



## Q4 Quarterly Business Review Technical Workshop

November 19, 2020 9:00 am – 11:30 a.m. WebEx: Bridge: (415) 527-5035 Access Code: 199 806 1789



# Agenda

Time	Min	Agenda Topic	Presenter
9:00	5	Introduction and safety moment	Chris Dunning
9:05	60	FY20 Actuals Including Income Statement, Capital, Reserves, and ACNR Update	Gwen Resendes, Karlee Manary, Kyle Hardy, Jeff Cook, Wayne Todd, Nadine Coseo, Damen Bleiler, Zach Mandell
10:05	15	IPR2, Budget Carryover and FY21 Outlook	Jesse Kintz
10:20	20	Strategic Cost Management Initiative	Marchelle Watson, Chris Dunning
10:40	30	Grid Modernization Update	Allie Mace
11:10	20	Q & A Session	All

### FY20 Actuals Including Income Statement, Capital and Reserves

Gwen Resendes, Karlee Manary, Kyle Hardy, Jeff Cook, Wayne Todd, Nadine Coseo, Damen Bleiler, Zach Mandell

Requesting BL: Transmission Business Unit Unit of Measure: \$ Thousands				
	А	В	С	
	FY 2	FY 2020		
	Rate Case	Actuals: FYTD	EOY Actuals Rate Case	
Operating Revenues				
Sales	\$ 919,467	\$ 938,253	\$ 18,	
Other Revenues	43,031	46,583	3,	
Inter-Business Unit Revenues	123,755	109,379	(14,	
Total Operating Revenues	1,086,253	1,094,215	7,9	
Operating Expenses				
Integrated Program Review Programs				
Asset Management	262,974	261,109	(1,	
Operations	71,098	68,600	(2,	
Commercial Activities	62,078	59,457	(2,	
Enterprise Services G&A	92,528	99,671	7,	
Undistributed Reduction	-	-		
Other Income, Expenses and Adjustments	-	-		
Sub-Total Integrated Program Review Operating Expenses	488,678	488,838	•	
Operating Expenses				
Non-Integrated Program Review Programs				
Commercial Activities	128,005	124,394	(3,	
Other Income, Expenses and Adjustments	-	(250)	(	
Depreciation & Amortization	342,088	339,833	(2,	
Sub-Total Non-Integrated Program Review Operating Expenses	470,093	463,977	(6,	
Total Operating Expenses	958,771	952,815	(5,	
Net Operating Revenues (Expenses)	127,482	141,401	13,	
Interest expense and other income, net				
Interest Expense	183.458	160.810	(22,	
AFUDC	(14,211)	(14,837)	(,	
Interest Income	(5,078)	(14,007)	2,9	
	(5,078)	( , ,	· · ·	
Other income, net	-	5,095	5,	
Total interest expense and other income, net	164,169	148,893	(15,	
Total Expenses	1,122,940	1,101,708	(21,	

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding wa uncertainties, among other factors, may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.</p>

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### Transmission Services QBR Analysis: FY 20 End of Year Results

(Note: Variance explanations are for +/-\$2M or greater)

#### **Operating Revenues:**

**Row 4 - Total Operating Revenue:** Operating Revenues are \$8 million above Rate Case due to higher than anticipated revenues for PTP short-term network in the 4th quarter due to higher than forecast hydro and prices, and NT load service with the warmer than normal weather this summer.

#### **Integrated Program Review Operating Expenses:**

**Row 6 - Transmission Operations:** \$2 million below rate case due to Enterprise Services direct charges for Grid Mod forecasted in rate case shifted from this program into the allocated Enterprise Services expense.

Row 7 - Commercial Activities: There were no Non-Wires activities which resulted in \$3 million below rate case .

**Row 8 – Enterprise Services G&A:** \$7 million higher due to a greater portion of the overall Enterprise Services support costs driven mainly by increased IT expense partially offset by a decrease in post retirement benefits.

#### **Non-Integrated Program Review Operating Expenses:**

**Row 12 – Commercial Activities:** \$4 million below rate case due to Covid-induced reduction in reimbursable work.

**Row 14 – Depreciation and Amortization:** \$2 million lower than rate case based on actual plant that has been placed into service during FY20.

**Row 18 – Interest Expense:** \$23 million below rate case due to lower interest rates and no call bond premium on lease financing bond transactions as was anticipated in rate case.

**Row 20 – Interest Income:** \$3 million below rate case due to lower interest earned with lower reserve balance than was anticipated in rate case.

Row 21 – Other Expense: \$5 million above rate case due to a loss incurred as part of the Port of Morrow takeout transaction.

	Report ID: 0121FY20	QBR Forecast Analysi	s: Power S	ervices Dat	a Source: PFMS
	Requesting BL: POWER BUSINESS UNIT Program Plan View				
	Unit of measure: \$ Thousands Through the Month Ended September 30, 2020				
		Preliminary / U	naudited		
			Α	В	С
			FY	FY 2020	
			Rate Case	Actuals: FYTD	EOY Actuals - Rate Case
	Operating Revenues				
1	Gross Sales (excluding bookout adjustment)		\$ 2,472,943	\$ 2,604,652	\$ 131,709
2	Bookout Adjustment to Sales		-	(45,313)	(45,313)
3	Other Revenues		28,016	39,368	11,352
4	Inter-Business Unit		117,901	115,442	(2,459)
5	U.S. Treasury Credits		90,850	100,108	9,258
6	Total Operating Revenues		2,709,710	2,814,257	104,547
	Operating Expenses				
	Integrated Program Review Programs				
7	Asset Management		961,496	918,070	(43,426)
8	Operations		124,378	125,594	1,215
9	Commercial Activities		106,852	91,139	(15,713)
10	Enterprise Services G&A		77,436	75,620	(1,815)
11	Undistributed Reduction		-	-	-
12	Sub-Total Integrated Program Review	Operating Expenses	1,270,162	1,210,422	(59,740)
	Operating Expenses				
	Non-Integrated Program Review Progra	ms			
13	Asset Management		36,708	30,754	(5,954)
14	Operations		351,361	323,412	(27,949)
15	Commercial Activities		214,630	236,823	22,193
16	Other Income, Expenses & Adjustments		-	(338)	(338)
17	Non-Federal Debt Service <note 2<="" td=""><td></td><td>-</td><td>-</td><td>-</td></note>		-	-	-
18	Depreciation, Amortization & Accretion		518,295	478,985	(39,309)
19	Sub-Total Non-Integrated Program R	eview Operating Expense	1,120,993	1,069,637	(51,356)
20	Total Operating Expenses		2,391,155	2,280,059	(111,096)
21	Net Operating Revenues (Expenses)		318,555	534,198	215,643
	Interest expense and other income, net				
22	Interest Expense		305,707	305,092	(615)
23	AFUDC		(15,904)	(12,848)	3,056
24	Interest Income		(13,777)	(1,086)	12,691
25	Other income, net		(5,052)	(12,073)	(7,021)
26	Total interest expense and other inc	ome, net	270,974	279,085	8,111
27	Total Expenses		2,662,129	2,559,144	(102,985)

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties, among other factors, may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

<2 In FY20, balances will be reflected in interest expense and amortization line items of the income statement.

### **Power Services QBR Analysis: FY 20 End of Year Results**

(Note: Variance explanations are for +/-\$2M or greater)

**Row 6 – Total Operating Revenues:** Higher than rate case due to \$21 million in the Reserves Surcharge, higher Demand Revenues and much higher Secondary Sales. Other Revenues were \$11 million higher due to financial swaps. Finally Revenue Credits were \$9 million higher than Rate Case because 4h10c credit from higher replacement power purchases.

#### **Integrated Program Review Operating Expenses:**

**Row 7 – Asset Management:** Primary drivers of the \$43M underspend is COVID delays for F&W and at the Corps of Engineers.

**Row 9 - Commercial Activities:** Primary driver is Conservation Purchases which came in under forecast. Additionally, when BP20 was created Program Plans did not exist therefore there has been cost shifts between the Plans

### Power Services QBR Analysis: FY 20 End of Year Results

(Note: Variance explanations are for +/-\$2M or greater)

#### **Non-Integrated Program Review Operating Expenses:**

**Row 13 – Asset Management:** \$6 million lower than Rate Case to reflect actual Colville Settlement.

**Row 14 – Operations:** \$28 million lower than Rate Case reflects lower loads and lower 3<sup>rd</sup> Party GTA wheeling.

**Row 15 – Commercial Activities:** \$22 million higher from power purchases due to dry weather conditions experienced early in FY as well as seasonality of runoff in the late spring.

**Row 18 – Depreciation, Amortization and Accretion:** \$39 million lower than Rate Case is due to the implementation of new accounting treatment for Energy Northwest and other nonfederal assets as discussed at Q1. Rate Case levels were set prior to the new accounting treatment being finalized and as such a Rate Case to actuals difference was created for the BP-20 rate period.

Row 23 – AFUDC: \$3 million lower due to lower Fed Hydro capital spending.

**Row 24 - Interest Income:** \$13 million lower due to lower interest rates and dividends on the CGS Decommissioning trust fund budgeted here in Rate Case (see next row).

**Row 25: Other income, net:** \$5 million higher from dividends on the CGS Decommissioning trust fund, budgeted in Interest Income for Rate Case.

Row 26 – Total Net Revenues: \$255 million, which is \$208 million greater than Rate Case.

### **Agency Capital Expenditures: FY 20 Performance**

C FY 2020
FY 2020
Y Actuals - ate Case
3,601
(38,667)
(87,133)
10,237
463
-
(7,850)
(50,673)
(1,110)
(189)
13,125
(158,195)
-
(87,345)
11,705
(3,900)
(7,082)
(86,621)
-
6,658
6,658
(238,158)

< 1 Excludes projects funded by federal appropriations.

< 2 Amounts are reported as regulatory assets and not utility plant

### **Agency Capital Expenditures: FY20 Performance**

(Note: Variance explanations are for +/-\$2M or greater)

#### **Transmission Business Unit**

Transmission is \$158 million below rate case mainly due to a \$129 million spending reduction from a shift in Transmission's Sustain and Expand Program prioritizations in FY18 and a \$27 million spending reduction from a facilities Asset Management Plan refresh. Regarding the Transmission prioritization change, analysis revealed BPA's need to focus on the Sustain Program was required in order to maintain the reliability of the Grid. This resulted in a change to the mix and size of projects & their corresponding demand for resources. A Sustain-focused program requires a larger amount of resources. Due to staffing change limitations, Transmission reduced their Start of Year (SOY) Budget to what they believed to be an accurate reflection of what could be delivered and executed within three percent of SOY.

**Row 1 – Main Grid:** \$4 million above rate case due to program reprioritization increases forecasted in the Start of Year (SOY) Budget, but somewhat offset by COVID-19 work stoppages/project delays.

**Row 2 – Area and Customer Service:** \$39 million below rate case due to a shift to more Sustain projects, including an \$11 million decrease due to work stoppage and project delays due to COVID-19.

Row 3 – System Replacements: \$87 million below rate case due to increase in smaller, complex projects with high resource demands.

Row 4 – Upgrades and additions: \$10 million above rate case due to higher loading costs forecasted in the Start of Year (SOY) Budget than included in Rate Case.

Rows 6-8 – Projects Funded in Advance (PFIA): \$60 million below rate case due to a change in strategy above.

#### **Power Business Unit**

**Row 13 – Bureau of Reclamation:** \$87 million below rate case due to reprioritization in the capital program that has shifted more investment in FY20 to the Corps. Additional delays further decreased FY20 results.

**Row 14 – Corps of Engineers:** \$12 million above rate case due to Asset Investment Excellence initiative, projects were prioritized and pulled forward, but had slower than expected project execution and delays due to COVID-19 work stoppages. COVID work stoppages decreased spending by approximately \$10 million.

Row 15 – Power IT: \$4 million below rate case due to prioritization of Corporate IT projects which reduced Power specific IT spending.

Row 16 – Fish and Wildlife: \$7 million below rate case due to delay of qualified land acquisitions and slower Steigerwald project spending.

#### **Corporate Business Unit**

**Row 18 – Corporate IT projects:** \$7 million above rate case due to the new customer billing center project for Grid Mod and enterprise business system disaster recovery project for DOE policy compliance, prioritization of corporate projects as opposed to business line specific IT projects, and project components qualifying for capital when assumed to be expense.

### **FY2020 EOY Reserves Actuals**

	FY20 RESERVES ACTUALS					
		Α	в	С	D	E
(ir	n \$ Thousands)	BP	BP-20		FY 2020	
P	OWER	Days FY 2020 Cash		Days EOY Cash		Delta (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
T	RANSMISSION					
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
A	GENCY					
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.

## **Power Crosswalk – Key Drivers**

PS FY20 EOY Reserves for Risk (RFR) is \$435m, which is ~\$114m more than the rate case forecast of \$321m. Key drivers:

- The BP-20 Rate Case assumed PS ended FY19 with RFR = \$288m, but PS ended FY19 with \$203m, resulting in \$85m less in RFR heading into FY20 than assumed in the rate case.
- FY20 Driver: Net Revenues are \$208M higher than the rate case projection.
  - Higher gross sales due to higher demand and lower Depreciation/Amortization (lower by ~\$40m, but is non-cash).
  - Other cash inflows, timing differences (EN cash timing, AP/AR lag, etc.), including a \$25m increase for other non-cash expenses, such as other accrued payables, etc.

\$ in millions)	
Power Crosswalk	
FY20 EOY RFR Actuals	435
BP-20 RFR Forecast	321
Delta	\$114
-	
Explain the \$114m Delta	
FY20 SOY RFR Beg Bal Delta from RC	(85)
Plus: Increase in Net Revenues	208
Minus: Non-Cash Portion of Net Revenues	(38)
Plus: Timining, Misc, Other	29
-	\$114

## **Transmission Crosswalk – Key Drivers**

TS FY20 EOY Reserves for Risk (RFR) is \$272m, which is ~\$125m more than the rate case (RC) forecast of \$148m. Key drivers:

- BP-20 assumed TS ended FY19 with RFR = \$207m, but TS ended FY19 with \$281m, resulting in \$75m more in RFR heading into FY20 than assumed in the RC.
- FY20 Drivers:
  - Net Revenues are \$29m higher than RC due primarily to a decrease in Interest Expense by \$21m.
  - RC net non-cash items are \$3m less than anticipated; a variety of changes in non-cash revenues, offset by non-cash expenses.
  - Cash timing & other is a net of: revenue/expense accruals that both result in a draw on reserves of \$22m; offset by cash inflows of \$15m (settlement, aircraft sale, misc.); and a \$57m increase for other non-cash expenses such as accrued payables, etc.
  - Adjustment to correct for prior year LP funding reclassification issue, a net reduction to reserves of \$26m.

(\$ in millions)	
Transmission Crosswalk	
FY20 EOY RFR Actuals	272
BP-20 RFR Forecast	148
Delta	\$125
-	
Explain the \$125m Delta	
FY20 SOY RFR Beg Bal Delta from RC	75
Plus: Increase in Net Revenues	29
Minus: Non-Cash Portion of Net Revenues	(3)
Plus: Cash Timing, Misc, Other	50
Plus: Prior Yr LP Net Adjustment	(26)
-	\$125
=	

## Update on Reserves Uncertainties – from Q3

- At 3<sup>rd</sup> 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 realign 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 by both 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.

### **Reserves Distribution Clause (RDC) Process**

• The 2020 Transmission General Rate Schedule Provisions, aka FY20 GRSPs, notes:

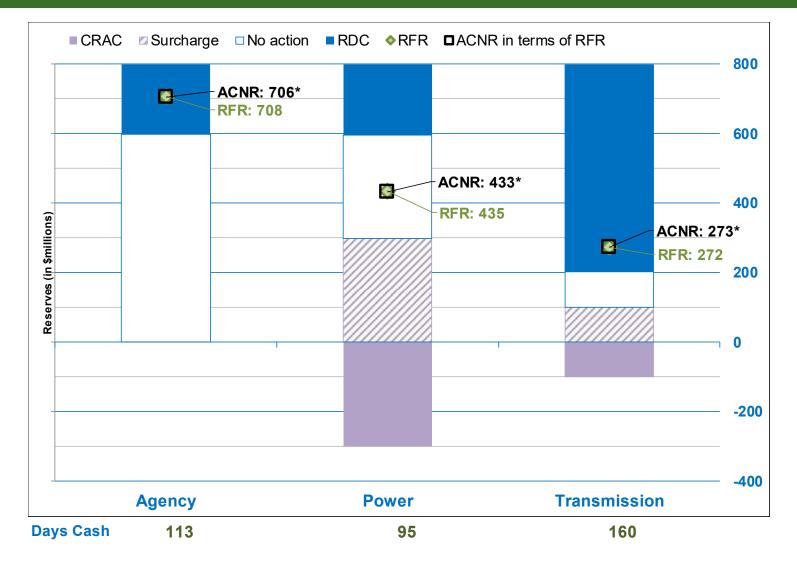
By November 30, 2020, BPA shall complete the calculation of Transmission ACNR and BPA ACNR through the end of FY 2020, for use in calculating the Transmission RDC applicable to rates for December through September of FY 2021.

If the Transmission RDC triggers, BPA will notify customers of the preliminary Transmission RDC Amount and whether the amount will be used to reduce debt, incrementally fund capital projects or other high-value Transmission purposes, or reduce rates, as soon as practicable, but in no case later than November 30 of each applicable year. BPA will make available to customers the preliminary data relied upon to calculate the Transmission RDC Amount, including the calculation of Transmission ACNR.

BPA will hold at least one public meeting to discuss the calculations of Transmission ACNR, the Transmission RDC Amount, and if applicable, the Transmission DD Credit Amount and the Transmission DD Credit percentage. BPA will provide customers an opportunity for comment on the preliminary data. BPA will issue the final Transmission RDC amount as soon as practicable, but in no case later than December 15 of each applicable year.

• At today's meeting BPA will share: the RDC calculation, including calibrations; the RDC amount and intended use of the RDC; the comment period timeline; and next steps.

### FY20 ACNR and RFR



\* ACNR values are shown in terms of RFR; they are translated to equivalent RFR levels.

## **FY20 Transmission RDC Calculation**

- ACNR values result in a Transmission RDC.
- The RDC triggers for the lesser of:
  - 1. The amount Agency ACNR that is over the Threshold set at the equivalent of 90 days cash (\$597m)
  - 2. The amount Transmission ACNR that is over the Threshold set at the equivalent of 120 days cash (\$194m)
- Results show an RDC of approximately \$80m:
  - 1. Agency ACNR is \$110.8m over the Agency Threshold
  - 2. Transmission ACNR is \$79.7m over the Transmission Threshold. As this is the lesser of the two amounts, the Transmission RDC is \$79.7m.

## **ACNR Calibration Results**

#### Power

- Three FY20 Calibrations have been identified, totaling \$23.2m.
- ACNR, accumulated from the start of FY20 through the end of FY21, is \$388.4m.
- After Calibrations, Power ACNR is \$2.6m below the RFR equivalent.
- Power is \$131.4m above the FRP Surcharge threshold and \$169.6 below the RDC threshold.

#### Transmission

- Six FY20 Calibrations have been identified, totaling \$15.2m.
- ACNR, accumulated from the start of FY20 through the end of FY21, is \$144.7m.
- After Calibrations, Transmission ACNR is \$0.8m above the RFR equivalent.
- Transmission is above the RDC threshold by \$79.7m, as described on slide 7.

## **RDC Application**

- Bottom Line Up Front: The Administrator considered a variety of options and has determined to apply the entire amount from the RDC toward debt reduction.
- The RDC application options are outlined in the Financial Reserves Policy, which is Appendix 1 of the BP20 Final Proposal Power and Transmission Risk Study. The policy notes:

If business line financial reserves and agency financial reserves are above their respective upper thresholds, the Administrator shall consider the above-threshold financial reserves for investment in other high-value business line-specific purposes including, but not limited to, debt retirement, incremental capital investment, or rate reduction.

- Customers are welcome to comment on the calculation and intended use.
  - The comment period is open through 11/30/20.
  - Please provide your comments to <u>TechForum@bpa.gov</u> and cc your AE with the Subject: RDC comments.
- The final determination for use of the RDC will be announced no later than December 15, 2020 via Tech Forum.

## IPR2, Budget Carryover and FY21 Outlook Jesse Kintz

## **Budget Carryover**

- Budget carryover is a tool that provides within-rate period budgeting flexibility while still managing to overall rate period amounts
- Carryovers move department budgets from FY 2020 to FY 2021 (or from the first year of BP-20 to the second year)
- Total carryovers: \$27M
  - Power \$24M mostly for Energy Efficiency, Corps of Engineers, Bureau of Reclamation, and Grid Modernization.
  - Transmission, Business Transformation, and Finance had small carryovers totaling \$3M, mostly related to Grid Modernization.

## FY21 Outlook

- Budget Carryover Impacts
  - COVID impacts
  - All else equal, and if we execute as planned, the carryover will result in a Slice true-up charge to customers in FY21. BPA will keep you updated on the FY21 Slice true-up each quarter.
- IPR2
  - Expected to be in Spring 2021
  - Expected to focus primarily on COVID, CRSO and capital program
  - Scope/schedule development in process
- Strategic Cost Management

## **Strategic Cost Management Initiative Marchelle Watson and Chris Dunning**

### Strategic Cost Management (SCM) Project Overview

#### Context:

- Reduce costs to remain at or below inflation
- Previous cost management efforts focused on two-year rate period cycles
- Cost cutting exercises relied heavily on across the board cuts or undistributed reductions

#### • Goal:

- Establish a methodology to improve BPA's cost-management discipline
- Enable BPA's leadership to strategically evaluate and prioritize spending
- Methodology should provide a framework to evaluate cost targets and program costs in order to clearly prioritize near term budget reductions

### Strategic Cost Management (SCM) Project Overview

- **Benefits:** This initiative will ensure BPA effectively manages costs and makes strategic spending choices in support of BPA's strategic plan.
- <u>The SCM initiative will provide value by</u>:
  - Creating cost transparency regarding how the agency costs are functionalized to the power and transmission revenue requirements.
  - Preserving the **value** of our federal assets.
  - Ensuring spending choices are well-informed, timely and transparent, with trade-offs and risks considered before spending decisions are made.
  - Ensuring spending is consistent with BPA's mission, strategic and financial plan goals, and aligns with BPA's Enterprise Architecture framework.

### **Strategic Cost Management and Enterprise Architecture**

It is both a **blueprint** that illustrates the structure and operation of an organization and a **framework** that facilitates the strategy by using a methodology to bring business (operations/processes) and IT (technology) together. What is Enterprise Architecture ?



- BPA has developed a representation of its current state, connecting business and IT information for the entire enterprise.
- EA provides discipline and a common information repository to reveal gaps, deficiencies and areas for optimization.
- EA facilitates discussion and better/faster decision-making.

### Strategic Cost Management (SCM) Project Overview

### Future State

- •Cost management actions are made strategically without the need for across the board cuts or undistributed reductions.
- •Cycle of continuous improvement, to ensure that we are spending money on the right programs and making future focused business investments.



## Grid Modernization Update Allie Mace

#### BONNEVILLE POWER A D M I N I S T R A T I O N

FY 2018 FY 2019 FY 2020 Marketing & Settlements System (MSS) (C) 06/30/2018 Outage Tracking System (OTS) (P) 09/30/2018 Coordinated Transmission Agreement (CTA) Implementation (P) 06/30/2019 Energy Trading & Risk Management & MSS Expansion (C) **Grid Modernization Roadmap** Mission Critical IT - Integration (C) Mission Critical IT - Infrastructure (C) RAS Automatic Arming (P) As of 10/14/2020 - Subject to Change Outage Management System (P) One BPA Outage (N) 02/28/2020 Mission Critical IT - Service Management (C) Real-time Operations Modernization (P) FY20 Q4 Mission Critical IT - Architecture (C) EIM Settlements Scoping (E) 10/1/2019 Reliability Coordinator Decision, Planning & Execution (C) Power Services Training Program (C) Federal Data & Generation Dispatch Modernization (C) Metering Review & Update (C) BPA Network Model (P) AGC Modernization (C) Data Analytics (P) Customer Billing Center Replacement (P) Agency Enterprise Portal (P) Agency Metering System (AMS) Replacement (P) Price & Dispatch Analysis (PRADA) (C) Sub-hourly Scheduling on the DC (P) Load & Renewable Forecasting (C)

E - EIM Project C - Critical for EIM P - Partially Critical for EIM N - Not Critical for EIM Bonneville - Completed Projects - Projects in "Deliver" - Projects in "Identify, Define, Integrate" - Projects not started

4/30/2020 9/30/2020 6/30/2022 9/30/2021 11/21/2021 04/29/2020 06/15/2025 -> 04/22/2020 12/31/2020 12/31/2020 06/1/2023 9/27/2024 9/30/2022 9/30/2023 12/31/2021 3/31/2022 9/30/2021 2/1/2022 9/30/2023 9/30/2021 10/31/2021 Short-Term Available Transfer Capability (N) 10/1/2021 Automated Operations Planning & Reliability Assessment (P) 12/31/2022 Legend Mission Critical IT - Re-Platforming 10/01/2024 -> EIM Settlements Implementation (E) 6/30/2022 EIM Bid and Base Scheduling (E) 6/30/2022 EIM Real Time Operations (E) 6/30/2022 EIM Training Program (E) 6/30/2022 10/1/2022 EIM Testing Program (E) VSA/DTC Phase 2 (P)

FY 2021

FY 2022

POC: GRIDMOD@BPA.GOV

FY 2023

# **GM Mobilization Status**

#### 65%

#### AGC Modernization

Agency Enterprise Portal Agency Metering System Replacement Automated Operations Planning & Reliability Assessment BPA Network Model

Customer Billing Center Replacement

Data Analytics

EIM Bid & Base Scheduling

EIM Real Time Operations

EIM Settlements Implementation

EIM Testing Program

EIM Training Project

Federal Data & Generation Dispatch Modernization

Metering Review & Update

MCIT – Infrastructure

MCIT – Integration

Outage Management System

Power Services Training

Price and Dispatch Analysis

RAS Automatic Arming

Reliability Coordinator Decision, Planning & Execution

ST Available Transfer Capability Sub-Hourly Scheduling on the DC

**Deliver** 

### 26%

CTA Implementation EIM Settlements Scoping Energy Trading & Risk Management & MMS Expansion Marketing & Settlements System MCIT – Architecture MCIT – Integration MCIT – Service Management One BPA Outage Outage Tracking System

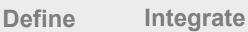
Complete

#### 9%

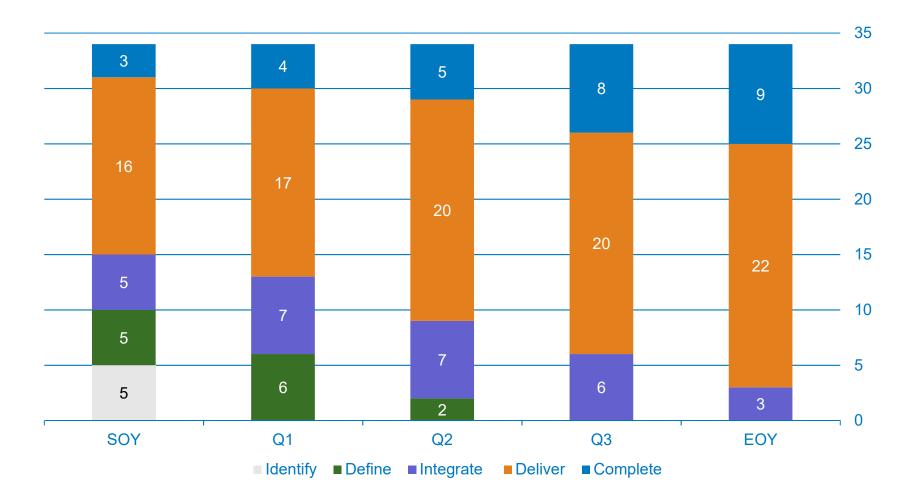
Load & Renewable Forecasting MCIT – Re-Platforming Real Time Ops Modernization

# 0%

Identify



## FY 2020 Progress



# **GM Progress Metric**

#### 98%

- 98% of milestones for projects in deliver were on-track or completed.
- A milestone identifies the completion of significant events and/or key decisions associated with the grid modernization project. Examples include (but are not limited to) a formal project kickoff, RFO release dates, "go-live" dates for new software, targets for completing training for new processes, and project conclusion.
- Status: Green

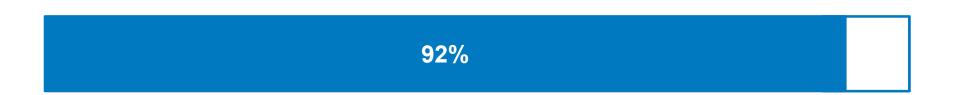
# **Milestones Completed**

- Agency Enterprise Portal: Solicited and selected a vendor.
- Energy Trading & Risk Management System: Completed and delivered system.
- **Outage Management System:** Execution contract was signed with the vendor and 13 sprints completed.
- **Mission Critical IT:** Completed three MCIT projects including Architecture, Integration and Service Management.

# **EIM Progress**

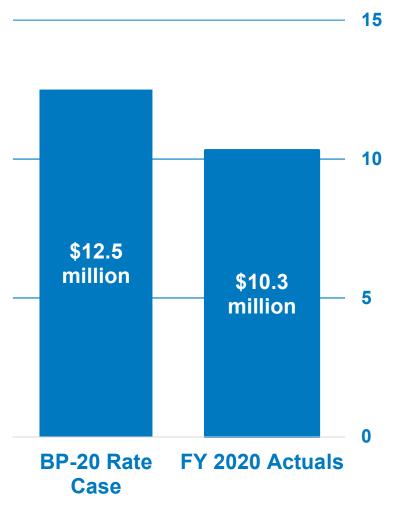
- Launched **five new grid modernization projects,** completed scoping (Identify, Deliver and Integrate), and all projects are in **deliver**.
- Formed an EIM implementation team and EIM implementation sponsor team to oversee our implementation.
- **Hired Utilicast** to serve as our EIM integrator.
- Completed **Phase III Policy** process with discussions on nine policy issues that will impact BPA's rates and tariff.

# **GM Finance Metric**



- 92% of the FY 2020 IPR expense budget was spent for projects in deliver.
- This is the equivalent of \$5.5 million out of an expected \$5.9 million.
- Status: Green

# GM FY 2020 Spending

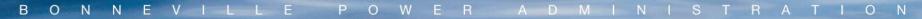


- BPA had previously anticipated an overspend in FY 2020.
- BPA actually spent \$10.3 million in FY 2020. BPA underspent due to:
  - Project costs shifted from expense to capital.
  - Costs shifted from FY 2020 to FY 2021.

# **More Information**

### On grid modernization: <u>www.bpa.gov/goto/gridmodernization</u>

On EIM: www.bpa.gov/goto/eim





# Appendix

# Slice Reporting Composite Cost Pool Review Final Annual Slice True-Up Adjustment

### Final Forecast of FY 2020 Slice True-Up Adjustment

	FY 2020 Forecast \$ in thousands
February 11, 2020 First Quarter Technical Workshop	\$(4,524)*
May 18, 2020 Second Quarter Technical Workshop	\$(10,111)*
August 18, 2020 Third Quarter Technical Workshop	\$(9,868)*
November 2020 Final Slice True-Up	\$(18,997)

\*Negative = Credit; Positive = Charge

### Summary of Differences From Final to FY 20 (BP-20)

		А	В
#		Composite Cost Pool True-Up Table Reference	Final – Rate Case \$ in thousands
1	Total Expenses	Row 95	\$(132,317)
2	Total Revenue Credits	Rows 113 + 122	\$(11,100)
3	Minimum Required Net Revenue	Row 145	\$41,492
4	TOTAL Composite Cost Pool (1 - 2 + 3) \$(132,317) - \$(11,100) + \$41,492 = (79,724)	Row 150	\$(79,724)
5	TOTAL in line 4 divided by <u>0.9384753</u> sum of TOCAs \$(79,724)/ <u>0.9384753</u> = \$(84,951)	Row 152	\$(84,951)
6	QTR Forecast of FY 20 True-up Adjustment 22.36267 percent of Total in line 5 0.2236267 * \$(84,951) = \$(18,997)	Row 153	\$(18 <i>,</i> 997)

### BONNEVILLE POWER ADMINISTRATION

### **FY20 Impacts of Debt Management Actions**

			А		В	С		D
FY20	) Impacts of Acceleration of Debt							
							Delta	from the FY20
#	Description	FY2	0 Final QBR	FY2	0 Rate Case	CCP	rate ca	ise
1	MRNR Section of Composite Cost Pool Table						\$	-
2	Principal Payment of Federal Debt						\$	-
3	2020 Regional Cooperation Debt (RCD)	\$	18,803,026	\$	21,148,026		\$	2,345,000
4	2020 Debt Service Reassignment (DSR)	\$	1,506,974	\$	1,506,974		\$	
5	Ргерау	\$	-	\$			\$	
6	Energy Northwest's Line Of Credit (LOC)	\$	-	\$			\$	
7	Rate Case Scheduled Base Power Principal	\$	151,000,000	\$	151,000,000		\$	-
8	Total Principal Payment of Fed Debt	\$	171,310,000	\$	173,655,000	row 125	S	2,345,000
							\$	-
9	Repayment of Non-Federal Obligations	S	227,000,000	\$	227,000,000	row 126	\$	-0
					a di sera ana ana		\$	-
10	Customer Proceeds	\$		\$	-	row 134	\$	
11	Non-Cash Expenses	\$	-	\$	-	row 133	\$	
		20						
12	Nonfederal Bond Principal Payment	\$	43,340,000	\$	41,581,000	row 127	\$	(1,759,000)

## **Composite Cost Pool Interest Credit**

### Allocation of Interest Earned on the Bonneville Fund (\$ in thousands)

		<u>Final 2020</u>	
1	Fiscal Year Reserves Balance	570,255	
2	Adjustments for pre-2002 Items	<u>16,341</u>	
3	Reserves for Composite Cost Pool (Line 1 + Line 2)	586,596	
4	Composite Interest Rate	0.22%	
5	Composite Interest Credit	(1,315)	
6	Prepay Offset Credit	0	
7	Total Interest Credit for Power Services	(1,086)	
8	Non-Slice Interest Credit (Line 7 – (Line 5 + Line 6))	229	

1 0 0 0 0

### Net Interest Expense in Slice True-Up Final

	FY20 Rate Case	Final
	<u>(\$ in thousands)</u>	<u>(\$ in thousands)</u>
Federal Appropriation	44,686	44,690
Capitalization Adjustment	(45,937)	(45,937)
Borrowings from US Treasury	61,157	56,303
Prepay Interest Expense	9,826	9,826
Interest Expense	69,733	64,882
AFUDC	(15,904)	(12,848)
Interest Income (composite)	(13,777)	(1,315)
Prepay Offset Credit	(0)	(0)
Total Net Interest Expense	40,052	50,720

#### BONNEVILLE POWER ADMINISTRATION

### Schedule for Slice True-Up Adjustment for Composite Cost Pool True-Up Table and Cost Verification Process

Dates	Agenda
February 11, 2020	First Quarter Technical Workshop
May 18, 2020	Second Quarter Technical Workshop
August 18, 2020	Third Quarter Technical Workshop
October 2020	BPA External CPA firm conducting audit for fiscal year end
Mid-October 2020	Recording the Fiscal Year End Slice True-Up Adjustment Accrual
End of October	Final audited actual financial data is expected to be available
November 13, 2020	Mail notification to Slice Customers of the Slice True-Up Adjustment for the Composite Cost Pool
November 17, 2020	BPA to post Composite Cost Pool True-Up Table containing actual values and the Slice True-Up Adjustment
November 19, 2020	Fourth Quarter Business Review Technical Workshop Meeting Provide Slice True-Up Adjustment for the Composite Cost Pool (this is the number posted in the financial system; the final actual number may be different)
December 9, 2020	Deadline for customers to submit questions about actual line items in the Composite Cost Pool True-Up Table with the Slice True-Up Adjustment for inclusion in the Agreed Upon Procedures (AUPs) Performed by BPA external CPA firm (customers have 15 business days following the BPA posting of Composite Cost Pool Table containing actual values and the Slice True-Up Adjustment)
December 23, 2020	BPA posts a response to customer questions (Attachment A does not specify an exact date)
January 8, 2021	Customer comments are due on the list of tasks (The deadline can not exceed 10 days from BPA posting)
February 1, 2021	BPA finalizes list of questions about actual lines items in the Composite Cost Pool True-Up Table for the AUPs

#### BONNEVILLE POWER ADMINISTRATION

			Final (\$000)	fore	cast for FY 2020 (\$000)		– Rate Case ifference
1	Operating Expenses						
2	Power System Generation Resources						
3	Operating Generation						
4	COLUMBIA GENERATING STATION (WNP-2)	\$	260.962		262,471		(1.503
5	BUREAU OF RECLAMATION	\$	152.612		153,609		(99)
6	CORPS OF ENGINEERS	1	240,298	2.8	252.557		(12,255
7	LONG-TERM CONTRACT GENERATING PROJECTS	\$	12.045		12,709		166
8	Sub-Total				681,345	1	(15,428
9	Operating Generation Settlement Payment and Other Paym		000,011		001,343		110,120
10	COLVILLE GENERATION SETTLEMENT	ŝ	17,586		22,997		(5.41
11	SPOKANE LEGISLATION PAYMENT			;	22,301	1	100.41
12	Sub-Total			*	22,997		(5,411
13		•	11,300		22,331		13,411
14	Non-Operating Generation TROJAN DECOMMISSIONING	\$	715		1.200		(48
15		\$	1,144		431		71
	WNP-18/3 DECOMMISSIONING	\$	1.859	22 ·	1.631		228
16	Sub-Total	•	1,055	•	1,031	•	220
17	Gross Contracted Power Purchases	1	0.74				(20)
18	PNCA HEADWATER BENEFITS		2,711	12 A.	3,100	-	(38
19	OTHER POWER PURCHASES (omit, except Designated Obligations or Purch		(7,168)		-		(7,168
20	Sub-Total	\$	(4,457)		3,100		(7,557
21	Bookout Adjustment to Pover Purchases (omit)						
22	Augmentation Power Purchases (omit - calculated below)						
23	AUGMENTATION POWER PURCHASES	\$	-			8	
24	Sub-Total	+	-	*		+	
25	Exchanges and Settlements				2000000		
26	RESIDENTIAL EXCHANGE PROGRAM (REP)	\$	249,983		249,767		21
27	OTHER SETTLEMENTS	\$		1		\$	
28	Sub-Total	+	249,983	+	249,767		217
29	Renewable Generation	1.000				1	2010
30	RENEWABLES (excludes KIII)	\$	24,708	1.00	26,475		(1,76)
31	Sub-Total	\$	24,708	\$	26,475	\$	(1,767
32	Generation Conservation		in the designation of the second s				
33	CONSERVATION ACQUISITION	\$	63,529		67,000	\$	(3.07
34	CONSERVATION INFRASCTRUCTURE	8	20,152		27,296	\$	(7,14
35	LOW INCOME WEATHERIZATION & TRIBAL	\$	3,268	\$	5,739	\$	(2,47
36	ENERGY EFFICIENCY DEVELOPMENT	\$	5,905	\$	8,000	1	(2,09
37	DR & SMART GRID	\$	252	1	855	\$	(60
38	LEGACY	1	724		590	\$	13
39	MARKET TRANSFORMATION	\$	11.857		12.050	\$	(19
40	Sub-Total		106,087	*	121,530		(15,443
41	Power System Generation Sub-Total		1.061.683		1,106,845	\$	(45,16)
42	The state of the second st	-	1,0001,000	-	100,010		

45

-			Final (\$000)	to	recast for FY 2020 (\$000)		l - Rate Case Jifference
43	Power Non-Generation Operations						
44	Power Services System Operations						
45	EFFICIENCIES PROGRAM	1		\$	-	\$	-
46	INFORMATION TECHNOLOGY	\$	(31)		6,714	1	(6,745
47	GENERATION PROJECT COORDINATION	\$	3,565	\$	6,059	\$	(2,495)
48	ASSET MGMT ENTERPRISE SVCS	\$	553	\$	-	1	553
49	SLICE IMPLEMENTATION	\$	774		555	\$	218
50	Sub-Total		4,861	+	13,329	+	(8,468)
51	Pover Services Scheduling			-		1.1	
52	OPERATIONS SCHEDULING	\$	9,233	\$	8,806	\$	427
53	OPERATIONS PLANNING	\$	7,537	\$	5,643	\$	1,894
54	Sub-Total	\$	16,770	\$	14,449		2,321
55	Power Services Marketing and Business Support						
56	COMMERCIAL ENTERPRISE SVCS	\$	1.837			\$	1.837
57	OPERATIONS ENTERPRISE SVCS	\$	4,323	\$	-	\$	4,323
58	POWER R&D	\$	2.041	\$	2,662	1	(621
59	SALES & SUPPORT	\$	13,669		23,191	\$	(9,522
60	STRATEGY, FINANCE & RISK MGMT (REP support costs included here	\$	19,347	8	16,905	1	2,442
61	EXECUTIVE AND ADMINISTRATIVE SERVICES (REP support costs incl				3,880	1	3,132
62	CONSERVATION SUPPORT	\$	8,116	\$	8,399	\$	(284
63	Sub-Total	\$	56,346	\$	55,038	\$	1,308
64	Power Non-Generation Operations Sub-Total		77,977	\$	82,815		(4,839)
65	Power Services Transmission Acquisition and Ancillary Service	25					
66	TRANSMISSION and ANCILLARY Services - Sustem Obligations	\$	32.028	\$	32,028	+	-
67	3RD PARTY GTA WHEELING	\$	67,419	\$	96,200	\$	(28,781
68	POWER 3RD PARTY TRANS & ANCILLARY SVCS (Composite Cost)	\$	2,562	\$	2.338	1	224
69	TRANS ACO GENERATION INTEGRATION	\$	13,540		13,577	\$	(37
70	TELEMETERING/EQUIP REPLACEMT	\$	-		-	1	
71	Power Services Trans Acquisition and Ancillary Serv Sub-1		115,551		144,143		(28,593)
72	Fish and Wildlife/USF&W/Planning Council/Environmental Reg		1067385		and the second		
73	Fish & Wildlife	\$	226,236	\$	249,603	1	(23,367
74	USF&V Lover Snake Hatcheries	\$	31,852		30,483	\$	1,369
75	Planning Council	\$	11,180		11,725	1	(545
76	Environmental Requirements	\$			1000	1	
77	Fish and Wildlife/USF&W/Planning Council Sub-Total	\$	269,268		291,811	\$	(22,543
78	BPA Internal Support						11.00
79	Additional Post-Retirement Contribution	\$	13,496		19,577	\$	(6,081
80	Agency Services G&A (excludes direct project support)	\$	62,125		57,859	1	4,266
81	BPA Internal Support Sub-Total		75,620		77,436	1	(1.815
82	Bad Debt Expense	1	6	\$		1	6
83	Other Income, Expenses, Adjustments	\$	(303)			\$	(303
84	Depreciation	\$	141.009		138,968	\$	2.041
85	Amortization	1		1	0100000	1	(40,726
86	Accretion (CGS)	\$	33,113	(E)	33,738		(625
87	Total Operating Expenses	\$	2,078,789		2,221,345		(142,556)
A 100							

#### COMPOSITE COST POOL TRUE-UP TABLE

\* The Residential Exchange Program Support costs have been moved from the Residential Exchange line into the respective Non-Gen Ops programs of Strategy, Finance & Risk Mgmt. and Executive and Administrative Services. This is a net zero impact but is different than what was shown in the final proposal rate case in Table F for these line items

#### BONNEVILLE POWER ADMINISTRATION

			Final	ło	recast for FY 2020		al - Rate Case Difference
- 1			(\$000)		(\$000)		
89	Other Expenses and (Income)						
90	Net Interest Expense	\$	290.910	\$	270,654	\$	20,256
91	LDD	\$	40,586		38,505	\$	2,081
92	Inigation Rate Discount Costs		20,880		20,905	\$	(24
93	Other Expense and (Income)	8	(12.073)			\$	(12.073
94	Sub-Total		340,303		330,064		10,239
95	Total Expenses	\$			2,551,409		(132,317
96						-	11002011
97	Revenue Credits						
98	Generation Inputs for Anoillary, Control Area, and Other Services Revenue	*	115,442		119,815	1	(4,373
39	Downstream Benefits and Pumping Power revenues	4	20,220		19.364		856
00	4(h)(10)(c) credit	\$	95,508		86,250	T	9,258
101	Colville and Spokane Settlements		4,600	1	4,600		0,200
102	Energy Efficiency Revenues	8	5.397		8,000		(2.603
02	PF Load Forecast Deviation Liquidated Damages	-	0,001	-	1.2522.231	-	(9,499
104	Miscellaneous revenues	-	11.102	2		1	11.26
04		-	11,102			-	11,26
0.50	Renewable Energy Certificates						-
06	Net Revenues from other Designated BPA System Obligations (Upper Bal	*	449		353		96
107	RSS Revenues	*	2,728	*	2,728		10.000
08	Firm Surplus and Secondary Adjustment (from Unused RHWM)	\$	65,444	*	68,746		(3,302
109	Balancing Augmentation Adjustment	\$	1,213		1,213		0
110	Transmission Loss Adjustment	\$	30,066	\$	30,066		C
111	Tier 2 Rate Adjustment	\$	510	+	510	6 - C-	
112	NR Revenues	\$	1	\$		\$	
113 114	Total Revenue Credits	+	352,679	•	363,507		(10,828
115	Augmentation Costs Inot subject to True-Up)			-		-	
116	Tier 1 Augmentation Resources (includes Augmentation RSS and Augmentatic	1	12,367		12,367		-
117	Augmentation Purchases	\$		\$		\$	
118	Total Augmentation Costs		12,367	+	12,367		-
119							
120	DSI Revenue Credit						
121	Revenues 12 aMW @ IP rate		4,031		4,303	\$	(272
22	Total DSI revenues	1	4,031	_	4,303	_	(272
23	Total Explorements		4,001		4,000		46.16
24	Minimum Required Net Revenue Calculation						
25	Principal Payment of Fed Debt for Pover		171.410		173.072		(1.662
10-10	Repayment of Non-Federal Obligations (EN Line of Credit)	-		1	227,000		(1,002
126			227,000	-	221,000		
26			49.440		41 504		7 000
126 127 128	Repayment of Non-Federal Obligations (CGS, WNP1, WNP3, N. Wasco, Cowlitz Irrigation assistance	8		-	41,581 24,331		7,855

47

	COMPOSITE COST POOL 1						
			Final	fo	ecast for FY 2020		l - Rate Casi lifference
			(\$000)		(\$000)		
130	Depreciation	\$	141,009	\$	138,968	\$	2,04
131	Amortization	\$	304,863	\$	345,589	\$	(40,72
132	Accretion	\$	33,113	\$	33,738	4	(62
133	Capitalization Adjustment	\$	(45,937)		(45,937)	4	
134	Non-Cash Expenses	\$	100	\$		\$	
135	Customer Proceeds	\$		\$		\$	
136	Cash freed up by DSR refinancing	\$	16,590	\$	16,590	\$	
137	Prepay Revenue Credits	\$	(30,600)	\$	(30,600)	4	
138	Bond Call Premium/Discount	\$	(257)	\$	-	4	(25
139	Non-Federal Interest (Prepay)	\$	9,826	\$	9,826	\$	
140	Contribution to decommissioning trust fund	\$	(4,094)	\$	(4,100)	\$	
141	Gainsflosses on decommissioning trust fund	\$	(12,080)	\$	(5,052)	\$	(7,02
142	Interest earned on decommissioning trust fund	\$	(20)	\$	(8,818)	\$	8,79
143	Sub-Total	:	412,415		450,204	:	(37,78
144	Principal Payment of Fed Debt plus krigation assistance exceeds non cash exp	\$	57,272	\$	15,780	\$	41,49
145	Minimum Required Net Revenues	\$	57,272		15,780	\$	41,49
146							
147	Annual Composite Cost Pool (Amounts for each FY)	\$	2,132,021		2,211,745	\$	(79,72)
148							
149	SLICE TRUE-UP ADJUSTMENT CALCULATION FOR COMPOSITE O	:051	POOL				
150	TRUE-UP AMOUNT (Diff. between Rate Case and Forecast)		(79,724)				
151	Sum of TOCAs		0.9384753				
152	Adjustment of True-Up Amount when actual TOCAs < 100 percent		(84,951)				
153	TRUE-UP ADJUSTMENT CHARGE BILLED (22, 36267 percent)		(18,997)				



# Appendix

## **Reserves Materials**

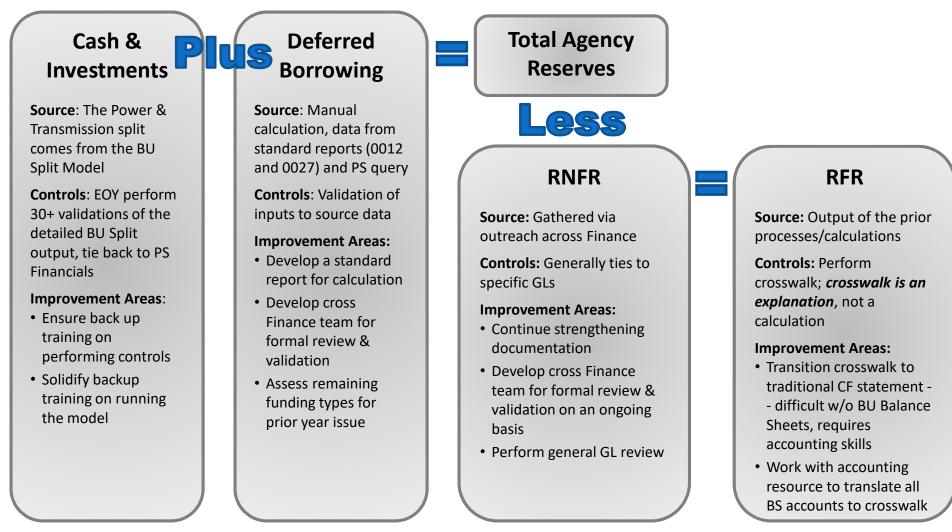
### **Reserves Not for Risk**

	9/30/2019	9/30/2020	
AGENCY	Actuals	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

	9/30/2019	9/30/2020	
POWER	Actuals	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

	9/30/2019	9/30/2020	
TRANSMISSION	Actuals	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

### **Overview of Reserves Development Process**



## Q3 QBR Technical Workshop - Uncertainties

- At the 3<sup>rd</sup> 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*).

## FY2020 Risk Adjustment Mechanisms

- **Cost Recovery Adjustment Clause (CRAC):** The CRAC is an upward adjustment to applicable power (PS) and transmission (TS) rates, and triggers when PS or TS Accumulated Calibrated Net Revenue (ACNR) falls below their relative CRAC thresholds.
- **Financial Reserves Policy (FRP) Surcharge:** The FRP Surcharge is an upward adjustment to applicable PS and TS rates and triggers when PS or TS ACNR falls below the business line lower threshold, set at the ACNR equivalent of reserves.
- **Reserves Distribution Clause (RDC):** The RDC is applicable only if financial reserves exceeds both the RDC threshold for that business line and for the Agency threshold. The RDC allows the Administrator to repurpose financial reserves for debt reduction, rate reduction through a Dividend Distribution (DD), and other high value options. The upper thresholds for RDC are set at the ACNR equivalent of reserves.

## FY2020 Risk Adj. Mechanisms - Thresholds

- The table below shows the thresholds as measured in both ACNR and Reserves for each business line, the for the RDC the agency (BPA) threshold level.
- It also shows the maximum amounts allowed to be collected for CRAC or FRP, or used for RDC purposes.

	FY2020 Thresholds and Caps (\$ in Millions)							
	Threshold Measured in ACNR		Threshold Measured in Reserves		Maximum Amounts			
	PS	TS	BPA	PS	TS	BPA	PS	TS
CRAC	(\$44)	(\$130)	-	\$0	\$0	-	\$300	\$100
FRP Surcharge	\$257	(\$33)	-	\$301	\$97	-	\$30	\$15
RDC	\$558	\$65	\$424	\$601	\$194	\$597	\$500	\$200

## **Appendix: ACNR Calibration List**

#### Power

- Depreciation and Amortization (\$39,310)
- Balance Sheet Accruals \$37,950
- Unidentified Non-Cash Expenses / Other \$24,570

### Transmission

- Non-Cash Termination Fee \$5,000
- Non-Cash Fiber Revenue (\$8,422)
- Customer Dispute Resolution \$10,318
- Balance Sheet Accruals (\$22,750)
- Lease Financing Adjustment (25,890)
- Unidentified Non-Cash Expenses / Other \$56,900

#### **POWER SERVICES RESERVES - FY2020**

(Dollars in Millions)

	Cash Flows from Operating Activities	EOY Actuals
2	Net revenues (expenses)	255.11
3	Adjustments to reconcile net revenues to cash provided by operations	170.00
4	Depreciation and amortization	478.99
5	Capitalization Adjustment	(45.94)
6	PrePay - Non Federal Interest	9.83
7	Non Cash Revenue (A)	(42.68)
8	Changes in Accruals	
9	Revenue Accruals	(1.95)
10	Expense Accruals	39.90
11	Slice True Up	17.28
12	Miscellaneous (Other Cash Timing & Under Review) (B)	18.47
13 14	Net Cash Provided by Operating Activities	729.00
14	Cash Flows from Investing Activities	
15	0	(195 21)
16	Investments in Utility Plant, including AFUDC Fish & Wildlife	(185.21) (40.18)
18	Appropriation CapEx	(106.00)
19	Appropriation Capex	(108:00)
20	Net Cash Provided by Investing Activities	(331.39)
20	Net cash Fronded by investing Activities	(331.39)
22	Cash Flows from Financing Activities	
23	Cash Sources - Financing	
24	Federal Borrowings	269.00
25	Appropriations Funding	106.00
26	RCD Extension	17.40
27		27110
28	Cash Uses - Financing	
29	Federal Bond Repayment	(96.10)
30	Federal Appropriations Repayment	(75.31)
31	Non-Federal Debt Payment	(274.61)
32	Irrigation Assistance	(24.13)
33		
34	Net Cash Provided by Financing Activities	(77.75)
35		
36	Net increase (decrease) in cash and cash equivalents	319.86
37	Beginning Cash and Cash Equivalent Balance	116.93
38	Deferred Borrowing Beginning Balance	226.49
39	Change in Deferred Borrowing	(43.60)
40	Other Changes in RNFR	(114.91)
41	EOY Total Reserves	504.77
42		
43	TOTAL RESERVES	504.77
44	RESERVES NOT FOR RISK	69.54
45	RESERVES FOR RISK	435.22

#### **NOTES - Further Details**

Note A - Non Cash Revenue	
PrePay - Non Cash Revenue	(30.60)
WNP3 Settlement - Non Cash Revenue	
CGS Decom Gain/Loss/interest	(12.08)
Total	(42.68)

Note B - Cash timing & Other	
EN Cash Timing	3.66
CGS Cash Contribution	(4.10)
Unearned Revenue	(4.65)
Prepaid Expense	(1.00)
Under Review	24.57
Total	18.47

#### TRANSMISSION SERVICES RESERVES - FY2020 (Dollars in Millions)

1	Cash Flows from Operating Activities	EOY Actuals
2	Net revenues (expenses)	(7.49)
3	Adjustments to reconcile net revenues to cash provided by operations	
4	Depreciation and amortization	339.83
5	Capitalization Adjustment	(18.97)
6	Amortization of Capitalized Bond Premiums	0.56
7	Non Cash Revenue (A)	(29.41)
8	Non Cash Expense (B)	10.04
9 10	Changes in Accruals Revenue Accruals	(3.59)
10	Expense Accruals	(19.16)
12	Miscellaneous (Cash In - Settlement, Misc, Under Review) (D)	72.56
13	Net Cash Provided by Operating Activities	344.37
14	Net cash i forded by operating Activities	544.57
15	Cash Flows from Investing Activities	
16	Investments in Utility Plant, including AFUDC	(383.91)
17		
18	Net Cash Provided by Investing Activities	(383.91)
19		
20	Cash Flows from Financing Activities	
21	Cash Sources - Financing Federal Borrowings	396.00
23	Third Party Financing (F)	63.05
24	Revenue Financing - Leverage	26.44
25		
26	Cash Uses - Financing	
27	Federal Bond Repayment	(199.90)
28	Federal Appropriations Repayment	
29	Non-Federal Debt Payment	(99.00)
30	Revenue Financing - Leverage	(26.44)
31	Net Ceek Drewided by Financing Activities	100.15
32 33	Net Cash Provided by Financing Activities	160.15
	Net increase (decrease) in cash and cash equivalents	120.61
35	Beginning Cash and Cash Equivalent Balance	71.82
36	Deferred Borrowing Beginning Balance	357.81
37	Change in Deferred Borrowing	(101.58)
38	Other Changes in RNFR	(38.09)
39	Prior Years' Adjustment for LF	(65.49)
40	Cash Draws for Prior Years LF	39.60
41	EOY Total Reserves	384.67
42		
43	TOTAL RESERVES	384.67
44	RESERVES NOT FOR RISK	112.35
45	RESERVES FOR RISK	272.32

#### **Notes - Further Details**

Note A - Non Cash Revenues	2020	
Fiber Revenues - Non Cash Revenue	(8.4)	
AC 3rd Intertie Non-Cash Revenue	(5.2)	
LGIA Credits- Non Cash Revenue	(15.8)	
Total	(29.4)	
Note B - Non Cash Expenses		

Credit Projects Net Interest (LGIA interest)	4.9
POM Takeout Termination Fee - Non Cash Expense	5.1
Total	10.0

Note D - Miscellaneous	2020	
PacifiCorp's Settlement	10.3	
Sale of Aircraft	2.2	
Unearned Revenue	1.6	
Prepaid Expense	1.6	
Under Review	56.9	
Total	72.6	

Note F - Third Party Financing			
PFIA-Funded	25.1		
Lease Finance-Funded	38.0		
Public Partner	0.0		
Total	63.0		

# **Financial Disclosures**

This information has been made publicly available by BPA on November 17, 2020 and contains information not sourced directly from BPA financial statements.