## UNITED STATES OF AMERICA DEPARTMENT OF ENERGY BEFORE THE BONNEVILLE POWER ADMINISTRATION

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Fiscal Years 2020-2021 Proposed Power and Transmission Rate Adjustment Proceeding **BPA Docket No. BP-20** 

### **INITIAL BRIEF OF:**

### **PUBLIC POWER COUNCIL**

and

### **POWEREX CORP.**

as

## **JOINT PARTY 4**

Category: Transmission Rates

General Topic Area: Southern Intertie Rates

May 6, 2019

BP-20-B-JP04-01

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#### **INITIAL BRIEF OF JOINT PARTY 4**

#### **Category: Transmission Rates**

#### **General Topic Area: Southern Intertie Rates**

The Public Power Council ("PPC") and Powerex Corp. ("Powerex"), together designated as Joint Party 4 ("JP04"), file this initial brief regarding Bonneville Power Administration's ("Bonneville" or "BPA") proposed rates for hourly service on the Southern Intertie. This initial brief follows the rebuttal testimony filed separately by JP04's members, BP-20-E-PX-01, BP-20-E-PX-02, and BP-20-E-PP-02. That rebuttal testimony was submitted in response to Joint Party 1's ("JP01") direct testimony that opposed the rates for hourly transmission service on the Southern Intertie set forth in Bonneville Staff's initial proposal and underlying partial settlement for transmission rates ("Settlement") found in BP-20-E-BPA-19. JP01's narrow objection to the Southern Intertie hourly rates set forth in the Settlement is without merit, and the Administrator should reject it.

#### EXECUTIVE SUMMARY

JP04 urges the Administrator to adopt Bonneville Staff's proposal and the transmission rates set forth in the broadly-supported Settlement, which generally applied a consistent percentage rate increase to all previously-established BP-18 transmission rates. Three California-based entities, Sacramento Municipal Utility District ("SMUD"), Turlock Irrigation District ("Turlock"), and the Transmission Agency of Northern California ("TANC"), appearing as JP01, represent the only party to oppose the Settlement and the only party to challenge any transmission rates in the BP-20 rate proceeding. These California entities oppose the uniform rate increase proposed in the Settlement, and it instead demands a massive and immediate discount or reduction to the Southern Intertie hourly rate. JP01's claims in this proceeding are merely its latest attempt to argue that it should be afforded virtually free access to the Southern Intertie facilities, paid for the long-term firm ("LTF") service customers in the Northwest. In support of its brazen and transparently self-serving demand, JP01 deliberately seeks to erode regional support for the Settlement by claiming that the BP-18 Southern Intertie hourly rate design change has depressed Northwest electricity prices, causing various Pacific Northwest entities—including Bonneville itself—to lose millions of dollars in forgone sales revenues. Both JP01's economic theory and its related regression analysis in support of its claims have been fully discredited by multiple witnesses and have proven contradictory to key elements of JP01's own testimony, rendering it so unreliable that no regulatory body or trier of fact should ascribe any weight to it.

Agreeing to JP01's demands for virtually free hourly service on the basis of JP01's case would be arbitrary, capricious, and contrary to Bonneville's statutory obligations to set transmission rates in accordance with sound business principles. First, evidence in the record overwhelming supports Bonneville Staff's implicit proposal to retain the BP-18 rate design for hourly service on the Southern Intertie. The Settlement demonstrates the broad support for Bonneville's transmission rates, including the hourly rates on the Southern Intertie, and resolves many complex issues associated with Bonneville ratemaking, saving time and resources for most parties. Second, no credible evidence has been put forward to justify rejecting the "black box" settlement. The BP-18 Record of Decision ("ROD") provided extensive analysis confirming the challenges presented by the seams issues and justifying Bonneville's chosen path to increase the hourly rate to ensure that hourly transmission customers pay for a fair share of the Southern Intertie facilities and to ensure transmission customers have appropriate incentives to invest in LTF service. To reverse course and lower the hourly rate would require the Administrator to abandon

the sound business principles and evidence that informed the BP-18 ROD and instead to rely on discredited theories, defective analyses, and misleading conclusions concocted by JP01. Third, affirmative evidence supports the preservation of the hourly rate design adopted in the BP-18 rate proceeding. For example, though not required to do so to maintain the new BP-18 hourly rate design on the Southern Intertie going forward, Bonneville Staff has monitored various markets to ensure that the rate design change did not result in unintended consequences. Bonneville Staff produced a voluminous report detailing the key metrics it evaluated and concluded that no unintended consequences or market disruptions occurred. Furthermore, the record demonstrates that there is strong demand for LTF service on the Southern Intertie: 100 percent of expiring rights eligible for renewal were, in fact, renewed, and no requests for LTF service have been declined. This is in contrast to outcomes prior to the BP-18 ROD, which exhibited numerous instances of transmission customers being unwilling to commit to new or continued LTF Southern Intertie service.

JP01 asks the Administrator to abandon his prior position on the Southern Intertie seams issues and the sound business principles that informed the BP-18 change in the hourly rate design, without providing any credible evidence of unintended consequences or changed circumstances and despite substantial credible evidence that supports retaining the current rate design. Agreeing to JP01's demands would constitute impermissible arbitrary and capricious decision-making. Instead, JP04 urges the Administrator to adopt the Settlement, consistent with the overwhelming evidence adduced in this proceeding.

#### **ARGUMENT**

## I. ISSUE 1: WHETHER BONNEVILLE HAS SUBSTANTIAL EVIDENCE TO ADOPT THE TRANSMISSION RATES SETTLEMENT

The Administrator must make a final decision on the proposed rates based on a full and complete record, and the final decision must include a "full and complete justification of the final rates."<sup>1</sup> In basing his decisions on the rate case record, the Administrator necessarily weighs the evidence presented to determine whether it is adequate to support a particular conclusion.<sup>2</sup> Moreover, the final rate determination must be "supported by substantial evidence in the rulemaking record," and cannot be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."<sup>3</sup>

## A. <u>Position Summary: The Administrator Has Substantial Evidence to Adopt the</u> <u>Settlement</u>

Consistent with the statutory standards, Bonneville has substantial evidence on which justify adopting the transmission rates Settlement. Substantial evidence "is simply more than a mere scintilla," and "[i]t means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."<sup>4</sup> The Settlement and nearly all the transmission rates set forth therein are widely supported or unopposed by virtually all parties. Moreover, evidence exists that the Settlement will recover Bonneville's costs.

The only challenge to the Settlement is in regard to one of the rates and is brought by one party. More specifically, the proposed Southern Intertie hourly rates are opposed by JP01, representing three California-based entities that purchase little, if any, transmission service from

<sup>&</sup>lt;sup>1</sup> Pacific Northwest Electric Power Planning and Conservation Act, §§ 7(i)(5), 7(i)(2)(B); 16 U.S.C. § 839e(a)(1) (2012) ("NWPA").

<sup>&</sup>lt;sup>2</sup> Bonneville Power Admin., Final Record of Decision, BP-18-A-04 at 163 (July 2017) ("BP-18 ROD").

<sup>&</sup>lt;sup>3</sup> NWPA § 9(e)(2); Administrative Procedures Act, 5 U.S.C. § 706(2)(A).

<sup>&</sup>lt;sup>4</sup> *Pub. Power Council v. Bonneville Power Admin.*, 442 F.3d 1204, 1209 (9th Cir. 2006) (quoting *Richardson v. Perales*, 402 U.S. 389, 401 (1971)).

Bonneville.<sup>5</sup> JP01 claims that the BP-18 rate design change, implicitly carried forward in the Settlement, has had unintended consequences. As the evidence shows, these claims are simply not credible. The testimony of numerous parties has established that both JP01's theory and its evidence of unintended consequences are without merit, and that JP01's core econometric analysis is deeply flawed and unreliable. Indeed, the record supports the conclusion that the seams issues identified in the BP-18 rate proceeding—a principal basis for establishing the current rate design in BP-18—continue to exist, that the incentives to invest in LTF service are strong since the BP-18 rate proceeding concluded, and that the Settlement maintains such incentives.

### B. JP01's Analysis Is Irredeemably Flawed and Presents No Credible Evidence of Unintended Consequences

When adopting the hourly rate design change in the BP-18 rate proceeding, the Administrator noted that if unintended consequences occurred, Bonneville might seek other ways to mitigate the effects of the seams issues it had identified.<sup>6</sup> But no such unintended consequences have been identified by Bonneville Staff, and thus there has been no need to examine or identify an alternative approach.

However, JP01—and only JP01—rejects the Bonneville Staff's analysis and conclusions, and argues that the BP-18 hourly rate design change—a design it unsuccessfully opposed in BP-18—has now wreaked significant adverse unintended consequences. According to JP01, these unintended consequences have allegedly been experienced, not just by members of JP01 (in the form of higher energy prices at the California-Oregon border ("COB")), but by several Northwest entities. JP01 puts forward a novel theory that the BP-18 hourly rate design change functions

<sup>&</sup>lt;sup>5</sup> *Frederickson, et al.*, BP-20-E-BPA-19 at 4. Given that JP01 does not object to all other transmission rates set forth in the Settlement except the hourly transmission rates on the Southern Intertie, JP04 limits its discussion in this Initial Brief to only issues related to the hourly rates.

<sup>&</sup>lt;sup>6</sup> BP-18 ROD at 176.

"effectively as a tax on hourly exports to California," that this "export tax" results in energy being "bottled up" in the Pacific Northwest, thereby causing Northwest prices to fall.<sup>7</sup> JP01 goes on to claim that the "depressed" prices at the Mid-C trading hub<sup>8</sup> led to millions of dollars in forgone surplus energy sales revenues for multiple Northwest entities, including Bonneville.<sup>9</sup>

JP01's claim of adverse unintended consequences to Northwest entities is the heart of its evidence in the BP-20 proceeding, but this claim has been so thoroughly discredited by multiple parties and witnesses as to merit no weight whatsoever.

As a threshold matter, JP01's basic theory makes no rational sense, as it is contrary to key facts about the Southern Intertie.<sup>10</sup> First, the hourly rate cannot be viewed as a "barrier to trade" because it does not apply to the vast majority of energy exports from the Pacific Northwest to California.<sup>11</sup> Indeed, the amount of exports facing the hourly rate averaged 57 MW in each hour of FY 2018, roughly one percent of the 5,825 MW of the North-to-South capacity of the Southern Intertie.<sup>12</sup> Second, JP01's "barrier to trade" theory ignores the fact that the entire capacity of the

<sup>&</sup>lt;sup>7</sup> Peters, BP-20-E-JP01-01-CC01 at 3; Parker & Peters, BP-20-E-JP01-02 at 1-6.

<sup>&</sup>lt;sup>8</sup> Parker & Peters, BP-20-E-JP01-02 at 2.

<sup>&</sup>lt;sup>9</sup> *Peters*, BP-20-E-JP01-01-CC01 at § 9.

<sup>&</sup>lt;sup>10</sup> To the extent JP01 attempts to rehabilitate its flawed testimony through new economic theories or analyses that went without mention or discussion in JP01's direct testimony, such attempts are without merit. For instance, JP01 apparently believes rebuttal testimony witnesses erred by not conducting a Granger causality analysis or by failed to evaluate the elasticity of demand at Mid-C. However, JP01 itself did not document any such analyses or theories in its direct testimony, and rebuttal testimony is limited by Bonneville's Rules of Procedure to responding to direct testimony. Bonneville Power Admin., Rules of Procedure at § 1010.13(a)(5). Moreover, substantively any ex post facto efforts to claim a Granger causality analysis or demand inelasticity theory entirely rehabilitates all the errors in JP01's analysis necessarily fails. See § I herein; see also JP01-PX-28-1; JP01-PX-28-7; JP01-PX-28-14; JP01-PX-28-15; JP01-PX-28-22 ("The entire substantiation by JP01 of its definition, use, and impact of "powerexeimentry," as well as any other variables, is appropriately contained in its pre-filed direct testimony. Per BPA Procedural Rule 1010.13(a)(4), "[a]ny conclusions by the witness should, if applicable, be supported by data and explanation."); JP01-BPA-28-107 (explaining that the price of natural gas is a direct input in the variable cost of power produced by a gas-fired power plant); Cross Transcript at 131 (Bonneville witness E. Graessley testifying that it was not necessary to conduct a Granger causality analysis). All data requests and responses cited herein were admitted into evidence by the Hearing Officer's Order Admitting Evidence Upon Declarations and Motions, BP-20-HOO-16, and for simplicity are cited as simply the data request number. Similarly, all citations to the transcript of cross examination held on April 23, 2019 are simply referenced to the "Cross Transcript."

<sup>&</sup>lt;sup>11</sup> Wellenius, BP-20-E-PX-01 at 3-5; Deen, BP-20-E-PP-02 at 3.

<sup>&</sup>lt;sup>12</sup> Wellenius, BP-20-E-PX-01 at 4; *Frederickson & Linn*, BP-20-E-BPA-22 at 16; *see also* JP01-BPA-28-103 ("This general claim is founded on fundamental economic reasoning. 1.4% of BPA's share of the Southern Intertie

Southern Intertie facilities can be utilized without incurring the hourly rate at all through the use of service of longer duration.<sup>13</sup> It is plainly misguided to ignore these alternative transmission products.<sup>14</sup> More specifically, it is undisputed that the Southern Intertie is fully subscribed on a LTF basis, meaning that the entire capacity of the facilities can be utilized by transmission customers with sunk LTF transmission reservation costs facing virtually no incremental cost to export energy from the Pacific Northwest.<sup>15</sup> Third, the minimal amount of original hourly service is rendered even more insignificant because it is dwarfed by the overall generation capability of the Pacific Northwest, which varies between 30,000 – 50,000 MW per hour.<sup>16</sup> In sum, "[t]here is no rational basis to conclude that a change in the price affecting this small volume of transactions could have a substantial effect on the underlying market fundamentals either in the Northwest or California."<sup>17</sup>

On the back of its fundamentally misguided theoretical starting point, JP01 puts forward a flawed regression analysis, the primary result of which is a claim that the wholesale day-ahead and

translates into about 50 aMWs of transmission, and Pacific Northwest regional demand has been over 20,000 aMWs from 2015 to 2017.... Given the small amount of transmission directly impacted by this rate increase, in comparison to the average Pacific Northwest regional demand, we expect the impact of the Southern Intertie hourly transmission rate increase on regional electricity markets to be small. This expectation is based on straightforward economic fundamentals.").

<sup>&</sup>lt;sup>13</sup> *Graessley, et al.*, BP-20-E-BPA-25 at 3; JP01-BPA-28-100 ("JP01's analysis and discussion presumes there is no alternative product available at all for transmission along the Southern Intertie. There is nothing in JP01's direct case indicating otherwise. Accordingly, it would appear that JP01 operated on the presumption that the hourly rate increase impacted every MWh of energy exports to California."); JP01-BPA-28-102 ("However, "BPA Southern Intertie Data as of FY2018" data shows that exports from the PNW to California increased despite less hourly transmission being reserved. The increase in exports must have been on products other than BPA's hourly transmission products."); JP01-BPA-28-139 ("The increase in exports shows that other transmission must have been used as substitutes for BPA's hourly transmission products.").

<sup>&</sup>lt;sup>14</sup> Graessley, et al., BP-20-E-BPA-25 at 3-4; JP01-PP-28-1.

<sup>&</sup>lt;sup>15</sup> Wellenius, BP-20-E-PX-01 at 3-4; *Deen*, BP-20-E-PP-02 at 3; JP01-PP-28-15 ("Full subscription of the Southern Intertie segment means that the cost of using the full capacity of the facilities is "sunk." This, in turn, means there is no marginal cost for using the facilities, which promotes maximum utilization consistent with sound business principles.").

<sup>&</sup>lt;sup>16</sup> Wellenius, BP-20-E-PX-01 at 17.

<sup>&</sup>lt;sup>17</sup> Deen, BP-20-E-PP-02 at 3; Wellenius, BP-20-E-PX-01 at 4; Frederickson & Linn, BP-20-E-BPA-22 at 15; Graessley, et al., BP-20-E-BPA-25 at 2-4.

real-time prices at the Mid-C trading hub were depressed.<sup>18</sup> To be clear, this regression analysis is JP01's sole support for its claim of harm to Northwest entities.<sup>19</sup> JP01's regression analysis purports to compare Mid-C prices in FY 2017 and FY 2018, while controlling for the many "exogenous" factors that influence wholesale energy prices.<sup>20</sup> This regression analysis essentially attempts to calculate what the Mid-C prices would have been absent the Southern Intertie hourly rate design change.<sup>21</sup>

As Bonneville Staff have observed as a starting point—without even examining the credibility of its analysis—because "JP01 has not shown that the hourly rate acts as a barrier to trade, [their] analysis of that theory proves nothing."<sup>22</sup>

Moreover, Professor McCrary—who appeared as an expert on regression analyses and "not as an advocate for any particular party"—concluded that JP01's regression analysis was "fundamentally distortionary and misleading," "inconsistent with professional standards," would have resulted in a failing grade in an undergraduate course, was based on a design that constituted an "amateur-hour type of mistake," and that no "regulatory body . . . or trier of fact" should take JP01's analysis "seriously" because it "just doesn't belong in that [] arena at all."<sup>23</sup> As Professor McCrary summarized, JP01's regression analysis is unreliable and should not be considered by a federal agency.<sup>24</sup>

<sup>&</sup>lt;sup>18</sup> *Parker & Peters*, BP-20-E-JP01-02 at 2 ("Given the econometric results presented here, there is no question that the 2017 increase in the transmission rate depressed spot market energy prices at the Mid-C hub; the only question that remains is the *size* of the reduction in Mid-C energy prices, and the resulting reduction in BPA's and other entities' off-system revenues due to the lower energy prices.").

<sup>&</sup>lt;sup>19</sup> Peters, BP-20-E-JP01-01-CC01 at § 9; Parker & Peters, BP-20-E-JP01-02 at § 5.

<sup>&</sup>lt;sup>20</sup> *Parker & Peters*, BP-20-E-JP01-02 at 9.

<sup>&</sup>lt;sup>21</sup> Wellenius, BP-20-E-PX-01 at 8.

<sup>&</sup>lt;sup>22</sup> Graessley, et al., BP-20-E-BPA-25 at 4.

<sup>&</sup>lt;sup>23</sup> All of the quotations derive from JP01's cross examination of Prof. McCrary. *See* Cross Transcript at 237, 239, 244, 245.

<sup>&</sup>lt;sup>24</sup> McCrary, BP-20-E-PX-02 at 10; Cross Transcript at 244-45.

The flaws in JP01's analysis also are evident in its plainly counter-intuitive results. For instance, the results of JP01's regression analysis suggest the following relationships, all of which are contrary to the understanding of entities familiar with Northwest energy markets:

- Day-ahead Mid-C prices are not affected by natural gas prices;<sup>25</sup>
- Day-ahead Mid-C prices rise where there is more northwest hydro availability (measured at the elevation of Lake Roosevelt);<sup>26</sup>
- Day-ahead Mid-C prices are not affected by northwest hydro flows (measured at The Dalles);<sup>27</sup> and
- Day-ahead Mid-C prices are not affected by the temperature in Seattle, Portland, and Spokane, but are strongly affected by the temperature in Burbank, California.<sup>28</sup>

A deeper examination of JP01's regression analysis confirms that it is not just unreliable, but is fatally flawed or "grossly misspecified" in numerous respects.<sup>29</sup> Each flaw is independently sufficient to render the analysis unreliable, but the sum total of the errors magnifies the comprehensively defective nature of JP01's evidence. A non-inclusive list of these flaws is provided below.

## 1. JP01's analysis was constructed to exclude half of FY 2018 when comparing FY 2017 and

**FY 2018**. JP01's regression analysis erroneously compares all of FY 2017 to only the first half of FY 2018, when prices were broadly lower. By designing a regression that ignores the

<sup>&</sup>lt;sup>25</sup> Wellenius, BP-20-E-PX-01 at 10-11; Graessley et al., BP-20-E-BPA-25 at 8.

<sup>&</sup>lt;sup>26</sup> Wellenius, BP-20-E-PX-01 at 10-11; JP01-PX-28-18.

<sup>&</sup>lt;sup>27</sup> Wellenius, BP-20-E-PX-01 at 10-11.

<sup>&</sup>lt;sup>28</sup> *Id.*; *Graessley et al.*, BP-20-E-BPA-25 at 8; JP01-PX-28-19 ("The cited testimony highlights the combined and incongruous findings of Parker & Peters in which temperatures in Burbank strongly affect Mid-C prices, but temperatures in Seattle, Spokane, and Portland do not. The Parker & Peters result appear to stand for the proposition that *only* southern California temperatures are relevant to power prices at Mid-C, which appears contrary to the intuition that Mid-C prices would be affected by temperatures at the major population centers in the Northwest.").

<sup>&</sup>lt;sup>29</sup> Graessley, et al., BP-20-E-BPA-25 at 19.

second half of FY 2018, JP01 proffers a distorted analysis that allows it to conclude that Mid-C prices were depressed.<sup>30</sup> The exclusion of higher prices during the second half of FY 2018 arises from JP01's undisclosed use of the "powerexeimentry" dummy variable, which captures and excludes all price-related changes occurring on or after April 4, 2018 (the date Powerex began participating in the Western Energy Imbalance Market ("EIM")). According to JP01's analysis, Powerex's entry into California's new energy imbalance market platform allegedly caused bilateral day-ahead Mid-C prices to more than double—a position other witnesses in the proceeding have characterized as a "ludicrous" and "implausible" result.<sup>31</sup>

The singular importance of this aspect of JP01's analysis was revealed by noting what happens to JP01's conclusions if this dummy variable is removed. Powerex's witness showed that eliminating the "powerexeimentry" dummy variable causes JP01's regression analysis to predict <u>no</u> statistically significant price changes at Mid-C, or at any other trading location evaluated by JP01.<sup>32</sup> In other words, without the Powerex EIM Entry dummy variable, JP01 would lose its sole pretext for its claim of harm to Northwest entities. Moreover, evidence also demonstrates that other completely irrelevant variables could be substituted in JP01's regression analysis and still allow its regression analysis to reach the same conclusions reached by JP01, and even with a better "fit."<sup>33</sup> This example demonstrates how JP01's analysis can be readily manipulated through the use of dummy variables.<sup>34</sup> As Professor McCrary testified,

<sup>&</sup>lt;sup>30</sup> McCrary, BP-20-E-PX-02 at 5-8.

<sup>&</sup>lt;sup>31</sup> Wellenius, BP-20-E-PX-01 at 11-16; *Deen*, BP-20-E-PP-02 at 5; Cross Transcript at 224; JP01-PP-28-5 ("[T]he limited scope of Powerex's participation in the EIM means that it is not reasonable to conclude that Powerex's participation could have a substantial impact on Mid-C prices. Further, as shown in BPA's Southern Intertie Data Report Figures 4.4 and 4.5, Powerex is generally a net importer of energy from the CAISO in the EIM. Therefore, if anything Powerex's participation might slightly increase supply in the Northwest, in contrast to the JP01 model's prediction of a substantial increase in prices.").

<sup>&</sup>lt;sup>32</sup> Wellenius, BP-20-E-PX-01 at 12-14.

<sup>&</sup>lt;sup>33</sup> *Id.* at 14.

<sup>&</sup>lt;sup>34</sup> *Id*.

JP01's elimination of the second half of FY 2018 in its "before-and-after" analysis is a "major error" that renders JP01's analysis "flawed" and "unreliable."<sup>35</sup> Professor McCrary also concluded that JP01's "regression model itself is fundamentally distortionary and misleading," and which "means that the regression doesn't have the interpretation that's being put on by Parker and Peters."<sup>36</sup>

Despite the magnitude of the Powerex EIM Entry dummy variable's purported impact, JP01 neglected to discuss it or even mention it in testimony, a glaring failure.<sup>37</sup> Professor McCrary noted that the omission of this dummy variable from testimony "is considerably below the requirements of standard econometric practice, and the conclusions rendered by Parker/Peters would not meet the standards for publication in a reputable research journal as the regression model is unreliable."<sup>38</sup>

2. JP01 engages in "false monocausality" by attributing all changes in FY 2018 to the Southern Intertie Hourly rate. JP01 compounds the errors of its misguided theory and flawed analysis by mischaracterizing its own results. Specifically, JP01 attributes all of the price changes it claims to find between FY 2018 and FY 2017 exclusively to the increased hourly rate. But JP01's characterization ignores multiple other factors that also changed between FY 2017 and FY 2018, such as changes to all of Bonneville's power and transmission rates (and, among other things, Portland General Electric's ("PGE") entry into the EIM).<sup>39</sup> In

<sup>&</sup>lt;sup>35</sup> McCrary, BP-20-E-PX-02 at 5, 10. Even if Powerex's EIM entry could plausibly have some impact on Mid-C prices, which no credible evidence points to, "the way in which that was done so here is still distortionary and misleading and is inconsistent with professional standards." Cross Transcript at 239.

<sup>&</sup>lt;sup>36</sup> Cross Transcript at 239.

<sup>&</sup>lt;sup>37</sup> Wellenius, BP-20-E-PX-01 at 13; McCrary, BP-20-E-PX-02 at 10; JP01-PX-28-19 ("As explained in Introductory" Econometrics: A Modern Approach (7<sup>th</sup> ed.), 'A significant variable that has the unexpected sign and a practically large effect is much more troubling and difficult to resolve. One must usually think more about the model and the nature of the data to solve such problems. Often, a counterintuitive, significant estimate results from the omission of a key variable[.]'"). <sup>38</sup> *McCrary*, BP-20-E-PX-02 at 10.

<sup>&</sup>lt;sup>39</sup> Wellenius, BP-20-E-PX-01 at 18-20; Graessley, et al., BP-20-E-BPA-25 at 10.

other words, there is absolutely no evidence to suggest that any changes in Mid-C prices that JP01 claims to have found can be connected specifically to the hourly rate change, as opposed to "the intertwined, cumulative, and joint impacts of BPA's transmission rate increase, PGE joining the EIM, and the influence of every other thing that happened in FY 2018 that was not explicitly include in one of the other input variables."<sup>40</sup> Accordingly, due to the way JP01 constructed its analysis and its failure to address other potential inputs, JP01 cannot "connect the dots" between even its own deeply flawed analysis and the specific transmission rate it opposes in this proceeding.

3. JP01's regression analysis contradicts its own economic theory. JP01's economic theory is that the hourly rate acts as a barrier to trade, which caused exports from the Pacific Northwest to fall following the implementation of the BP-18 Southern Intertie rate, all else being equal.<sup>41</sup> Tellingly, JP01 neglected to conduct an analysis to test directly whether exports from the Pacific Northwest actually did decline, as its theory would predict.<sup>42</sup> Indirectly, however, JP01's regressions actually found a statistically significant *increase* in day-ahead transaction quantities in FY 2018 at both COB and NOB, and *no statistically significant* change in day-ahead transaction quantities at Mid-C.<sup>43</sup> In other words, JP01's own regression analysis "refutes the causal link they claim exists between the Hourly IS rate and energy exports on the Southern Intertie, and subsequently on prices."<sup>44</sup> And JP01's theory about the hourly rate acting as a barrier to exports from the Pacific Northwest likewise "completely fails to explain how Mid-C prices would decline without any meaningful changes in export flows."<sup>45</sup>

<sup>&</sup>lt;sup>40</sup> Graessley, et al., BP-20-E-BPA-25 at 11.

<sup>&</sup>lt;sup>41</sup> Parker & Peters, BP-20-E-JP01-02 at 3-4; Wellenius, BP-20-E-PX-01 at 20-21.

<sup>&</sup>lt;sup>42</sup> Wellenius, BP-20-E-PX-01 at 20-21.

<sup>&</sup>lt;sup>43</sup> *Id.* at 21.

<sup>&</sup>lt;sup>44</sup> *Id.* at 22.

<sup>&</sup>lt;sup>45</sup> Graessley, et al., BP-20-E-BPA-25 at 5.

- 4. JP01's regression analysis contains numerous data errors. The data and assumptions underlying JP01's regression analysis contain a variety of errors that cause the analysis to be unreliable. For instance, JP01's analysis is based on data representing wind and nondispatchable thermal generation in the BPA control area. During the period of analysis, however, some 2,000 MW of wind capacity plus the Centralia coal plant left Bonneville's control area. Although these resources continued to operate and produce electricity under the umbrella of a different control area, the data used in JP01's analysis appears to indicate a large reduction in output. JP01's failure to address this structural change properly in its data inflated the change in Mid-C prices attributed by JP01 to the hourly rate change.<sup>46</sup> A second example of JP01's data-related errors is its analysis of only a subset of sellers' EQR transaction data, instead of published index prices at Mid-C and other locations. JP01's narrow reliance on EQR data introduced measurement error (as the data relied upon may not be representative of the entire market) and limited any inferential value of JP01's regression.<sup>47</sup> A third example of data-related errors in JP01's analysis is the apparent double-counting of water flows at The Dalles, and JP01's failure to account for spill amounts or fish operations in its water flow variables for The Dalles.48
- 5. JP01 omitted key explanatory variables from its regression analysis. Pacific Northwest natural gas-fired power plants frequently set the marginal cost for energy in the Northwest, thus the fuel costs for these plants can have a significant impact on the price of electricity.<sup>49</sup> However, JP01 did not include any explanatory variables for key Pacific Northwest natural gas

<sup>&</sup>lt;sup>46</sup> *Id.* at 12.

<sup>&</sup>lt;sup>47</sup> *Graessley, et al.*, BP-20-E-BPA-25 at 17.

<sup>&</sup>lt;sup>48</sup> Id.

<sup>&</sup>lt;sup>49</sup> *Id.* at 14.

pricing, and as other witnesses concluded, this omission "fundamentally compromises both JP01's model and its results."<sup>50</sup>

6. JP01's model demonstrates a poor fit to the actual data and provides low explanatory value. JP01's regression analysis has an R-squared value of only 0.189, meaning that JP01's model for day-ahead prices fails to explain<sup>51</sup> over 80 percent of the variation in Mid-C day-ahead prices.<sup>52</sup>

In sum, JP01's evidence begins with a defective and baseless economic theory that the hourly rate caused depressed Mid-C prices. JP01 then designed a grossly distorted analysis, further corrupted by the use of inaccurate and/or incomplete data, which even then yielded only a poor explanation of the studied variable. JP01 then mischaracterized the results of its analysis, ignored multiple "red flags" that its analysis was erroneously constructed, and disregarded the fact that the analysis directly undermined the core premise of its "barriers to trade" theory. None of this prevented JP01 from stridently claiming that numerous Northwest entities had forgone millions of dollars in revenue as a result of the BP-18 Southern Intertie hourly rate design change, or from arguing—as it did in BP-18—that the "solution" is for Bonneville to give hourly Southern Intertie service away virtually for free.<sup>53</sup>

<sup>&</sup>lt;sup>50</sup> *Id.* at 14-15.

<sup>&</sup>lt;sup>51</sup> The ability of a regression model to explain real-world outcomes is measured by the "R-squared" statistic. An R-squared value of 1.0 means that the model perfectly tracks all real-world changes in outcomes, whereas an R-squared value of 0 means that none of the real-world changes are reflected in the model results. <sup>52</sup> *Graessley, et al.*, BP-20-E-BPA-25 at 12; *Deen*, BP-20-E-PP-02 at 6.

<sup>&</sup>lt;sup>53</sup> The Settlement proposes a Southern Intertie hourly rate of \$9.98/MWh, but JP01 asks for an immediate and continuing discount to \$0.25/MWh. *See Frederickson, et al.*, BP-20-E-BPA-19 at A-105 (stating the Settlement Hourly IS rate); *Peters*, BP-20-E-JP01-01-CC01 at 47-48 (stating that the hourly rate should be discounted to "a nominal amount such as \$0.25/MWh" and that "[a] nominal amount, such as \$0.25/MWh recognizes that 'zero' may not be an accepted value in some software systems.").

JP01's testimony deserves no weight, and the Administrator should reject JP01's brazen effort deliberately calculated to undermine support for the broad regional Settlement among Bonneville and its transmission customers.<sup>54</sup>

#### C. JP01's Claims of Harm to Its Members Are Specious

JP01 also claims that the BP-18 hourly rate design change has harmed its California -based members to varying degrees. For instance, JP01 claims that SMUD incurred higher variable costs of between \$7.7 million and \$14.7 million, based on another regression analysis.<sup>55</sup> JP01 also asserts that Turlock suffered \$2 million in lower revenues caused by lower Mid-C prices.<sup>56</sup> However, these claims of harm appear inflated and spurious and are contradicted by other evidence in the record.

First, JP01's claims of harm to SMUD are based on an allegation of increased costs of energy purchases at COB. However, this claim is contradicted by JP01's separate econometric analysis, which found no statistically significant change in electricity prices at COB in FY 2018.<sup>57</sup> The analysis of SMUD's costs also contains a host of errors and misspecifications, as detailed by Bonneville Staff's testimony.<sup>58</sup>

Second, JP01's present claims of harm to its members are inconsistent with prior claims or other statements. In the BP-18 rate proceeding, for instance, SMUD claimed its harm was expected to be roughly \$3.3 to \$4.4 million. And in addressing the Southern Intertie rate in recent public bond offering documents, SMUD stated that it "estimates a negative financial impact to SMUD in the range of \$1 million to \$4 million annually in additional costs of energy."<sup>59</sup> To put these

<sup>&</sup>lt;sup>54</sup> *Peters*, BP-20-E-JP01-01-CC01 at 6-7.

<sup>&</sup>lt;sup>55</sup> Id. at 19.

<sup>&</sup>lt;sup>56</sup> *Id.* at 21.

<sup>&</sup>lt;sup>57</sup> Deen, BP-20-E-PP-02 at 9-10; Wellenius, BP-20-E-PX-01 at 26.

<sup>&</sup>lt;sup>58</sup> Frederickson & Linn, BP-20-E-BPA-22 at 22-28.

<sup>&</sup>lt;sup>59</sup> Wellenius, BP-20-E-PX-01 at 26-27; Frederickson & Linn, BP-20-E-BPA-22 at 28.

projections in context, SMUD concluded that "any increased costs ultimately borne by SMUD as a result of higher energy prices at COB will not have a material adverse impact on SMUD's financial position, liquidity, or results of operations."<sup>60</sup> SMUD also explained in its most recent annual budget that its energy costs were largely "locked in," with "[o]nly a small portion" of purchases exposed to spot market prices.<sup>61</sup>

Third, JP01's claim of harm to Turlock is based on forgone revenues from sales it would have made at Mid-C at allegedly depressed prices. This claim suffers from the same defects as all of JP01's claims that Mid-C prices were "depressed." Furthermore, Bonneville Staff found that Turlock actually purchased more energy than it sold at Mid-C; as a net seller, then, even under JP01's theory, Turlock would actually benefit from the lower Mid-C prices that JP01 alleges were caused by the BP-18 hourly rate design change.<sup>62</sup>

In sum, JP01's evidence of harm to its members should be afforded no weight given the erroneous econometric analysis on which most of its evidence relies, given SMUD's statements that the BP-18 hourly rate change has no material adverse impact on SMUD's financial position, and given evidence by Bonneville Staff that Turlock suffered no harm at all.

#### D. BPA Staff Identified No Unintended Consequences from the Hourly Rate Change

Bonneville Staff also examined market data to determine whether unintended consequences occurred, but it reached the opposite conclusion from JP01. Specifically, Bonneville Staff collected and reviewed a comprehensive amount of market data on a monthly basis during the first year of the BP-18 rate period to evaluate whether unintended consequences occurred.<sup>63</sup> Bonneville Staff provided this monthly data to all parties and prepared a 34-page report

<sup>&</sup>lt;sup>60</sup> Wellenius, BP-20-E-PX-01 at 26-27.

<sup>&</sup>lt;sup>61</sup> Id.

<sup>&</sup>lt;sup>62</sup> Frederickson & Linn, BP-20-E-BPA-22 at 28.

<sup>&</sup>lt;sup>63</sup> *Id.* at 12-13.

summarizing this data, which included (1) Southern Intertie LTF renewal history; (2) Southern Intertie hourly product reservations; (3) Southern Intertie resale data; (4) Southern Intertie path loadings and operating limits; (5) day-ahead market prices for trading points relevant to the Southern Intertie; (6) CAISO day ahead price spreads; (7) COI day ahead bilateral price spreads; (8) PDCI bilateral price spreads; (9) real-time prices; (10) market liquidity; (11) California installed renewable capacity and distributed solar generation; and (12) CAISO net load components.<sup>64</sup> Bonneville Staff found "no negative impacts on power markets,"<sup>65</sup> that there were "no discernable impacts on Mid-C power prices,"<sup>66</sup> and that the "West Coast markets did not experience a 'price shock' or any other discernable effect as a result of the BP-18 hourly rate increase."<sup>67</sup>

#### E. <u>Substantial Evidence Demonstrates the Seams Issues Persist</u>

In the BP-18 rate proceeding, the Administrator identified several seams issues that contributed to decreased demand for Southern Intertie LTF service. Notably, at that time JP01's members did not dispute the existence of the seams the Administrator identified.<sup>68</sup> The identified seams issues, coupled with increasing amounts of solar generation in California and a reduction in the number of heavy load hours, contributed to the Administrator's decision to alter the hourly rate design in the BP-18 rate proceeding.<sup>69</sup> To mitigate the effects of the seams issues, Bonneville

<sup>&</sup>lt;sup>64</sup> See Wellenius, BP-20-E-PX-01-AT01.

<sup>&</sup>lt;sup>65</sup> JP01-BPA-28-68; *Frederickson & Linn*, BP-20-E-BPA-22 at 30. BPA Staff's conclusions also are consistent with Staff's expectations from the BP-18 rate proceeding, where Staff expected to see no meaningful change in overall flows on the Southern Intertie or significant price changes as a result of the Southern Intertie hourly rate design change. *Conger, Jr., et al.*, BP-18-E-BPA-32 at 2, 5.

<sup>&</sup>lt;sup>66</sup> Frederickson & Linn, BP-20-E-BPA-22 at 16.

<sup>&</sup>lt;sup>67</sup> *Id.* at 29, 30.

 <sup>&</sup>lt;sup>68</sup> BP-18 ROD at 132 ("No party to this proceeding questions whether seams issues with the CAISO exists or whether such issues should be addressed."); *Peters*, BP-20-E-JP01-01-CC01 at 28 (summarizing the seams issues); but see *Peters*, BP-20-E-JP01-01-CC01 at 57 (questioning whether seams issues need to be addressed).
<sup>69</sup> BP-18 ROD at 178.

sought to ensure that it appropriately incentivized customers to subscribe to LTF service and to reapportion costs more fairly among customer groups.<sup>70</sup>

The first seams issue arises from California's market rules, which reduce the incentive for Bonneville customers to purchase LTF transmission on the Southern Intertie under the current rate structure because customers can reserve non-firm service on Bonneville's Southern Intertie and flow ahead of customers who made long-term investments in firm service. This allows customers to bid into CAISO's day-ahead market without purchasing LTF service from Bonneville, to later acquire the lower-cost non-firm transmission only for the hours in which they receive a day-ahead award, and as a result flow ahead of customers with firm transmission.<sup>71</sup> In essence, the CAISO rules allow sellers to use hourly non-firm transmission service to "cherry pick" the reduced number of high-value hours at significantly lower total cost than is paid by LTF customers.<sup>72</sup>

The second seams issue arises between the Pacific Northwest and non-CAISO transmission providers in California because those transmission providers do not consider the curtailment priority of Bonneville's transmission service when curtailing transmission schedules.<sup>73</sup> This creates a disincentive to reserve LTF service on Bonneville's system because it minimizes or eliminates the additional delivery risk that would normally be associated with Bonneville non-firm transmission service.<sup>74</sup>

 $<sup>^{70}</sup>$  *Id.* at 177-78; JP01-BPA-28-78 ("The BP-18 hourly rate was designed so that a customer would have incentive to purchase long-term firm service rather than purchasing hourly service for 25 hours or more per week."); JP01-BPA-28-79 ("From BPA's perspective, the reduction in the number of hours of hourly service that a customer could purchase per week before it became more economical to purchase long-term service was the primary change in the incentive to renew in FY18.").

<sup>&</sup>lt;sup>71</sup> BP-18 ROD at 177-78; *Deen*, BP-20-E-PP-02 at 10-11; *Wellenius*, BP-20-E-PX-01 at 29-30; *Frederickson & Linn*, BP-20-E-BPA-22 at 10-11.

<sup>&</sup>lt;sup>72</sup> Deen, BP-20-E-PP-02 at 10-11; Wellenius, BP-20-E-PX-01 at 29-30.

<sup>&</sup>lt;sup>73</sup> BP-18 ROD at 131.

<sup>&</sup>lt;sup>74</sup> Id.

Bonneville explained in the BP-18 rate proceeding that the impact of the two foregoing seams issues was exacerbated by the integration of large amounts of solar generation, which changed the daily net load shape in California and effectively reduced the number of daily high-value hours from 16 (the traditional "heavy load hours") to approximately 5 hours in the early evening.<sup>75</sup> As the number of peak hours declined, Bonneville concluded that hourly service became more economical (as compared to LTF service), meaning that a decline in the peak hours in California reduced the demand for LTF service.<sup>76</sup>

The record in this proceeding contains substantive evidence that the seams issues described in the BP-18 proceeding persist. For instance, PPC's witness testified that CAISO does not consider the firmness of transmission when evaluating bids and issuing market awards, which creates opportunity for non-firm customers to flow ahead of firm customers, even in hours when firm customers with LTF are attempting to use their transmission rights.<sup>77</sup> Similarly, a Powerex witness testified that seams issues continue to exist, stating that "there have been no fundamental changes to the rules for submitting offers and scheduling energy awards that clear the CAISO dayahead market" and the seams issues "continue to result in non-firm service on the Southern Intertie being functionally equivalent to firm service for making day-ahead sales to the CAISO markets."<sup>78</sup>

Moreover, Bonneville Staff's Southern Intertie Data Report showed (1) reservation of hourly service continues to be highly concentrated in the evening hours; (2) CAISO's net load curve continues to decline during the mid-day "belly of the duck" hours, suggesting reduced opportunities for the Northwest sellers to sell energy to California during these hours; and (3) the CAISO "duck curve" shows continued growth of installed renewables, particularly behind-the-

<sup>&</sup>lt;sup>75</sup> *Id.* at 129-135.

<sup>&</sup>lt;sup>76</sup> *Id.* at 133, 135.

<sup>&</sup>lt;sup>77</sup> Deen, BP-20-E-PP-02 at 10.

<sup>&</sup>lt;sup>78</sup> Wellenius, BP-20-E-PX-01 at 29-30.

meter solar.<sup>79</sup> This testimony clearly demonstrates that the seams issues continue, and thus the Administrator's justifications for the hourly rate design change continue to apply. But it also suggests that the need to mitigate the effects of the seams issues has grown even stronger and that the hourly rate should be even higher to address the impacts of the seams issues effectively.

JP01 has made various allegations that Bonneville failed to study or quantitatively evaluate certain issues related to the seams it identified in BP-18, implying that Bonneville lacks substantial evidence to adopt the Settlement. But JP01's claims in this regard are specious.

First, JP01 asserted that there is no evidence on the continued validity or resolution of the seams issues.<sup>80</sup> But, as described above, the record contains evidence that the seams issues identified in the BP-18 rate proceeding continue. JP01 also mistakenly argued that the hourly rate design change was ineffective in addressing the seams issues because it did not change curtailment or scheduling priorities in CAISO or with non-CAISO transmission providers in California.<sup>81</sup> These arguments highlight the magnitude of JP01's misunderstanding.<sup>82</sup> Bonneville has no control over the fundamental origins of the seams issues; instead, the hourly rate design implemented in BP-18 was designed to mitigate the *impact* of the seams issues.<sup>83</sup>

Second, JP01 faulted Bonneville for not conducting an analysis of the magnitude of hourly service displacing LTF service for sales into California and for not quantifying how often customers can actually reserve hourly non-firm service on the Southern Intertie.<sup>84</sup> To the contrary, Bonneville Staff testimony confirmed that "hourly service is widely available" and that there is

<sup>&</sup>lt;sup>79</sup> Wellenius, BP-20-E-PX-01 at 30-31; Frederickson & Linn, BP-20-E-BPA-22 at 12-17.

<sup>&</sup>lt;sup>80</sup> Peters, BP-20-E-JP01-01-CC01 at 3.

<sup>&</sup>lt;sup>81</sup> *Id.* at § 6.

<sup>&</sup>lt;sup>82</sup> Frederickson & Linn, BP-20-E-JP01-22 at 11.

<sup>&</sup>lt;sup>83</sup> JP01-PP-28-7 ("The [hourly rate design] change does not resolve the underlying seams issues and market conditions. Rather, it ameliorates the disincentive to invest in long-term firm service that those circumstances create.").

<sup>&</sup>lt;sup>84</sup> See, e.g., Peters, BP-20-E-JP01-01-CC01 at 4, 54-55.

little, if any, unmet demand for hourly service on the Southern Intertie.<sup>85</sup> Moreover, such analyses are not required for the Administrator to adopt the Settlement. The record demonstrates that seams issues persist, the Settlement continues to mitigate the effects of the seams issues by maintaining the incentives for customers to take LTF service, and the record contains no credible evidence of adverse unintended consequences.

## F. <u>Substantial Evidence Demonstrates Customer Willingness to Commit to LTF</u> <u>Service</u>

In the BP-18 rate proceeding, the Administrator expressed concern that "the incentive to reserve long-term firm transmission service is not as strong as it was during the BP-16 rate proceeding" due to the combined effects of the seams issues and the increasing amount of solar generation in California.<sup>86</sup> While the acceptance rate of LTF offers has historically remained fairly high,<sup>87</sup> extensive evidence in the BP-18 proceeding indicated that customers were increasingly unwilling to request or commit to LTF service when offered. For instance, in the three-year period before the BP-18 initial proposal, the queue for LTF service on the Southern Intertie shrank from 6,228 MW to 1,002 MW.<sup>88</sup> In FY 2015, approximately 31 percent of the megawatts available for renewal were not renewed by customers.<sup>89</sup> Moreover, during the BP-16 rate period up until the Administrator issued the BP-18 ROD, five different customers declined LTF service.<sup>90</sup> Bonneville's concerns were also based on the information gathered during the broad public stakeholder process conducted by Bonneville Staff following the BP-16 ROD.<sup>91</sup>

<sup>&</sup>lt;sup>85</sup> Frederickson & Linn, BP-20-E-BPA-22 at 19.

<sup>&</sup>lt;sup>86</sup> BP-18 ROD at 133, 135; *Deen*, BP-20-E-PP-02 at 12.

<sup>&</sup>lt;sup>87</sup> See Wellenius, BP-20-E-PX01-AT01 at 4 (summarizing renewal history of LTF service on the Southern Intertie).

<sup>&</sup>lt;sup>88</sup> Deen, BP-20-E-PP-02 at 12.

<sup>&</sup>lt;sup>89</sup> Id.

<sup>&</sup>lt;sup>90</sup> Wellenius, BP-20-E-PX-01 at 28.

<sup>&</sup>lt;sup>91</sup> BP-18 ROD at 177-78; Wellenius, BP-20-E-PX-01 at 28.

However, since the Administrator's adoption of the BP-18 hourly rate design change, *no* customer has declined LTF service,<sup>92</sup> and customers renewed all 2,683 MW of LTF rights that were up for renewal in FY 2018.<sup>93</sup> This data is uncontroverted, and provides evidence of strong demand for LTF service on the Southern Intertie since the BP-18 hourly rate design change was approved.

## G. <u>The Consensus of Nearly all of Bonneville's Transmission Customers Provides</u> Evidence to Reject JP01's Discredited Claims of Unintended Consequences

Before initiation of the BP-20 rate proceeding, Bonneville and its customers engaged in an extensive settlement negotiation process. This process resulted in the Settlement, a black box agreement that provided for a weighted average transmission rate increase of 3.6 percent for the BP-20 rate period (and specifically a 4.4. percent increase in the Southern Intertie hourly rates) and which implicitly carried forward the Southern Intertie hourly rate design from the BP-18 rate proceeding.<sup>94</sup> Nearly 70 transmission customers signed the Settlement, and of the 30 parties gaining Party status in the BP-20 proceeding, only the members of JP01 opposed it.<sup>95</sup> Simply because a settlement is a "black box" agreement does not mean the settlement is without justification. Settlements resolve complex issues among many parties with substantially different interests and represent a valuable consensus - allowing Bonneville to adopt transmission rates without voluminous litigation.<sup>96</sup> "So long as the Settlement complies with the relevant statutory authority . . . BPA does not need its customers to unanimously agree to the rates it sets in accordance with the Settlement."<sup>97</sup> The broad support across many different types of customer groups provides additional evidence supporting an Administrator decision to adopt the Settlement

<sup>&</sup>lt;sup>92</sup> Wellenius, BP-20-E-PX-01 at 28.

<sup>&</sup>lt;sup>93</sup> Deen, BP-20-E-PP-02 at 12.

<sup>&</sup>lt;sup>94</sup> Frederickson, et al., BP-20-E-BPA-19 at 2; Frederickson & Linn, BP-20-E-BPA-22 at 5-6.

<sup>&</sup>lt;sup>95</sup> Frederickson, et al., BP-20-E-BPA-19 at 3.

<sup>&</sup>lt;sup>96</sup> See Ass'n of Pub. Agency Customers v. Bonneville Power Admin., 733 F.3d 939, 961 (9th Cir. 2013).

<sup>&</sup>lt;sup>97</sup> *Id.* at 967.

and reject JP01's claims.<sup>98</sup> Against this broad consensus, JP01 alleges that the current hourly rate has had unintended consequences, but besides the California-based members of JP01, no party or customer has identified any such consequences or voiced concerns about the purported consequences JP01 has "identified." As discussed above, JP01's claims are specious and should be given no weight.

### H. JP01's BP-20 Analysis Contradicts its Past Theories and Claims of Unintended Consequences

In the BP-18 rate proceeding, JP01's members (as Joint Party 3) postulated a possible "market shift" or a "market disruption" as a result of the Southern Intertie hourly rate change.<sup>99</sup> For the market shift possibility, JP01's members suggested that hourly prices at COB and NOB would rise, but the hourly markets at those points would continue to operate with reduced liquidity.<sup>100</sup> For the market disruption possibility, JP01's members suggested that the liquidity of hourly transactions at COB/NOB could go to zero.<sup>101</sup> JP01's members also asserted that the magnitude of the price increase at COB and NOB would be approximately \$8/MWh.<sup>102</sup>

Actual data from FY 2018 and JP01's own analysis in this proceeding both show that its past theories and predictions were erroneous. For instance, in actuality, exports from the Pacific Northwest to California reached the highest level in FY 2018 since FY 2011, whereas JP01 previously suggested that exports would be dramatically reduced or cease altogether after the hourly rate design change took effect.<sup>103</sup> Similarly, wholesale prices at COB and NOB also did

<sup>&</sup>lt;sup>98</sup> Frederickson & Linn, BP-20-E-BPA-22 at 4; Ass'n of Pub. Agency Customers, 733 F.3d 939, 967.

<sup>&</sup>lt;sup>99</sup> *Holcomb, et al.*, BP-18-E-JP03-02-CC01 at 22.

<sup>&</sup>lt;sup>100</sup> *Id*.

<sup>&</sup>lt;sup>101</sup> *Holcomb, et al.*, BP-18-E-JP03-02-CC01 at 22.

<sup>&</sup>lt;sup>102</sup> *Frederickson & Linn*, BP-20-E-BPA-22 at 15. SMUD also gave a presentation at a pre-rate case workshop in which it claimed that exports from the Pacific Northwest to California would decrease by 33 percent as a result of the BP-18 hourly rate change. *See Frederickson & Linn*, BP-20-E-BPA-22 at 15, BP-20-E-BPA-22-AT03 at 13. <sup>103</sup> *Frederickson & Linn*, BP-20-E-BPA-22 at 15.

not increase by \$8/MWh as JP01 previously predicted.<sup>104</sup> The foregoing contradictory evidence demonstrates that JP01's underlying economic theory, which posits that the hourly rate acts as a barrier to all exports, is fundamentally unsound and further compels that its new evidence in this proceeding should be given no weight.<sup>105</sup>

## I. <u>Conclusion and Requested Decision: BPA Has Substantial Evidence to Adopt the</u> <u>Settlement</u>

Bonneville has substantial evidence to adopt the initial proposal and Settlement and reject JP01's purported evidence. JP01's economic theory and regression analysis should be discredited and given no weight, so too should any claims of unintended consequences to Northwest entities or JP01 members.

## II. ISSUE 2: WHETHER ADOPTING THE SETTLEMENT RATES WOULD BE ARBITRARY AND CAPRICIOUS

## A. <u>Position Summary</u>

Any decision to reject the Settlement would be arbitrary and capricious given the substantial evidence supporting the Settlement and the lack of credible evidence of unintended consequences.

## B. <u>The Administrator Has No Basis to Alter the Conclusions and Rate Design from</u> the BP-18 Rate Proceeding

The Administrator set forth a clear decision in the BP-18 rate proceeding, concluding that the Southern Intertie hourly rate design should be revised to (1) ensure that Bonneville reliably recovers its costs for the Southern Intertie by increasing the incentive to purchase LTF service; and (2) ensure that different customer groups are paying their fair share of the facility costs.<sup>106</sup> The primary bases for this conclusion were (a) the extensive evidence of seams issues between

<sup>&</sup>lt;sup>104</sup> *Id.* at 16.

<sup>&</sup>lt;sup>105</sup> *Id.* at 15.

<sup>&</sup>lt;sup>106</sup> BP-18 ROD at 177-78; Frederickson & Linn, BP-20-E-BPA-22 at 7-9.

Bonneville and California, coupled with an increasing amount of solar generation in California that reduced the number of peak load hours to just five hours per day, and (b) declining interest by customers in LTF service.<sup>107</sup>

As described above, substantial evidence exists in the BP-20 record that the seams issues persist and that the number of peak hours in California is still only five hours per day, perhaps even fewer given further increases in installed solar generation capacity in California. The presence of this evidence, and the lack of substantial evidence to the contrary or other change in any other relevant factor, *requires* the Administrator to reach the same conclusion reached in the BP-18 rate proceeding and to adopt the Settlement. The Settlement, by applying similar acrossthe-board increases to all transmission rates, maintains the relative pricing of LTF service and hourly service on the Southern Intertie and thus (1) preserves the incentive for customers to invest in LTF service established in the BP-18 rate proceeding, and (2) ensures that hourly customers are paying their fair share of the Southern Intertie costs.<sup>108</sup> To avoid an arbitrary and capricious decision, Bonneville "cannot rely on factors which Congress has not intended it to consider, entirely fail to consider an important aspect of the problem, or offer an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise."<sup>109</sup> With conclusive evidence of the persistence the seams issues and that the Settlement embodies the objectives of the BP-18 rate decision, Bonneville would be acting arbitrarily and capriciously to reach a decision that ignored

<sup>&</sup>lt;sup>107</sup> BP-18 ROD at 131-135.

<sup>&</sup>lt;sup>108</sup> JP01-BPA-28-125 ("the BP-18 hourly rate increase changed the relative price of hourly and long-term firm transmission service, creating incentive to purchase long-term firm transmission service. The proposed BP-20 rates does not change the relative price of hourly and long-term firm transmission service, and, as a result, maintains the incentive established in the BP-18 rate proceeding.").

<sup>&</sup>lt;sup>109</sup> California Energy Comm'n v. Bonneville Power Admin., 909 F.2d 1298, 1313 (9th Cir. 1990) (quoting Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automotive Insurance Co., 463 U.S. 29, 43 (1983)).

this evidence, especially when JP01's claims of unintended consequences have been so thoroughly discredited.<sup>110</sup>

Bonneville may certainly change its existing rate design, but in doing so it must provide a reasoned explanation for the change and "show that there are good reasons for the new policy."<sup>111</sup> In explaining a change in policy (or rate design), "an agency must also be cognizant that longstanding policies may have engendered serious reliance interests that must be taken into account."<sup>112</sup> It must offer a reasoned explanation for disregarding the facts and circumstances that underlay or were engendered by the prior policy.<sup>113</sup> An "unexplained inconsistency in agency policy is a reason for holding an interpretation to be an arbitrary and capricious change from agency practice," and a policy of this sort is unlawful and receives no *Chevron* deference.<sup>114</sup>

Under the Administrative Procedures Act, any change in policy or practice, such as the hourly rate design, must be cogently explained and supported by evidence in the record. In other words, "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made."<sup>115</sup> An agency cannot act on pure speculation or contrary to the evidence in the record, <sup>116</sup> and, if changing its course, the agency "is obligated to supply a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance."<sup>117</sup> When Bonneville has

<sup>&</sup>lt;sup>110</sup> Dep't of Water & Power of City of Los Angeles v. Bonneville Power Admin., 759 F.2d 684, 690 (9th Cir. 1985) (citing 5 U.S.C. § 706(2)).

<sup>&</sup>lt;sup>111</sup> Encino Motorcars, LLC v. Navarro, 136 S. Ct. 2117, 2126 (2016) (internal quotations and citations omitted).

<sup>&</sup>lt;sup>112</sup> *Id.* (internal quotations and citations omitted).

<sup>&</sup>lt;sup>113</sup> *Id*.

<sup>&</sup>lt;sup>114</sup> *Id*.

<sup>&</sup>lt;sup>115</sup> Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (internal citation omitted).

<sup>&</sup>lt;sup>116</sup> Arizona Cattle Growers' Ass'n v. Salazar, 606 F.3d 1160, 1164 (9th Cir. 2010).

<sup>&</sup>lt;sup>117</sup> Motor Vehicle Mfrs. Ass'n of U.S., Inc., 463 U.S. at 42; see also Nw. Environmental Defense Center v. Bonneville Power Admin., 477 F.3d 668, 687-688 (9th Cir. 2007).

arbitrarily departed from its long-standing practices in the past, the Court has applied this standard to set aside Bonneville's actions.

Record evidence in this proceeding demonstrates there is no "reasoned analysis" that would justify changing course and that Bonneville cannot justify reaching a different conclusion in the BP-20 proceeding on the same facts and justifications that were determinative in the BP-18 rate proceeding. As explained above, JP01's principal claim of changed facts and circumstances is its claim of purported unintended consequences to various Northwest entities.<sup>118</sup> But, as the record indicates, and as outlined above in Section I.B, JP01's "unintended consequences" theory relies solely on a flawed economic theory and a discredited regression analysis. While JP01 has presented no credible evidence of changed facts and circumstances, other evidence demonstrates the continued presence of the seams issues that motivated Bonneville to modify the hourly rate design in the BP-18 rate proceeding.

## C. <u>Conclusion and Requested Decision: Adopting the Settlement Is Not Arbitrary</u> <u>and Capricious</u>

Adopting the Settlement rates is consistent with the BP-18 rate decision and the rate design objectives contained therein and is consistent with the credible evidence presented in this proceeding; thus, adopting the Settlement and the transmission rates set forth therein would not be arbitrary or capricious.

## III. ISSUE 3: WHETHER THE SETTLEMENT RATES MEET BPA'S STATUTORY RATEMAKING REQUIREMENTS

Bonneville is subject to a variety of overlapping statutory obligations when establishing rates for transmission service. As relevant here, the Northwest Power Act requires Bonneville to establish and periodically review and revise the rates for the transmission of non-Federal power.<sup>119</sup>

<sup>&</sup>lt;sup>118</sup> Peters, BP-20-E-JP01-01-CC01 at 2-4.

<sup>&</sup>lt;sup>119</sup> NWPA § 7(a), 16 U.S.C. § 839e(a)(1).

Bonneville must set rates to recover, in accordance with sound business principles, the costs associated with the acquisition, conservation, and transmission of electric power over a reasonable period of years.<sup>120</sup> Further, The Northwest Power Act directs Bonneville to transmit and dispose of electric power and energy in such a manner as to encourage the most widespread use of power at the lowest possible rates to consumers consistent with sound business principles.<sup>121</sup> The Transmission System Act provides that rates shall be established with a view to encouraging the widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles.<sup>122</sup> The Transmission System Act also allows for uniform rates for transmission and specifies the cost of the transmission system shall be equitably allocated between Federal and non-Federal power utilizing the system.<sup>123</sup>

#### A. <u>Position Summary</u>

JP01's flawed economic theory and discredited regression analysis do not support a conclusion that Bonneville is unlikely to recover its costs, and the Settlement sets rates consistent with Bonneville's statutory mandate to establish the lowest possible rates consistent with sound business principles.

## B. JP01's Flawed Theory and Analysis Provide No Credible Evidence that Bonneville Will Fail to Recover Its Costs

To the extent that JP01 is propounding a theory that the BP-18 hourly rate design change will cause Bonneville to under-forecast net secondary revenues and thus cause BPA to fall short of its rate-setting or cost-recovery obligations, such a theory is without merit.<sup>124</sup> JP01's entire basis for alleging forgone revenues is the specious economic theory and regression analysis that

 $<sup>^{120}</sup>$  *Id*.

<sup>&</sup>lt;sup>121</sup> Flood Control Act of 1944, § 5, 16 U.S.C. § 825s.

<sup>&</sup>lt;sup>122</sup> Transmission System Act, § 9, 16 U.S.C. § 838g.

<sup>&</sup>lt;sup>123</sup> Transmission System Act, § 10, 16 U.S.C. § 838h.

<sup>&</sup>lt;sup>124</sup> Peters, BP-20-E-JP01-01-CC01 at 42-45.

has been so thoroughly discredited to merit no weight, as described in Section I.B. Without this regression analysis, JP01 offers no evidence that Bonneville will fail to meet its statutory cost-recovery or rate-setting obligations.

#### C. The Settlement Rates Are Consistent with Sound Business Principles

As described above, Bonneville must set its rates in accordance with sound business principles to recover the costs of transmitting electric power,<sup>125</sup> and Bonneville's transmission rates are to be established with a view to encouraging the widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles.<sup>126</sup> These directives embody conflicting principles, and the Administrator must reach a "reasonable accommodation of conflicting policies that were committed to the agency's care by the statute."<sup>127</sup> Congress also directed Bonneville to conduct its affairs in a sound and business-like manner, and actions in furtherance of Bonneville's "business interests consistent with its public mission" are presumed to be in accordance with the statutory "sound business principles" obligation.<sup>128</sup> This does not mean that "BPA always charge the lowest possible rates."<sup>129</sup>

By adopting the Settlement, Bonneville would be engaging in a "reasonable accommodation" and would be acting in accordance with its business interests, its public mission, and its statutory requirements. Specifically, the Settlement resolves complex and resource-

<sup>126</sup> Transmission System Act, § 9, 16 U.S.C. § 838g; Flood Control Act of 1944, § 5, 16 U.S.C. § 825s.

<sup>&</sup>lt;sup>125</sup> NWPA, § 7(a)(1), 16 U.S.C. § 839e(a)(1).

<sup>&</sup>lt;sup>127</sup> United States v. Fulton, 475 U.S. 657, 667 (1986); Aluminum Co. of Am. v. Bonneville Power Admin., 903 F.2d 585, 598 (9th Cir. 1989).

<sup>&</sup>lt;sup>128</sup> *Pac. Nw. Generating Coop. v. Bonneville Power Admin.*, 596 F.3d 1065, 1080 (9th Cir. 2010) ("*PNGC II*") ("we are particularly deferential to the agency's assessment of whether its actions further BPA's business interests consistent with its public mission." (citations and quotations omitted)).

<sup>&</sup>lt;sup>129</sup> Alcoa, Inv. v. Bonneville Power Admin., 698 F.3d 774, 789 (9th Cir. 2012); *Cal. Energy Comm'n v. Bonneville Power Admin.*, 909 F.2d 1298, 1308 (9th Cir. 1990) ("Also, the statutes do not dictate that BPA always charge the lowest possible rates. 16 U.S.C. § 838g directs that rates be set 'with a view to encouraging ... the lowest possible rates to consumers....' The words 'with a view to encouraging' do not constitute a statutory command that the prices charged to consumers always be the lowest possible.... In addition, the direction to charge the lowest possible rates is tempered by the addition of the clause "consistent with sound business principles." 16 U.S.C. § 838g.").

intensive rate-making issues, and it allows Bonneville to recover its costs (and no more than its costs).<sup>130</sup> To the extent that the BP-18 hourly rate design is implicitly carried forward in the Settlement,<sup>131</sup> the hourly rate design also comports with sound business principles because it continues to preserve the incentives for customers to invest in LTF service while fairly apportioning the Southern Intertie costs between customer classes.<sup>132</sup> As Bonneville Staff testified, LTF service contracts "typically last at least several years, and the customers commit to pay for that service whether they utilize it or not."<sup>133</sup> And, "[i]f the amount of long-term firm service that customer purchased decreased, BPA would have to rely on the sales of short-term transmission service for cost recovery."<sup>134</sup> As a result, short-term transmission revenues would be more volatile and LTF service revenue, and the amount of short-term service reserved would largely depend on load and resource conditions and the resulting economic of selling energy over the Southern Intertie on a short-term basis.<sup>135</sup> Bonneville Staff expressed concern that this may change yearly, "impacting BPA's ability to set rates to recover the costs of the Southern Intertie."<sup>136</sup> These concerns highlight that Bonneville has a valid business interest to incentivize customers to invest in LTF service.

In contrast to the Settlement's prudent and reasonable accommodation, JP01 demands that Bonneville immediately adopt nearly free hourly transmission rates for no clear benefit.<sup>137</sup> Any decision adopting JP01's free or nearly-free hourly rate proposal would be a violation of

<sup>&</sup>lt;sup>130</sup> Frederickson, et al., BP-20-E-BPA-19 at 8.

<sup>&</sup>lt;sup>131</sup> Frederickson & Linn, BP-20-E-BPA-22 at 5-6.

<sup>&</sup>lt;sup>132</sup> BP-18 ROD at 177-78.

<sup>&</sup>lt;sup>133</sup> Frederickson & Linn, BP-20-E-BPA-22 at 8-9 (citing the BP-18 ROD at 133).

<sup>&</sup>lt;sup>134</sup> *Id.* at 9.

<sup>&</sup>lt;sup>135</sup> Id.

 $<sup>^{136}</sup>$  Id. (citing the BP-18 ROD at 133).

<sup>&</sup>lt;sup>137</sup> *Peters*, BP-20-E-JP01-01-CC01 at 47-48 (suggesting that the hourly rate should be discounted to "a nominal amount such as \$0.25/MWh"). JP01's only reason for not demanding free hourly service was that "zero' may not be an accepted value in some software systems." *Id*.

Bonneville's statutory obligations and contrary to sound business principles for several reasons. First, such a decision would ignore the effects of the seams issues and concerns about LTF service revenues, discussed above. Second, adopting JP01's proposal would effectively give away hourly transmission for nothing in return. JP01 claims that discounting the hourly rate to zero or near zero "should have corresponding beneficial effects, by encouraging trade and thus increasing more efficient energy flows and the more efficient use of transmission capacity."<sup>138</sup> But JP01's claims of efficiency are based on its erroneous economic theory (discussed in Section I.B above).<sup>139</sup> In contrast, incentivizing customers in invest in LTF actually improves utilization. "By better incenting investment in long-term firm, the rate change increased the probability of full subscription of the segment, which minimizes the amount of transactions that would face an incremental transmission costs."<sup>140</sup> JP01 has identified no benefit to Bonneville or the region should it (misguidedly) provide nearly free hourly transmission service.

Moreover, adopting JP01's preferred solution of Bonneville setting the hourly rate to zero or nearly zero or adopting non-rate solutions would cause Bonneville to forgo revenues<sup>141</sup> without a corresponding statutory directive to do so.<sup>142</sup> Discretionary decisions, like rate design decisions,

<sup>&</sup>lt;sup>138</sup> Peters, BP-20-E-JP01-01-CC01 at 47.

<sup>&</sup>lt;sup>139</sup> Moreover, BPA has a statutory obligation to recover its costs. *See* JP01-PP-28-6 ("In this context, economic efficiency must be balanced with considerations such as equity between customer classes and stable cost recovery. If maximum possible usage of the intertie at all times were the only relevant issue, BPA would not charge anyone for use of the facilities at any time and could go further to pay others to use the facilities. Conversely, encouraging full long-term subscription of the Southern Intertie segment ensures the full capacity of the facilities can be utilized at no marginal costs while simultaneously ensuring stable cost recovery.").

<sup>&</sup>lt;sup>140</sup> *Deen*, BP-20-E-PP-02 at 3.

<sup>&</sup>lt;sup>141</sup> See Frederickson & Linn, BP-20-E-BPA-22 at 30 (stating that adopting JP01's approach would "reduce[] BPA's revenue, thereby increasing costs to all of BPA's remaining Southern Intertie transmission customers. Finally, the non-rates alternatives that JP01 apparently seems to favor would increase costs to Southern Intertie transmission customers overall, not decrease them.").

<sup>&</sup>lt;sup>142</sup> See Pac. Nw. Generating Coop. v. Bonneville Power Admin., 580 F.3d 792, 820-25 (9th Cir. 2009) ("PNGC I") (finding that Bonneville acted contrary to sound business principles by forgoing revenues when Congress had not created an applicable exception and finding that subsidizing one customer's energy rates contradicts BPA's statutory mandate to operate in a business-like manner); *PNGC II* at 1080-81 (finding that entering an agreement to provide a "non-obligatory gift of up to \$32 million" for "nothing in return" violated Bonneville's obligation to act in accordance with sound business principles).

that forgo revenues are actions the Ninth Circuit has found to violate Bonneville's statutory obligations, and Bonneville can avoid this error by rejecting JP01's demands.<sup>143</sup> As with the BP-18 hourly rate design change, the Settlement should provide long-term stable revenues to cover the Southern Intertie segmented costs, and it should increase the amount of revenues from hourly service sales.<sup>144</sup> In sum, the Settlement, like the BP-18 hourly rate design change, improves Bonneville's financial health by creating and maintaining incentives for long-term and stable revenues while assuring that its Southern Intertie rate design meets basic fairness requirements.

### D. <u>Conclusion and Requested Decision: The Settlement Rates Are Consistent with</u> <u>BPA's Ratemaking Requirements</u>

The Administrator should conclude that JP01's flawed analysis provides no credible evidence that Bonneville will fail to recover its costs and that the Settlement results in rates that are consistent with sound business principles.

#### **CONCLUSION**

The Administrator should adopt the Settlement. The record demonstrates that the Administrator has substantial evidence to adopt the Settlement and reject JP01's because (1) seams issues continue to exist; (2) LTF service continues to be attractive and customers renew LTF service at very high rates; and (3) there is no credible evidence of unintended consequences. The Administrator also should conclude that it would be arbitrary and capricious to reject the Settlement and to rely on JP01's evidence; indeed, the Administrator *must* accept the Settlement rates as a matter of law given there is no other substantial evidence on which to base a decision. Further, the Administrator should conclude it that would be arbitrary and capricious to discount

<sup>&</sup>lt;sup>143</sup> *PNGC I* at 821-23; *PNGC II* at 1080-81.

<sup>&</sup>lt;sup>144</sup> Frederickson & Linn, BP-20-E-BPA-22 at 8-9, 30.

southbound hourly rates on the Southern Intertie in the BP-20 rate period given the evidence of ongoing seams issues.

Respectfully submitted,

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May 6, 2019

# LIST OF EXHIBITS

Exhibit No.	Exhibit Name	Date Filed	Status
BP-20-E-PP-02	Rebuttal Testimony of Michael Deen on behalf of the Public Power Council	March 28, 2019	Admitted
BP-20-E-PX-01	Rebuttal Testimony of P. Kevin Wellenius on behalf of Powerex Corp.	March 28, 2019	Admitted
BP-20-E-PX-02	Rebuttal Testimony of Justin McCrary on behalf of Powerex Corp.	March 28, 2019	Admitted
BP-20-Q-PP-01	Qualification Statement of Michael Deen	March 28, 2019	Admitted
BP-20-Q-PX-01	Qualification Statement of P. Kevin Wellenius	March 28, 2019	Admitted
BP-20-Q-PX-02	Qualification Statement of Justin McCrary	March 28, 2019	Admitted
BP-20-M-JP04-02	Joint Party 4's Motion to Admit Data Requests and Responses into the Record	April 26, 2019	Admitted

# **CERTIFICATE OF SERVICE**

I hereby certify that I electronically filed the foregoing on May 6, 2019 by uploading it to the Bonneville Power Administration's secure website. Pursuant to Section 1010.10(a) of the Rules of Procedure of the Bonneville Power Administration, such filing constitutes service on all Litigants.

Submitted by,

<u>/s/ Tyler S. Johnson</u> Tyler S. Johnson Counsel for Powerex Corp., Member of Joint Party 4

### UNITED STATES OF AMERICA DEPARTMENT OF ENERGY BEFORE THE BONNEVILLE POWER ADMINISTRATION

Fiscal Year 2020-2021 Proposed)Power and Transmission Rate)Adjustments)

**BPA File No.: BP-20** 

# INITIAL BRIEF OF PUBLIC POWER COUNCIL

### CATEGORY AND GENERAL TOPIC AREA: Power Rates Net Secondary Revenue Forecast

May 6, 2019

Issue: Whether BPA should change how it models in the net secondary revenue forecast the value of secondary sales related to firm surplus energy not serving Tier 2 and "committed purchases."

#### **SUMMARY OF POSITION**

Pursuant to Section 1010.17 of the Rules of Procedure of the Bonneville Power Administration (BPA) and the Order Amending Procedural Schedule (BP-20-HOO-12), the Public Power Council (PPC) submits this initial brief in support of its proposal that BPA change its approach to valuing certain energy sources in the net secondary revenue forecast. Specifically, BPA should value firm surplus energy not serving Tier 2 and "committed purchases" at the "critical water price" forecast. Alternatively, PPC also supports a proposal to value this surplus energy at the price assumed for firm surplus serving Tier 2. Either the "critical water price" or the Tier 2 price would more accurately reflect the value of surplus energy as firm across all water conditions. The Administrator should revise the agency's approach to valuing firm surplus energy not serving Tier 2 and "committed purchases" in the net secondary revenue forecast.

#### **ARGUMENT**

In response to PPC's proposals over the last several rate cases, BPA Staff has proposed in the BP-20 Initial Proposal to change two of its practices for modeling net secondary revenues. First, BPA Staff has proposed to calculate the net secondary revenue credit in power rates based on the true average of BPA's stochastic revenue simulations rather than using a mean of the middle 10 percent of simulations.<sup>1</sup> Second, BPA Staff has proposed to change the way it models the value of extra-regional market sales in calculating the net secondary revenue credit.<sup>2</sup> Under this proposal, BPA would no longer discount in RevSim the value of secondary energy sold to

<sup>&</sup>lt;sup>1</sup> Mandell et al., BP-20-E-BPA-18, at 18-20.

<sup>&</sup>lt;sup>2</sup> *Id.* at 16-17.

markets outside the Pacific Northwest. These two changes will lead to a more accurate forecast and credit for net secondary sales, and therefore, more accurate power rates.<sup>3</sup> PPC appreciates BPA Staff's willingness to implement these changes and urges the Administrator to adopt them for the BP-20 rate period.

In addition to these changes, the Administrator should adopt a third change that would further improve the accuracy of the agency's net secondary revenue forecast – the agency should value firm surplus energy not serving Tier 2 and "committed purchases" at the "critical water price," and not at the spot or short-term market price.<sup>4</sup> This would better reflect the value of that surplus power as firm across all water conditions and would increase the net secondary revenue forecast by approximately \$7.4 million per year and \$14.9 million during the rate period.<sup>5</sup>

"Firm surplus" is the energy that results when BPA's resources under critical water conditions exceed its firm load obligations. "Committed purchases" represent energy purchased by BPA to serve loads in Southeast Idaho out of BPA's balancing authority area. "Because these loads are already in BPA's firm load obligations, the hedging purchase of physical power means that an additional amount of power is available to market or avoid balancing purchases."<sup>6</sup> Like firm surplus energy, committed purchases energy is available to be marketed across all water conditions and to contribute to the net secondary revenue credit in power rates.

BPA currently values the energy from firm surplus and committed purchases as part of its regular inventory for secondary sales.<sup>7</sup> The forecasted value of that inventory is adjusted for variations in water supply, natural gas prices, and other factors and results in a net secondary

<sup>7</sup> *Id.* at 7.

<sup>&</sup>lt;sup>3</sup> Deen & Bush, BP-20-E-PP-01, at 4-6.

<sup>&</sup>lt;sup>4</sup> *Id.* at 6.

<sup>&</sup>lt;sup>5</sup> *Id.* at 4, 8.

<sup>&</sup>lt;sup>6</sup> *Id*. at 6.

revenue forecast based on spot or short-term market price.<sup>8</sup> This forecast does not accurately reflect the value of firm power available under all water conditions and is substantially below the price BPA is likely to collect by marketing that energy on a forward basis.<sup>9</sup>

Indeed, when BPA must purchase power to make up a deficit in its firm capability, it uses the forecast generated using the "critical water price" run of Aurora, and not the spot or shortterm market price forecast.<sup>10</sup> If BPA uses the "critical water price" to value *purchases* of firm energy in case of a deficit, it is only logical that the agency would use the same value for *sales* of firm energy in case of a surplus. Given the firmness and favorable environmental attributes of BPA's firm power, Power Services would certainly be expected to market that energy on a forward basis and achieve at least this value.<sup>11</sup>

BPA Staff agrees with PPC "that BPA's surplus firm energy has real value above and beyond a spot or short-term market price, and that Power Services' marketing efforts may be able to realize the value."<sup>12</sup> Because forward market sales tend to include a risk premium compared to spot market prices, "it may be reasonable to assume that BPA would attempt to make forward market sales of firm surplus to receive some of that risk premium."<sup>13</sup> Nonetheless, BPA staff expresses concerns that assuming a higher forward market price instead of a lower spot market price would place greater financial risk on BPA by locking a higher credit into rates before the sale actually happened and by calculating the risk premium based on a snapshot in time that was likely to change.<sup>14</sup>

- <sup>10</sup> *Id.* at 7.
- <sup>11</sup> *Id.* at 8.

<sup>&</sup>lt;sup>8</sup> Deen & Bush, BP-20-E-PP-01, at 7.

<sup>&</sup>lt;sup>9</sup> *Id.* at 8.

<sup>&</sup>lt;sup>12</sup> *Fisher et al.*, BP-20-E-BPA-21, at 7.

<sup>&</sup>lt;sup>13</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>14</sup> *Id.* at 5.

BPA Staff seems to disagree with PPC that modeling firm surplus and committed purchases energy at the critical water price forecast would not adversely affect Power Services' risk profile during the upcoming rate period, but then concedes that it is "mostly a matter of timing."<sup>15</sup> The agency would not face greater financial risk because "the consequence of a higher or lower net secondary revenue forecast in base rates would ultimately be borne by the same customer group."<sup>16</sup> As BPA Staff points out, power customers are subject to BPA's risk adjustment provisions and would ultimately bare the risk "either through higher base rates and a lower probability of a risk adjustment triggering, or lower base rates and higher probability of a risk adjustment triggering."<sup>17</sup> In the opinion of BPA Staff, customers should choose the former and not count on forward sales being included in the base rates until they actually happen.

This position, however, ignores the customers' message to the agency about *their* preferred choice. It prioritizes the general principle of rate stability over the customers' message that "any" increase in the base power rates "is burdensome to preference customers and their ultimate consumers in light of the trajectory of recent rate cases."<sup>18</sup> The power customers are keenly aware of the risks associated with marketing power, and recognize that a significant component of the rate challenges facing Power Services is related to revenues.<sup>19</sup> The customers are not asking the agency to take on undue or unknown risks here. Instead, consistent with their commitment to support BPA's efforts to make calculated improvements to the agency's marketing and risk managements practices,<sup>20</sup> the customers are simply asking the agency to make an intelligent and fair choice about the expected value of net secondary revenues.

<sup>18</sup> Deen & Bush, BP-20-E-PP-01, at 2.

<sup>&</sup>lt;sup>15</sup> *Fisher et al.*, BP-20-E-BPA-21, at 12.

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>&</sup>lt;sup>19</sup> *Id.* <sup>20</sup> *Id.* 

Despite its initial reluctance, BPA Staff ultimately seems to recognize the customers' logic in asking BPA to change its approach for valuing firm surplus and committed purchases energy. Having agreed with PPC's point that "BPA's surplus firm energy has real value above and beyond a spot and short-term market price,"<sup>21</sup> BPA Staff also acknowledges that "using the forward market price is a reasonable proxy for the actual market transaction cost when small amounts of firm surplus must be valued."<sup>22</sup> It further acknowledges that "[v]aluing unsold firm surplus at the forward market price for purposes of setting rates would remove the incentive to rush an actual sale for the sole purpose of making the sale in time to be included in final rates."<sup>23</sup> Therefore, BPA Staff concludes that "it may be reasonable to use the same treatment for Tier 2 pricing as for valuing firm surplus."<sup>24</sup>

#### **REQUESTED ACTION**

Although PPC proposed in its testimony that BPA value firm surplus and committed purchases energy in the net secondary revenue forecast using the output of the "critical water price" run of AURORA, PPC supports BPA Staff's proposal to value this energy at the same price assumed for firm surplus serving Tier 2. PPC urges the Administrator to adopt this approach for purposes of the net secondary revenue forecast because it would more accurately reflect the value of BPA's firm surplus energy.

Dated this 6th day of May, 2019.

Respectfully submitted by,

/s/ Irene A. Scruggs Irene Scruggs Attorney for Public Power Council

<sup>&</sup>lt;sup>21</sup> *Fisher et al.*, BP-20-E-BPA-21, at 7.

<sup>&</sup>lt;sup>22</sup> *Id.* at 12.

<sup>&</sup>lt;sup>23</sup> *Id.* at 13.

<sup>&</sup>lt;sup>24</sup> Id.

Filing Code	Document Title	Date Filed	Status
BP-20-E-PP-01	Direct Testimony of Public Power Council on Power Rates and Financial Issues	2/21/19	Admitted
BP-20-Q-PP-01	Qualification Statement of Michael Deen	2/21/19	Admitted
BP-20-Q-PP-02	Qualification Statement of Aaron Bush	2/21/19	Admitted

# POST-HEARING EXHIBIT LIST OF PUBLIC POWER COUNCIL

# **CERTIFICATE OF SERVICE**

I hereby certify that I electronically filed the foregoing on May 6, 2019 by uploading it to the Bonneville Power Administration's secure website. Pursuant to Section 1010.10(a) of the Rules of Procedure of the Bonneville Power Administration, such filing constitutes service on all Litigants.

Submitted by,

<u>/s/ Irene A. Scruggs</u> Irene A. Scruggs General Counsel Public Power Council