes.

Comment #17: [M-S-R] Do the capital spending projections reflect BPA's non-wires solutions?

BPA Response to Comment #17: To the extent that there were non-wires capital projects included in the 2016 IPR/CIR, they are assumed in this analysis.

Comment #18: [M-S-R] How does the annual projection of capital spending break down between Power and Transmission?

BPA Response to Comment #18: See excel spreadsheet titled "2016 CIR Sustain vs. Expand" for the approximate breakdown between Power and Transmission.

Comment #19: [M-S-R] How does each business line's capital spend projection break down between expansion projects and sustain projects?

BPA Response to Comment #19: See excel spreadsheet titled "2016 CIR Sustain vs. Expand" for the approximate breakdown between Power and Transmission.

Comment #20: [M-S-R] How much depreciation is projected for each business line each of the nine years shown?

BPA Response to Comment #20: See table below:

	Depreciation by Year ($000s)											
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	Power Depreciation	144,092	144,092	144,065	148,526	152,731	157,306	162,047	167,343	173,514	178,899	185,612
2	Transmission Depreciation	270,973	282,159	288,210	302,174	311,757	322,554	335,169	345,432	357,190	367,265	382,262

Comment #21: [M-S-R] During the workshop, it was noted that BPA's leverage after the 2000-2001 events was 150%. What actions did BPA take to bring the leverage down from 150% to the current 90%?

BPA Response to Comment #21: Primarily meeting the requirements of the repayment methodology has resulted in BPA reducing its leverage over time. It is not until recently, for Transmission in particular, that the output from the repayment methodology results in an increasing Transmission leverage position.

Comment #22: [M-S-R] BPA indicated it compares its debt to its revenue producing assets to determine leverage. What categories of assets are excluded as not being revenue producing?

BPA Response to Comment #22: The phrase "revenue producing assets" is used broadly to describe those assets that are identified as Utility Plant in BPA's annual report. These assets generate sales revenue or are in support of revenue generating functions. BPA includes all utility plant, net of accumulated depreciation, construction work in progress and nonfederal generation (as reported in the annual report) as revenue producing assets. This includes:

- Power assets combined in the annual report from the Corps of Engineers and the Bureau of Reclamation
- Transmission assets
- Corporate assets
- Nonfederal generation assets include a portion of the Columbia Generating Station

All other assets, including regulatory assets, are excluded from the leverage calculation.

Utility Plant does not include regulatory assets. For Power, this is Energy Northwest Projects 1 and 3, all fish and wildlife investments, and legacy energy efficiency spending. Transmission's regulatory assets consist of spacer dampers and the spending on the terminated South of Alston project. Additional information on FCRPS assets can be found in BPA's 2017 annual report on pages 50, 55, and 60.

Comment #23: [M-S-R] On slide 24, BPA refers to net utility plant – is that the same as revenue producing assets?

BPA Response to Comment #23: Net utility plant is based on the definition used in the audited financial statements. It includes Completed Plant less Accumulated Depreciation plus CWIP. In this context, they are all classified as revenue producing assets along with nonfederal generation (a portion of the Columbia Generating Station). All other assets, including regulatory assets, are not considered revenue producing assets.

Comment #24: [M-S-R] Why is nonfederal generation included in Power's assets for leverage purposes?

BPA Response to Comment #24: The nonfederal portion of the Power assets represents a portion of the Columbia Generating Station, which provides about 10 percent of the power that is marketed by BPA, and Lewis County's Cowlitz hydro facility. These facilities produce power that is sold by BPA and are treated as part of the FCRPS.

Comment #25: [M-S-R] Slide 12 shows the projected annual interest expense for the two business lines. Are the projections based on assumptions of debt financing the capital expenditures reflected on slide 14? What assumptions are made about funding sources (e.g. federal versus non-federal debt financing)? What interest rates are assumed? If Power is deleveraging during the time period shown, why does its interest expense remain constant?

BPA Response to Comment #25: Yes, the information in slide 12 is sourced from the same data as slide 14 which is all based from BPA's last rate filing, the BP-18 final proposal.

For Transmission: $15 million of reserves financing through 2023, lease purchase 50 percent of all capital spending in 2018-2019 and then 25 percent in years 2021 and on, the remaining capital spending is financed with Federal bonds regardless of whether there is remaining borrowing authority.

Power: Federal bonds and appropriations are used to fund capital investment in federal assets, nonfederal bonds issued by Energy Northwest are used to fund capital investments in the Columbia Generation Station.

As these studies are based in the BP-18 rate case, the interest forecast in the BP-18 documentation is also used here. The leverage ratio is made up of two parts: total debt by business line is the numerator of the ratio and the amount of revenue producing assets are the denominator of the ratio.

Power's interest expense is staying relatively flat because its total debt is declining modestly at the same time BPA's interest rate forecast shows a modest increase in interest rates in the coming years. Power's overall leverage is declining because its total debt is declining modestly and its asset base is increasing.

Comment #26: [M-S-R] Has the percentage of Transmission projects that are sustain versus expansion increased?

BPA Response to Comment #26: Yes. The capital forecast used in this analysis is consistent with that of the 2016 IPR/CIR. Transmission sustain projects as a portion of Transmission total capital spending was forecast to be 60 percent in 2018 and 70 percent in 2026.

Comment #27: [M-S-R] Is Regional Cooperation Debt refinancing equally labor intensive as third-party leasing?

BPA Response to Comment #27: No. Carrying out the activities of the Regional Cooperation Debt program are similar to traditional bond issuances, requiring some internal Treasury staff, bankers, attorneys etc. For the bond issuance itself, the lease purchase program is somewhat similar in nature, however the lease purchase program requires an additional amount of administrative cost and business process change in order to monitor and track assets that may end up meeting the legal, accounting, and business requirements so that they can be funded through the lease purchase program.

Comment #28: [PSE] The Presentation states at page 14 that "Industry practice is to revenue finance a large portion, if not all replacement costs." (1) Please provide any back-up documentation or other support for this statement. (2) Please explain what revenue financing means in this context. Does it mean paying for capital assets out of current revenues (e.g., including the capital cost in the annual revenue requirement)? (3) Please provide any rationale accepted in industry for financing replacement capital assets differently than expansion capital assets. (4) What would BPA's projected leverage--and the impact on BPA rates--be, by business line, over the next ten years if it revenue financed (i) all of its replacement capital costs? (ii) half of its replacement capital costs?

BPA Response to Comment #28: (1) BPA assumes that many utilities revenue finance a portion or all of their replacement costs given that according to Moody's September 2016 report showed the top 50 Public Power utilities with generation Assets as having a median debt ratio of 54%. In addition, based on annual reports and strategic plans produced by EWEB, Cowlitz County PUD, and Grant County PUD they rate finance a portion of replacement and/or expansion capital costs. (2) Revenue financing means the revenue requirement generates cash from current revenues to pay for capital investments. (3) BPA assumes that if a utility chose to revenue finance only a portion of capital expenditures, it would be a prudent rationale to revenue finance replacements first as they do not add any additional capacity or revenue generation to the system. (4) BPA has not looked at leverage ratios assuming this level of revenue financing. However, see the attached spreadsheet titled “2016 CIR sustain versus expand” for the dollar impact of such a change. Full revenue financing of sustain investments in BP-20 equate to roughly $312 million for Power and $394 million for Transmission. These levels of revenue financing would have a significant downward impact on both Power and Transmissions leverage.

Comment #29: [M-S-R] On slides 14 and 18 BPA indicates industry practice is to fund a considerable portion of sustain projects through revenue financing. Can BPA provide any reference materials showing that is industry practice?

BPA Response to Comment #29: BPA assumes that many utilities revenue finance a portion or all of their replacement costs given that according to Moody’s September 2016 report showed the top 50 Public Power utilities with generation Assets as having a median debt ratio of 54%. In addition, based on annual reports and strategic plans produced by EWEB, Cowlitz County PUD, and Grant County PUD they rate finance a portion of replacement and/or expansion capital costs.

Comment #30: [M-S-R] BPA points to an industry average of 54 percent leverage. Is it correct that the 54% is based on a group that is largely made up of investor owned utilities that can issue stock to fund investments? Do the rating agencies take that into account when comparing leverage?

BPA Response to Comment #30: No, The list of utilities used in the Moody’s report follows:

Exhibit 9

Select List of Public Power Electric Utilities with Generation Assets

OBLIGOR NAME	STATE	ELECTRIC ENTERPRISE RATING	OUTLOOK	DIRECT DEBT OUTSTANDING ($'000)
Alexandria (City of) MN Electric Enterprise, MN	MN	A1	NOO	11,344
Algona (City of) IA Electric Enterprise, IA	IA	Baa1	Stable	15,475
Anaheim (City of) CA Electric Enterprise, CA	CA	Aa3	Stable	624,310
Arizona Power Authority, AZ	AZ	Aa2	Stable	44,305
Atlantic (City of) IA Electric Enterprise, IA	IA	A1	NOO	7,350
Austin (City of) TX Electric Enterprise, TX	TX	Aa2	Stable	1,349,251
Benson (City of) MN Electric Enterprise, MN	MN	Baa2	NOO	5,185
Bonneville Power Administration, WA	WA	Aa1	Stable	16,089,851
Brownsville Public Utility Board, TX	TX	A2	Stable	293,832
Bryan (City of) TX Electric Enterprise, TX	TX	A2	Stable	203,530
Burbank (City of) CA Combined Utility Enterprise, CA	CA	A1	Stable	88,031
Burlington (City of) VT Electric Enterprise, VT	VT	Baa1	Stable	76,501
Cedar Falls (City of) IA Electric Enterprise, IA	IA	Aa2	NOO	40,375
Chelan County Public Utility District 1, WA	WA	Aa3	Stable	619,456
Clark County Public Utility District 1, WA	WA	A1	Stable	377,040
Clatskanie People's Utility District, OR	OR	A3	Negative	23,043
Coldwater (City of) MI Electric Enterprise, MI	MI	A3	Stable	2,705
Colorado Springs (City of) CO Combined Utility Enterprise, CO	CO	Aa2	Stable	2,358,790
Confederated Tribes Warm Springs Reservation, OR	OR	A3	Stable	52,080
Cowlitz County Public Utility District 1, WA	WA	A1	NOO	225,163
Denton (City of) TX Combined Utility Enterprise, TX	TX	A1	NOO	63,340
Detroit Lakes (City of) MN Electric Enterprise, MN	MN	A3	NOO	2,505
Easley (City of) SC Combined Utility Enterprise, SC	SC	A2	NOO	51,147
Elk River Municipal Utilities, MN	MN	Aa3	NOO	5,125
Eugene Water & Electric Board, OR Electric Enterprise, OR	OR	Aa2	Stable	236,148
Fayetteville Public Works Commission, NC	NC	Aa2	Stable	252,620
Gaffney (City of) SC Combined Utility Enterprise, SC	SC	A3	NOO	6,829
Gainesville (City of) FL Combined Utility Enterprise, FL	FL	Aa2	Stable	1,948,060
Glendale (City of) CA Electric Enterprise, CA	CA	Aa3	Stable	177,617
Grand Island (City of) NE Electric Enterprise, NE	NE	A1	Stable	46,695
Grand River Dam Authority, OK	OK	A1	Stable	1,130,580
Grant County Public Utility District 2, WA	WA	Aa3	Stable	1,306,020
Green Island Power Authority, NY	NY	Ba1	Stable	15,575
Greenville (City of) TX Electric Enterprise, TX	TX	A2	Stable	70,253
Greenville Utilities Commission, NC	NC	Aa2	Stable	99,960
Greer Commission of Public Works, SC	SC	A1	NOO	79,303
Griffin (City of) GA Combined Utility Enterprise, GA	GA	A3	Stable	56,456
Guam Power Authority, GU	GU	Baa2	Stable	635,550
Harlan Municipal Utilities, IA	IA	A3	NOO	8,355
Hastings (City of) NE Electric Enterprise, NE	NE	A2	Stable	15,985

Heber Light & Power Company, UT	UT	A2	Stable	8,830
Henderson Municipal Power & Light, KY	KY	Baa2	Stable	13,270
Holland (City of) MI Electric Enterprise, MI	MI	Aa3	Stable	158,840
Holyoke Gas and Electric Department, MA	MA	A1	Stable	30,507
Hutchinson (City of) MN Combined Utility Enterprise, MN	MN	A1	NOO	18,290
Imperial Irrigation District, CA Electric Enterprise, CA	CA	A1	Stable	551,031
JEA, FL	FL	Aa2	Stable	2,570,220
Jacksonville Beach (City of) FL Combined Utility Enterprise, FL	FL	Aa3	NOO	21,825
Kaukauna (City of) WI Electric Enterprise, WI	WI	A3	NOO	67,790
Key West Utility Board, FL	FL	A1	Stable	44,848
Kissimmee Utility Authority, FL	FL	A1	NOO	116,730
LCRA Transmission Services Corporation, TX	TX	A1	Stable	1,983,100
Lafayette (City of) LA Combined Utilities Enterprise, LA	LA	A1	Stable	226,365
Lakeland (City of) FL Electric Enterprise, FL	FL	Aa3	Stable	417,790
Lansing Board of Water & Light, MI	MI	Aa3	Stable	349,560
Leesburg (City of) FL Electric Enterprise, FL	FL	A2	NOO	44,186
Long Island Power Authority, NY	NY	A3	Stable	9,838,329
Los Angeles Department of Water & Power, CA Electric Enterprise	CA	Aa2	Stable	8,490,169
Lower Colorado River Authority, TX	TX	A2	Stable	3,484,200
MILLER (CITY OF) ELECTRIC ENTERPRISE	SD	Baa1	Stable	6,685
Manitowoc (City of) WI Electric Enterprise, WI	WI	A1	Stable	15,955
Marshall (City of) MN Combined Utility Enterprise, MN	MN	A3	NOO	39,790
Memphis (City of) TN Electric Enterprise, TN	TN	Aa2	Stable	421,030
Modesto Irrigation District, CA	CA	A2	Stable	787,205
Monroe (City of) NC Combined Utility Enterprise, NC	NC	A2	NOO	40,165
Moorhead (City of) MN Combined Utility Enterprise, MN	MN	Aa3	NOO	29,883
NEW LONDON UTILITY	WI	A3	NOO	8,426
NORTH ST. PAUL (CITY OF) ELECTRIC ENTERPRISE	MN	A2	Negative	1,390
Nebraska Public Power District, NE	NE	A1	Stable	1,838,672
New Richmond (City of) WI Electric Enterprise, WI	WI	A2	NOO	1,765
New York State Power Authority, NY	NY	Aa1	Stable	2,731,000
Newberry (City Of) Sc Combined Utility Enterprise, SC	SC	A3	NOO	55,044
Newnan Water, Sewerage & Light Commission, GA	GA	A1	NOO	30,945
Ocala (City of) FL Combined Utility Enterprise, FL	FL	A1	NOO	146,545
Oconomowoc (City of) WI Electric Utility Enterprise, WI	WI	A2	NOO	3,280
Omaha Public Power District, NE	NE	Aa2	Stable	2,256,348
Opelika (City of) AL Electric Enterprise, AL	AL	A1	NOO	28,295
Orange City Electric Enterprise, IA	IA	A3	NOO	3,830
Orlando Utilities Commission, FL	FL	Aa2	Stable	1,552,915
Owensboro (City of) KY Electric Enterprise, KY	KY	A3	Stable	203,275
Paducah (City of) KY Electric Enterprise, KY	KY	Baa1	Stable	153,670
Pella (City of) IA Electric Enterprise, IA	IA	A2	NOO	3,245
Pend Oreille County Public Utility District 1, WA	WA	Baa1	Negative	151,818
Peru (City of) IL Electric Enterprise, IL	IL	A1	NOO	11,060
Princeton (City of) MN Combined Utility Enterprise, MN	MN	A3	NOO	9,113
Princeton Electric Plant Board, KY	KY	Baa1	Stable	18,695
Rochelle (City of) IL Electric Enterprise, IL	IL	A3	Stable	16,370
Rochester (City of) MN Electric Enterprise, MN	MN	Aa3	Stable	105,335
Rock Hill (City of) SC Combined Utility Enterprise, SC	SC	A3	Stable	118,065
Roseville (City of) CA Electric Enterprise, CA	CA	A2	Positive	210,691
Sacramento Municipal Utility District, CA	CA	Aa3	Stable	2,903,100
Salt River Project Agricultural Improvement and Power District, AZ	AZ	Aa1	Stable	4,060,705
San Antonio (City of) TX Combined Utility Enterprise, TX	TX	Aa1	Stable	6,030,528
Santa Clara (City of) UT Electric Enterprise, UT	UT	Ba1	Negative	4,091
Seattle (City of) WA Electric Enterprise, WA	WA	Aa2	Stable	2,070,800
Shakopee Public Utilities Commission, MN	MN	A1	NOO	8,425
Shelby (City of) NC Combined Utility Enterprise, NC	NC	A1	NOO	30,577
Snohomish County Public Utility District 1, WA Electric Enterprise	WA	Aa3	Stable	538,910
South Carolina Public Service Authority, SC	SC	A1	Stable	7,664,374
Spencer (City of) IA Electric Enterprise, IA	IA	A1	NOO	6,960
Springfield (City of) IL Electric Enterprise, IL	IL	A3	Stable	531,840
St. George (City of) UT Electric Enterprise, UT	UT	Baa1	Stable	56,280
St. Peter (City of) MN Electric Enterprise, MN	MN	A3	NOO	8,145

Stoughton (City of) WI, WI	WI	A2	NOO	4,460
Sun Prairie (City of) WI Combined Utility Enterprise, WI	WI	A1	NOO	9,325
Sylacauga Utilities Board, AL	AL	Aa3	NOO	24,315
Tennessee Valley Authority	TN	Aaa	Stable	26,103,000
Tacoma (City of) WA Electric Enterprise, WA	WA	Aa3	Stable	385,800
Tallahassee (City of) FL Electric Enterprise, FL	FL	Aa3	Stable(m)	557,345
Turlock Irrigation District, CA	CA	A2	Stable	1,140,557
Unified Government of Wyandotte County/Kansas City,KS Combined Utility Enterprise, KS	KS	A3	Stable	563,060
Vernon (City of) CA Electric Enterprise, CA	CA	Baa1	Stable	385,805
Vero Beach (City of) FL Electric Enterprise, FL	FL	A1	NOO	32,300
Virgin Islands Water & Power Authority, VI	VI	B1	Negative	266,575
Waunakee (Village of) WI Combined Utility Enterprise, WI	WI	A1	NOO	8,525
Waupun (City of) WI Combined Utility Enterprise, WI	WI	A3	NOO	8,470
Waverly Municipal Electric Utility, IA	IA	A2	Positive	10,404

Comment #31: Slide 12: [PSE] Was any new lease financing assumed over the 10 year period? If so, how much and when? If not, how would the graph of projected leverage (debt utilization) over the next 10 years change if 25 percent of the transmission capital investments over the 10 year period were assumed to be lease financed?

BPA Response to Comment #31: Yes, 50 percent was included for 2018 and 2019 and then 25 percent thereafter.

Comment #32: [PSE] BPA indicated that BPA assumed in developing this graph that it had unlimited federal borrowing authority. How would the graph change if BPA reflected its current federal borrowing authority limit? Please provide a list of transmission projects that were assumed over the 10 year period in developing the graph. Are the assumed transmission projects the same as those assumed in the BP-18 proceeding and record of decision? Is the debt used for this graph solely federal debt? If not, please explain.

BPA Response to Comment #32: The capital spending levels are consistent with those presented at the 2016 IPR/CIR and which were included in BPA's repayment studies for the BP18 rate proceeding. The 2016 IPR/CIR material is available on BPA's external website at: https://www.bpa.gov/Finance/FinancialPublicProcesses/IPR/Pages/IPR-2016.aspx.

How this graph would change if we assumed borrowing authority limits may depend on how BPA reacts to the limits. BPA could reduce capital spending levels, increase debt repayment or revenue finance investments, or more aggressively seek third-party debt sources. It is reasonable to expect that some additional debt repayment would be required, therefore the ratios would be lower, but this has not been studied. Finally, as a clarification, this graphic refers to total debt not just Federal debt.

Comment #33: Slide 12: [PSE] Please provide the projected total debt by year over the 10 year period for each business line assumed in developing the graph on page 12. If power debt is projected to decrease over the 10 years (as is suggested by the decreasing power leverage shown on page 10), why does the projected power interest expense remain roughly level over the 10 year period? Please provide a list of transmission projects that were assumed over the 10 year period in developing the graph. Are the assumed transmission projects the same as those assumed in the BP-18 proceeding and record of decision? Is the interest expense shown solely interest on federal debt? If not, please explain. Does this graph assume unlimited federal borrowing authority? Please explain.

BPA Response to Comment #33:

The interest expense shown on slide 12 is the sum of Federal and nonfederal interest for each business unit.

Power interest expense remains roughly level through 2028 because the outstanding debt declines only modestly over this time. Power assets grow over this period resulting in a decline in the debt ratio.

We did not have detail on specific projects for this analysis. The total capital investment is consistent with what was presented in the 2016 IPR. See (Cite 2016 IPR page on BPA's website)

Total Outstanding Debt ($00s)											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Power	9,724	9,572	9,606	9,472	9,365	9,333	9,387	9,333	9,393	9,367	9,398
Transmission	5,838	6,110	6,504	6,909	7,313	7,667	7,977	8,291	8,608	8,944	9,275

Comment #34: [PSE] Slide 17: The Presentation states at page17 that "BPA has a very high debt-to-asset ratio relative to other utilities, 90 percent versus the average of 54 percent." Please describe the group of referenced "other utilities". For example, is it the top 50 municipal or publicly owned utilities that own generation? Please confirm that the referenced "other utilities" do not include investor-owned utilities.

BPA Response to Comment #34: Yes, the "other utilities" include the referenced Moody report on the Top 50 municipal utilities that own generation. Please see question #30 for the detailed list.

Comment #35: [SCL] On slide #7, BPA refers to the fact that the federal repayment minimum is the cash generated by the revenue requirement. Are there any year or years between now and 2028 when this minimum is the federal repayment for power or transmission?

BPA Response to Comment #35: Yes, there are years when Federal repayment is increased to the minimum thresholds. Using the BP-18 final study, BPA expects that Power's Federal repayment will be at the minimums in 2025, 2026, and 2027. BPA expects Transmission to be either at or within a few thousand dollars of the minimum through 2028.

Comment #36: [SCL] Also on slide #7, BPA refers to the repayment model calculations. Subject to the other minimum repayment criteria, could BPA modify the repayment model to calculate the lowest present value repayment?

BPA Response to Comment #36: The model would require significant redesign. The model is designed to determine the lowest levelized debt service over the applicable repayment period. The model does not calculate present value.

Comment #37: [SCL] On slide #10, BPA notes that "(c)urrent practices do not consider the appropriate use of debt…" What does BPA consider appropriate uses of debt?

BPA Response to Comment #37: This policy and process is helping to define what appropriate uses of debt are. The slide wasn't meant to show what appropriate uses of debt are, but simply what a reasonable level of debt outstanding compared to asset value is.

Comment #38: [SCL] On slide #13, BPA refers to an assumption about future lease-finance of transmission assets. Will BPA pursue lease finance to the maximum extent possible?

BPA Response to Comment #38: BPA is continuing to pursue lease-purchase funding consistent with legal, accounting, and business requirements. The current expectation is that at least 25% of Transmission's capital program can be funded through the lease-purchase program.

Comment #39: [SCL] Are the future benefits of the goal shown on page 19 in any order?

BPA Response to Comment #39: No

Comment #40: [PPC] On page 10 of the "Leverage Policy" slide deck there is a chart showing projected leverage positions for the business lines and BPA as a whole. PPC would be interested in additional documentation on these values and any sensitivity analysis BPA has conducted. In particular, what is the driver for the relatively sharp decline in Power Services' leverage ratio starting in approximately 2024 and how robust is that conclusion?

BPA Response to Comment #40: We are planning to show sensitivity analysis in the March 20th meeting. This analysis will focus on capital spending sensitivities, which are the primary variable that can change future repayment levels. The graph on page 10 shows a relatively flat and then declining debt ratio primarily because during the 2018-2024 timeframe BPA is paying off a significant amount of CGS debt.

The depreciation of the CGS asset is tied to the amount of debt outstanding; this is the only asset like this for BPA. When CGS debt is paid off, the value of the asset is reduced by the same amount. Over the 2021 to 2028 timeframe, CGS debt is paid off faster in the first half of this period than in the second half: on average, $200m/yr in the first half of the period and $50m/yr in the second half of this period. This results in a slower decline in the debt-to-asset ratio in the first half of the period than the second. If BPA repaid more CGS debt during this period than is currently scheduled, which is unlikely, it is reasonable to conclude that the debt-to-asset ratio would not decline as quickly as the current projection.

Comment #41: [PPC] On page 21 of the “Leverage Policy” slide deck there is a statement regarding “Discontinuing regulatory treatment of certain investments.” Could BPA provide a list of such potential investments for Power and Transmission along with their magnitude in the next ten years?

BPA Response to Comment #41:

The 2017 annual report includes a complete list of BPA’s regulatory assets (pp. 61-62). The concept of discontinuing regulatory treatment is focused on those regulatory assets that are growing because of continuing spending and those that we chose to debt finance. This group includes fish and wildlife mitigation that is capitalized, components of Columbia River Fish Mitigation program spending, and the remainder of the spacer damper replacement program.

https://www.bpa.gov/Finance/FinancialInformation/AnnualReports/Documents/AR2017.pdf

Comment #42: [NW Council] First, reducing the overall agency debt to asset ratio from 90 percent to 85 percent to as much as 75 percent in 10 years should maintain or even improve BPA’s Bond Rating. However this is a very broad range calling for a minimum of a 5 percent reduction to a 15 percent reduction (three times greater). In the documents I have read you interchangeably refer to objectives over six years (strategic plan) and a longer 10-year planning horizon. I hope that in the ensuing public process you would clearly identify specific measurable targets to be achieved in each fiscal year covered by the current strategic plan (2018-2023). Without specific targets it will be very hard to ascertain progress or recognize the lack thereof.

BPA Response to Comment #42: The leverage policy materials presented on March 20th will identify current projections of the debt to asset ratio by business line from 2018 to 2028. At a minimum these can be viewed as benchmarks BPA will be measuring performance against. The strategic plan set broad goals in key areas, the policies we are developing collaboratively now will define how we go about achieving those goals, and provide an opportunity to be specific about our approach, which could include establishing annual targets for the debt to asset ratio.

Comment #43: [NW Council] Third, moving even a modest portion (10 percent) of replacement costs (Sustain Category) away from debt financing to current revenue streams would move BPA towards better business practices and overtime could substantially reduce BPA’s debt-to-asset ratio.

BPA Response to Comment #43: Yes, beginning to reduce reliance on debt financing by revenue financing will reduce the debt-to-asset ratio and is a common practice. These impacts will be discussed further at the March 20 workshop.