Follow Up from QBR Technical Meeting

Reserves Overview & Details Re: Prior Year Funding Adjustment

12/17/2020

Agenda

- Reserves Background
- Review of Prior Year Funding Adjustment
- Status Update on Internal Audit Review
- Reminder – RDC Use and Plan

Reserves Background: Overview

Cash & Investments + Deferred Borrowing − Reserves Not For Risk = Reserves for Risk

Cash & Investments

Source: The Power & Transmission split comes from the BU Cash Split Model

Controls: EOY perform 30+ validations of the detailed BU Split output, tie back to PS Financials

Improvement Areas:
- Ensure back up training on performing controls and running model

Deferred Borrowing

Source: Manual calculation, data from standard reports (0012 and 0027) and PS query

Controls: Validation of inputs to source data

Improvement Areas:
- Develop a standard report for calculation
- Develop cross Finance team for formal review & validation

Reserves Not For Risk

Source: Gathered via outreach across Finance and review of specific GLs

Controls: Generally ties to specific GLs

Improvement Areas:
- Develop cross Finance team for formal review & validation on an ongoing basis

Reserves Background: Deferred Borrowing

- Deferred borrowing (DB) = capital expenditures incurred for which BPA has yet to borrow.
  - BPA funds capital expenditures with cash from the BPA fund.
  - BPA borrows to replenish the cash spent on capital when it is prudent for liquidity management purposes.
- DB is a component of reserves because it is like a cash equivalent. Additionally, it ensures the practice of borrowing after-the-fact does not impact reserve levels in rate making or within rate period rate mechanism calculations.
  - When capital expenditures are incurred, cash is disbursed from the BPA Fund and DB increases.
  - When BPA borrows from the Treasury, DB decreases, and cash increases.
  - Reserves remain indifferent – whether the capital expenditure resides in DB or is converted to cash through a borrowing, reserves do not change.

Adjustment: 11/19/20 QBR Meeting Message

- At the Q4 QBR Technical meeting, we shared the following:
  - At 3rd quarter, we noted that assessment of our prior year funding adjustment process, specific to Transmission and related to project funding source changes, could result in a true up to Transmission reserves, depending on the results of the analysis.
  - Analysis has been completed and shows that the previous process used to reclassify and realigned capital spending from prior years to its new funding source after a project changed funding sources, did not properly remove all capital spending from the US Treasury borrowing authority (UST) funding category *in certain circumstances*. The issue assessed is specific to changes from funding a project using UST borrowing authority to funding it via the Lease Purchase (LP) program, or vice versa.
  - To correct this issue, Transmission's reserves will be reduced by $25.9M. This will ensure that no portion of a capital project is funded <u>by both</u> UST borrowing authority and by the LP program.
  - This adjustment will correct for all prior year issues; going forward, the new reclassification process to capture UST to LP (and vice versa) funding changes, will properly reclassify *spending from all prior years* to the proper funding source.
  - The analysis was conducted by a cross Finance team. The analysis and results will be reviewed by BPA's Internal Audit team for reasonableness of approach, validity of inputs and accuracy of results.
  - Should Internal Audit's review result in changes to the true up amount, it will be dealt with through additional increments or decrements to deferred borrowing.
- Today's presentation is intended to provide more insight into this issue.

Adjustment: Funding Sources Impact on Reserves

- Capital Spending Impact on Reserves: All capital spending has a source of funding. Unless the source is "reserve" or "revenue" financing, there should be no impact to Reserves from capital funding, see simplified example.

- Key Take Away: Funding of capital via US Treasury (UST) or Master Lease (ML) should not impact reserve levels.

UST Funded Capital	Current FY Activity	Impact to Reserves
Capital Spending	-$100	Depleted by $100 to pay for capital spending
UST Borrowing	$40	Increased by $40; proceeds from the UST borrowing
Deferred Borrowing	$60	Increased by $60 to record the difference between capital spending and borrowing
Net Impact	$0	No Impact

ML Funded Capital	Current FY Activity	Impact to Reserves
Capital Spending	-$50	Depleted by $50 to pay for capital spending
LOC Funding	$50	Increased by $50; proceeds from the LOC draws
Net Impact	$0	No Impact

Adjustment: Changes in Funding Sources

- The funding source of a project can change from time to time. Generally, funding has changed from US Treasury (UST) financing to Master Lease (ML) financing, and sometimes vice versa. Why?
  - UST to ML: Often projects are initially tagged as UST funded, but the intention is to ultimately fund via ML, assuming lease purchase criteria is met. The act of signing the project to a lease is the trigger that switches the funding type in PS Financials from UST to ML funding.
  - ML to UST: Project spending violates a ML program requirement, e.g. too much material is drawn from BPA inventory, forcing the project to move to UST funding.

  NOTE: Projects are tagged at the work order level in PeopleSoft (PS) Financials as to the funding source.

- Projects are typically multi-year in nature, with spending over a number of years. Depending on when the change to the funding source takes place, there may be spending associated with the project that goes back several years.

- When a project changes funding source, realigning all prior year capital spending to the appropriate funding source ensures no portion of a project is funded by both UST and ML.
  - Realigning the prior spending to the update funding source is a manual process.
  - ***This is where the issue lies – the process used to realign prior years' capital spending with the updated funding source did not pick up all of the prior capital spending, in certain circumstances.***

Adjustment: Example of Issue

- Example shows four projects that changed funding type, from UST to ML. All had spending in prior years.
- To realign spending with the new funding source, deferred borrowing is decreased to remove project spend from UST funding and cash is drawn on the ML LOC, the new funding source.
- The Issue: The process used to realign prior year spending to the new funding source, only picked up spending in the current and prior fiscal year, i.e. T-0 and T-1.
  - Spending in T-2 or beyond was left in deferred borrowing *and* was included in the new ML LOC draw, resulting in double funding.
  - In this example, ~$18m is double funded.

Capital Spending - $ in millions

Project Workorder	T-6 FY14	T-5 FY15	T-4 FY16	T-3 FY17	T-2 FY18	T-1 FY19	T-0 (CY) FY20	
00350982	$ 0.05	$ 0.06	$ 0.08	$ 0.40	$ 5.11	$ 2.15	$ 3.00	
00350983	$ 0.05	$ 0.06	$ 0.09	$ 0.37	$ 3.37	$ 6.76	$ 5.37	
00439963	$ -	$ -	$ -	$ 0.80	$ 7.57	$19.14	$ 1.87	
00468251	$ -	$ -	$ -	$ -	$ 0.36	$ 2.00	$ 0.69	
Totals	$ 0.09	$ 0.12	$ 0.17	$ 1.57	$ 16.41	$30.07	$ 10.93	$ 59.36

$\underbrace{\text{T-6 to T-2}}_{\$18.36}$

Example of What Happened

Period	Adjustment to DB	ML Draw Process
CY	($10.93)	$10.93
T-1	($30.07)	$30.07
T-2 to T-6	$0	$18.36
Total	**($41.00)**	**$59.36**

What Should Happen

Period	Adjustment to DB	ML Draw Process
CY	($10.93)	$10.93
T-1	($30.07)	$30.07
T-2 to T-6	($18.36)	$18.36
Total	**($59.36)**	**$59.36**

Adjustment: Why Did This Happen

- The Lease Financing program has been in effect since 2002; however, when it started, a typical project was signed on a lease early in its life in order to meet certain eligibility requirements for the Lease Finance program.
  - Very little to no spending occurred prior to the project being signed on a lease.
  - If there was spending prior to lease signing, it generally did not go beyond the prior fiscal year.
- The process used to realign spending to funding source when a project changed funding sources was developed with the above in mind, and under these circumstances, the process worked fine.
- In 2013, BPA started heavily utilizing "turnkey projects" in the Lease Financing program.
  - Turnkey projects are signed onto a lease towards the end of construction due to the timing of ownership transfer.
  - Because projects can continue for multiple years, a large amount of spending for turnkey projects can occur in the years prior to lease signing and therefore that spending would be included in the deferred borrowing that carries forward.
- The process to realign spending to funding source upon a change in funding source should have been adjusted with this change in 2013, but was not.

Status Update on Internal Audit Review

- A cross Finance team conducted the analysis to determine the net adjustment to Reserves. BPA's Internal Audit group is reviewing this analysis for reasonableness, soundness and accuracy.
- Should their review reveal issues with the analysis or additional considerations, either of which result in an increase or decrease to the original adjustment to Reserves, it will be dealt with as a true up with increments or decrements to deferred borrowing.
- We expect the review to be complete no later than the end of the second quarter. An update on their review will be shared at a QBR Technical workshop.

Plan for RDC Application

- The Administrator considered a variety of options and has determined to apply the entire amount from the Transmission RDC toward Transmission debt reduction.

- Debt Repayment Plan: BPA will select Transmission federal bonds for early repayment that result in no call premiums or only minor call premiums.
  - All Transmission federal fixed rate bonds have make-whole calls, most of which are extremely out of the money, from a call perspective. There may be a few fixed rate bonds that can be called in at little to no call premium cost.
  - Variable rate debt (VRD) can be called at no cost at interest reset dates.
  - Avoiding call premiums allows 100% of the payment to go towards restoring borrowing authority.

- VRD has a combination of quarterly and semiannual reset dates, providing the flexibility to pay off the $80m in total in any of the quarters, Q2 – Q4.

- As we make debt repayment associated with RDC, the details will be shared at QBR Technical workshops and recapped as part of the FY21 close out.

Appendix Materials

Deferred Borrowing Calculation - Summary

DB Calculation Formula

Start of Year DB + Current Year Capital Spend − Non-Treasury Funding − Treasury Borrowing = End of Year DB

Example: FY19 Agency DB (in $millions)

$338.4 + $663.3 − (PFIA: $76.9, LF: $37.1, Public: $28.7, ResFin: $15.0, Prepay: $81.6) − $180.0 = $584.3

Deferred Borrowing Calculation - Detailed

- Deferred borrowing is tracked by business line and by capital asset type.
- Transmission capital categories:
  - Construction (C), rows 1-4
  - Environment (E), row 5
  - Agency Services (AT), 65% of row16
- Power capital categories:
  - Corps/Bureau (B), rows 11-12
  - Power IT (PT), row 13
  - Fish &Wildlife (F), row 14
  - Agency Services (AP), 35% of row 16
- Bonds are issued in these same categories, and tracked and maintained by business line for all purposes: financial reporting, analysis, and rate making.

Report ID: 0027FY19
Requesting BL: Corporate Business Unit
Unit of Measure: $Thousands

BPA Statement of Capital Expenditures
Through the Month Ended September 30, 2019
Preliminary / Unaudited

		A FY 2019 Rate Case	B FY 2019 Actuals: FYTD
	Transmission Business Unit		
1	MAIN GRID	$ 40,884	$ 6,595
2	AREA & CUSTOMER SERVICE	48,967	70,828
3	SYSTEM REPLACEMENTS	329,441	214,680
4	UPGRADES & ADDITIONS	78,465	54,333
5	ENVIRONMENT CAPITAL	7,625	8,409
	PFIA		
6	MISC. PFIA PROJECTS	6,827	54,467
7	GENERATOR INTERCONNECTION	13,654	21,615
8	SPECTRUM RELOCATION	683	786
9	CAPITAL INDIRECT, undistributed		(129)
10	**TOTAL Transmission Business Unit**	**526,547**	**431,585**
	Power Business Unit		
11	BUREAU OF RECLAMATION *<Note 1*	141,814	38,871
12	CORPS OF ENGINEERS *<Note 1*	124,168	160,790
13	POWER INFORMATION TECHNOLOGY	5,000	122
14	FISH & WILDLIFE *<Note 2*	44,000	22,313
15	**TOTAL Power Business Unit**	**314,982**	**222,095**
	Corporate Business Unit		
16	CORPORATE BUSINESS UNIT	16,525	9,627
17	**TOTAL Corporate Business Unit**	**16,525**	**9,627**
18	**TOTAL BPA Capital Expenditures**	**$ 858,054**	**$ 663,307**

< 1 Excludes projects funded by federal appropriations.
< 2 Amounts are reported as regulatory assets and not utility plant

Deferred Borrowing Calculation - Steps

Step 1: Spending for each of the capital programs is tracked and reported separately. The BPA Statement of Capital Expenditure Report (0027), is the starting point for the deferred borrowing calculation.

Report ID: 0027FY19
Requesting BL: Corporate Business Unit
Unit of Measure: $Thousands

BPA Statement of Capital Expenditures
Through the Month Ended September 30, 2019
Preliminary / Unaudited

		A	B
		FY 2019	FY 2019
		Rate Case	Actuals: FYTD
	Transmission Business Unit		
1	MAIN GRID	$ 40,884	$ 6,595
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Step 2: In the BPA Executive Highlights Report (0012), to calculate deferred borrowing, gross capital is reduced for capital financed by sources other than US Treasury financing.

Report ID: 0012FY19
Requesting BL: CORPORATE BUSINESS UNIT
Unit of measure: $ Thousands

	A	B	C
	FY 2019	FY 2019	
FCRPS Results of Operations	Rate Case	Actuals	Actuals - FYTD OY Budget
Gross Revenues ***(excluding bookouts)***	$ 3,658,502	$ 3,693,752	$ 121,843
Bookout adjustment to Sales	-	(37,867)	(37,867)
Total Operating Revenues	**3,658,502**	**3,655,885**	**83,976**
Operations and Maintenance *(excluding Power Purchases and Bookouts)*	2,640,661	2,370,612	(66,775)
Power Purchases *(excluding Bookouts) < Note 1*	111,846	336,124	239,148
Gross Operations and Maintenance *(excluding Bookouts)*	2,752,507	2,706,736	172,372
Bookout Adjustment to Power Purchases	-	(37,867)	(37,867)
Depreciation and Amortization	521,740	530,931	(32,434)
Interest and AFUDC	264,319	208,469	2,029
Total Expenses	**3,538,566**	**3,408,269**	**104,100**
Net Revenues (Expenses)	**$ 119,936**	**$ 247,616**	**$ (20,125)**
	FY 2019	FY 2019	
FCRPS Capital Expenditures	Rate Case	Actuals	Actuals - FYTD OY Budget
BPA Capital Expenditures	**$ 858,054**	**$ 663,307**	**$ (155,717)**
Less: Budgeted Projects Ineligible for Borrowing Authority (PF	21,164	76,868	(33,171)
Less: Lease-purchase Projects	-	37,059	37,059
Less: Power Services Power Prepayment Program	-	81,611	-
Less: Public Partnership Projects	-	28,689	28,689
Less: Transmission Services Cash Reserve Financed Projec	15,000	15,000	-
Capital Expenditures Eligible for Borrowing Authority	**$ 821,890**	**$ 424,080**	**$ (188,295)**

Financial Reserves	BPA Actuals: FYTD 2019
Capital Expenditures Eligible for Borrowing Authority	**$ 424,080**
Plus: Beginning year Deferred Borrowing	338,376
Less: Borrowings for capital from U.S. Treasury during current Fiscal Year	180,000
Adjustment: Reclassification of Project Fund Type from Prior Fiscal Years	-
Adjustment: USACE and Reclamation Expense-to-Capital (net) for Prior Yea	1,842
Deferred Borrowing	**$ 584,297**
Cash Balance Available for Reserves	51,753
Cash Invested in Market Based Specials (*Current Market Value*)	137,000
Reserves Balance	**$ 773,051**

Deferred Borrowing Calculation - Steps

Step 3: New borrowings are entered and maintained in PeopleSoft Deal Manager by the borrowing categories (noted on prior slide), and are subtracted, by capital category to calculate deferred borrowing.

Step 4: Summarize by category and add in the beginning balance for each category.

*Note the SOY balance is the carry over from the prior fiscal year and used the same calculation as shown here.

FY19 Deferred Borrowing Calcuation
By Business Unit and Capital Type ($ in 000s)

Business Unit	Capital Type	SOY DB Balance*	FY19 CapEx	Adjustments: Non US Treasury Financing	Adjustments: Prior Year Exp to Cap Shift	FY19 Borrowings	EOY DB Balance
T	Construction - C	182,196	423,175	(157,616)		(118,000)	329,755
T	Envionment - E	16,266	8,409			(5,000)	19,675
P	Corps/Bur - B	81,716	199,661	(81,611)	1,842	(41,000)	160,608
P	Fish & Wildlife - F	31,000	22,313			(4,000)	49,313
P	Power IT - PT	14,502	122			(3,000)	11,624
P/T	Agency Ser - AT/AP	12,695	9,627			(9,000)	13,322
		338,375	663,307	(239,227)		(180,000)	584,297
			Step 1	*Step 2*	*Step 2*	*Step 3*	*Step 4*
	By Business Unit						
	Transmission	206,714	437,842	(157,616)	-	(128,850)	358,089
	Power	131,661	225,465	(81,611)	1,842	(51,150)	226,208
	Agency	338,375	663,307	(239,227)	1,842	(180,000)	584,297

FY2020 EOY Reserves Actuals

	FY20 RESERVES ACTUALS	A	B	C	D	E
	(in $ Thousands)	BP-20		FY 2020		Delta
	POWER	FY 2020	Days Cash	EOY	Days Cash	(C - A)
1	**PS RESERVES for RISK**	**320,594**	**65**	**435,266**	**95**	114,672
2	PS RESERVES not for RISK	121,509		69,543		**(51,966)**
3	**PS TOTAL RESERVES**	**442,103**		**504,809**		62,706
	TRANSMISSION					
4	**TS RESERVES for RISK**	**147,750**	**88**	**272,312**	**160**	**124,562**
5	TS RESERVES not for RISK	114,538		112,356		**(2,182)**
6	**TS TOTAL RESERVES**	**262,288**		**384,668**		122,380
	AGENCY					
7	RESERVES for RISK	**468,344**	**70**	**707,578**	**113**	**239,234**
8	RESERVES not for RISK	236,046		181,899		**(54,148)**
9	**AGENCY TOTAL RESERVES**	**704,391**		**889,478**		**185,087**

Note: ACNR is the trigger for the RDC, not RFR.

Reserves Not for Risk

AGENCY	9/30/2019 Actuals	9/30/2020 Actuals	Delta
Total Agency Reserves	**773.1**	**889.5**	**116.4**
1. Funds Held for Others	62.5	59.0	-3.5
2. Capital Funds	86.9	33.1	-53.7
3. Liquidity Facility Borrowings	0.0	0.0	0.0
4. Cash Timing Differences	139.4	62.7	-76.7
5. Other Reserves Not for Risk	0.0	27.0	27.0
Less: Agency Reserves Not for Risk (RNFR)	**288.8**	**181.9**	**-106.9**
Total: Agency Reserves for Risk (RFR)	**484.3**	**707.6**	**223.3**

POWER	9/30/2019 Actuals	9/30/2020 Actuals	Delta
Total Reserves Attributed to Power	**343.4**	**504.8**	**161.4**
1. Funds Held for Others	**26.7**	**16.9**	**-9.8**
2. Capital Funds	**0.0**	**0.0**	**0.0**
3. Liquidity Facility Borrowings	**0.0**	**0.0**	**0.0**
4. Cash Timing Differences	**114.0**	**27.9**	**-86.1**
5. Other Reserves Not for Risk	**0.0**	**24.8**	**24.8**
Less: Reserves Not for Risk (RNFR) Attributed to Power	**140.6**	**69.5**	**-71.1**
Total: Reserves for Risk (RFR) Attributed to Power	**202.8**	**435.3**	**232.5**

TRANSMISSION	9/30/2019 Actuals	9/30/2020 Actuals	Delta
Total Reserves Attributed to Transmission	**429.6**	**384.7**	**-45.0**
1. Funds Held for Others	**35.9**	**42.1**	**6.3**
2. Capital Funds	**86.9**	**33.1**	**-53.7**
3. Liquidity Facility Borrowings	**0.0**	**0.0**	**0.0**
4. Cash Timing Differences	**25.4**	**34.8**	**9.4**
5. Other Reserves Not for Risk	**0.0**	**2.3**	**2.3**
Less: Reserves Not for Risk (RNFR) Attributed to Transmission	**148.2**	**112.4**	**-35.8**
Total: Reserves for Risk (RFR) Attributed to Transmission	**281.5**	**272.3**	**-9.2**

Q3 QBR Technical Workshop - Uncertainties

- At the 3rd quarter QBR technical workshop, we communicated the message below regarding issues being explored and uncertainties with the forecast.

> - As part of our continued focus on strengthening key processes, including our Reserve forecasting ability, there are two areas of uncertainty to highlight with the current forecast.
>   - Forecast Model Differences:
>   - To forecast the end of year (EOY) reserves, BPA uses an annual reserves model that starts with the current net revenue forecast and adjusts for non-cash revenues and expenses (aka the "annual model").
>   - BPA also maintains a model that forecasts reserves 90 days out, known as the "short-term model".
>   - At Q3, comparison of the EOY reserves forecasts produced by these two models revealed: Power – only a $2M difference; Transmission – a $25M difference, with the short-term model coming in higher than the annual model.
>   - True Up for Prior Year Financing Adjustments:
>   - Most BPA construction projects are multi-year; prior to project close out the source of financing may change, e.g. from master lease (ML) to US Treasury (UST) financing, or vice versa. This change requires a "lookback" or true up process to ensure financing sources stay aligned.
>   - From a Reserves perspective there should be no impact as the cash to fund the project is either from UST borrowings or from ML draws.
>   - We are improving (systemizing and standardizing) this prior year lookback process. Analysis of prior year spending and the timing of cash draws will indicate the amount of the prior year adjustment, if any.
> - These uncertainties have been incorporated into the Transmission risk distribution and risk mechanism probabilities (*discussed further Transmission Risk Distribution slide*).