Northwest **Power** and **Conservation** Council

August 6, 2018

MEMORANDUM

TO: **Council Members**

FROM: **Leslie Bach and John Fazio**

SUBJECT: **Bonneville's Decision to Implement the FY 2018 Spill Surcharge**

BACKGROUND:

Presenters: Bryan Mercier, Peter Cogswell and Daniel Fisher, Bonneville Power Administration (BPA).

Summary: On June 21, 2018, BPA released the Administrator's Decision, Implementation of the FY 2018 Spill Surcharge, documenting the final decision to implement the Fiscal Year (FY) 2018 Spill Surcharge in an amount of $10.2 million. BPA will present information on the 2018 spill, the cost calculations and final FY 2018 spill surcharge amount, and the public review process.

Relevance: The 2014 Fish and Wildlife Program sub-strategy for mainstem hydrosystem flow and passage operations contains both general and specific measures for flow and spill to improve habitat conditions and fish passage and survival. At the same time, the sub-strategy calls for the Council to consider the adequacy, efficiency, economics and reliability of the power system.

Background: The Spill Surcharge, Appendix C of BPA's 2018 Power Rate Schedules and General Rate Schedule Provisions, was established in the BP-18 rate proceeding. Pursuant to Appendix C, BPA must calculate and, if

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appropriate, implement the Spill Surcharge for Fiscal Year (FY) 2018 and again for FY 2019.

The Spill Surcharge is a formula rate adjustment that approximates the additional cost that power customers would have been charged if BPA had known planned fish passage spill operations when setting final BP-18 rates.

In April 2017, the U.S. District Court for the District of Oregon issued a ruling in National Wildlife Federation v. National Marine Fisheries Services granting in part motions for an injunction with respect to spring fish passage spill levels for the 2018 juvenile fish passage season. This resulted in a "spill implementation plan" for 2018 in which spill was increased over the levels specified in the current Biological Opinion.

The consequence of additional spill is a reduction in available generation. Reductions in generation result in reductions in revenue because BPA is unable to sell energy associated with the amount of water that is spilled. Reduced revenues associated with an increase in planned annual spill levels affect the ability of BPA's initially proposed BP-18 rates to recover its total costs. Because the ruling was issued after the release of the BP-18 Initial Proposal, it created a new cost risk for BPA.

The Spill Surcharge is formula-based and evaluates each fiscal year of the rate period independently, comparing increases in planned annual spill levels relative to the spill levels assumed in setting rates. The calculation of the Spill Surcharge amount and rates for FY 2018 was made available to customers and interested parties for their review and comment before the decision was made on the final FY 2018 surcharge.

More Info: BPA overview document (attached)
BPA spill surcharge website:
https://www.bpa.gov/Finance/RateCases/surcharge18/Pages/default.aspx

Final FY 2018 Spill Surcharge

The final FY 2018 Spill Surcharge amount is $10.2 million (see chart below), which translates into a final FY 2018 Spill Surcharge rate of 0.71 mills per kWh applied to non-Slice power sales for the period June–September, 2018.

The final FY 2018 Spill Surcharge is the same as that provided to interested parties for review and comment in May of this year. Please see the Spill Surcharge – FY 2018 webpage for additional information:

- The Administrator's decision document, which addresses the comments received from customers and interested parties.
  - Attachment 2 shows additions to the 2018 Power Rates Schedules and General Rate Schedule Provisions to reflect the final FY 2018 Spill Surcharge rates.
- Documentation

Background
The Spill Surcharge (Appendix C of BPA's 2018 Power Rate Schedules and GRSPs) is a formula rate adjustment that approximates the additional amount that customers would have been charged if BPA had known the planned spill operations when setting final BP-18 rates.

The Spill Surcharge is calculated independently for each year of the FY 2018–2019 rate period based on planned spill operations for each year.

FY 2018 Spill Surcharge Amount – Formula		
Spill Cost	$38.6 million	The average lost generation due to more planned spill, over the modeled 80 historical water year record, multiplied by the rate case forecast Mid-C electricity price.
Cost Reduction (CostR)	($15.5 million)	Program spending reductions relative to those assumed for setting BP-18 rates. Represents a forecast reduction of $20 million of F&W costs and the corresponding reduction in the NW Power Act section 4(h)(10)(C) credit (22.3% credit on F&W costs).
	$23.1 million	
Non-Slice	× .7726	Adjusts formula to reflect costs associated with non-Slice PF power sales only.
	$17.8 million	
Secondary Reduction (SecR)	($7.6 million)	Accounts primarily for the impact that more spill would have on the market-clearing price for the remaining secondary sales.
FY 2018 Spill Surcharge Amount	$10.2 million	

FY 2018 Spill Surcharge

Northwest Power and Conservation Council

August 15, 2018

Background

- Bonneville included in its final BP-18 power rate schedules a Spill Surcharge that charges customers for the cost of any increased planned spill that occurs relative to the amount of Federal hydro generation forecast to be available when setting rates.
- The Spill Surcharge is:
  - Calculated independently for each year of the FY 2018-2019 rate period based on planned spill operations for each year.
  - Applicable to non-Slice power sales
    - Slice customers are directly impacted by increased spill and assume the associated cost risk independent of Bonneville.
- For each year of the rate period, the preliminary Spill Surcharge amount must be provided to customers no later than May 31, with a public meeting and a comment period of at least 10 business days.
  - BPA must issue the final Spill Surcharge no later than 14 calendar days after the comment period closes.

Forecast vs. Actuals

What the Spill Surcharge *is*:

- The Spill Surcharge is an established formula rate adjustment that approximates the additional amount the customers would have been charged if BPA had known the planned spill operations when setting final BP-18 rates.
- Because the planned spill operations were not known when the final BP-18 rates were calculated, the Spill Surcharge adjusts power rates in each year of the rate period (FY 2018 and FY 2019) for the new *planned* spill operations relative to the *planned* spill operations modeled when final rates were set.
- Rates are set based on an analysis of monthly forecast generation and market prices over 80 historical water conditions.

What the Spill Surcharge *is not*:

- The surcharge does not reflect actual conditions on the Federal hydro system or actual net secondary revenue.
- All else equal, if *actual* net secondary revenue is higher than revenue forecast when setting rates, it would add to financial reserves; if lower than forecast, it could result in triggering the Power Cost Recovery Adjustment Clause.

Spill Surcharge Formula

- There are three major components of the Spill Surcharge formula. The methodology for calculating the first two components was defined in the BP-18 rate setting process.
  1) **Spill Cost Component** – The average lost generation, over the modeled 80 historical water year record, multiplied by the rate case forecast Mid-C price of electricity.
  2) **Secondary Revenue Component (SecR)** – Net impact on Bonneville's balancing purchases and remaining secondary sales. Accounts for the impact that more spill would have on the market clearing price. On average, more spill would cause an upward shift in the forecast Mid-C market-clearing price, which would impact Bonneville's balancing purchases and remaining secondary sales.
  3) **Cost Reduction Component (CostR)** – Administrator's discretion to reduce the Spill Surcharge by applying "specific forecast and actual program spending reductions" to the Spill Surcharge Amount .
- The Spill Surcharge formula also includes a **Non-Slice Component** adjustment to capture the financial difference between Slice and Non-Slice sales.

Spill Surcharge Formula, cont.

Cost Reduction Component (CostR)
At Administrator's discretion, "specific forecast and actual program spending reductions" relative to the cost included in the final BP-18 power rates.

Non-Slice Component
Adjusts the formula to reflect cost associated with Non-Slice PF power sales only.

$$\left(\left(\frac{\left(\sum_{i=1}^{1120}\left((BP18FedGen_i - RevFedGen_i) \times BP18Price_i\right)\right)}{80}\right) - CostR\right) \times \left(1 - \sum Slice\%\right) - SecR$$

Spill Cost Component
Average water year cost – The average lost generation, over the modeled historical 80-water year record, multiplied by the rate case forecast Mid-C electricity price.

Secondary Revenue Component (SecR)
Net impact on Bonneville's balancing purchases and remaining secondary sales. Accounts for the impact that more spill would have on the market clearing price. On average, more spill would cause an upward shift in the forecast Mid-C market-clearing price, which would impact Bonneville's balancing purchases and remaining secondary sales.

Spill Surcharge for FY 2018

Formula Component	
Spill Cost	$38.6 million
Cost Reduction*	($15.5 million)
	$23.1 million
Non-Slice	X .7726
	$17.8 million
Secondary Revenue	($7.6 million)
Spill Surcharge	$10.2 million

*Represents a forecast reduction of $20 million of F&W costs and the corresponding reduction in NW Power Act section 4(h)(10(C) credits (22.3% credit on F&W costs).

Secondary Reduction (SecR)

- Modeled prices at Mid-C increase, on average, during the spring spill months due to lost generation:
  - April: $1.32
  - May: $1.54
  - June: $0.88

  Price deltas relative to BP-18 final rates

- The effect is most dramatic in May because May has the most available generation relative to April and June.
- In total, the price effect contributes to an additional $7.6 million in modeled SecR, after adjusting for the amount of spill surcharge that will not be collected due to Low Density Discounts (LDD).

Cost Reduction (CostR)

- BPA has been working on reducing its program budgets across the agency as part of a larger exercise delivering on strategic goal 1 – strengthen financial health.
- In the BP-18 ROD, BPA recognized that cost reductions could help offset the financial uncertainty the Spill Surcharge placed on customers.
- Consistent with BPA's strategic goal and its BP-18 Spill Surcharge formula, BPA is applying its forecast Fish and Wildlife program cost reductions to the Spill Surcharge and have its other forecast cost reductions strengthen its financial health.

Cost Reduction (CostR), cont.

- BPA is forecasting it will spend $20 million less than its rate case estimates on Fish and Wildlife in fiscal year 2018.
- These forecast cost reductions include cost management actions within contracts (e.g., restrictions on travel, training and discretionary spending) and reform efforts within Research, Monitoring, and Evaluation (RME) programs.
- Actual cost reductions will occur in the normal course of Fish and Wildlife program management.
- The $20 million forecast cost reduction is reduced by 22.3 percent to reflect the allocation of Fish and Wildlife costs to the non-power uses of the dams (NW Power Act section 4(h)(10)(C)).

Spill Surcharge Rates

- The spill surcharge rate for June 2018 – September 2018 is 0.71 mills per kilowatthour.
- The spill surcharge rate is equal to the spill surcharge amount divided by the sum of billing determinants for the unbilled remaining portion of the Fiscal Year. The rate is used to bill Priority Firm (PF) customers and Industrial Firm (IP) customers and to adjust the June 2018 – September 2018 PF Tier 1 equivalent energy rates.
- The billing determinant for PF customers will be System Shaped Load. A customer's System Shaped Load is equal to its non-Slice TOCA multiplied by the RHWM Tier 1 System Capability (RT1SC). The billing determinant for an IP customer will be its actual IP load.

FY2018	
Spill Surcharge Amount:	$10,194,415
Sum of June - Sept Billing Determinants (MWh):	14,395,976
Spill Surcharge Rate June - Sept ($/MWh):	**$0.71**
Spill Surcharge Amount:	$10,194,415
Sum of Annual Billing Determinants (MWh):	44,224,558
Annual Spill Surcharge Rate ($/MWh):	**$0.23**

- The annual spill surcharge rate is 0.23 mills per kilowatthour and is equal to the spill surcharge amount divided by the sum of billing determinants for FY 2018. The annual rate is used to adjust the Load Shaping Charge True-Up rate and the PF Melded Equivalent Energy Scalar rate (which is used in the actual DSI revenue credit calculation in the Slice True-Up.)

Extended Billing

- Pursuant to the Spill Surcharge, section D, customers may request a payment schedule of flat monthly amounts that recover its FY 2018 Spill Surcharge over the remaining months of the FY 2018-2019 rate period, up to 16 months.

- In consideration of such a request, BPA must review its own cash flow and the potential impact a delayed cost recovery could have on other customers and on triggering a Cost Recovery Adjustment Charge.

- No customer requested extended billing of the FY 2018 Spill Surcharge.

Questions?

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Peter Cogswell, Acting Executive Vice-President, Environment, Fish and Wildlife