

## ATTACHMENT 1, RATE PERIOD TERMS

1. **Term.** The terms and conditions in this Attachment 1 will apply to and will be binding on Bonneville and the Assenting Parties during the Fiscal Year (FY) 2016-2017 Rate Period (“Rate Period”), but must expire and not survive in any form after September 30, 2017.
2. **Imbalance Service.** Bonneville shall attempt to provide an imbalance service based on the incremental (*inc*) and decremental (*dec*) reserve quantities described in this Attachment 1. Bonneville shall use reasonable efforts in accordance with this Agreement to provide an *inc* imbalance service that is equal to or better than the service provided in FY 2014. This is estimated to be less than 10 curtailment events in October, November, December, January, February, March, August and September (“Non-Spring Months”) and less than 30 curtailment events in April, May, June and July (“Spring Months”).
3. **Dec Reserve.** Bonneville will use reasonable efforts to provide 900 MW of *dec* balancing reserve capacity from the Federal Columbia River Power System (“FCRPS”) during all hours of the Rate Period. Bonneville and the Assenting Parties acknowledge that operational constraints and significant energy imbalance accumulations during operationally constrained periods of the year may limit Bonneville’s ability to provide 900 MW of *dec* balancing reserve capacity from the FCRPS at times during the Rate Period. Bonneville shall not make any *dec* balancing reserve capacity acquisitions unless Bonneville determines *dec* balancing reserve capacity acquisitions are necessary to maintain system reliability.
4. **Inc Reserve (Non-Spring Months).** Bonneville will use reasonable efforts to provide a total of 910 MW of *inc* balancing reserve capacity (subject to adjustment by the Mid-Rate Period Adjustment described in section 8 of this Attachment 1 and Direct Assignment Charges as described in section III, E.4 and F.4 of the ACS-16 rate schedules in Attachment 2) for all hours in Non-Spring Months of each fiscal year in the Rate Period. Notwithstanding any other section in this Agreement and except as a direct result of Direct Assignment Charges as described in section III, E.4 and F.4 of the ACS-16 rate schedules in Attachment 2, Bonneville is not obligated to provide more than 910 MW of *inc* balancing reserve capacity, FCRPS-sourced or otherwise, in any hour during the Non-Spring Months of each fiscal year in the Rate Period.
  - a. **FCRPS Source.**
    1. Bonneville will plan to provide up to 900 MW of the Non-Spring Month *inc* balancing reserve capacity from the FCRPS. To the extent Bonneville is unable to provide 900 MW of *inc* balancing reserve capacity from the FCRPS, Bonneville will attempt to, but is not obligated to, replace that capacity with third-party *inc* reserve capacity purchases. In making such acquisitions, Bonneville will consider previous monthly or quarterly purchases for that timeframe, the available remaining Annual Budget, the projected reserve needs and the expected impacts during the affected timeframe, and the remaining periods in the Non-Spring Months.



- c. **Balancing Reserve Capacity purchases on Forward Basis.** Bonneville shall attempt to acquire at least 200 MW of *inc* balancing reserve capacity (in addition to 400 MW from the FCRPS) for April, May, and June in each fiscal year at least 25 days in advance or such longer period as Bonneville determines is practicable (“Forward Basis”), except that Bonneville is not obligated to make any individual purchase of balancing reserve capacity if the price for that purchase would exceed \$0.29/kW/day. Nothing in this subsection limits Bonneville’s right to provide balancing reserve capacity on a Forward Basis from the FCRPS at a cost of \$0.29/kW/day funded from the Annual Budget before making any purchases from third parties.
  - d. **FCRPS source before third party source.** Before attempting to acquire *inc* balancing reserve capacity from a third party, Bonneville will assess whether the balancing reserve capacity required to meet its forecast need is available from the FCRPS. If Bonneville determines that more than 400 MW of *inc* balancing reserve capacity is available from the FCRPS, Bonneville shall provide that *inc* balancing reserve capacity from the FCRPS. In that instance, the cost of Spring Month *inc* balancing reserve capacity that Bonneville provides from the FCRPS above 400 MW will be at a cost of \$0.29/kW/day and will be funded by the Annual Budget.
  - e. **Third Party Source.** If Bonneville determines that the FCRPS is not capable of producing more than 400 MW of *inc* balancing reserve capacity as provided in section 5(a) above at the time of the purchase request, then Bonneville shall attempt to purchase, based on various factors as listed below in this section 5(e), up to 510 MW of *inc* balancing reserve capacity from third parties for imbalance service in the Spring Months and fund such purchases with the Annual Budget subject to section 6 below. In making such acquisitions, Bonneville will consider previous monthly or quarterly purchases for that timeframe, the available remaining Annual Budget, the projected reserve needs and the expected impacts during the affected timeframe, and the remaining periods in the Spring Months.
6. **Annual Budget for the FY 2016-2017 rate period.**
- a. Bonneville shall establish a base \$17.65 million annual budget (“Annual Budget”) to fund the purposes set forth in section 6(b) below during the Rate Period. Any unspent funds from the FY 2016 Annual Budget will increase the FY 2017 Annual Budget for the purposes in this section 6. Any unspent funds in FY 2017 will remain with Transmission Services.
  - b. The Annual Budget is subject to adjustment as provided for in this Attachment 1. The FY 2017 Annual Budget is subject to reduction by the Mid-Rate Period Adjustment as described in section 8 and as described in section 16 below. Bonneville will use the Annual Budget to fund (1) the purchase of 10 MW of *inc* balancing reserve capacity (subject to adjustment by the Mid-Rate Period Adjustment) during the Non-Spring Months (see Section 4(b) above); (2) the cost of any *inc* balancing reserve capacity that Bonneville provides from the FCRPS above 400 MW during the Spring Months (see section 5(d) above); (3) purchases of *inc* balancing reserve capacity from third parties during the Spring Months; (4) any differences between the energy cost Bonneville incurs for deployment of third-party capacity and the hourly energy index price in the Pacific Northwest; and (5) replacement *inc* balancing reserve capacity Bonneville purchased from third parties under Section 4(a)(1) and 5(a) of this Attachment 1.

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- c. When the Annual Budget is exhausted, Bonneville shall treat any energy costs of third-party balancing reserve capacity deployment that exceed the hourly energy index price in the Pacific Northwest as a Transmission Services cost.
- d. Bonneville will post quarterly reports on its OASIS website describing: (1) the types and amounts of expenditures made in the previous quarter and the status of the Annual Budget; and (2) any instances during the previous quarter in which Bonneville committed to provide *inc* balancing reserve capacity from the FCRPS, as contemplated by Sections 4(a)(1) and 5(a) of this Attachment 1, and was subsequently unable to do so.
- e. The Annual Budget is subject to increase in an amount equivalent to the revenue received from the \$0.20/kW-nameplate/mo fee (section III.E.2.a.(4)(d) of the ACS-16 rate schedules in Attachment 2) paid by customers that elect to opt out of the Intentional Deviation Penalty Charge.
- f. If Bonneville anticipates or observes a total of 120 hours in which a curtailment event occurs due to lack of *inc* balancing reserve capacity in the Spring Months of FY 2016 before the expiration of such Spring Months or if Bonneville determines that it needs to spend additional funds above the Annual Budget for FY 2016 to support the *inc* imbalance service in FY 2016 Spring Months, Bonneville may use up to \$5 million of the FY 2017 Annual Budget to support the *inc* imbalance service provided during the FY 2016 Spring Months. In such event, Bonneville shall inform all parties of the issue(s) causing the decreased quality of imbalance service and will convene a stakeholder process to discuss approaches to provide the quality of imbalance service intended in this settlement for the FY 2017 Spring Months without violating any other terms and conditions of this settlement. Notwithstanding section 6(b) above, Bonneville will restore the FY 2017 Annual Budget by the amount of the FY 2017 Annual Budget used to support the *inc* imbalance service provided during the FY 2016 Spring Months, not to exceed \$5 million. Under this approach, Bonneville shall treat any increase to the Annual Budget as a transmission cost.
- g. To the extent Bonneville does not use all of the \$5 million described in section 6(f) above to restore the FY 2017 Annual Budget, Bonneville may use the remainder of those funds to supplement the FY 2017 Annual Budget if Bonneville anticipates or observes a total of 120 hours in which a curtailment event occurs due to lack of *inc* balancing reserve capacity in the Spring Months of FY 2017 before the expiration of such Spring Months or if Bonneville determines that it needs to spend additional funds above the Annual Budget for FY 2017 to support the *inc* imbalance service in FY 2017 Spring Months. In such event, Bonneville shall inform all parties of the issue(s) causing the decreased quality of imbalance service and will convene a stakeholder process to discuss approaches to provide the quality of imbalance service intended in this settlement for the remaining FY 2017 Spring Months without violating any other terms and conditions of this settlement. Bonneville shall treat any increase to the Annual Budget described in this section 6(g) as a transmission cost.
- h. If the Annual Budget is exhausted in either fiscal year of the Rate Period, Bonneville will not be obligated to purchase any additional *inc* balancing reserve capacity in the fiscal year, except as

described in Direct Assignment Charges, section III, E.4 and F.4 of the ACS-16 rate schedules in Attachment 2.

- i. Nothing in this Agreement is intended to limit Bonneville’s right to purchase additional balancing reserve capacity for system reliability purposes.

**7. Mid-Rate Period Election.**

- a. Bonneville will offer VERBS customers a mid-Rate Period election opportunity to change their scheduling elections to a superior scheduling commitment, elect self-supply, use Dynamic Transfer Capability (“DTC”) to transfer out of Bonneville’s balancing authority area (subject to implementation of necessary arrangements, which shall not be unreasonably delayed), or elect to participate in Customer Supplied Generation Imbalance (“CSGI”). VERBS customers that elect self-supply, use of DTC to transfer out of Bonneville’s balancing authority area, or CSGI must provide Bonneville with written notice to change service by close of business on April 4, 2016, and the effective date of the election change will be October 1, 2016. Customers that elect to change their scheduling election to a superior scheduling commitment must provide Bonneville with written notice to change service by close of business on June 1, 2016, and the effective date of the election change will be October 1, 2016.
- b. The election changes in 7(a) above will be capped at 800 MW of nameplate movement offered on a first-come first-served basis. The expansion of self-supply, including the CSGI program, and DTC will be limited to a total of 300 MW and will count toward the 800 MW cap on nameplate movement. Bonneville will use two adjustments to calculate the nameplate movement equivalent when a customer switches from CSGI to either (1) self-supply in accordance with Bonneville’s self-supply Business Practice, as revised, or (2) use DTC to transfer out of Bonneville’s balancing authority area. The amount of nameplate that switches from CSGI will be multiplied by 21% for purposes of calculating the impact on the 300 MW cap on nameplate movement. The amount of nameplate that switches from CSGI will be multiplied by 53% for purposes of calculating the impact on the 800 MW cap on nameplate movement and amount of nameplate that changed elections as used in section 8 below. Customers will pay the posted rates associated with their revised election choice.

- 8. **Mid-Rate Period Adjustment.** The Mid-Rate Period Adjustment (“Mid-Rate Period Adjustment” or “MidRPAdjustment”) will apply to the second year of the Rate Period. The Mid-Rate Period Adjustment will adjust the amount of *inc* balancing reserve capacity Bonneville will provide in the Non-Spring Months in FY 2017 and the FY 2017 Annual Budget. Bonneville shall calculate the Mid-Rate Period Adjustment using the ratio of nameplate that changed elections (“Nameplate Movement”) to the total amount of allowable nameplate movement (800 MW) under section 7 above. The Mid-Rate Period Adjustment will equal:

$$MidRPAdjustment = \frac{Nameplate\ Movement}{800\ MW}$$

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- a. The Mid-Rate Period Adjustment may reduce the 910 MW of *inc* balancing reserve capacity requirement described in section 4, *Inc Reserve (Non-Spring Months)*, above. The second year amount will equal:

$$910 \text{ MW} - [10 \text{ MW} \times \text{MidRPAdjustment}]$$

- b. The Mid-Rate Period Adjustment may reduce the FY 2017 Annual Budget. The FY 2017 Annual Budget will equal:

$$\$17.65 \text{ million} - [\$900,000 \times \text{MidRPAdjustment}]$$

9. **Scheduling Elections.** Bonneville shall offer VERBS customers a mid-Rate Period election opportunity to change their scheduling elections from a sub-hourly scheduling commitment (30/15 or 40/15) to a 30/60 committed scheduling election, which will not be subject to the Direct Assignment Charges as described in Section III, E.4 and F.4 of the ACS-16 rate schedules in Attachment 2. These election changes will be capped at 800 MW of nameplate movement offered on a first-come first-serve basis. VERBS customers must provide Bonneville with written notice to change service by close of business on April 4, 2016, and the effective date of the election change will be October 1, 2016. Customers will pay the posted rates associated with their revised election choice.

10. **Operating Practices.**

- a. Bonneville shall replace Dispatcher Standing Order No. 216 with a reliability tool that applies to all non-Federal non-controlling generation—both dispatchable and variable energy resources—in Bonneville’s Balancing Authority Area, except the schedule curtailment protocol will not apply to behind-the-meter generation. Bonneville will design the new reliability tool to attempt to equitably allocate curtailments among all resources that are subject to the reliability tool. Bonneville shall use reasonable efforts to provide a mechanism for multiple resources to combine their Station Control Error to take advantage of diversity benefits during balancing reserve capacity-related events. Bonneville shall not apply its automated balancing reserve capacity-related generation limitation protocol to dispatchable energy resources.
- b. Bonneville shall research potential impacts that Federal dispatchable resources have on Bonneville’s Balancing Authority Area net Station Control Error during *inc* reliability events and provide results to customers in spring 2015. Any material impacts discovered will be mitigated through changes in internal Bonneville business practices or modifications to implementation of balancing reserve capacity-related schedule curtailments of dispatchable and variable energy resources.
- c. Bonneville shall conduct a stakeholder process through the Joint Operating Committee or other public forum to discuss Bonneville’s proposed reliability tool and provide an opportunity for customers to comment on the reliability tool.

11. **Intentional Deviation.** One Hundred Percent (100%) of the revenue that Bonneville receives through the Intentional Deviation Charge shall remain with Transmission Services. Revenue that Bonneville receives from Energy Imbalance (“Elev”), Generation Imbalance (“Glev”), and Persistent Deviation

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("PDrev") will be split between Power Services and Transmission Services. Power Services' share ("PSshare") in such revenue will equal:

$$PSshare = [EIrev + GIrev + PDrev] - \sum Hr3PSD \times HrIndex$$

Where:

*Hr3PSD* = The MWh amount of third-party *inc* balancing reserve capacity deployed each hour.

*HrIndex* = The hourly energy index in the Pacific Northwest during the hour when the third-party *inc* balancing reserve capacity was deployed.

12. **Revenue Credit.** Power Services will receive a payment of at least \$50,834,800 each year of the Rate Period from Transmission Services in exchange for planned balancing reserve capacity provided from the FCRPS as described in sections 3, 4 and 5 above. Power Services will set power rates with the revenue credit expectation that it will receive \$54,834,800 from Transmission Services. This section 12 is subject to section 16(b) below.
13. **Rate Period Initiative.**
  - a. Bonneville and customers will establish a Solar Task Force to discuss transmission and integration issues related to solar energy development in Bonneville's Balancing Authority Area, including the discussion of customer proposals on Solar VERBS rate design.
  - b. Bonneville shall hold a workshop in October of 2014 to discuss with customers the potential for an acquisition strategy for the Spring Months that includes long-term purchases of *inc* balancing reserve capacity that are 6 to 9 months in advance of the Spring Months.
14. **Other charges.** Pursuant to the conditions under Direct Assignment Charges, section III, E.4 and F.4 of the ACS-16 rate schedules in Attachment 2, Bonneville will use the following table to assess the additional amount of *inc* balancing reserve capacity.

From Service in Row to Service in Column	<u>Direct Assignment Charges. Additional Amount of Inc Capacity on Nameplate</u>						
	<b>30/15</b>	<b>40/15</b>	<b>30/60</b>	<b>Uncommitted</b>	<b>Solar</b>	<b>DERBS</b>	<b>CSGI</b>
<b>30/15</b>	N/A	2.5%	5.2%	8.1%	N/A	N/A	N/A
<b>40/15</b>	N/A	N/A	2.7%	5.6%	N/A	N/A	N/A
<b>30/60</b>	N/A	N/A	N/A	2.9%	N/A	N/A	N/A
<b>CSGI</b>	3.3%	5.8%	8.5%	11.4%	N/A	N/A	N/A
<b>No Service</b>	8.3%	10.8%	13.5%	16.4%	2.4%	0.5%	5.0%

15. **Inter-Business Line Allocations.** Bonneville and Assenting Parties agree to the Inter-Business Line Allocations described in Attachment 3.

16. **Risk Mitigation Tools.**

a. **CRAC, DDC, and NFB Mechanisms.** 8.2 percent of the Cost Recovery Adjustment Clause, Dividend Distribution Clause, and NFB Mechanisms (the NFB Adjustment and the Emergency NFB Surcharge) will apply to the balancing reserve capacity-based rates specified in Section II.H of the General Rate Schedule Provisions in Attachment 2.

b. **Planned Net Revenues for Risk.** The rates under this Agreement are based on the assumption that Bonneville’s power revenue requirement will not contain Planned Net Revenues for Risk or any risk mitigation tool that: (1) supports Bonneville’s power Treasury Payment Probability; (2) supports Bonneville’s credit rating; or (3) enhances Bonneville’s financial strength or financial standing by improving Bonneville’s cash position (“Risk Mitigation Tool” or “RMT”). If Bonneville adopts any RMT in its overall power revenue requirement as determined in the BP-16 Final Proposal, then the following will apply:

(i) The Annual Budget will decrease by 4.27% multiplied by the RMT.

(ii) Notwithstanding section 12 above, Power Services will receive a payment of at least  $\$50,834,800 + [8.2\% \times RMT]$  each year of the Rate Period from Transmission Services in exchange for planned balancing reserve capacity provided from the FCRPS as described in sections 3, 4 and 5 above. Power Services will set power rates with the revenue credit expectation that it will receive  $\$54,834,800 + [8.2\% \times RMT]$  from Transmission Services.

(iii) The ancillary and control area service rates in Attachment 2, ACS-16, sections II and III, will increase to collect each rate’s percentage share of the  $[8.2\% \times RMT]$  amount based on the following table:

Rates	Percent Share of RMT
Regulating and Frequency Response Service	0.46%
Dispatchable Energy Resource Balancing Service (DERBS) <i>Inc</i>	0.09%
DERBS <i>Dec</i>	0.09%
Operating Reserve - Spinning	1.65%
Operating Reserve – Spinning default	Function of Operating Reserves Spinning (115%)
Operating Reserve - Supplemental	1.65%
Operating Reserve – Supplemental default	Function of Operating Reserves Supplemental (115%)

17. **Official Forecast.** Bonneville will attempt to provide the results of the Super Forecast Methodology to

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customers at 15 minutes or earlier after the top of the hour, but will commit to provide the results of the Super Forecast Methodology to customers no later than 20 minutes after the top of the hour.

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