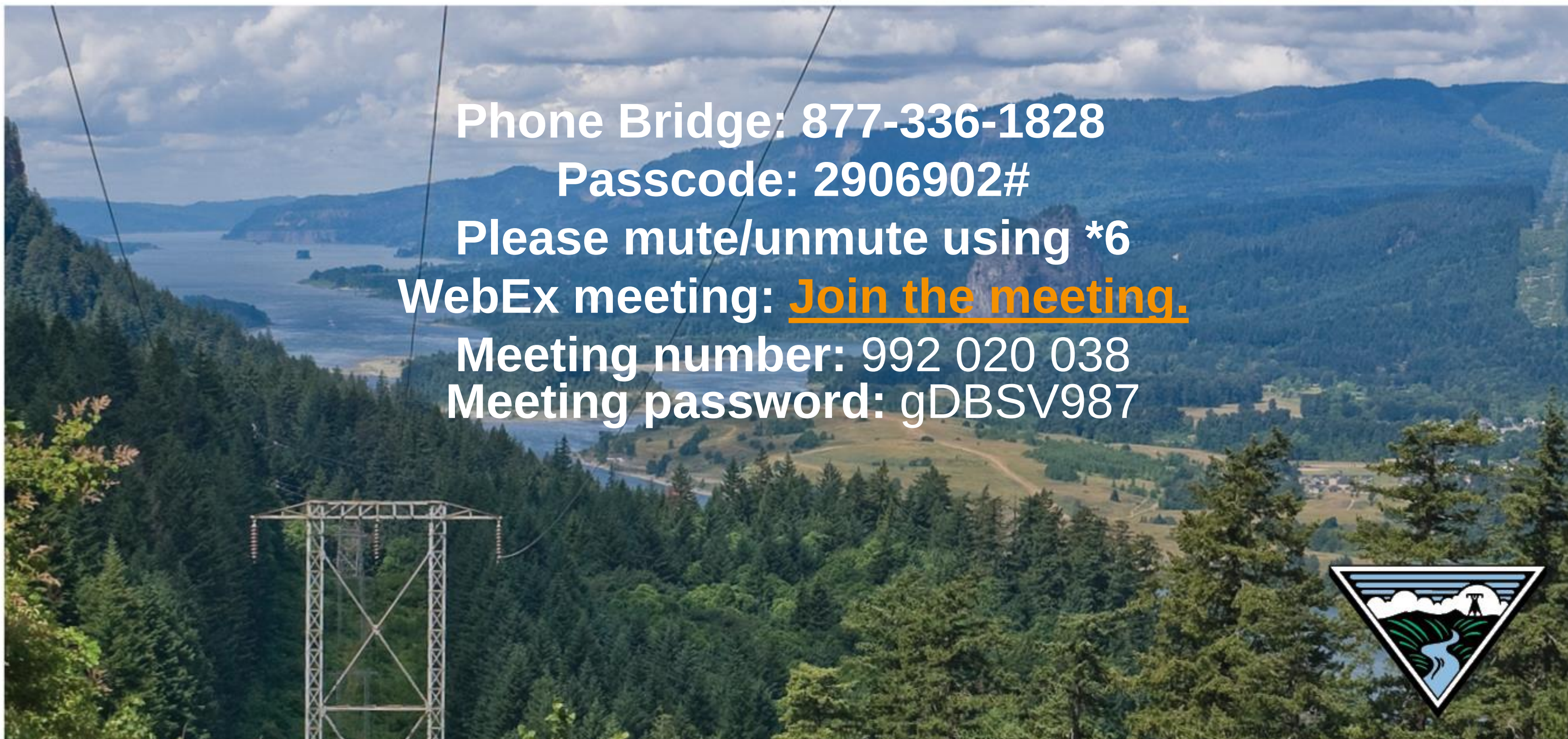
Debt Management

June 24, 2016



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Agenda

• Interest offset credit phase-out	Damen Bleiler
• Regional cooperation debt update	Bill Hendricks
• Lease purchase program update	Alayne Switzer
• Access to capital update and financial health	Bill Hendricks
• Capital related costs estimate for BP-18	Alex Lennox & Miranda Gestrin

Interest offset credit (IOC) phase-out

- Traditional interest credit earning mechanism.
- Rate based on weighted-average interest rate on all outstanding U.S. Treasury debt.
  - Long-term debt / long-term IOC.
  - Short-term debt / short-term IOC.
- Phase-out began Oct.1, 2008, over a period not to exceed 10 years. $100 million per year is no longer entitled to earn IOC (phase-out amount).
- An equivalent amount of the required IOC phase-out is then invested in Treasury's market-based specials.
- Phase-out will end when deposits in the BPA fund are equal to, or less than, the then-applicable phase-out amount or in 10 years on Sept. 30, 2018, whichever is sooner.

IOC phase-out overview (millions)

Fiscal Year	Treasury payment	Federal interest	Interest offset credit	IOC phase-out	EOY financial reserves
2006	$1,113	$391	($42)	-	$1,193
2007	$1,045	$395	($64)	-	$1,463
2008	$963	$384	($108)	-	$1,646
2009	$845	$367	($74)	$100	$1,363
2010	$864	$364	($51)	$200	$1,114
2011	$830	$382	($34)	$300	$1,006
2012	$886	$358	($25)	$400	$1,032
2013	$692	$372	($27)	$500	$1,273
2014	$991	$333	($21)	$600	$1,224
2015	$891	$350	($13)	$700	$1,187
2016	$1,906	$343	($5)	$800*	$787*

*End-of-year estimate

- BPA projects the complete phase-out to occur at the end of fiscal year 2016.
- In preparation for the phase-out of the IOC, BPA is considering alternative cash management strategies to minimize net interest expense in the new environment.

Regional cooperation debt update

- In 2014, BPA and Energy Northwest identified regional cooperation debt (RCD) as an integrated debt management approach that can provide substantial benefits to the region's ratepayers.
- BPA and Energy Northwest refinance non-federal debt at low, tax-exempt interest rates and use the funds that become available to pay, dollar-for-dollar, high-interest rate federal obligations.
  - A portion of the 2016-2018 funds are used to mitigate the effects of moving energy efficiency funding from capital to expense.
- To date, four RCD transactions have closed, refunding a total of $1,168 million and producing a gross savings of $650 million through 2032.

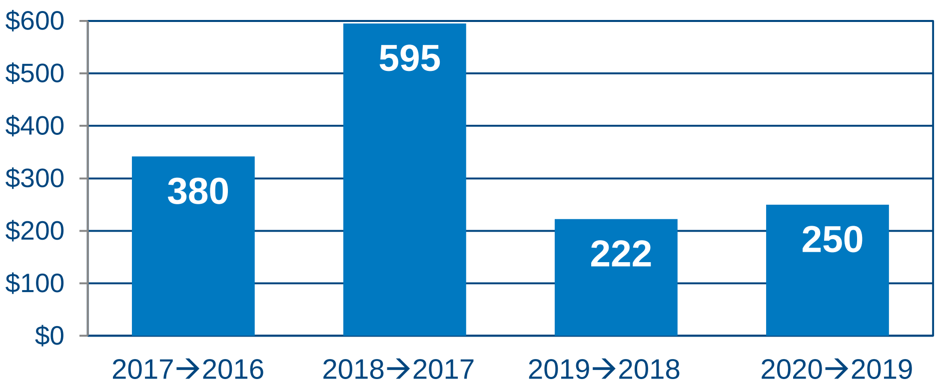
Completed transactions (millions)				
Transaction	Close date	Par refunded	Savings	PV savings
2014-C	8/21/2014	$321	$123	$112
2015-AB	5/21/2015	$229	$102	$82
2015-C	10/21/2015	$130	$63	$48
2016-AB*	4/20/2016	$488	$361	$256
	Total	$1,168	$650	$498

* Does not include the $72 million used to mitigate the effects of moving the energy efficiency program from capital to expense.

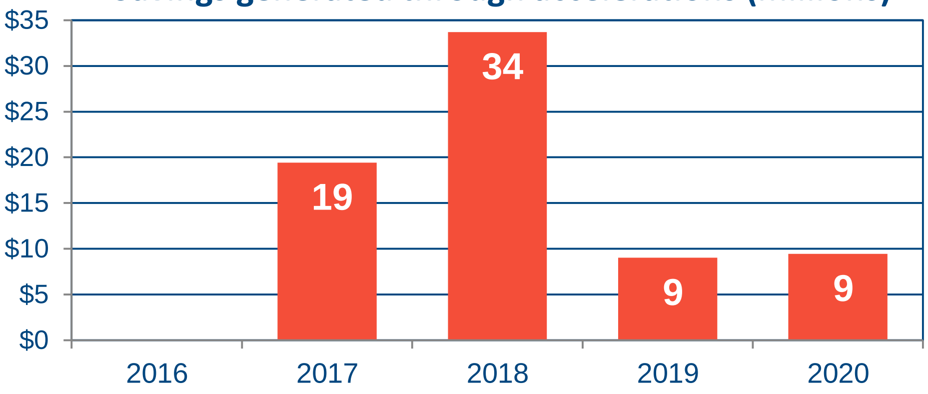
Regional cooperation debt update

- In January 2016, the Energy Northwest executive board reviewed and supported a $300 million line of credit to fund Energy Northwest's operation and maintenance and interest expense needs.
  - This line of credit has been established and has already been drawn upon with an effective interest rate of less than 1 percent.
- Combining this line of credit with remaining prepay funds allows for $380 million of the 2017 RCD transaction to be accelerated into FY 2016, which is projected to save $19 million in interest expense in FY 2017.

RCD amounts accelerated (millions)



Savings generated through accelerations (millions)

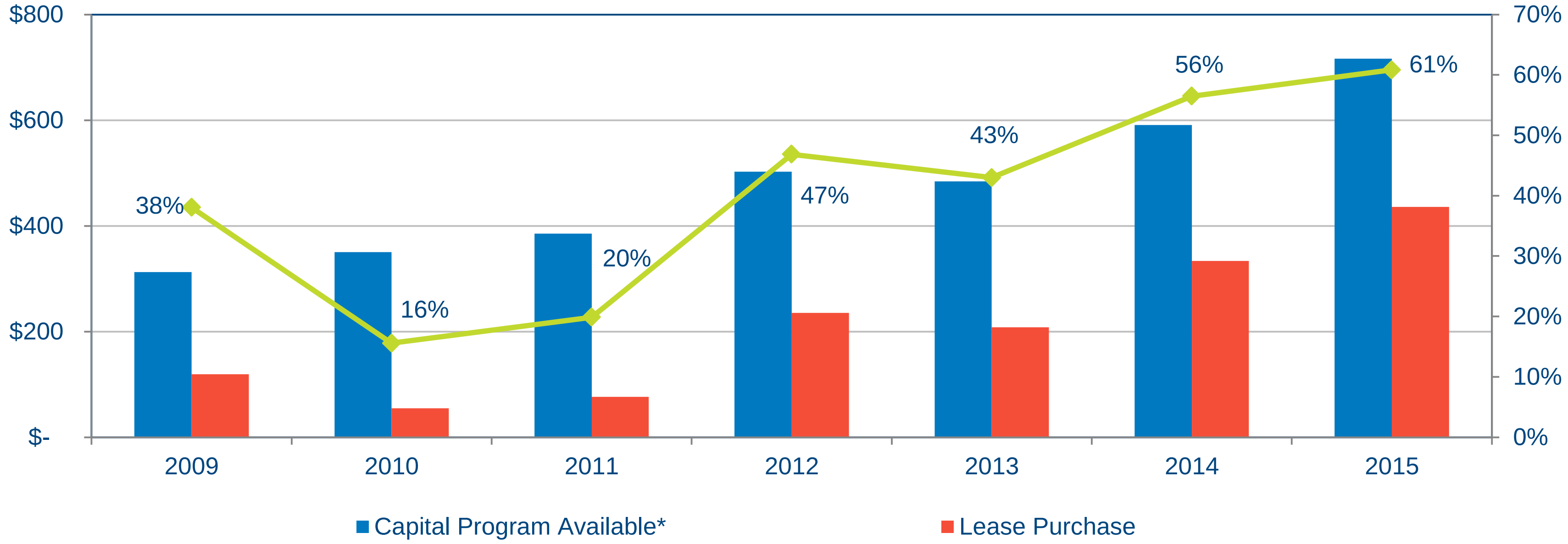


- On June 23, 2016, BPA requested that the Energy Northwest executive board support all RCD transaction accelerations through 2020, allowing the effects to be included in the BP-18 rate case.

Lease purchase program update

- First lease agreement was executed in 2004.
- As of Sept. 30, 2015, $1.6 billion in executed leases have preserved an equivalent amount access to U.S. Treasury borrowing authority.
- An average of 40 percent of the transmission capital program has been leased between 2009 and 2015, and over 50 percent between 2012 and 2015.

Lease purchasing, capital spending by year (millions)



*Capital program available: Transmission Services capital expenditures less budgeted PFIA projects less cash reserve financed projects.

Lease purchase program update

- Incremental cost of the lease purchase program:
  - The weighted average interest cost of leased assets is often lower than Treasury due to a mix of short-term and medium-term borrowing rates compared to one long-term rate over the same borrowing period.
  - Administrative costs for leased assets are higher then Treasury borrowed assets due to higher transaction costs.
- Future outlook of the lease purchase program:
  - One key assumption for the long-term financial and rates analysis portion of the Focus 2028 initiative is that 50 percent of the transmission construction capital borrowing is to be lease purchased.
  - Lease purchase funding will continue to be vital to maintaining low stable rates.

Access to capital and financial health

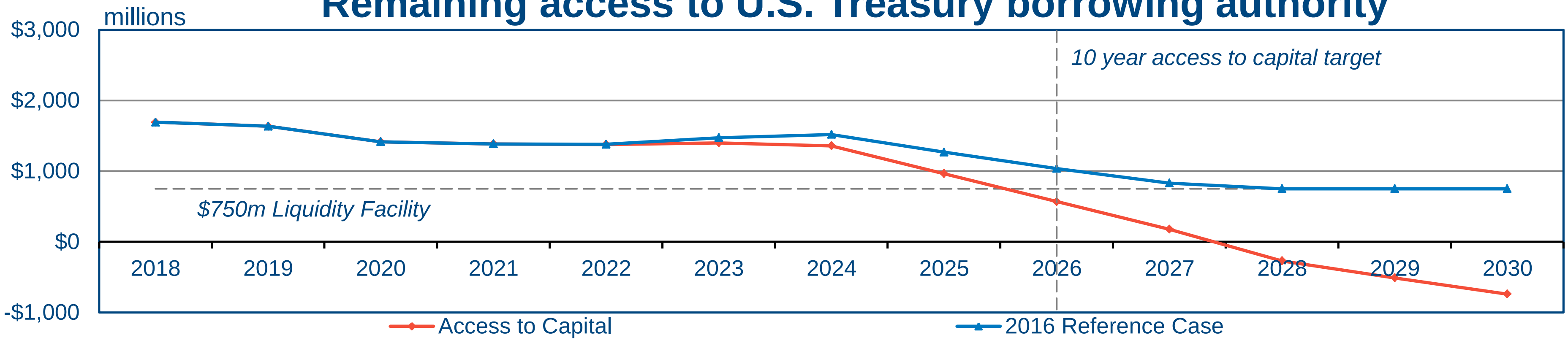
- In January 2013, BPA published its Access to Capital Strategy; the objective of which is as follows:
  - "Develop a comprehensive Access to Capital Strategy that will provide reliable access to cost-effective sources of capital over a rolling 10-year period. Ensure that the costs of these sources are prudent and well controlled, as well as reliable and sufficient to meet the agency's investment priorities."
- Over the past 3½ years, BPA has reviewed all the proposed debt management options:
  - **Lease purchase** – The 50 percent goal was achieved, on average, for 2013-2015 and the projected assumption of 50 percent still stands.
  - **Prepay** – The prepay program was successfully implemented in the middle of 2013, raising a total of $340 million to fund power capital needs. No additional prepay program is currently being planned.
  - **Anticipated accumulation of cash (AAC)** – Any projected AAC is used to pay additional debt.
  - **Reserve financing** – The original assumption of $15 million annually for transmission capital costs through 2023 is still in effect.
  - **Energy efficiency** – In the original strategy, 70 percent of the energy efficiency program was proposed to be financed through non-federal means starting in 2016. This program is now fully expensed.
  - **Regional cooperation debt** – Not included in the original strategy but has proven to be a useful approach for both interest expense reductions and borrowing authority preservation.
  - **Revenue financing** – BPA does not currently revenue finance assets.

Access to capital and financial health

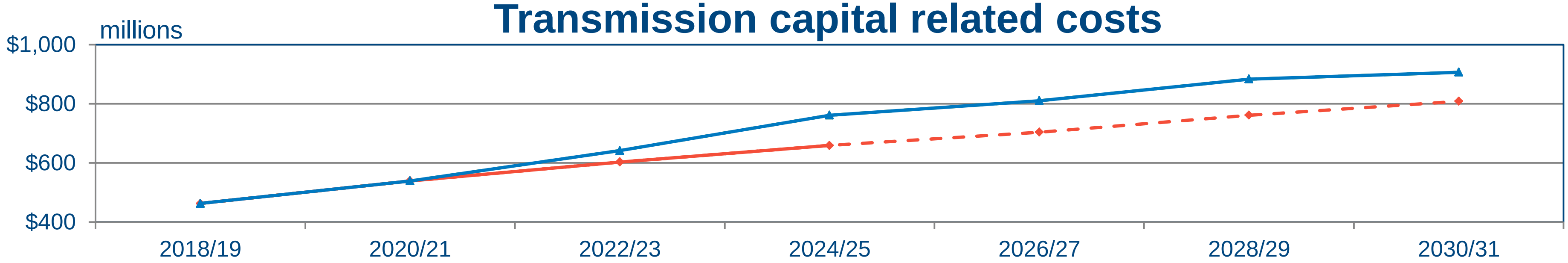
- The most dependable and lowest cost source of capital BPA has is issuing bonds to the U.S. Treasury. BPA's borrowing capacity with the U.S. Treasury is capped at $7.7 billion, $750 million of which is held for operational liquidity.
- The 10-year access to capital goal is missed by one year after employing the access to capital tools outlined on the previous slide.
- Missing the 10-year access to capital target is not the desired outcome for the future. It is BPA's intent to address the access to capital target and other sound business principle financial metrics together through the Focus 2028 effort.
- One facet of Focus 2028 is to inform discussions about BPA's long-term financial strength and attractiveness as a low cost provider, which allows BPA to analyze the impact that near-term decisions may have on future rates based on a variety of assumptions.
  - A key product of this analysis is the reference case, a 15-year analysis of BPA's financial condition and rates. An updated reference case was shared last week as part of the IPR workshops.
  - The reference case assumptions on debt management differ from those in the access to capital strategy which result in not missing the access to capital goal in the same 10-year horizon. These differences are explained in the following slides.

Access to capital and financial health

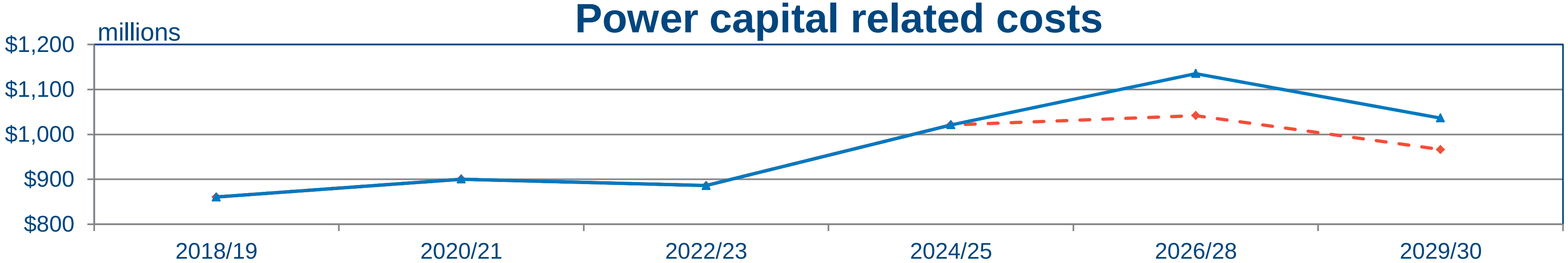
Remaining access to U.S. Treasury borrowing authority



Transmission capital related costs



Power capital related costs



Access to capital and financial health

Breakdown of federal bond payments ($ millions)

Power	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
New Federal Bonds	327	343	272	377	377	385	401	409	416	424	432	440	448	5,054
Access to Capital	90	285	168	461	471	479	446	159	146	160	152	348	364	3,728
net BA	*(237)*	*(59)*	*(104)*	*84*	*94*	*94*	*45*	*(250)*	*(270)*	*(264)*	*(280)*	*(93)*	*(85)*	*(1,326)*
2016 Reference Case	90	285	168	461	471	479	446	159	186	217	352	440	448	4,202
net BA	*(237)*	*(59)*	*(104)*	*84*	*94*	*94*	*45*	*(250)*	*(230)*	*(207)*	*(80)*	*-*	*-*	*(852)*
Added Payments to Maintain BA	-	-	-	-	-	-	-	-	40	56	200	93	85	474
Reduced Federal Interest	-	-	-	-	-	-	-	-	(1)	(4)	(11)	(17)	(21)	(53)

Transmission	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
New Federal Bonds	240	246	300	306	307	287	291	290	299	299	305	311	323	3,803
Access to Capital	5	248	183	193	205	215	204	148	172	172	139	164	178	2,226
net BA	*(235)*	*3*	*(116)*	*(113)*	*(102)*	*(72)*	*(87)*	*(142)*	*(127)*	*(128)*	*(166)*	*(148)*	*(145)*	*(1,577)*
2016 Reference Case	5	248	183	193	206	287	291	290	299	299	305	311	323	3,241
net BA	*(235)*	*3*	*(116)*	*(113)*	*(101)*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*(562)*
Added Payments to Maintain BA	-	-	-	-	1	72	87	142	127	128	166	148	145	1,015
Reduced Federal Interest	-	-	-	-	(0)	(1)	(7)	(12)	(18)	(24)	(31)	(38)	(45)	(177)

Access to capital and financial health

	Metrics	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Access to Capital	Debt Service/ Capital Spending	2.35	1.80	1.45	1.61	1.66	1.64	1.54	1.55	1.41	1.51	1.66	1.49	1.52
	Principal Payment/ Total Debt Service	75.18%	67.81%	61.05%	62.97%	62.76%	61.53%	60.43%	56.63%	56.64%	56.10%	58.50%	54.74%	55.10%
	Debt Ratio	92.23%	87.67%	86.34%	86.01%	85.04%	83.99%	82.96%	81.54%	80.13%	79.46%	78.69%	78.14%	78.15%
	WAI	3.94%	3.96%	4.05%	4.13%	4.18%	4.22%	4.25%	4.29%	4.34%	4.38%	4.42%	4.46%	4.51%
	WAM	16.91	17.22	17.62	17.72	17.79	18.03	18.15	18.49	18.57	18.91	19.04	19.31	19.29
2016 Reference Case	Debt Service/ Capital Spending	2.35	1.80	1.45	1.61	1.67	1.70	1.61	1.66	1.53	1.65	1.94	1.65	1.66
	Principal Payment/ Total Debt Service	75.18%	67.81%	61.05%	62.97%	62.78%	63.04%	62.47%	60.34%	61.05%	61.12%	66.43%	61.85%	62.18%
	Debt Ratio	92.23%	87.67%	86.34%	86.01%	85.04%	83.98%	82.63%	80.83%	78.82%	77.47%	75.97%	73.94%	73.02%
	WAI	3.94%	3.96%	4.05%	4.13%	4.18%	4.22%	4.24%	4.29%	4.34%	4.37%	4.42%	4.45%	4.50%
	WAM	16.49	16.72	17.03	17.02	16.98	17.10	17.09	17.28	17.20	17.37	17.14	17.46	17.26
Difference	Debt Service/ Capital Spending	0.00	0.00	0.00	0.00	0.00	0.06	0.07	0.12	0.12	0.13	0.28	0.16	0.14
	Principal Payment/ Total Debt Service	0.00%	0.00%	0.00%	0.00%	0.02%	1.51%	2.05%	3.71%	4.41%	5.02%	7.93%	7.11%	7.07%
	Debt Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.33%	-0.71%	-1.31%	-1.99%	-2.72%	-4.20%	-5.12%
	WAI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.01%	-0.01%	-0.02%	-0.01%
	WAM	-0.41	-0.49	-0.60	-0.70	-0.81	-0.93	-1.06	-1.21	-1.37	-1.54	-1.91	-1.86	-2.03

Capital related costs estimates for BP-18: Generation

	BP-16 final proposal	2016 IPR/CIR
	2016/2017 average	2018/2019 average
Non-federal debt service	$594,574,000	$528,565,000
Depreciation/amortization expense	$225,527,000	$232,640,000
Net interest expense	$191,978,000	$133,217,000
Minimum required net revenue (MRNR)	-	$37,751,000
Other income & expense	($14,208,000)	($11,189,000)
Total capital related costs	$997,870,000	$920,984,000

- This is a rate case-like view which does not directly forecast future RCD transactions. Instead, the revenue requirement is adjusted for the expected effect of such transactions.
- Energy Northwest debt service declines as expected because debt associated with WNP-1 and WNP-3 is due to be repaid by 2018.
- Net interest expense declines significantly as a result of actual RCD transactions.
- Minimum required net revenue increases in 2019 because non-federal debt declines significantly, allowing for additional federal payment to be scheduled.
- Other income and expense changes as the effects of the projected RCD transactions change.

Capital related costs estimates for BP-18: Transmission

	BP-16 final proposal	2016 IPR/CIR
	2016/2017 average	2018/2019 average
Depreciation/amortization expense	$244,091,000	$287,456,000
Net interest expense	$144,669,000	$174,584,000
Minimum required net revenue (MRNR)	$98,199,000	$901,000
Total capital related costs	$486,959,000	$462,941,000

- Transmission capital related costs are projected to decline by $24 million on average, driven by declining MRNR.
- Key drivers for the MRNR decline include:
  - Non-federal debt service reduced due to the debt service reassignment beginning to taper off in 2019.
  - Refinements to projected federal debt service, resulting in a lower leveling point, which reduces costs.
  - Repayment obligations are flattening, thereby lowering the level of repayment.

Comments & Questions

- Participants can submit comments and questions during an eight-week public comment period beginning June 16, 2016, and concluding August 12, 2016.
- Comments and Questions can be submitted by:
  - Online at www.bpa.gov/comment
  - By mail to: BPA, P.O. Box 14428, Portland, OR 97293-4428.
  - By email to BPAFinance@BPA.gov

Integrated Program Review

Financial Disclosure

This information was made publicly available on June 22, 2016, and contains information not sourced directly from BPA Financial statements.