

2010 WHOLESALE POWER) **BPA Docket Nos. WP-10 and TR-10**
AND TRANSMISSION RATE)
PROCEEDING)

WP-10-E-JP6-04
TR-10-E-JP6-04

Attachment 1

**DATA RESPONSE
2010 POWER RATE CASE (WP-10)**

**2010 WHOLESALE POWER AND TRANSMISSION
RATE ADJUSTMENT PROCEEDING**

DATA REQUEST NUMBER: IR-BPA-9

DATE RECEIVED: Friday, February 27, 2009

DIRECTED TO: Bonneville Power Administration

REQUESTOR'S NAME: Lara Skidmore

AGENCY: Iberdrola Renewables

EXHIBIT: Overview of Wind Integration-Within-Hour Balancing Service Rate Proposal
Testimony WP-10-E-BPA-22

PAGE(S): 23

LINE(S): 16-18

DATA REQUEST:

Please provide a complete list with associated timelines of the “steps BPA is taking to facilitate the integration of large amounts of wind generation into BPA’s BAA.”

RESPONSE:

The following initiatives and timelines are subject to change:

- | | |
|--|------------------|
| I. RESERVE REQUIREMENT CALCULATIONS | |
| • Rerun for new load forecast | 4/30/09 |
| • Improve Scaling Component | 10/31/11 |
| II. FCRPS WIND STUDIES | |
| • Scenario analysis | 5/29/09 |
| • Model development | 5/29/09 |
| III. ACE DIVERSITY INTERCHANGE | |
| • Benefits Analysis | 3/31/09 |
| • WECC Analysis | 7/31/09 |
| IV. CONNECTING VARIABLE GENERATING RESOURCES TO GRID | |
| • Phase I requirements document | 3/16/09 |
| • Phase II implementation | 10/1/09 |
| V. WIND FORECASTING | |
| • Install 16 additional wind monitoring sites | 7/31/09 |
| • Hour ahead wind forecast | 11/30/09 |
| VI. DYNAMIC SCHEDULING | |
| • System Studies | 2/26/10 |
| • Reservation & Scheduling design | 5/1/09 – 9/30/09 |

**DATA RESPONSE
2010 POWER RATE CASE (WP-10)**

**2010 WHOLESALE POWER AND TRANSMISSION
RATE ADJUSTMENT PROCEEDING**

• Dispatch/Scheduling enhancement	9/1/09 – 2/26/10
• Hourly ATC controls	9/30/09
• Operator training	4/1/10 – 6/30/10
• Test and Evaluate	2/1/10 – 5/31/10
• Operate Pilot	6/1/10 – 10/31/11
• Regional Implementation	10/31/11
VII. IMPLEMENT WI WITHIN-HOUR BALANCING SERVICE RATE	
• Fiscal Year 2010 Rate Period	10/01/10
VIII. INTRA-HOUR SCHEDULING	
• Regional Implementation – Business Practices Joint Initiative	10/31/11
IX. THIRD PARTY SUPPLY	
• Negotiate with Projects	7/31/09
• Pilot for Projects located in BPA Balancing Authority	10/26/09 – 10/19/10
• Pilot for projects not located in BA	10/1/10 – 9/30/11
• Regional Implementation	10/31/11
X. DISPATCH & SCHEDULING SYSTEMS AND TOOLS	9/30/10
XI. WIND RELATED GRID STABILITY MITIGATION ACTIONS	
• 1200 MW sites	10/01/09
• 1200 MW Build/Operate	2/24/10
• Frequency responsive studies	10/1/09
• Frequency responsive build/operate	2/24/11
• Large-scale interconnection studies	10/1/10
XII. I-TAP (Memorandum of Understanding offered by Joint Initiative) (e.g., bulletin board to facilitate intra-hour transactions)	8/28/09
XIII. LARGE STORAGE PROJECTS & NEW REGULATION FOLLOWING (e.g., Pump storage and other research and development)	Ongoing

For questions about this response please contact Marcus Chong Tim by phone 503-230-4083 or email mhchongtim@bpa.gov.

Attachment 2

From: ratecase@bpa.gov

Date: 6 April, 2009 7:03:15 PM PDT

To: lmdimitman@bpa.gov, jmshaughnessy@bpa.gov, jack.speer@alcoa.com, larry.labolle@avistacorp.com, r.blair.strong@painehamblen.com, greggr@bentonpud.org, dborges@canbyutility.org, tgrim@chbh.com, pmurphy@mbllp.com, lboomer@franklinpud.com, cheryl.chevis@pgn.com, lwolv@tds.net, susan.k.ackerman@comcast.net, jsaven@pacifier.com, ghcarr@pacifier.com, schall@stoel.com, mthompson@ppcpdx.org, kpom@ppcpdx.org, DKari@perkinscoie.com, sara.johnson@pse.com, terrym@millcreeklaw.com, jkallstrom@snopud.com, tmetcalfe@cityoftacoma.org, wmgmt@montana.com, dbyers@wutc.wa.gov, mwood@stoel.com, JKuzma@perkinscoie.com, pjburger@bpa.gov, rffinnen@snopud.com, krcasad@bpa.gov, temiller@bpa.gov, ragreene@bpa.gov, jawelch@bpa.gov, celee@bpa.gov, alennox@bpa.gov, tcmisley@bpa.gov, jahirsch@bpa.gov, belovell@bpa.gov, eaevans@bpa.gov, pabrodie@bpa.gov, wjdoubleday@bpa.gov, dlgilman@bpa.gov, rjhomenick@bpa.gov, jrklippstein@bpa.gov, cmiller@bpa.gov, tmurphy@bpa.gov, dhfisher@bpa.gov, jcolive@bpa.gov, rdbliven@bpa.gov, rnotebo@gcpud.org, EJohnson@REJPC.com, Karen.mcdonald@powerex.com, ccopat@e-z.net, mail@dvclaw.com, michael.andrea@avistacorp.com, bob@oregoncub.org, sdleonard@earthlink.net, stefan.brown@pgn.com, stephanie.andrus@doj.state.or.us, mhchongtim@bpa.gov, robin.straughan@state.or.us, falcon@eesconsulting.com, majackson@bpa.gov, rspettinger@bpa.gov, energlaw@aol.com, speerja@verizon.net, ccaldwell@mbllp.com, cformanjr@bpa.gov, andersen@eesconsulting.com, nparker@bpa.gov, dtrotter@utc.wa.gov, david.white@tonkon.com, deb@a-klaw.com, rjpetty@bpa.gov, klc@a-klaw.com, janna.leasy@pacificorp.com, natalie.hocken@pacificorp.com, phil.obenchain@pacificorp.com, lara.skidmore@troutmansanders.com, rmmiller@bpa.gov, nbaker@ppcpdx.org, mark.brown@state.or.us, demetcalf@comcast.net, neil.price@puc.idaho.gov, don.howell@puc.idaho.gov, louann.westerfield@puc.idaho.gov, mdeen@ppcpdx.org, anita.swanson@avistacorp.com, dsmith@ghpud.org, lkandra@cablehouston.com, cameron@rnp.org, doug_brawley@pngc.com, irhunter@snopud.com, sbernstein@perkinscoie.com, neoma.lane@state.or.us, mmichel@canbyutility.org, ty.bettis@pgn.com,

melissa.seymour@iberdrolausa.com,
daniel.archuleta@troutmansanders.com, Matt.Muldoon@state.or.us,
tlhunter@bpa.gov, robert.cahail@pse.com, Robert.Clark@state.or.us,
cwgriffen@bpa.gov, mcdotten@msn.com, scott.brattebo@comcast.net,
tracey.bradley@bgllp.com, kcspear@ppcpdx.org, pgmunz@snopud.com,
bjbeck53@comcast.net, jrussell@cityoftacoma.org,
mstratman@pacifier.com, lafinley@snopud.com, ajmiles@snopud.com,
deanna.king@bgllp.com, Catriona@oregoncub.org,
LorenABaker@comcast.net, rkindley@cablehuston.com,
amrodehorst@bpa.gov, doug.faulkner@pse.com, mwperkins@bpa.gov,
gordon@oregoncub.org, jzhyde@bpa.gov, skobak@schwabe.com,
carichardson@bpa.gov, robin.cross@seattle.gov, mpa@a-klaw.com,
elisha@clatskaniepud.com, ryan.flynn@pacificorp.com,
brent.thompson@constellation.com, pnichols@idahopower.com,
zach.mayer@glencore-us.com, dtill@martenlaw.com

Subject: 2010 Power Rate Case - Response to Data Request PP-NG-1

This is an automated message from the Bonneville 2010 Power Rate Case Website:

<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
PP-NG-1

RESPONSE BY:
Stephen Hall - Northwest Wind Group

ORIGINAL DATA REQUEST:

Please provide copies of all documentation and other information that you rely on to support, or otherwise explain the basis of, your statement that “[e]rrors as high as 22 percent were shown in some of the wind balancing service requirements in the analysis done for the wind projects examined in the study.” Please include all data, calculations, worksheets and documents underlying the above statement.

EXHIBIT: BPA's Proposed Wind Balancing Service Rate and Intentional Deviation Penalty WP-10-Q-NG-01

PAGE(S): 6

LINE(S): 21-23

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)

--TEXT DESCRIPTION:

Please see the "BPA Scaling Analysis Study Results.pdf" document provided in response to BPA-NG-2. Specifically, the allocation of wind decremental generating imbalance reserves using the BPA methodology (last column on the "3 Scaled Values" row of the "Wind Allocation" Box) was -101.0 MW. The value derived from the actual generation was -82.6 MW. This shows that the "dec" imbalance portion of the wind reserve allocation was overestimated by the difference, or 18.4 MW. This value is 22.3% of the dec imbalance requirement computed directly from the generation of those projects over the historical period examined.

For technical questions about this request please contact Stephen C. Hall by phone (5032949625) or email (schall@stoel.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

2010 BPA Rate Case Analysis of Scaling

	Total (Load-Wind)					
Summary of levels	Regulation		Following		Imbalance	
	Inc	Dec	Inc	Dec	Inc	Dec
Actual Values	119.1	-138.8	313.7	-353.7	720.6	-513.3
3 Scaled Values	116.8	-137.5	323.2	-356.9	729.7	-568.9

	Wind Allocation					
Summary of levels	Regulation		Following		Imbalance	
	Inc	Dec	Inc	Dec	Inc	Dec
Actual Values	12.3	-13.2	67.1	-81.6	103.0	-82.6
3 Scaled Values	11.1	-12.2	66.9	-65.4	113.2	-101.0

	Load Allocation					
Summary of levels	Regulation		Following		Imbalance	
	Inc	Dec	Inc	Dec	Inc	Dec
Actual Values	106.8	-126.1	246.6	-272.1	617.5	-430.7
3 Scaled Values	105.7	-125.4	256.3	-291.4	616.5	-467.9

Attachment 3

Scaling Re-Analysis
PPC April 2009

Source of Data: 2010 Rate Case, Analysis of Scaling, 12 Nov 08									
Total (Load & Wind)									
	Reg Inc	Reg Dec	LF Inc	LF Dec	Imb Inc	Imb Dec		Total Inc	Total Dec
Actual (MW)	119.1	-138.8	313.7	-353.7	720.6	-513.3		1153.4	-1005.8
3-Scaled (MW)	<u>116.8</u>	<u>-137.5</u>	<u>323.2</u>	<u>-356.9</u>	<u>729.7</u>	<u>-568.9</u>		<u>1169.7</u>	<u>-1063.3</u>
Delta (MW)	2.3	-1.3	-9.5	3.2	-9.1	55.6		-16.3	57.5
% Delta	1.93	0.94	-3.03	-0.90	-1.26	-10.83		-1.41	-5.72
Wind Allocation									
	Reg Inc	Reg Dec	LF Inc	LF Dec	Imb Inc	Imb Dec		Total Inc	Total Dec
Actual (MW)	12.3	-13.2	67.1	-81.6	103.0	-82.6		182.4	-177.4
3-Scaled (MW)	<u>11.1</u>	<u>-12.2</u>	<u>66.9</u>	<u>-65.4</u>	<u>113.2</u>	<u>-101.0</u>		<u>191.2</u>	<u>-178.6</u>
Delta (MW)	1.2	-1	0.2	-16.2	-10.2	18.4		-8.8	1.2
% Delta	9.76	7.58	0.30	19.85	-9.90	-22.28		-4.82	-0.68
Load Allocation									
	Reg Inc	Reg Dec	LF Inc	LF Dec	Imb Inc	Imb Dec		Total Inc	Total Dec
Actual (MW)	106.8	-126.1	246.6	-272.1	617.5	-430.7		970.9	-828.9
3-Scaled (MW)	<u>105.7</u>	<u>-125.4</u>	<u>256.3</u>	<u>-291.4</u>	<u>616.5</u>	<u>-467.9</u>		<u>978.5</u>	<u>-884.7</u>
Delta (MW)	1.1	-0.7	-9.7	19.3	1	37.2		-7.6	55.8
% Delta	1.03	0.56	-3.93	-7.09	0.16	-8.64		-0.78	-6.73

Attachment 4

From: ratecase@bpa.gov

Date: 6 April, 2009 7:06:35 PM PDT

To: lmdimitman@bpa.gov, jmshaughnessy@bpa.gov, jack.speer@alcoa.com, larry.labolle@avistacorp.com, r.blair.strong@painehamblen.com, greggr@bentonpud.org, dborges@canbyutility.org, tgrim@chbh.com, pmurphy@mbllp.com, lboomer@franklinpud.com, cheryl.chevis@pgn.com, lwolv@tds.net, susan.k.ackerman@comcast.net, jsaven@pacifier.com, ghcarr@pacifier.com, schall@stoel.com, mthompson@ppcpdx.org, kpom@ppcpdx.org, DKari@perkinscoie.com, sara.johnson@pse.com, terrym@millcreeklaw.com, jkallstrom@snopud.com, tmetcalfe@cityoftacoma.org, wmgmt@montana.com, dbyers@wutc.wa.gov, mwood@stoel.com, JKuzma@perkinscoie.com, pjburger@bpa.gov, rffinnen@snopud.com, krcasad@bpa.gov, temiller@bpa.gov, ragreene@bpa.gov, jawelch@bpa.gov, celee@bpa.gov, alennox@bpa.gov, tcmisley@bpa.gov, jahirsch@bpa.gov, belovell@bpa.gov, eaevans@bpa.gov, pabrodie@bpa.gov, wjdoubleday@bpa.gov, dlgilman@bpa.gov, rjhomenick@bpa.gov, jrklippstein@bpa.gov, cmiller@bpa.gov, tmurphy@bpa.gov, dhfisher@bpa.gov, jcolive@bpa.gov, rdbliven@bpa.gov, rnotebo@gcpud.org, EJohnson@REJPC.com, Karen.mcdonald@powerex.com, ccopat@e-z.net, mail@dvclaw.com, michael.andrea@avistacorp.com, bob@oregoncub.org, sdleonard@earthlink.net, stefan.brown@pgn.com, stephanie.andrus@doj.state.or.us, mhchongtim@bpa.gov, robin.straughan@state.or.us, falcon@eesconsulting.com, majackson@bpa.gov, rspettinger@bpa.gov, energlaw@aol.com, speerja@verizon.net, ccaldwell@mbllp.com, cformanjr@bpa.gov, andersen@eesconsulting.com, nparker@bpa.gov, dtrotter@utc.wa.gov, david.white@tonkon.com, deb@a-klaw.com, rjpetty@bpa.gov, klc@a-klaw.com, janna.leasy@pacificorp.com, natalie.hocken@pacificorp.com, phil.obenchain@pacificorp.com, lara.skidmore@troutmansanders.com, rmmiller@bpa.gov, nbaker@ppcpdx.org, mark.brown@state.or.us, demetcalf@comcast.net, neil.price@puc.idaho.gov, don.howell@puc.idaho.gov, louann.westerfield@puc.idaho.gov, mdeen@ppcpdx.org, anita.swanson@avistacorp.com, dsmith@ghpud.org, lkandra@cablehouston.com, cameron@rnp.org, doug_brawley@pngc.com, irhunter@snopud.com, sbernstein@perkinscoie.com, neoma.lane@state.or.us, mmichel@canbyutility.org, ty.bettis@pgn.com,

melissa.seymour@iberdrolausa.com,
daniel.archuleta@troutmansanders.com, Matt.Muldoon@state.or.us,
tlhunter@bpa.gov, robert.cahail@pse.com, Robert.Clark@state.or.us,
cwgriffen@bpa.gov, mcdotten@msn.com, scott.brattebo@comcast.net,
tracey.bradley@bgllp.com, kcspear@ppcpdx.org, pgmunz@snopud.com,
bjbeck53@comcast.net, jrussell@cityoftacoma.org,
mstratman@pacifier.com, lafinley@snopud.com, ajmiles@snopud.com,
deanna.king@bgllp.com, Catriona@oregoncub.org,
LorenABaker@comcast.net, rkindley@cablehuston.com,
amrodehorst@bpa.gov, doug.faulkner@pse.com, mwperkins@bpa.gov,
gordon@oregoncub.org, jzhyde@bpa.gov, skobak@schwabe.com,
carichardson@bpa.gov, robin.cross@seattle.gov, mpa@a-klaw.com,
elisha@clatskaniepub.com, ryan.flynn@pacificorp.com,
brent.thompson@constellation.com, pnichols@idahopower.com,
zach.mayer@glencore-us.com, dtill@martenlaw.com

Subject: 2010 Power Rate Case - Response to Data Request PP-NG-2

This is an automated message from the Bonneville 2010 Power Rate Case Website:

<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
PP-NG-2

RESPONSE BY:
Stephen Hall - Northwest Wind Group

ORIGINAL DATA REQUEST:

Please provide copies of all documentation and other information that you rely on to support, or otherwise explain the basis of, your statement that "BPA reported that the result was an overestimate of the needed reserves ranging from around 5 percent to more than 20 percent." Please include all data, calculations, worksheets and documents underlying the above statement.

EXHIBIT: BPA's Proposed Wind Balancing Service Rate and Intentional Deviation Penalty WP-10-Q-NG-01

PAGE(S): 8
LINE(S): 4-6

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)

--TEXT DESCRIPTION:

Please see the response to PP-NG-1 which shows the analysis behind the "more than 20 percent" portion of the statement. Referencing the same document: "BPA Scaling Analysis Study Results.pdf," note that in BPA's analysis the total inc reserve for wind ($12.3 + 67.1 + 103.0 = 182.4$ MW) was overestimated ($11.1 + 66.9 + 113.2 = 191.2$ MW) by ($191.2 - 182.4 = 8.8$ MW) 4.8% ($8.8/182.4$). This forms a basis for the bottom of the range cited in the testimony.

For technical questions about this request please contact Stephen C. Hall by phone (5032949625) or email (schall@stoel.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

Attachment 5

From: ratecase@bpa.gov
To: imdimitman@bpa.gov; jmshaughnessy@bpa.gov; jack.speer@alcoa.com; r.blair.strong@painehamblen.com; greggr@bentonpud.org; dborges@canbyutility.org; tgrim@chbh.com; pmurphy@mbllp.com; lboomer@franklinpud.com; cheryl.chevis@pgn.com; lwolv@tds.net; susan.kackerman@comcast.net; jsaven@pacifier.com; ghcarr@pacifier.com; schall@stoel.com; mthompson@ppcpdx.org; kpom@ppcpdx.org; DKari@perkinscoie.com; sara.johnson@pse.com; terrym@millcreeklaw.com; jkallstrom@snopud.com; tmetcalf@cityoftacoma.org; wmgmt@montana.com; dbyers@wutc.wa.gov; mwood@stoel.com; JKuzma@perkinscoie.com; piburger@bpa.gov; rffinnen@snopud.com; krcasad@bpa.gov; temiller@bpa.gov; ragreene@bpa.gov; jawelch@bpa.gov; celee@bpa.gov; alennox@bpa.gov; tcmisley@bpa.gov; jahirsch@bpa.gov; belovell@bpa.gov; eaevans@bpa.gov; skbermejo@bpa.gov; pabrodie@bpa.gov; wjdoubleday@bpa.gov; rjhomenick@bpa.gov; jrkippstein@bpa.gov; cmiller@bpa.gov; tmurphy@bpa.gov; dhfisher@bpa.gov; icolive@bpa.gov; rdbliven@bpa.gov; rnotebo@gcpud.org; EJohnson@REJPC.com; Karen.mcdonald@powerex.com; ccopat@e-z.net; mail@dvclaw.com; michael.andrea@avistacorp.com; bob@oregoncub.org; sdleonard@earthlink.net; stefan.brown@pgn.com; stephanie.andrus@doj.state.or.us; mhchongtim@bpa.gov; robin.straughan@state.or.us; falcon@eesconsulting.com; majackson@bpa.gov; rspettinger@bpa.gov; energlaw@aol.com; speerja@verizon.net; ccaldwell@mbllp.com; andersen@eesconsulting.com; nparker@bpa.gov; dtrotter@utc.wa.gov; david.white@fonkon.com; deb@a-klaw.com; ripetty@bpa.gov; klc@a-klaw.com; janna.leasy@pacificorp.com; natalie.hocken@pacificorp.com; phil.obenchain@pacificorp.com; lara.skidmore@troutmansanders.com; rmiller@bpa.gov; nbaker@ppcpdx.org; mark.brown@state.or.us; neil.price@puc.idaho.gov; don.howell@puc.idaho.gov; louann.westerfield@puc.idaho.gov; mdeen@ppcpdx.org; anita.swanson@avistacorp.com; lkandra@cablehuston.com; cameron@rnp.org; doug_brawley@pngc.com; irhunter@snopud.com; sbernstein@perkinscoie.com; neoma.lane@state.or.us; mmichel@canbyutility.org; ty.bettis@pgn.com; melissa.seymour@iberdrolausa.com; daniel.archuleta@troutmansanders.com; Matt.Muldoon@state.or.us; adrobertson@bpa.gov; tthunter@bpa.gov; robert.cahail@pse.com; Robert.Clark@state.or.us; cwgriffen@bpa.gov; mcdotten@msn.com; scott.brattebo@comcast.net; tracey.bradley@bgllp.com; kcspear@ppcpdx.org; pgmunz@snopud.com; bibeck53@comcast.net; jrussell@cityoftacoma.org; mstratman@pacifier.com; laflinley@snopud.com; ajmiles@snopud.com; deanna.king@bgllp.com; Catriona@oregoncub.org; LorenABaker@comcast.net; rkindley@cablehuston.com; amrodehorst@bpa.gov; doug.faulkner@pse.com; mwperkins@bpa.gov; gordon@oregoncub.org; jzhyde@bpa.gov; skobak@schwabe.com; carichardson@bpa.gov; robin.cross@seattle.gov; mpa@a-klaw.com
Subject: 2010 Power Rate Case - Response to Data Request PP-BPA-8
Date: Friday, March 06, 2009 5:56:21 PM

This is an automated message from the Bonneville 2010 Power Rate Case Website:
<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
PP-BPA-8

RESPONSE BY:
Janet Klippstein - Bonneville Power Administration

ORIGINAL DATA REQUEST:
Please provide all workpapers, documentation, and underlying datasets used in the calculations and methods described in Section 2, "Generation Reserve Forecast" of exhibit WP-10-BPA-08 in appropriate electronic format.

EXHIBIT: Generation Inputs Study and Study Documentation WP-10-E-BPA-08

PAGE(S): 5-47
LINE(S): Section 2

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)

--TEXT DESCRIPTION:
Please see the Generation Reserve Forecast workpapers posted at:
http://www.bpa.gov/corporate/ratecase/2008/2010_BPA_Rate_Case/wp-10.cfm.

The “Study Data” file includes data that BPA used in its analysis.

The estimated output of the total wind fleet, on a one-minute time basis, for varying assumptions of installed wind, are identified in columns labeled FY07_Wind_MW_Qty through FY13_Wind_MW_Qty.

Estimated BAA load used in the study, on a one-minute time basis, for varying assumptions of installed wind, is in columns labeled FY07_Load_MW_Qty and FY08_Load_MW_Qty.

The load forecasts, on a one-minute time basis, for varying assumptions of installed wind, are identified in columns labeled FY07_Load_ES_MW_Qty and FY08_Load_ES_MW_Qty.

The “Study Model and Results” file includes the study model results and summary. Note that this includes results from years outside of the rate period and that were not included in the initial proposal.

The “Forecast Accuracy Analysis” file includes workpapers related to section 2.4 of WP-10-E-BPA-08.

For technical questions regarding this response please contact Bart McManus by phone 360-418-2309 or by e-mail bamcmanus@bpa.gov.

For legal questions about this response please contact Matt Perkins by phone 503-230-5904 and/or email mwperkins@bpa.gov.

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

(att. 5)

Because the workpapers referenced in the attached data response do not display well in pdf format, they are uploaded separately. See WP-10-E-JP6-04-AP01; TR-10-E-JP6-04-AP01.

Attachment 6

From: ratecase@bpa.gov
To: imdimitman@bpa.gov; jmshaughnessy@bpa.gov; jack.speer@alcoa.com; larry.labolle@avistacorp.com; r.blair.strong@painehamblen.com; greggr@bentonpud.org; dborges@canbyutility.org; tgrim@chbh.com; pmurphy@mbllp.com; lboomer@franklinpud.com; cheryl.chevis@pgn.com; lwolv@tds.net; susan.k.ackerman@comcast.net; jsaven@pacifier.com; ghcarr@pacifier.com; schall@stoel.com; mthompson@ppcpdx.org; kpom@ppcpdx.org; DKari@perkinscoie.com; sara.johnson@pse.com; terrym@millcreeklaw.com; jkallstrom@snopud.com; tmetcalfe@cityoftacoma.org; wmgt@montana.com; dbyers@wutc.wa.gov; mwood@stoel.com; JKuzma@perkinscoie.com; pjburger@bpa.gov; rffinnen@snopud.com; krcasad@bpa.gov; temiller@bpa.gov; ragreene@bpa.gov; jawelch@bpa.gov; celeee@bpa.gov; allennox@bpa.gov; tcmsley@bpa.gov; jahirsch@bpa.gov; belovell@bpa.gov; eaevans@bpa.gov; pabrodie@bpa.gov; wjdoubleday@bpa.gov; dlgilman@bpa.gov; rjhomenick@bpa.gov; jrkliппstein@bpa.gov; cmiller@bpa.gov; tmurphy@bpa.gov; dhfisher@bpa.gov; icolive@bpa.gov; rdbliven@bpa.gov; rnotebo@gcpud.org; EJohnson@REJPC.com; Karen.mcdonald@powerex.com; ccopat@e-z.net; mail@dvclaw.com; michael.andrea@avistacorp.com; bob@oregoncub.org; sdleonard@earthlink.net; stefan.brown@pgn.com; stephanie.andrus@doj.state.or.us; mhchongtim@bpa.gov; robin.straughan@state.or.us; falcon@eesconsulting.com; majackson@bpa.gov; rspettinger@bpa.gov; energylaw@aol.com; speerja@verizon.net; ccaldwell@mbllp.com; cformanjr@bpa.gov; andersen@eesconsulting.com; nparker@bpa.gov; dtrotter@utc.wa.gov; david.white@tonkon.com; deb@a-klaw.com; ripetty@bpa.gov; kic@a-klaw.com; janna.leasy@pacificorp.com; natalie.hocken@pacificorp.com; phil.obenchain@pacificorp.com; lara.skidmore@troutmansanders.com; rmiller@bpa.gov; nbaker@ppcpdx.org; mark.brown@state.or.us; demetcalfe@comcast.net; neil.price@puc.idaho.gov; don.howell@puc.idaho.gov; louann.westerfield@puc.idaho.gov; mdeen@ppcpdx.org; anita.swanson@avistacorp.com; dsmith@ghpud.org; lkandra@cablehouston.com; cameron@rnp.org; doug.brawley@pngc.com; irhunter@snopud.com; sbernstein@perkinscoie.com; neoma.lane@state.or.us; mmichel@canbyutility.org; ty.bettis@pgn.com; melissa.seymour@iberdrolousa.com; daniel.archuleta@troutmansanders.com; Matt.Muldoon@state.or.us; tlhunter@bpa.gov; robert.cahail@pse.com; Robert.Clark@state.or.us; cwgriffen@bpa.gov; mcdotten@msn.com; scott.brattebo@comcast.net; tracey.bradley@bgllp.com; kcspear@ppcpdx.org; pgmunz@snopud.com; bjbeck53@comcast.net; jrussell@cityoftacoma.org; mstratman@pacifier.com; lafinley@snopud.com; ajmiles@snopud.com; deanna.king@bgllp.com; Catriona@oregoncub.org; LorenABaker@comcast.net; rkindley@cablehouston.com; amrodehorst@bpa.gov; doug.faulkner@pse.com; mwperkins@bpa.gov; gordon@oregoncub.org; jzhyde@bpa.gov; skobak@schwabe.com; carichardson@bpa.gov; robin.cross@seattle.gov; mpa@a-klaw.com; elisha@clatskaniepud.com; ryan.flynn@pacificorp.com; brent.thompson@constellation.com; pnichols@idahopower.com; zach.mayer@glencore-us.com; dtill@martenlaw.com
Subject: 2010 Power Rate Case - Response to Data Request BPA-IR-22
Date: Saturday, April 11, 2009 7:57:19 AM

This is an automated message from the Bonneville 2010 Power Rate Case Website:
<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
BPA-IR-22

RESPONSE BY:
Lara Skidmore - Iberdrola Renewables, Inc.

ORIGINAL DATA REQUEST:
Please provide all workpapers, documents, data, and analyses that were used to develop Attachment C. Please provide all individual project data and supporting calculations used to determine the MAE and RMSE for the projects in the time step used in the analysis and clearly indicate those data that were filled using the data filling methodology cited in Lines 9-11. Please provide all electronic files in the originating software with all formulae intact.

EXHIBIT: Direct Testimony of Iberdrola Renewables WP-10-E-IR-01

PAGE(S): 31
LINE(S): 6-12

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)

--UPLOADED DOCUMENTS:

https://secure.bpa.gov/RateCase/openfile.aspx?fileName=DR_BPA-IR-22-2009-04-10.xls&contentType=application%2fx-msexcel

--TEXT DESCRIPTION:

Iberdrola has discovered an error in a column heading in two spreadsheets included in its response to this data request. The spreadsheets that need to be corrected were in the zip archive named:

DR_BPA_IR-22.zip

There were two versions of the spreadsheet, an Office 2003 version (.xls) and an Office 2007 version (.xlsx).

Their original names are:

DR_BPA-IR-22.xls

DR_BPA-IR-22.xlsx

Both spreadsheets have the same error, in that the column F heading was "Fcst". The data is the "Actual" metered data, not a forecast. The data in the spreadsheet is correct, and it is utilized in the spreadsheet correctly - it is simply an error in the column F heading. Attached is a corrected version.

For technical questions about this request please contact Melissa Seymour by phone (5037967114) or email (melissa.seymour@iberdrolausa.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

(att. 6)

Because the uploaded document referenced in the attached data response does not display well in pdf format, it is uploaded separately. See WP-10-E-JP6-04-AP02; TR-10-E-JP6-04-AP02.

Attachment 7

From: ratecase@bpa.gov
To: imdimitman@bpa.gov; jmshaughnessy@bpa.gov; jack.speer@alcoa.com; larry.labolle@avistacorp.com; r.blair.strong@painehamblen.com; greggr@bentonpud.org; dborges@canbyutility.org; tgrim@chbh.com; pmurphy@mbllp.com; lboomer@franklinpud.com; cheryl.chevis@pgn.com; lwolv@tds.net; susan.k.ackerman@comcast.net; jsaven@pacifier.com; ghcarr@pacifier.com; schall@stoel.com; mthompson@ppcpdx.org; kpom@ppcpdx.org; DKari@perkinscoie.com; sara.johnson@pse.com; terrym@millcreeklaw.com; jkallstrom@snopud.com; tmetcalfe@cityoftacoma.org; wmgt@montana.com; dbyers@wutc.wa.gov; mwood@stoel.com; JKuzma@perkinscoie.com; pjburger@bpa.gov; rffinnen@snopud.com; krcasad@bpa.gov; temiller@bpa.gov; ragreene@bpa.gov; jawelch@bpa.gov; celeee@bpa.gov; allennox@bpa.gov; tcmsley@bpa.gov; jahirsch@bpa.gov; belovell@bpa.gov; eaevans@bpa.gov; pabrodie@bpa.gov; wjdoubleday@bpa.gov; dlgilman@bpa.gov; rjhomenick@bpa.gov; jrkliппstein@bpa.gov; cmiller@bpa.gov; tmurphy@bpa.gov; dhfisher@bpa.gov; icolive@bpa.gov; rdbliven@bpa.gov; rnotebo@gcpud.org; EJohnson@REJPC.com; Karen.mcdonald@powerex.com; ccopat@e-z.net; mail@dvclaw.com; michael.andrea@avistacorp.com; bob@oregoncub.org; sdleonard@earthlink.net; stefan.brown@pgn.com; stephanie.andrus@doj.state.or.us; mhchongtim@bpa.gov; robin.straughan@state.or.us; falcon@eesconsulting.com; majackson@bpa.gov; rspettinger@bpa.gov; energylaw@aol.com; speerja@verizon.net; ccaldwell@mbllp.com; cformanjr@bpa.gov; andersen@eesconsulting.com; nparker@bpa.gov; dtrotter@utc.wa.gov; david.white@tonkon.com; deb@a-klaw.com; ripetty@bpa.gov; kic@a-klaw.com; janna.leasy@pacificorp.com; natalie.hocken@pacificorp.com; phil.obenchain@pacificorp.com; lara.skidmore@troutmansanders.com; rmiller@bpa.gov; nbaker@ppcpdx.org; mark.brown@state.or.us; demetcalfe@comcast.net; neil.price@puc.idaho.gov; don.howell@puc.idaho.gov; louann.westerfield@puc.idaho.gov; mdeen@ppcpdx.org; anita.swanson@avistacorp.com; dsmith@ghpud.org; lkandra@cablehouston.com; cameron@rnp.org; doug_brawley@pngc.com; irhunter@snopud.com; sbernstein@perkinscoie.com; neoma.lane@state.or.us; mmichel@canbyutility.org; ty.bettis@pgn.com; melissa.seymour@iberdrolausa.com; daniel.archuleta@troutmansanders.com; Matt.Muldoon@state.or.us; tlhunter@bpa.gov; robert.cahail@pse.com; Robert.Clark@state.or.us; cwgriffen@bpa.gov; mcdotten@msn.com; scott.brattebo@comcast.net; tracey.bradley@bgllp.com; kcspear@ppcpdx.org; pgmunz@snopud.com; bjbeck53@comcast.net; jrussell@cityoftacoma.org; mstratman@pacifier.com; lafinley@snopud.com; ajmiles@snopud.com; deanna.king@bgllp.com; Catriona@oregoncub.org; LorenABaker@comcast.net; rkindley@cablehouston.com; amrodehorst@bpa.gov; doug.faulkner@pse.com; mwperkins@bpa.gov; gordon@oregoncub.org; jzhyde@bpa.gov; skobak@schwabe.com; carichardson@bpa.gov; robin.cross@seattle.gov; mpa@a-klaw.com; elisha@clatskaniepud.com; ryan.flynn@pacificorp.com; brent.thompson@constellation.com; pnichols@idahopower.com; zach.mayer@glencore-us.com; dtil@martenlaw.com
Subject: 2010 Power Rate Case - Response to Data Request BPA-IR-19
Date: Tuesday, April 07, 2009 3:21:08 PM

This is an automated message from the Bonneville 2010 Power Rate Case Website:
<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
BPA-IR-19

RESPONSE BY:
Lara Skidmore - Iberdrola Renewables, Inc.

ORIGINAL DATA REQUEST:
Please provide all workpapers, data, calculations, confidence levels, and other assumptions used to determine whether differences in Iberdrola's forecast and the 30-minute persistence were statistically indistinct.

EXHIBIT: Direct Testimony of Iberdrola Renewables WP-10-E-IR-01

PAGE(S): 28
LINE(S): 1-6

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)
--UPLOADED DOCUMENTS:
<https://secure.bpa.gov/RateCase/openfile.aspx?fileName=DR-BPA-IR->

[17.xls&contentType=application%2fx-msexcel](#)

--TEXT DESCRIPTION:

Iberdrola tested whether the average WAMM error is significantly statistically different from the average 30-min error using a z-test and a f-test.

Iberdrola used the same data that was provided for IR-BPA-22 to perform the analysis. The results of the analysis are attached as DR-BPA-IR-17.xls. Iberdrola used data for which hourly forecasts were available for the period 02/23/2009 through 03/15/2009. The resulting sample size was 306 observations. Values of the WAMM forecast less metered data to the 30-min forecast less metered data were compared.

The z-test shows that there is not enough statistical evidence to conclude that there is a difference between the two sample means at a 95% confidence level. The f-test on the sample variances and found that there is not enough statistical evidence to conclude that the sample variances are different at a 95% confidence level.

For technical questions about this request please contact Melissa Seymour by phone (5037967114) or email (melissa.seymour@iberdrolausa.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

(att. 7)

Because the uploaded document referenced in the attached data response does not display well in pdf format, it is uploaded separately. *See* WP-10-E-JP6-04-AP03; TR-10-E-JP6-04-AP03.

Additional analysis was performed using the file referenced above. Because that analysis does not display well in pdf format, it is uploaded separately. *See* WP-10-E-JP6-04-AP04; TR-10-E-JP6-04-AP04.

Attachment 8

From: ratecase@bpa.gov

Date: 7 April, 2009 3:41:26 PM PDT

To: lmdimitman@bpa.gov, jmshaughnessy@bpa.gov, jack.speer@alcoa.com, larry.labolle@avistacorp.com, r.blair.strong@painehamblen.com, greggr@bentonpud.org, dborges@canbyutility.org, tgrim@chbh.com, pmurphy@mbllp.com, lboomer@franklinpud.com, cheryl.chevis@pgn.com, lwolv@tds.net, susan.k.ackerman@comcast.net, jsaven@pacifier.com, ghcarr@pacifier.com, schall@stoel.com, mthompson@ppcpdx.org, kpom@ppcpdx.org, DKari@perkinscoie.com, sara.johnson@pse.com, terrym@millcreeklaw.com, jkallstrom@snopud.com, tmetcalfe@cityoftacoma.org, wmgmt@montana.com, dbyers@wutc.wa.gov, mwood@stoel.com, JKuzma@perkinscoie.com, pjburger@bpa.gov, rffinnen@snopud.com, krcasad@bpa.gov, temiller@bpa.gov, ragreene@bpa.gov, jawelch@bpa.gov, celee@bpa.gov, alennox@bpa.gov, tcmisley@bpa.gov, jahirsch@bpa.gov, belovell@bpa.gov, eaevans@bpa.gov, pabrodie@bpa.gov, wjdoubleday@bpa.gov, dlgilman@bpa.gov, rjhomenick@bpa.gov, jrklippstein@bpa.gov, cmiller@bpa.gov, tmurphy@bpa.gov, dhfisher@bpa.gov, jcolive@bpa.gov, rdbliven@bpa.gov, rnotebo@gcpud.org, EJohnson@REJPC.com, Karen.mcdonald@powerex.com, ccopat@e-z.net, mail@dvclaw.com, michael.andrea@avistacorp.com, bob@oregoncub.org, sdleonard@earthlink.net, stefan.brown@pgn.com, stephanie.andrus@doj.state.or.us, mhchongtim@bpa.gov, robin.straughan@state.or.us, falcon@eesconsulting.com, majackson@bpa.gov, rspettinger@bpa.gov, energlaw@aol.com, speerja@verizon.net, ccaldwell@mbllp.com, cformanjr@bpa.gov, andersen@eesconsulting.com, nparker@bpa.gov, dtrotter@utc.wa.gov, david.white@tonkon.com, deb@a-klaw.com, rjpetty@bpa.gov, klc@a-klaw.com, janna.leasy@pacificorp.com, natalie.hocken@pacificorp.com, phil.obenchain@pacificorp.com, lara.skidmore@troutmansanders.com, rmmiller@bpa.gov, nbaker@ppcpdx.org, mark.brown@state.or.us, demetcalf@comcast.net, neil.price@puc.idaho.gov, don.howell@puc.idaho.gov, louann.westerfield@puc.idaho.gov, mdeen@ppcpdx.org, anita.swanson@avistacorp.com, dsmith@ghpud.org, lkandra@cablehouston.com, cameron@rnp.org, doug_brawley@pngc.com, irhunter@snopud.com, sbernstein@perkinscoie.com, neoma.lane@state.or.us, mmichel@canbyutility.org, ty.bettis@pgn.com,

melissa.seymour@iberdrolausa.com,
daniel.archuleta@troutmansanders.com, Matt.Muldoon@state.or.us,
tlhunter@bpa.gov, robert.cahail@pse.com, Robert.Clark@state.or.us,
cwgriffen@bpa.gov, mcdotten@msn.com, scott.brattebo@comcast.net,
tracey.bradley@bgllp.com, kcspear@ppcpdx.org, pgmunz@snopud.com,
bjbeck53@comcast.net, jrussell@cityoftacoma.org,
mstratman@pacifier.com, lafinley@snopud.com, ajmiles@snopud.com,
deanna.king@bgllp.com, Catriona@oregoncub.org,
LorenABaker@comcast.net, rkindley@cablehuston.com,
amrodehorst@bpa.gov, doug.faulkner@pse.com, mwperkins@bpa.gov,
gordon@oregoncub.org, jzhyde@bpa.gov, skobak@schwabe.com,
carichardson@bpa.gov, robin.cross@seattle.gov, mpa@a-klaw.com,
elisha@clatskaniepud.com, ryan.flynn@pacificorp.com,
brent.thompson@constellation.com, pnichols@idahopower.com,
zach.mayer@glencore-us.com, dtill@martenlaw.com

Subject: 2010 Power Rate Case - Response to Data Request PP-IR-5

This is an automated message from the Bonneville 2010 Power Rate Case Website:

<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
PP-IR-5

RESPONSE BY:

Lara Skidmore - Iberdrola Renewables, Inc.

ORIGINAL DATA REQUEST:

Please provide the rationale, and the support for that rationale, for excluding Hay Canyon and Pebble Springs from the analysis referred to in this portion of the testimony and provide support for your explanation.

EXHIBIT: Direct Testimony of Iberdrola Renewables WP-10-E-IR-01

PAGE(S): 45

LINE(S): Att. C

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)

--TEXT DESCRIPTION:

Hay Canyon and Pebble Springs have only recently been commissioned. We are still resolving start-up issues at the site and the SCADA system is not yet reporting reliable enough data to accurately calculate 30-minute and 45-minute persistence values.

For technical questions about this request please contact Melissa Seymour by phone (5037967114) or email (melissa.seymour@iberdrolausa.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

Attachment 9

From: ratecase@bpa.gov
To: imdimitman@bpa.gov; jmshaughnessy@bpa.gov; jack.speer@alcoa.com; larry.labolle@avistacorp.com; r.blair.strong@painehamblen.com; greggr@bentonpud.org; dborges@canbyutility.org; tgrim@chbh.com; pmurphy@mbllp.com; lboomer@franklinpud.com; cheryl.chevis@pgn.com; lwolv@tds.net; susan.k.ackerman@comcast.net; jsaven@pacifier.com; ghcarr@pacifier.com; schall@stoel.com; mthompson@ppcpdx.org; kpom@ppcpdx.org; DKari@perkinscoie.com; sara.johnson@pse.com; terrym@millcreeklaw.com; jkallstrom@snopud.com; tmetcalfe@cityoftacoma.org; wmgt@montana.com; dbyers@wutc.wa.gov; mwood@stoel.com; JKuzma@perkinscoie.com; pjburger@bpa.gov; rffinnen@snopud.com; krcasad@bpa.gov; temiller@bpa.gov; ragreene@bpa.gov; jawelch@bpa.gov; celeee@bpa.gov; allennox@bpa.gov; tcmsley@bpa.gov; jahirsch@bpa.gov; belovell@bpa.gov; eaevans@bpa.gov; pabrodie@bpa.gov; wjdoubleday@bpa.gov; dlgilman@bpa.gov; rjhomenick@bpa.gov; jrkliппstein@bpa.gov; cmiller@bpa.gov; tmurphy@bpa.gov; dhfisher@bpa.gov; icolive@bpa.gov; rdbliven@bpa.gov; rnotebo@gcpud.org; EJohnson@REJPC.com; Karen.mcdonald@powerex.com; ccopat@e-z.net; mail@dvclaw.com; michael.andrea@avistacorp.com; bob@oregoncub.org; sdleonard@earthlink.net; stefan.brown@pgn.com; stephanie.andrus@doj.state.or.us; mhchongtim@bpa.gov; robin.straughan@state.or.us; falcon@eesconsulting.com; majackson@bpa.gov; rspettinger@bpa.gov; energylaw@aol.com; speerja@verizon.net; ccaldwell@mbllp.com; cformanjr@bpa.gov; andersen@eesconsulting.com; nparker@bpa.gov; dtrotter@utc.wa.gov; david.white@tonkon.com; deb@a-klaw.com; ripetty@bpa.gov; kic@a-klaw.com; janna.leasy@pacificorp.com; natalie.hocken@pacificorp.com; phil.obenchain@pacificorp.com; lara.skidmore@troutmansanders.com; rmiller@bpa.gov; nbaker@ppcpdx.org; mark.brown@state.or.us; demetcalfe@comcast.net; neil.price@puc.idaho.gov; don.howell@puc.idaho.gov; louann.westerfield@puc.idaho.gov; mdeen@ppcpdx.org; anita.swanson@avistacorp.com; dsmith@ghpud.org; lkandra@cablehouston.com; cameron@rnp.org; doug_brawley@pngc.com; irhunter@snopud.com; sbernstein@perkinscoie.com; neoma.lane@state.or.us; mmichel@canbyutility.org; ty.bettis@pgn.com; melissa.seymour@iberdrolausa.com; daniel.archuleta@troutmansanders.com; Matt.Muldoon@state.or.us; tlhunter@bpa.gov; robert.cahail@pse.com; Robert.Clark@state.or.us; cwgriffen@bpa.gov; mcdotten@msn.com; scott.brattebo@comcast.net; tracey.bradley@bgllp.com; kcspear@ppcpdx.org; pgmunz@snopud.com; bjbeck53@comcast.net; jrussell@cityoftacoma.org; mstratman@pacifier.com; lafinley@snopud.com; ajmiles@snopud.com; deanna.king@bgllp.com; Catriona@oregoncub.org; LorenABaker@comcast.net; rkindley@cablehouston.com; amrodehorst@bpa.gov; doug.faulkner@pse.com; mwperkins@bpa.gov; gordon@oregoncub.org; jzhyde@bpa.gov; skobak@schwabe.com; carichardson@bpa.gov; robin.cross@seattle.gov; mpa@a-klaw.com; elisha@clatskaniepud.com; ryan.flynn@pacificorp.com; brent.thompson@constellation.com; pnichols@idahopower.com; zach.mayer@glencore-us.com; dtil@martenlaw.com
Subject: 2010 Power Rate Case - Response to Data Request BPA-NG-9
Date: Monday, April 06, 2009 6:01:02 PM

This is an automated message from the Bonneville 2010 Power Rate Case Website:
<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:
BPA-NG-9

RESPONSE BY:
Stephen Hall - Northwest Wind Group

ORIGINAL DATA REQUEST:
Please provide all "evidence" referred to in line 11 that shows that scheduling errors tend to cancel one another out.

EXHIBIT: Qualification Statement of Ken Dragoon WP-10-E-NG-01

PAGE(S): 12
LINE(S): 10-12

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)
--UPLOADED DOCUMENTS:
<https://secure.bpa.gov/RateCase/openfile.aspx?fileName=Recent+Week+Scheduling+Accuracy.xls&contentType=application%2fx-msexcel>

<https://secure.bpa.gov/RateCase/openfile.aspx?fileName=2009+Scheduling+Accuracy.xls&contentType=application%2fx-msexcel>

--TEXT DESCRIPTION:

The cited testimony refers to the evidence described in detail on pages 15-16, lines 12-2 which also refers to Table 1 of the testimony. The data on which that testimony is based is contained in the attached worksheet: "Recent Week Scheduling Accuracy.xls". NWG looked at additional data that has become available and is attached as "2009 Scheduling Accuracy.xls," which calculates similar results using all data from January through March 2009. That analysis demonstrates that the RMS error of the January through March 2009 wind schedules were equivalent to the accuracy of 45-50 minute persistence schedules (see "Persistence Error" tab). Nevertheless, the net schedule was most highly correlated with a persistence forecast made between 80 and 90 minutes before the start of the hour.

In other words, although schedulers seem to be submitting on the basis of 80 or 90 minute persistence, the net error is significantly lower than would be expected at that level. This appears to be attributable to the schedule errors canceling one another out to some extent.

For technical questions about this request please contact Stephen C. Hall by phone (5032949625) or email (schall@stoel.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."

(att. 9)

The first “uploaded document” referenced in the data response is uploaded separately as WP-10-E-JP6-04-AP05; TR-10-E-JP6-04-AP05.

Attachment 10

From: ratecase@bpa.gov

Date: 7 April, 2009 2:43:00 PM PDT

To: larry.labolle@avistacorp.com, r.blair.strong@painehamblen.com, greggr@bentonpud.org, tgrim@chbh.com, pmurphy@mbllp.com, lboomer@franklinpud.com, cheryl.chevis@pgn.com, lwolv@tds.net, susan.k.ackerman@comcast.net, jsaven@pacifier.com, ghcarr@pacifier.com, schall@stoel.com, Doug_Brawley@PNGCPower.com, mthompson@ppcpdx.org, kpom@ppcpdx.org, DKari@perkinscoie.com, sara.johnson@pse.com, jkallstrom@snopud.com, tmetcalfe@cityoftacoma.org, wmgmt@montana.com, dbyers@wutc.wa.gov, JKuzma@perkinscoie.com, rffinnen@snopud.com, alennox@bpa.gov, belovell@bpa.gov, dlgilman@bpa.gov, rnotebo@gcpud.org, EJohnson@REJPC.com, Karen.mcdonald@powerex.com, ccopat@e-z.net, temayer@bpa.gov, mail@dvclaw.com, michael.andrea@avistacorp.com, sdleonard@earthlink.net, stefan.brown@pgn.com, stephanie.andrus@doj.state.or.us, mhchongtim@bpa.gov, robin.straughan@state.or.us, falcon@eesconsulting.com, majackson@bpa.gov, rspettinger@bpa.gov, energlaw@aol.com, ccaldwell@mbllp.com, andersen@eesconsulting.com, dtrotter@utc.wa.gov, david.white@tonkon.com, janna.leasy@pacificorp.com, natalie.hocken@pacificorp.com, phil.obenchain@pacificorp.com, lara.skidmore@troutmansanders.com, nbaker@ppcpdx.org, mark.brown@state.or.us, demetcalf@comcast.net, louann.westerfield@puc.idaho.gov, mdeen@ppcpdx.org, anita.swanson@avistacorp.com, lkandra@cablehuston.com, cameron@rnp.org, doug_brawley@pngc.com, irhunter@snopud.com, sbernstein@perkinscoie.com, neoma.lane@state.or.us, ty.bettis@pgn.com, melissa.seymour@iberdrolausa.com, daniel.archuleta@troutmansanders.com, Matt.Muldoon@state.or.us, adrobertson@bpa.gov, robert.cahail@pse.com, cwgriffen@bpa.gov, mcdotten@msn.com, ayshintani@bpa.gov, tracey.bradley@bgllp.com, kcspear@ppcpdx.org, pgmunz@snopud.com, bjbeck53@comcast.net, jrussell@cityoftacoma.org, mstratman@pacifier.com, lafinley@snopud.com, ajmiles@snopud.com, deanna.king@bgllp.com, LorenABaker@comcast.net, rkindley@cablehuston.com, doug.faulkner@pse.com, mwperkins@bpa.gov, robin.cross@seattle.gov, brent.thompson@constellation.com

**Subject: 2010 Transmission Rate Case - Response to Data Request
BPS-IR-3**

This is an automated message from the Bonneville 2010 Transmission Rate Case Website:

<https://secure.bpa.gov/RateCase>

PLEASE DO NOT RESPOND TO THIS EMAIL.

The Following DATA RESPONSE Has Been Issued:

DATA REQUEST NUMBER TO REFERENCE:

BPS-IR-3

RESPONSE BY:

Lara Skidmore - Iberdrola Renewables, Inc.

ORIGINAL DATA REQUEST:

1. Does Iberdrola receive revenues from unscheduled energy? If so, please list the types of revenues you receive.
2. What is the typical dollar per megawatt hour of these revenues.

EXHIBIT: Direct Testimony of Iberdrola Renewables TR-10-E-IR-01

PAGE(S): 11

LINE(S): 10-11

DATA RESPONSE: (NOTE: You MUST log in to the site in order to view any documents)

--TEXT DESCRIPTION:

1. Yes. For some contracts we receive revenue based on metered generation not scheduled generation.
2. There is no typical dollar per megawatt hour; each individual arrangement is different.

For technical questions about this request please contact Melissa Seymour by phone (5037967114) or email (melissa.seymour@iberdrolausa.com)

If you do not wish to receive notification of data responses from this system, please log into your account, select "Account" on the left hand menu and clear the checkboxes next to the setting marked "Email data response notifications."