

**UNITED STATES OF AMERICA
U.S. DEPARTMENT OF ENERGY
BEFORE THE
BONNEVILLE POWER ADMINISTRATION**

IN THE MATTER OF:

**OVERSUPPLY MANAGEMENT COST-RECOVERY
RATE PROPOSED AS PART OF COMPLIANCE
FILING WITH THE FEDERAL ENERGY
REGULATORY COMMISSION**

Docket No. OS-14

**DOCUMENTS REFERENCED IN OS-14-E-CS-03,
THE REBUTTAL TESTIMONY OF WILLIAM A. PASCOE
WITNESSES FOR CAITHNESS SHEPHERDS FLAT, LLC**

This is OS-14-E-CS-04, consisting of a cover and 9 pages.

Bonneville Power Administration<http://www.bpa.gov>[BPA Home](#) ▶ [EE Home](#)**Promoting and fostering the efficient use of energy in the Pacific Northwest**

For 30 years, the Northwest has been a leader in treating energy efficiency and conservation as a power resource. The Northwest Power Act of 1980 called on the Northwest to give energy conservation top priority in meeting its power needs, and the region quickly learned that a megawatt saved is the equivalent of a megawatt produced.

As of 2009, energy efficiency accounted for only 1 percent of all electricity production in the United States. But in the Northwest, it accounted for 12 percent, thanks to collaboration among a number of entities - the Bonneville Power Administration, Northwest Power and Conservation Council, regional utilities, state agencies and environmental interests.

In fiscal year 2009 alone, BPA secured approximately 70 average megawatts of energy efficiency for the Northwest - enough energy to power 60,000 homes. Today, energy efficiency is more important than ever. It is clean and emission free. It is also low cost relative to new energy generating resources. It serves our national goals of reducing our carbon footprint and enhancing our energy independence. In short, it is the world's most environmentally and economically friendly energy resource.

**Contracts and Implementation Manual**

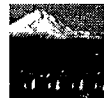
- ▶ Implementation Manual
- ▶ Energy Conservation Agreement
- ▶ Interim Solution 2.0 Files

**Conservation Sectors**

- ▶ Commercial
- ▶ Industrial
- ▶ Residential
- ▶ Agriculture
- ▶ Federal

**Energy Efficiency Innovation**

- ▶ Innovation Overview
- ▶ Smart Grid/Demand Response
- ▶ Energy Efficiency Emerging Technology
- ▶ Behavior Change

**Energy Efficiency Guidelines**

- ▶ BPA and the Sixth Power Plan
- ▶ Conservation Adjustment to the Contract High Water Mark (CHWM)
- ▶ Utility Sounding Board
- ▶ BPA Post-2011 Energy Efficiency Role

**News & Resources**

- ▶ Promotional - Informational Materials
- ▶ BPA Energy Efficiency Action Plan
- ▶ E Source Membership
- ▶ Residential Segmentation Research
- ▶ Utility Potential Calculator
- ▶ Conduit
- ▶ Brown Bag Videos
- ▶ EE Maximization Tool
- ▶ Energy Efficiency Financial Assistance Application
- ▶ Case for Conservation
- ▶ EE vs Mid-C Excel Analysis

**Energy Efficiency For Your Home**

- ▶ Money-Saving Energy Efficiency Tips
- ▶ Home Weatherization Information

News & Events

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Energy Efficiency
Capital Budget
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BPA Post-2011 Energy
Efficiency Role

Energy Smart
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IS 2.0 Updates

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

San Diego Gas & Electric Company,
Complainant,

v.

Sellers of Energy and Ancillary Services
Into Markets Operated by the California
Independent System Operator and the
California Power Exchange,
Respondents.

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Docket Nos. EL00-95-248
EL00-95-269

BONNEVILLE POWER ADMINISTRATION'S BRIEF ON EXCEPTIONS

Dated April 12, 2013

XIV.	ARGUMENT REGARDING THE SUMMER PERIOD: ALL OF DR. BERRY'S ALLEGATIONS AGAINST BPA ARE FATALLY FLAWED BECAUSE OF HER UNINFORMED AND INCORRECT OPPORTUNITY COST ASSUMPTIONS.....	81
A.	The ID Errs When, Without Any Reasoned Analysis, It Finds That Dr. Berry's Type I, II And III Allegations Constitute Violations Of The CAISO Tariff.	81
1.	The Marginal Cost Based Theory That Underlies The Alleged Tariff Violations Leads To Absurd Results.	82
B.	The ID Erroneously Adopts The "Perfect Competition" Standard Embedded In The California Parties' Tests For Tariff Violations.....	83
C.	The ID Errs When It Concludes That The Mid-C Off-Peak Price Was An Appropriate Proxy For BPA's Marginal Or Opportunity Cost.....	84
D.	BPA's Bids Into The CAISO Reflected Its Opportunity Costs, Which Are Driven By Complex And Competing Factors -- the Mid-C Index price does not fully reflect these factors.	84
1.	BPA's Bids Were Legitimate Market Behavior Because They Reflected The Varying Operational Flexibility Associated With The Movement Of Each Additional Amount Of Water On The System.	88
E.	The ID Errs In Concluding That The CAISO Real Time Market Was The Last Market In Which BPA Could Sell Its Energy.....	90
F.	Dr. Berry's Analysis Is Incorrect Because MMCP Is Not A Reasonable Proxy For BPA's Opportunity Cost.....	91
G.	Although Not Required To Do So, BPA Presented Significant Evidence Which Linked Each Alleged Anomalous Dids To Specific Constraints On BPA's System That Impacted The Bidding And Provided A Legitimate Business Reason For It – The ID Erred By Ignoring This Evidence.....	92
1.	Specific Operational Constraints During the Summer Period Which Influenced BPA Operations and its Bids in the CAISO Markets.	93
2.	Attachment A links the hours when BPA is alleged to have violated the tariff and the factors that impacted BPA's bids.	95
H.	Dr. Berry Improperly Includes In Her Analysis BPA's Replacement Reserve Bids, Which Are a Type of Ancillary Service Bid.....	96
1.	In Paragraph 75 The ID Combines Two Distinct Arguments Made By BPA And Draws A Flawed Conclusion.....	98

I

1. BPA's Bids Were Legitimate Market Behavior Because They Reflected The Varying Operational Flexibility Associated With The Movement Of Each Additional Amount Of Water On The System.

BPA's hydro generation is inherently energy-limited by the amount of water available and by constraints on the use of that water.³⁸⁰ As a result, the operational flexibility associated with the water behind the dams is the primary factor that drove the size and pricing of BPA's bids. At times, BPA had limited operational flexibility due to fish mitigation measures or other operational constraints and had to release a certain amount of water to augment flows on the river. Under those conditions, BPA had limited discretion regarding the timing of the generation.³⁸¹ Thus, when BPA had to move an amount of water through the system, BPA's bids tended to be at low or sometimes even negative-priced.³⁸²

At other times, when BPA had some degree of operational flexibility, BPA had more control over the timing and amount of surplus generation. Depending upon the degree of operational flexibility, BPA attempted to market the available energy in higher value periods.³⁸³ Under these conditions, BPA's bids attempted to reflect prices that were high enough to ensure that the energy was dispatched only if the clearing price was at or above BPA's view of the next best alternative.³⁸⁴ This could be a relatively high or low price depending upon BPA's view of the available alternatives over the next few hours or days.

³⁸⁰ BPA-001 (Oliver Direct) at 11:8-22.

³⁸¹ The fish and wildlife operational restrictions generally involved flow requirements on the river over HLH or LLH periods. With these HLH or LLH requirements BPA generally still has some operational flexibility to shift its limited surplus generation between hours. BPA-001 (Oliver Direct) at 77-78.

³⁸² BPA-001 (Oliver Direct) at 61:19-22 (Explaining that a -\$500/MWh bid into the CAISO helped "ensure that the bid would be taken and so that it could move that particular amount of water through the system to meet the flow objectives necessary to meet the mandated fish and wildlife requirements.")

³⁸³ *Id.* at 31:15-32:2.

³⁸⁴ BAP-001 (Oliver Direct) at 60:11-15 ("BPA considered its marginal cost to be the opportunity cost to place its limited energy surplus in the market at highest value periods, and not its production cost. We have also explained that we were willing to take the prices being established in the market at that time, and had alternative bilateral markets to the ISO.")

In addition there is some amount of water BPA can, if needed, draw from storage to generate power. Drawing down the reservoirs in this fashion creates a risk that BPA may need to make future market purchases to replace this power so that BPA can meet its load obligations.³⁸⁵ The bids associated with this amount of water must be high enough to assure that, if the sale is made, BPA can replace the power sold at an equal or lower price.³⁸⁶ During the Summer Period, the bids associated with storage water tended to be priced high due to the high and volatile replacement prices at the time.

Consequently BPA's bids into the CAISO markets regularly contained stair-stepped price and quantity segments, each of which reflected the different opportunity cost and operational flexibility associated with the movement of that particular amount of water through BPA's system.³⁸⁷ BPA's bids generally contained a lower priced segment that reflected generation where there was limited operational flexibility due to fish and wildlife measures. The other bid segments reflected the increasingly higher opportunity costs associated with the movement of each additional amount of water.³⁸⁸

As Mr. Oliver explained, BPA submitted its stair-stepped bids based on its view of the opportunity cost associated with moving the additional amount of water through the system.³⁸⁹ These bids highlight the fact that BPA was not withholding capacity from the market by its bid, but rather valued the movement of each segment of water differently.

³⁸⁵ Van Vactor, Tr. 9625:1-9 (July 13, 2012) ("In other words, it might be the case, for example, that if you decide to sell some of your water inventory right now, ultimately you might have to replace it at a period of time when the load is very high and prices are very high and it could be a very, very costly replacement. So you're not going to want to let that additional supply out of your system unless you are compensated sufficiently to take account of the risk and expected future cost.")

³⁸⁶ BPA-001 (Oliver Direct) at 75.

³⁸⁷ BPA-001 (Oliver Direct) at 62.

³⁸⁸ In his testimony, Mr. Oliver used BPA's Supplemental Energy bids on July 11, 2001 (for hour-ending 24) to demonstrate how BPA's bids reflect the varying value of the water. See BPA-001 (Oliver Direct) at 75.

³⁸⁹ *Id.*

BPA's bidding patterns are similar to the methods SCE used to bid its hydro resources in the CAISO market. Dr. Gary Stern, SCE's Director of Market Strategy and Resource Planning, testified that, in the CAISO Supplemental Energy market, SCE bid its energy-limited hydro resources at high prices to ensure the resource would be dispatched only in the event prices reached certain price points.³⁹⁰ This allowed SCE to maximize the value of the resource by avoiding dispatch when prices were low or dropped in a particular hour.³⁹¹ This strategy is materially the same as the strategy BPA and other energy-limited hydro suppliers used.

The BPA bids that Dr. Berry labeled as anomalous were bid in a fashion to avoid being dispatched unless market prices hit BPA's view of its opportunity cost. BPA's bids (as with SCE's bids) were designed to maximize the value of its energy-limited hydro resources and were not part of some scheme to manipulate the market as Dr. Berry contends. The Commission should therefore find that BPA's bid represented a legitimate market behavior.

E. The ID errs in concluding that the CAISO real time market was the last market in which BPA could sell its energy.

In an attempt to buttress the adoption of the California Parties' marginal or opportunity costs, the ID contends that the Respondents had no opportunity costs because the CAISO was the market of last resort.³⁹² Contrary to the conclusion in the ID, BPA presented significant testimony explaining why, because of the flexibility of its hydro system, the CAISO real time market was not the market of last resort for BPA. None of BPA's evidence on this point is mentioned in the ID.³⁹³

³⁹⁰ Stern, Tr. 802:1-15 (April 12, 2012).

³⁹¹ Stern, Tr. 799:22-800:6 (April 12, 2012).

³⁹² ID at P 96.

³⁹³ The closest the ID comes is to state, without any citation, that some unnamed Respondent witness attempted to make this point but could not substantiate it. ID at P 96. Given the absence of any citation, it is virtually impossible to tell what the ID is referring to and how to respond to it.

However the ID misses the point, namely, that there were alternatives after the close of the CAISO market and even Dr. Berry begrudgingly acknowledged as much in her rebuttal testimony but refused to concede that the

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Request (click to view)	Exhibit	Responded	Requesting Party	Responding Party	Date Filed	Response (click to view)
PX-BPA-21	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 3:54 PM	Select Request to view Response
PX-BPA-22	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 3:56 PM	Select Request to view Response
PX-BPA-23	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 3:58 PM	Select Request to view Response
PX-BPA-24	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 4:00 PM	Select Request to view Response
PX-BPA-25	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 4:02 PM	Select Request to view Response
PX-BPA-26	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 4:04 PM	Select Request to view Response
PX-BPA-27	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 4:05 PM	Select Request to view Response
PX-BPA-28	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 4:07 PM	Select Request to view Response
PX-BPA-29	OS-14-E-BPA-02	Yes	Powerex Corporation	Bonneville Power Administration	4/19/2013 4:09 PM	Select Request to view Response
CS-JP06-1	OS-14-E-JP06-01	Yes	Caithness Shepherds Flat, LLC	Joint Party 6	5/28/2013 2:32 PM	Select Request to view Response
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Request Detail

Request ID: CS-JP06-1
Page Number: 13
Line Number: 11-13
Exhibit Filing: [OS-14-E-JP06-01](#)

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Request Text:

Please provide copies of all studies, analyses, surveys or other documents that would substantiate the truthfulness of the following statement, made in your direct testimony at OS-14-E-JP06-01, p. 13, lines 11-13: "BPA cannot point to any instance where a Slice customer intentionally took less than its MDA during an oversupply event to capture the economic advantage of purchasing energy at negative market prices."

Response Detail

Date Response Filed: 6/4/2013 8:39:06 AM

Contact Name:

Contact Phone:

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Response Text:

The witnesses for JP-06 are unaware of any studies, analyses, surveys or other documents that substantiate the fact that no Slice customer has intentionally taken less than its MDA during an oversupply event to capture the economic advantage of purchasing energy at negative market prices.

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<u>Request</u> (click to view)	<u>Exhibit</u>	<u>Responded</u>	<u>Requesting Party</u>	<u>Responding Party</u>	<u>Date Filed</u>	<u>Response</u> (click to view)
CS-JP06-2	OS-14-E-JP06-01	Yes	Caithness Shepherds Flat, LLC	Joint Party 6	5/28/2013 2:41 PM	Select Request to view Response
BPA-CS-1	OS-14-E-CS-01	Yes	Bonneville Power Administration	Caithness Shepherds Flat, LLC	5/31/2013 9:46 AM	Select Request to view Response
BPA-CS-2	OS-14-E-CS-01	Yes	Bonneville Power Administration	Caithness Shepherds Flat, LLC	5/31/2013 9:48 AM	Select Request to view Response
BPA-CS-3	OS-14-E-CS-01	Yes	Bonneville Power Administration	Caithness Shepherds Flat, LLC	5/31/2013 9:49 AM	Select Request to view Response
BPA-IR-1	OS-14-E-IR-01	No	Bonneville Power Administration	Iberdrola Renewables, LLC	5/31/2013 9:52 AM	Select Request to view Response
BPA-JP03-1	OS-14-E-JP03-01	No	Bonneville Power Administration	Joint Party 3	5/31/2013 9:54 AM	Select Request to view Response
BPA-JP03-2	OS-14-E-JP03-01	No	Bonneville Power Administration	Joint Party 3	5/31/2013 9:59 AM	Select Request to view Response
BPA-JP03-3	OS-14-E-JP03-01	No	Bonneville Power Administration	Joint Party 3	5/31/2013 10:01 AM	Select Request to view Response
BPA-JP03-4	OS-14-E-JP03-01	No	Bonneville Power Administration	Joint Party 3	5/31/2013 10:03 AM	Select Request to view Response
BPA-JP03-5	OS-14-E-JP03-01	No	Bonneville Power Administration	Joint Party 3	5/31/2013 10:07 AM	Select Request to view Response
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Request Text:

If there are no documents responsive to the first data request CS-JP06-1, please provide a narrative statement substantiating the truthfulness of the quoted sentence of your testimony

Response Detail

Date Response Filed: 6/4/2013 8:40:17 AM
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Response Text:

There are four facts that substantiate the truthfulness of the quoted testimony. First, BPA in its direct testimony did not cite to a single instance where a Slice customer intentionally took less than its MDA during an oversupply event to capture the economic advantage of purchasing energy at negative market prices. BPA only cited to its concern that such behavior could occur in the future. OS-14-E-BPA-02, p. 15. If BPA had documentary evidence of such behavior, they would have cited to it in support of their proposal. Second, Slice customers are constantly in contact with their scheduling agents with whom they discuss a wide variety of operational matters, in particular imposition of penalties by BPA (such as energy reductions for failure to take full MDA) on any Slice customer, how such penalties happened and how they can be avoided in the future. All three JP-06 witnesses have participated in such discussions, and none can recall an instance where there was a penalty imposed on a Slice customer for intentionally taking less than its MDA during an oversupply event to capture the economic advantage of purchasing energy at negative market prices. Third, under the Slice Contract representatives of Slice customers meet periodically with BPA as part of the Contract Implementation Group ("CIG") to discuss operational matters, and to provide BPA a venue where it can bring forward concerns about operational issues. The witnesses are unaware of any instance where BPA has brought to the CIG a concern regarding any instance of intentional failure by a Slice customer to take its full MDA during an oversupply event in order to capture negative priced market power. The absence of evidence in any venue of such behavior substantiates the fact that it has not occurred. Fourth, when asked during clarification whether there had ever been an instance where a Slice customer intentionally took less than its MDA in order to access negative priced market power, the BPA panel stated that they were not aware of any such instance having occurred.

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