

# **BP-20 Rate Case Workshop: Power and Transmission Risk**

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# Risk topics

- Risk Study Overview
- Financial Reserves Policy (FRP) implementation to be decided in 7(i) process
  - Timing and metric methodologies for triggering a reserves rate action
  - Rate mechanisms for increasing financial reserves
- NFB Mechanisms

# Risk Study Overview: Objectives

The Power and Transmission Risk Study serves to ensure that BPA meets the Treasury Payment Probability (TPP) Standard and to implement BPA's Financial Reserves Policy (FRP).

- **TPP Standard:** BPA must set rates high enough to have at least a 95% probability of making all payments to the Treasury over a two-year rate period.
- **FRP Implementation:** Establish tools to meet FRP objectives for managing business line and agency financial reserves.

# Risk Study Overview: Tools

The Risk Study uses risk mitigation tools to meet the TPP and FRP objectives and evaluates the effectiveness of those tools.

- **Cost Recovery Adjustment Clause (CRAC):** A rate adjustment mechanism that increases rates for the next Fiscal Year when below a threshold at the end of a year.
- **Reserves Distribution Clause (RDC):** A mechanism for identifying reserves the Administrator shall consider for rate reduction, debt repayment, incremental capital investment, or any other high-value purpose when above a threshold at the end of a year.
- **Planned Net Revenue for Risk (PNRR):** A fixed amount of additional revenue added to the Revenue Requirement, which increases reserves over the rate period.
- **Reserves Surcharge:** A *potential* method for implementing the FRP, which functions similarly to the CRAC (discussed in the following section)

# Risk Study Overview: Changes

- The Risk Study is planned to use the same methods and organization as in BP-18 rates.
- For BP-20, there are three notable changes, which we would like to discuss in this workshop:
  - Potential changes to the mechanism used to trigger the CRAC and RDC (currently Accumulated Calibrated Net Revenue)
  - Implementation of the FRP through PNRR or a new Surcharge-type mechanism
  - Removal of the NFB Mechanisms [National Marine Fisheries Service (NMFS) Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp)]

# Review draft revised FRP

- FRP Timeline:
  - Draft revised Financial Reserves Policy published on April 20, 2018.
  - Extended comment period ended on August 2, 2018.
  - ROD and final revised FRP to be published in September.
- Summary of draft revised FRP:
  - Annual rate action of \$40 million for Power and \$15 million for Transmission when a business line's financial reserves are below its lower threshold of 60 days cash on hand.
  - In addition to the rate action described above, BPA will propose in each rate case a mechanism to increase financial reserves in the event they fall below \$0. Such rate mechanism will include the following:
    - Incorporate current CRAC methodology of dollar for dollar for first \$100 million, then fifty cents on the dollar for any amounts greater than \$100 million.
    - Capped at \$300 million for Power and \$100 million for Transmission.

# FRP implementation in rate case

- FRP states that implementation in the rate case will include:
  - Parallel rate mechanisms for each business line that will trigger if financial reserves are below the lower financial reserves thresholds or above upper financial reserves thresholds.
  - Specific rate mechanisms to achieve annual rate actions for increasing financial reserves may be implemented as a single rate mechanism or multiple rate mechanisms.
  - Implementation of the rate mechanism to increase financial reserves in the event they fall below \$0, including the timing of when the calculations will be performed, will be determined each rate period. Such implementation may include *de minimis* thresholds.

# Timing and metric methodologies

- Objective:
  - Develop a clear and reliable methodology for triggering annual Cost Recovery Adjustment Clause (CRAC) and Reserves Distribution Clause (RDC) for both Power and Transmission, which can be adopted in BP-20 rates.
  - Use the same (or similar) methodology as the metric for triggering the FRP annual rate action when reserves are below a business line's lower threshold.
- We will be discussing the metric used to trigger the rate actions (such as accumulated net revenues or cash reserves) and the timing of such a metric (such as using forecast or actual values)

# Decision criteria

- Decision criteria used to develop and evaluate BP-20 FRP implementation timing and trigger metric proposals:
  - *Verifiable*: process and calculations are repeatable and can be reviewed by others
  - *Simplicity*: metric is easy to explain and understand
  - *Aligns with BPA's goals regarding financial reserves*: metric should reasonably reflect end of year reserves for risk since it is the basis of the Financial Reserves Policy
- Other considerations:
  - Low error potential: consider input, calculation, and forecast errors
  - Low staff workload: consider workload for standing up process and routine execution
  - Cost effectiveness: consider combined implementation and ongoing costs
  - Low impact on Business Decisions: consider potential for undesirable financial choices in order to keep metric from “misbehaving”
  - Impact on customer rates: consider recovery period and time for customers to react

# BP-20 timing and metric proposals

- When developing proposals for triggering the CRAC, RDC, and FRP annual rate actions, BPA considered the following alternatives:
  - Timing:
    - Forecast (status quo): use forecast data for calculating the metric released at the end of July for the first year of the rate period and the end of September for second year of the rate period.
    - Actuals: use end of year actual net revenue or reserves data released at the end of October
  - Metric:
    - ACNR – accumulated calibrated net revenues (status quo): Not audited, however can be cross walked to ANR
    - ANR – accumulated net revenues: Derived from audited (or pre-audit) net revenue numbers
    - RFR – reserves for risk: Not audited, however reflects the targeted cash performance and can be cross walked to GL accounts and financial statements
- BPA is primarily focusing on three proposals:
  - Forecast ACNR (status quo)
  - Actual ANR (actual accumulated net revenues)
  - Actual RFR (actual cash reserves)

# NR and ACNR definitions

- **Net Revenue (NR)**  
Net revenues for any given fiscal year is defined as generation function accrued revenue less accrued expenses (in accordance with Generally Accepted Accounting Principles).
- **Calibrated Net Revenue (CNR)**  
Net revenue adjusted (aka calibrated) to remove the effect of certain events that affect NR and Reserves for Risk differently.
- **Accumulated Calibrated Net Revenue (ACNR)**  
The accumulation of CNR since the start of the year before the rate period. For BP-18 ACNR is accumulated from the start of FY17.
- **Calibration Events**  
Events that change the relationship between NR and Reserves for Risk relative to the assumptions in the Rate Case.

# Forecast ACNR (status quo)

- Currently CRACs and RDCs are triggered on forecast accumulated calibrated net revenues (ACNR). The data is released at the end of July for the first year of the rate period and the end of September for the second year of the rate period.

## ***\*ACNR Calculation (in \$ millions)***

FY 18 CNR = FY18 NR + FY18 Total Calibration.

FY 18 ACNR = FY17 CNR + FY18 CNR.

- Purpose of ACNR:
  - While the CRAC is designed to mitigate reserves for risk, BPA has historically used an NR based metric to determine whether and for how much the CRAC triggers.
  - Changes in NR usually, but do not always, mirror RFR. Certain events (e.g. RCD transactions) can cause very large increases to NR without increasing RFR.
  - Any NR based trigger for the CRAC needs an adjustment method so that the CRAC will trigger at the appropriate reserves level.
  - ACNR is meant to correct for these deviations by calibrating for such events.

# Actual ANR

- End of year actual Accumulated Net Revenue calculation:
  - If ANR actuals as of September 30 of each fiscal year is below zero by more than a *de minimis* threshold, the CRAC will trigger for the subsequent fiscal year's rates.
  - If ANR actuals as of September 30 of each fiscal year is above 120 days cash and the agency is above 90 days cash, the RDC will trigger for the subsequent fiscal year's rates.
  - Historically, ANR and RFR have deviated substantially, primarily due to Regional Cooperation Debt (RCD) transactions. For BP-20 these transactions will be accounted for differently in the rate case, minimizing this potential impact.
  - ANR and RFR will still likely deviate by some amount due to cash timing, legal settlements, or other "calibration events" which would no longer be calibrated for.
  - If a pre-audited ANR number is used in the case of a CRAC, then the amount would be spread out over 11 months of service (November-September) instead of 12. This allows for time to determine EOY Actuals and implement the rate adjustment into the November bills, which are sent in December.
  - Using an audited ANR number will likely delay the decision and shorten the recovery period for a CRAC/RDC as the number will not be available until the audit is complete. Bonneville would need to develop a process for what number to use for a CRAC/RDC in the event Bonneville does not receive a clean audit.

# RFR definitions

- Reserves not for Risk (RNFR)

A subcategory of funds within Total Financial Reserves that are restricted for specific purposes. RNFR is comprised of [1] deposits from third parties (Funds Held for Others), [2] capital funds drawn in advance (Capital Funds), [3] borrowing for expenses (Expense Note Borrowing), and [4] other amounts deemed by the Administrator not to be available for risk.

- Reserves for Risk (RFR)

A subcategory of funds within Total Financial Reserves that represents amounts in the Bonneville Fund that are generated through normal operations. RFR excludes Reserves not for Risk and includes funds that have been spent for capital projects that have not yet been borrowed for (Deferred Borrowing). RFR provide a liquidity buffer should BPA cash flow decline or turn negative for any significant period of time. They form the basis for determining whether Transmission and Power meet the Treasury Payment Probability (TPP) standard when setting rates. RFR are also a key metric for liquidity planning purposes.

- Total Reserves

The sum of Reserves for Risk and Reserves not for Risk.

# Actual RFR

- End of year actual RFR calculation:

Total Reserves = Cash + Investments + Deferred Borrowing

RFR = Total Reserves – Reserves not for Risk (RNFR)

- If RFR actuals as of September 30 of each fiscal year is below zero by more than a *de minimis* threshold, then the CRAC will trigger for the subsequent fiscal year's rates.
- If RFR actuals as of September 30 of each fiscal year is above 120 days cash and the agency is above 90 days cash, then the RDC will trigger for the subsequent fiscal year's rates.
- In case of a CRAC, the amount would be spread out over 11 months of service (November-September) instead of 12. This allows for time to determine EOY Actuals and implement the rate adjustment into the November bills, which are sent in December.

	<b>Verifiable - process and calculations are repeatable and can be reviewed by others</b>	<b>Simplicity - metric is easy to explain and understand</b>	<b>Aligns with BPA's goals for financial reserves</b>
<b>Forecast ACNR</b> (Accumulated Calibrated Net Revenue) Status quo	Yes, BPA has a process for calculating ACNR, although it is considered complicated and labor intensive. Can be cross walked to audited net revenue values.	No, it is complicated to communicate and calculate the calibrations necessary to make ACNR mirror RFR.	For the most part yes, since the net revenue values are adjusted and calibrated to better reflect reserve levels.
<b>Actual ANR</b> (Accumulated Net Revenue)	Yes, accumulated net revenues are audited values.	Yes, values are already calculated and shared publicly.	No, accumulated net revenue is likely to deviate from financial reserves without adjustment.
<b>Actual RFR</b> (Reserves For Risk)	Yes, BPA is developing a process and calculation that is transparent and repeatable. Values can be cross walked to GL accounts and financial statements.	No, although total reserves are simple to understand reserves for risk requires clearly defining reserves not for risk. This adds a layer of complexity.	Yes, best reflects BPA's cash performance and reserve levels.

# Rate mechanism proposals

- In the FRP workshops we primarily discussed the following two methods to increase reserves when a business line is below its lower threshold.
  - PNRR (planned net revenues for risk), included in the revenue requirement when rates are set
  - Financial Reserves Surcharge, not included in the revenue requirement, could be triggered annually like the CRAC/RDC
- Both mechanisms are capped, \$40 million per year for Power and \$15 million per year for Transmission, unless a larger increase in reserves is necessary to achieve the TPP standard.
- BPA plans to continue to use the current CRAC and RDC mechanisms when BPA is below \$0 or above the upper thresholds.

# PNRR

- Currently using PNRR (\$20 million in Power rates) to implement the FRP (status quo).
- During the rate case BPA would forecast RFR for each year of the rate period to calculate the amount of PNRR required to be included in each business line's revenue requirement for each year of the upcoming rate period. PNRR would be up to \$40 million annually for Power and \$15 million annually for Transmission.

# Surcharge

- At the time BPA calculates the CRAC and RDC values (using forecast ACNR, actual ANR, or actual RFR), BPA would calculate the Financial Reserves Surcharge amount for the upcoming fiscal year.
- A surcharge of up to \$40 million would replace the current \$20 million in PNRR for Power Services. The surcharge would be up to \$15 million for Transmission.

# PNRR/Surcharge

	Timing and trigger descriptions	Implementation considerations
<p><b>PNRR (status quo)</b> Currently using PNRR (\$20 million in Power rates) to implement the FRP in BP-18.</p>	<p>During the rate case BPA would forecast RFR for each year of the rate period to calculate the amount of PNRR required to be included in each business line's revenue requirement for each year of the upcoming rate period.</p>	<p>More likely to either over- or under-collect financial reserves, especially in the second year of the rate period; Essentially, increases probability of a CRAC/RDC.</p> <p>Embedded within rates; does not require its own billing line item.</p>
<p><b>Financial Reserves Surcharge</b> Surcharge would replace the current \$20 million of PNRR in Power rates.</p>	<p>At the same time BPA calculates the CRAC and RDC values (using forecast ACNR, actual ANR, or actual RFR), BPA would calculate the Financial Reserves Surcharge amount for the upcoming fiscal year.</p>	<p>Decreases likelihood of either over- or under-collecting financial reserves, especially in the second year of the rate period.</p> <p>Requires its own billing line item; however, uses same trigger mechanism as CRAC/RDC to simplify the process.</p>

# NFB Mechanisms

- BPA staff is reviewing the NFB Mechanisms (aka the “Fish CRAC”) to determine if they should be removed for the BP-20 rate case.
- The mechanisms were designed to mitigate financial risks arising from BiOp-related court orders. Both the risks and the mitigation mechanisms need to be reviewed to determine if:
  - whether the risks the NFB Mechanism was designed to address still exist; and
  - Is the NFB an effective and necessary tool to mitigate the remaining risk

# NFB update decision criteria

- Decision Criteria:
  - Risk magnitude (likelihood and impact) warrants mitigation
  - Risk arises fast enough to warrant within rate period mitigation
- Implementation Criteria:
  - Rules for trigger are clearly defined
  - Risk adjustment amounts/calculations are clearly defined
  - Minimize implementation costs
  - Correlation between Risk and Mitigation Tool

# Review NFB mechanisms

- The existing NFB Mechanisms provide two adjustment clauses to mitigate BiOp-related financial risks:
  - NFB Adjustment
    - The NFB Adjustment is a tool that can adjust the maximum amount of the Cost Recovery Adjustment Clause (CRAC) if a BiOp action causes a reduction in Power Net Revenue.
    - The NFB Adjustment is designed to increase the CRAC cap amounts (\$100 million for Transmission and \$300 million for Power) so that, in the event that BPA has a severe CRAC and the BiOp actions were a factor, then the caps are increased by the amount of the BiOp effect.
  - Emergency NFB Surcharge
    - The Emergency NFB Surcharge is a tool that can increase rates in a year in which there have been financial effects from a BiOp action and the agency is in a cash crunch.

# NFB trigger events

- For the NFB Adjustment to have a beneficial financial effect for BPA, it would require the following confluence of events:
  1. A BiOp court order being announced during the year prior to the rate period or the first year of the rate period (for BP-20, the order would have to come out during FY19 or FY20)
  2. That court order resulting in actual lost revenue during the same period (i.e. FY19 or FY20)
  3. Power Reserves For Risk falling below negative \$100 million at the end of the year prior to the rate period or the first year (end of FY19 or end of FY20)
- If all three of the these events occurred, then the CRAC amount would be increased by 50% of the financial effect of the BiOp order (e.g. if we calculated that new BiOp spill resulted in \$20 million in lost revenue, the CRAC would be \$10m higher than it otherwise would have been)
- For the Emergency NFB Surcharge to have a beneficial financial effect for BPA, then the first two events described above would have to occur and BPA's agency within-year treasury payment probability (TPP) would have to be below 80 percent.

# NFB Evaluation

- The current NFB mechanism language regarding how to determine a trigger event and how to calculate the amount of an event leaves substantial room for interpretation.
- In practice, NFB events have been handled through targeted rates mechanisms (e.g., the BP-18 Spill Surcharge).
- The combination of circumstances for an NFB event to trigger and for the mechanism to significantly improve BPA's financial situation appears to be very unlikely; these are tail events for which a more substantial response would be necessary.
- For these reasons, staff believe that the NFB mechanisms do not provide effective financial risk mitigation and should be removed. Any specific high probability NFB-type events that are known when setting rates should be managed when setting rates (e.g., Spill Surcharge).
- Any remaining cost-recovery risk is sufficiently mitigated through financial reserves and the CRAC.

# Next Steps

- By August 22, please send comments on Risk topics to [techforum@bpa.gov](mailto:techforum@bpa.gov).
- Upcoming BP-20 rates workshops are:
  - August 22, 2018 (W)
  - September 12, 2018 (W)