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

2014 WHOLESALE POWER AND TRANSMISSION RATE PROCEEDING	)))	**BPA Docket No. BP-14**

INITIAL BRIEF OF JOINT PARTY 24
Consisting of:

Industrial Customers of Northwest Utilities
and
Simpson Tacoma Kraft Company, LLC

DISPATCHABLE ENERGY RESOURCES BALANCING SERVICE RATE

May 1, 2013

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I. STATEMENT OF THE CASE

During and prior to this general rate case ("BP-14"), Bonneville Power Administration ("BPA") Staff and the parties have worked jointly to consider the issues surrounding the Dispatchable Energy Resource Balancing Service ("DERBS") rate, and all concerned parties recognize that changes should be made. Industrial Customers of Northwest Utilities ("ICNU") and Simpson Tacoma Kraft Company, LLC ("Simpson") (jointly, "JP24") submit that the DERBS rate should be discontinued for cogeneration customers to allow opportunity to pursue non-rate measures, and to analyze DERBS rate effects on cogeneration facilities and the use of renewable fuel sources. If the DERBS rate is maintained, then changes should be made to ensure it is more equitable and consistent with the principles of cost causation. JP24 appreciates Staff's diligence and efforts to present the Administrator with equitable proposals in this matter involving the relatively novel DERBS rate, and JP24 urges the Administrator and Staff to creatively modify the DERBS rate to ensure it does not unnecessarily harm customers.

Before the Administrator in this matter are proposals: 1) to change the billing determinants for the DERBS rate; 2) to extend the current 2 megawatt ("MW") dead band to a 3 MW dead band; and 3) to lower the DERBS rate revenue requirement to recognize that fewer reserves will be needed, because, in part, non-Federal thermal generators have improved their scheduling practices. BPA Staff and JP24 are in agreement on two of the three issues, and Staff generally agrees that more recent and accurate information should be used to set the overall revenue requirement.

JP24 agrees with BPA Staff that a switch to five-minute average revenue meter data as a billing determinant is warranted. Currently the billing determinant is the 1-minute

average Supervisory Control and Data Acquisition System data. The use of five-minute data are preferable as it increases transparency, and reduces administrative complexity and error.

JP24 further agrees with BPA Staff that an expansion to a 3 MW dead band is warranted to better align rate charges with cost causation. In addition, the expansion will better serve customers who cannot control fluctuations outside the current 2 MW dead band due to the difficulty in scheduling renewable energy resources, and better incentivize generators to manage the large deviations that are within their control.

JP24 and BPA Staff are also in agreement that the improved scheduling practices of generators and changes in the number of DERBS customers should be reflected in the final rates. JP24 and Staff, however, disagree on the proper method of changing the rate design to recognize these improved practices. There are a wide variety of options available to the Administrator to lower the proposed DERBS rate increase, and the Administrator should use his discretion to ensure that DERBS customers do not pay for reserves that BPA will not actually use. Given the fact that the DERBS rate is new and it is very difficult to accurately estimate the amount of reserves needed for thermal generators, the Administrator should adopt a lower revenue requirement that protects DERBS customers in the event that current reserve need forecasts are too high.

II. ARGUMENT

A. The Administrator Should Significantly Modify or Discontinue the DERBS Rate for Cogeneration Customers and Pursue Non-Rate Measures

The Administrator should abandon or significantly revise the DERBS rate for cogeneration resources because the rate has significant shortfalls in forecasting reserve usage and imposes an undue detriment on the operation and development of efficient and environmentally beneficial cogeneration resources in contravention of Federal energy policy. BP-14-E-IN-01 at

3:16–21. BPA should take additional non-rate steps to address the usage of reserves by non-Federal thermal generators before continuing the current DERBS rate. Id. at 3:14–16. If the Administrator does not eliminate the DERBS rate for cogeneration customers, then he should limit its applicability to cogeneration resources and reduce the size of the rate impact on all customers.

BPA should work with individual customers to improve customer scheduling practices and to better understand the operational characteristics of their individual plants, which would enable BPA to hold fewer reserves for non-Federal thermal plants. Id. at 3:24–4:2. BPA could also pursue changes to its own scheduling regime, such as "committed intra-hour scheduling for non-Federal thermal to potentially reduce reserve usage and the need for the DERBS rate. BPA has established 30-minute scheduling options and should adopt similar scheduling for thermal generators to lower the cost of reserves." Id. 4:3–6.

In addition, analysis is needed on how the rate adversely affects the efficient and environmentally beneficial cogeneration resources within BPA's balancing area. BPA should investigate how the unique characteristics of cogeneration resources may reduce BPA's need for reserves. Cogeneration resources often serve load, and BPA calculates the need for load and generation reserves separately. This may result in "double counting cogeneration reserve needs and overcharging cogeneration customers." Id. at 4:10–11.

As currently structured, the DERBS rate contravenes the Federal policy set forth in an Executive Order entitled "Accelerating Investment in Industrial Energy Efficiency." BP-14-E-IN-02. The Order identifies numerous economic and environmental benefits of combined heat and power ("CHP") generation and orders the Department of Energy, among other agencies, to "coordinate and strongly encourage efforts to achieve a national goal of deploying 40

gigawatts of new, cost effective industrial CHP . . . ." BP-14-E-IN-01 at 4:19–20. The Order tasks agencies with "utiliz[ing] their respective relevant authorities . . . to encourage investment in industrial energy efficiency and CHP" and "providing incentives for the deployment of CHP . . . ." BP-14-E-IN-02 (Exec. Order No. 13,624, 77 Fed. Reg. 54,779 (Aug. 30, 2012)). BPA's current DERBS rate conflicts with this policy encouraging the development of CHP resources because it imposes an unnecessary and inequitable charge on operators of CHP and cogeneration facilities. BP-14-E-IN-01 at 5:3–5.

BPA should commit itself to finding other means to reduce reserve usage by non-Federal thermal plants through collaboration with customers and revisions to its scheduling practices. At a minimum, BPA should discontinue or substantially modify the DERBS rate for CHP facilities as the charges are contrary to Federal energy policy related to CHP development. Id. at 5:8–12.

B. JP24 Supports BPA's Decision to Use Five Minute Average Data From Revenue Meters as a Billing Determinant

The Administrator should accept Staff's proposed change from one-minute Supervisory Control and Data Acquisition System data to five-minute average revenue meter data as a billing determinant. The five-minute average will mean that the DERBS billing determinant for a given hour will be the highest of twelve five-minute average periods of station control error rather than the highest one-minute average. Such a method is "preferable, because there is a process to correct five-minute revenue meter data, while there is not for one-minute SCADA data." Id. at 10:21–23. Such a change will lead to "greater transparency to customers as well as reduce data errors." Id. at 10:20–21. BPA Staff discussed this and other possible changes in the pre-rate case process, and ICNU strongly supported moving to the five-minute data. JP24 continues to agree with BPA Staff that this change is reasonable and should be

adopted. This change is an excellent example of BPA Staff working creatively with rate case parties to make a reasonable and common sense revision that is not opposed by any parties.

C. The Administrator Should Increase the DERBS Dead Band From 2 MWs to 3 MWs

The DERBS rate dead band should be increased from 2 MWs to 3 MWs, because such a change better aligns BPA's rate charges with cost causation. Also, a wider dead band better incentivizes customers to effect changes in their scheduling behavior related to large deviations that most significantly contribute to the need for a DERBS rate. A wider dead band also reduces the chances of the dead band being a detriment to customers who cannot control fluctuations in consumption due to their use of a renewable "green fuel" resource.

1. Raising the Dead Band to 3 MWs Better Aligns BPA's Rate Charges with Cost Causation

The Administrator should adopt the position shared by JP24 and BPA Staff that an increase in the DERBS dead band from 2 MWs to 3 MWs is consistent with cost causation by imposing a larger portion of the DERBS rate on those customers for which BPA must hold reserves. JP24 agrees with BPA Staff that increasing the DERBS dead band from 2 MWs to 3 MWs is more equitable because those customers that cause large deviations requiring BPA to acquire reserves should be responsible for a larger share of the costs. As BPA Staff explained, smaller generators are incapable of causing a large deviation from schedule and an increase in the dead band would shift a small portion of the costs to those larger plants that contribute most of the need for reserves. BP-14-E-BPA-51 at 6:21—7:2. The current dead band is not serving one of BPA's intended purposes for the DERBS rate, which is to control and charge for outlier generators that use "a disproportionate share of reserves . . . ." BP-14-E-IN-01 at 9:20–22.

Generators incur DERBS charges based upon their *incs* and *decs*—"*[i]ncs* are when BPA must increase production when the aggregated production is less than hourly

scheduled, and *decs* are when the aggregate production is more than hourly scheduled." Id. at 7:10–12. A 3 MW dead band, "all else being equal, will increase the *inc* and *dec* rates, because the revenue requirement would be spread across a smaller level of billing determinants." BP-14-E-BPA-51 at 6:8–9.

The smaller level of billing determinants is appropriate because, of the 25 DERBS plants, six account for 88% of the total DERBS nameplate capacity. Id. at 6:15–18. The remaining 19 make up just 12% of the DERBS nameplate capacity for the total group, with a maximum individual nameplate rating of 64 MWs. Id. at 6:18-20. Therefore, the smaller DERBS generators "are incapable of causing a large deviation from schedule that is over [nameplate capacity.]" Id. at 6:20–22. As such, a "shift [of] a modest portion of imbalance costs to the larger plants, which have the larger contribution to the need for DERBS . . . is consistent with the principle of cost causation." Id. at 6:22–7:2. The resulting rate increase will incentivize control of the large deviations, which drive DERBS cost causation concerns. Id. at 6:9–14.

BPA Staff further notes that an increase in the dead band from 2 MWs to 3 MWs would have "little impact" on BPA. Id. at 6:23. Given that the proposed increase will have little impact on BPA and serves the goal of aligning rate charges to cost causation, the Administrator should adopt the mutually presented proposal to increase the DERBS dead band.

2. A 3 MW Dead Band Will Provide Better Incentives

Customers that have the most ability to control large and consistent deviations from generation schedules should pay a greater portion of the DERBS rate to provide them with incentives to control their deviations. BP-14-E-IN-01 at 9. Increasing the dead band to 3 MWs, BPA will allow customers that can control their deviations to better manage their behavior, and result in BPA appropriately charging larger customers for the "reserve usage of outlier

generators that used a disproportionate share of reserves relative to other Non-Federal thermal generators." Id. at 9:19-22.

The proposed incremental change from 2 MWs to 3 MWs enhances "the incentive structure of the rate design without causing undue cost shifts between customers." Id. at 10:6–9. As explained by ICNU witness Michael Deen, increasing the dead band provides correct incentives because those deviations that can be controlled are large and consistent differences from generation schedules. Id. at 8-10. A larger dead band "would have the effect of incentivizing customers to properly manage the deviations over which they have the most control and therefore have a greater positive effect in the upcoming rate period." Id. at 6:17-19. This provides both the pricing signal that BPA is intending to send to customers, and will provide incentives for customers to reduce the need for reserves due to large and consistent deviations.

3. The Current 2 MW Dead Band Harms Customers Using Difficult-to-Schedule Renewables

The Administrator should increase the dead band to 3 MWs to avoid penalizing cogeneration facilities and consumers of alternative "green fuels." For example, the 2 MWs dead band is working as a detriment to the Simpson facility in Tacoma, Washington, which powers its plant through a biomass, "green fuel" alternative. The Simpson facility is also a cogeneration facility. The variability in the Btu content of their renewable resource fuel, and the corresponding inconsistency in the steam emitted during the production process, can change electricity consumption and generation "instantaneously and take [it] outside the 2 MW bandwidth." BP-14-E-ST-02 at 5:16–19. Such volatility has made controlling station-control error to stay within a 2 MWs dead band extremely difficult, if not impossible.

Expanding the dead band to 3 MWs would better allow current customers using these green alternatives and CHP cogeneration facilities to avoid DERBS charges and also avoid

erecting an obstacle to other customers' development of cogeneration resources. The Administrator should make this incremental change to recognize, as it has in the past, "the difficulty in scheduling renewable energy resources," and to avoid penalizing the end-use customer for something it cannot control. BP-14-E-ST-01 at 6:9–14. At a minimum, the Administrator should adopt a modified DERBS rate and/or bandwidth for non-Federal thermal renewable energy facilities to accommodate the "normal" deviations in dealing with renewable resources. Id. at 6:15–7:3. Such a change would also be consistent with the President's Executive Order that BPA provide incentives for the development of cogeneration resources. BP-14-E-IN-01 at 4:13-5:12

D. The Administrator Should Reduce the DERBS Rate Because the Initial Proposal Estimate Relies on Outdated Data and Overstates the Need for Reserve Capacity

JP24 urges the Administrator to reject the current forecast of the DERBS reserve requirement as it will result in overcharging customers for unneeded reserve capacity. Unless changes to the forecasting design are made, use of pre-DERBS years will likely lead to the overcharging of customers and the overstating of the need for reserve quantity. BP-14-E-IN-01 at 6:28–29. The overstated, outdated data simply do not support a fair and just rate. BP-14-E-ST-01 at 9:13–14.

JP24 urges the Administrator to either not increase the current DERBS rate, or consider a forecast that recognizes that, given downward trends in occurrences, there will be a greater reduction in *incs* and *decs* capacity needs than currently forecast. The current DERBS rate uses data beginning from fiscal year ("FY") 2007 that was collected during a period in which there were few efforts to change generator behavior and no DERBS charges for station control errors. This results in the need for reserves for the non-Federal thermal sector being overstated. BP-14-E-ST-01 at 8:8–12. Post-implementation of the DERBS rate there was a 31%

reduction in *incs*, and a 20.4% reduction in *decs*. BP-14-E-IN-01 at 7:9-11. The reduction in billing determinants is a clear indication of changes in behavior of the non-Federal thermal users, and warrants an even greater adjustment to needed reserves from the estimate using data based on when the DERBS rate had not yet been implemented. The reduced need for reserves will produce a lower revenue requirement. There are a variety of options for the Administrator to lower the DERBS revenue requirement, and JP24 are not wedded to any specific option, but the Administrator should use his discretion to ensure that the DERBS rate is no higher than necessary.

1. The Current Approach Does Not Take into Account the Continued Potential to Improve Scheduling

Given the downward trend in thermal reserves usage and the potential for additional steps by BPA and customers, significant reductions in the DERBS revenue requirement would be appropriate. BPA Staff recognizes that the Final Proposal should account for the some scheduling improvements, but takes a conservative approach that may overstate BPA's need for reserves. BP-14-E-BPA-48 at 3:10-25. BPA Staff suggests a pro rata reduction to the rate. The reduction would correspond with the ratio of *inc* and *dec* needed in the FY 2007–FY 2011 data to the *inc* and *dec* shown in FY2012–2013. Id. at 3:20-4:2. JP24 appreciates BPA Staff's acknowledgement that the scheduling improvements should be recognized in the final rates, but urges the Administrator to take into account that the proposal still relies on outdated data, and fails to take into account the continuing improvement by generators in scheduling. The final revenue requirement should take into account the balancing capacity requirements resulting from the downward trend in *incs* and *decs*.

The Administrator should also consider the newness of this rate when reviewing the Final Proposal. The fact that the rate is new is important because there is a potential for

continued improvement in scheduling, especially if BPA engages with its customers to pursue the above suggested non-rate measures. BPA Staff agreed that investigating non-rate measures has merit. BP-14-E-BPA-51 at 4:6. While JP24 appreciates BPA Staff's concern that implementation of the measures by all generators is not guaranteed, improvement need not be an all or nothing proposition.

JP24 urges the Administrator to be mindful that its customers subject to the DERBS rate operate in a highly competitive market in which power supply costs have very significant impacts on the viability of their businesses in the Northwest. The Administrator should weigh the equities of the parties involved to decide where the risk of any error with this novel rate should fall. "The DERBS revenue requirement is extremely small in terms of BPA's overall revenues (only $5.9 million per year in the initial proposal) . . . ." BP-14-E-IN-01 at 8:1–2. In contrast, increase of power costs on generators significantly affects their operation and viability in the market. The Administrator should "consider this asymmetry of cost impact" when making its determination of where any error in the rate setting should fall. Id. at 8:5–6.

2. *Inc* and *Dec* Reductions May also Accompany a Corresponding Decrease in Peak Reserve Usage

As JP24 does not have the full set of non-Federal thermal data, JP24 is unable to take issue with BPA Staff's assertion that reduction in *inc* and *dec* occurrences have a less than proportionate change on the peak reserve usage needed. JP24, however, does not agree with the premise that such reductions do not have any corresponding effect on peak reserve needed. The greater the reduction in occurrences of *inc* and *dec*, the greater is the likelihood that peak reserve usage will fall. Put another way, the more generators improve and comply with their scheduling requirements, the more likely that the peak reserve usage will be lower as well. Given the

changes which have occurred to date, it should be also recognized that outdated reserve data provides little guidance to the appropriate peak usage for the rate period.

3. The Administrator Has Numerous Options to Reduce the DERBS Rate and Should Do So

The Administrator could simply freeze the current *inc* and *dec* rates, and allow DERBS customers and BPA Staff another two years to adjust to the rate and improve forecasting. In the alternative, the Administrator could reduce the proposed increase in the *inc* and *dec* rates by an amount greater than the scheduling improvements to date. For example, the Administrator could assume an additional five percent reduction in the proposed DERBS rate, which would reduce the need by 36% for *inc* and 25% for *dec*. BP-14-E-IN-01 at 8:6-10.

JP24 also advances for the Administrator's consideration, the following methods of alternatively calculating the rate to avoid the impact of the pre-DERBS outdated capacity requirement estimates:

- The capacity required for the class can simply be reduced by the ratio of the new billing determinants to the old billing determinants. "Thus, the reduction in *inc* needed would be 31.3 percent for this rate period and the *dec* capacity reduction would be 20.4 percent." BP-14-E-ST-01, at 11:6–8.

- For developing the non-Federal thermal class rate only, BPA's technical staff could perform an "incremental standard-deviation analysis for all within-hour capacity uses from only FY2012 data (plus any FY2013 data [] available)." Id. at 11:12–15. The result would become the basis for the allocation of coincidental capacity for the non-Federal thermal class DERBS rate. Other rate classes' rates would be determined using BPA's proposed historical-years method.

While these proposals are not perfect solutions, "each is 'good enough' to make a reasonable adjustment to the MW capacity needed for the DERBS rate." Id. at 13:5–6. JP24 urges BPA to be as aggressive as possible in its downward adjustment of the

DERBS reserve requirement forecast based on operational and scheduling improvements observed in FY2012 and the materially lower reserve usage relative to the historical record.

III. CONCLUSION

The Administrator should abandon or significantly modify the DERBS rate until further non-rate steps are taken and further analysis into the effects on renewable-fueled and cogeneration facilities are performed. Specifically, the Administrator should increase the restrictive 2 MW dead band to the more reasonable and equitable 3 MW bandwidth. The Administrator should adopt Staff's reasonable proposal to move to five-minute average data from revenue meters as a billing determinant. Finally, the Administrator should aggressively adjust downward the DERBS reserve requirement forecast based on the operational and scheduling improvements observed in FY 2012. The Administrator should consider the asymmetry of cost impacts, the downward trend in thermal reserves usage, and the potential for additional non-rate steps in the coming period when setting the DERBS rate.

DATED this 1st of May, 2013.

Respectfully submitted,

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ICNU AND SIMPSON POST-HEARING EXHIBIT LIST

	SPONSOR	DATE.	DESCRIPTION	Admitted? Y/N
WITNESS: ICNU: MICHAEL DEEN				
BP-14-E-IN-01	**Deen**	**1/28/13**	**Direct Testimony of ICNU DERBS, Tier 1 Demand Rate, and CFCT Rate Treatment**	**Y**
DIRECT EXHIBITS				
BP-14-Q-IN-01	**Deen**	**1/28/13**	**Qualifications of Michael Deen**	**Y**
BP-14-E-IN-02	**Deen**	**1/28/13**	**Executive Order**	**Y**
REBUTTAL EXHIBITS				
BP-14-E-IN-03	**Deen**	**3/11/13**	**Rebuttal Testimony of ICNU Transmission Financial Reserve Usage Transmission Segmentation Methodology**	**Y**
CROSS EXAMINATION EXHIBITS				
BP-14-E-IN-04	**ICNU**	**3/27/13**	**Cross-Examination Exhibit of ICNU 2004 Initial Transmission Proposal TR-04-E-BPA-03**	**Y**

NUMBER	SPONSOR	DATE.	DESCRIPTION	Admitted? Y/N
WITNESS: SIMPSON TACOMA: LINCOLN WOLVERTON				
BP-14-E-ST-01	**Wolverton**	**1/28/13**	**Direct Testimony of Simpson Tacoma Kraft Company**	**Y**
BP-14-E-ST-02	**Conkle**	**1/28/13**	**Direct Testimony of Simpson Tacoma Kraft Company**	**Y**
DIRECT EXHIBITS				
BP-14-Q-ST-01	**Wolverton**	**1/28/13**	**Qualifications of Lincoln Wolverton**	**Y**
BP-14-Q-ST-02	**Conkle**	**1/28/13**	**Qualifications of John Conkle**	**Y**
CROSS EXAMINATION EXHIBITS				
BP-14-E-ST-05	**Simpson**	**4/8/13**	**Cross-Examination Exhibit of Simpson Tacoma Responses to Data Requests ST-BPA-16, ST-BPA-17, ST-BPA-18, and ST-BPA-19**	**Y**

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing Initial Legal Brief on Bonneville Power Administration's Office of General Counsel, the Hearing Clerks, and all litigants in this proceeding by uploading it to the 2014 Rate Adjustment Proceeding secure website pursuant to BP-14-HOO-02 and BP-14-HOO-05.

Dated: May 1, 2013.

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