

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-026

Regarding: Market prices, Judith Gap production

Witness: Fine

- a. Please provide the hourly, Dow Jones Mid-C index market prices for the 08-09 tracker period in a Microsoft Excel spreadsheet.
- b. Please provide the hourly Judith Gap output for the 08-09 tracker period in a Microsoft Excel spreadsheet, and in the same format used for hourly Mid-C market prices provided in response to part a.
- c. Please provide the hourly day-ahead Judith Gap prescheduled output for the 08-09 tracker period in a Microsoft Excel spreadsheet, and in the same format used for hourly Mid-C market prices provided in response to part a.
- d. Please provide the actual monthly Operations and Maintenance Energy Rate associated with the Judith Gap power purchase agreement for the 08-09 tracker period.
- e. Please provide the hourly difference between the day-ahead prescheduled Judith Gap output and the real-time scheduled Judith Gap output for the 08-09 tracker period, and in the same format used for Mid-C market prices provide in response to part a.

RESPONSE:

- a. See the Excel spreadsheet on the attached to the CD. The information provided in this response is copyright protected material and one copy has been provided to each the Montana Public Service Commission and the Montana Consumer Counsel. This information is being provided in connection with regulatory requirements, proceedings, and compliance activities before the Montana Public Service Commission. Parties that receive this copyright protected information pursuant to this Docket shall not otherwise redistribute, sell, publish or disclose the information provided in this response in whole or in part to any other persons or parties.
- b. See attached CD.
- c. See CD attached to part (b).

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-026 (con't)

- d. The O&M Energy Rate for the period July 1, 2008 through June 30, 2009 is: July 2008 through February 2009 \$9.242 per megawatt-hour and March 1, 2009 through June 2009 \$9.443 per megawatt-hour.
- e. Due to time constraints in responding to this request, and the voluminous data involved the requested calculation has not been performed. The data to perform the calculation is included in the CD attached to part (b).

Dkt. No. D2008.5.45/D2009.5.62

PSC Set 1 – 026(a)

Attachment 1

Provided Under Copyright Protection

On CD

(One Copy each to MPSC and MCC)

Dkt. No. D2008.5.45/D2009.5.62

**PSC Set 1 – 026(b)
– 026(c)
– 026(e)**

**Attachment 1
On CD**

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27,, 2009

PSC-027

Regarding: Wind integration costs

Witness: Fine/Donaldson

- a. Please explain the status of any NWE analyses regarding the economic costs and benefits of controlling output at the Judith Gap wind project as a way to reduce associated regulating reserve capacity requirements. Please provide any estimates, preliminary or otherwise, of costs and regulating reserve savings. (Note: this data request is identical to data request PSC-114, Docket No. D2008.12.146 and the same response will suffice.)
- b. Please describe the process that led to NWE's decision to acquire 31 MW of regulating reserve capacity to integrate wind resources in the retail supply portfolio. Please discuss the roles played by both NWE's transmission function and NWE's supply function.
- c. Please provide a copy of any RFP issued by NWE's supply function for regulating reserve capacity to integrate wind resources in the retail supply portfolio.
- d. Please provide any information NWE's Energy Supply function receives from the transmission function regarding hourly or monthly use of the 31 MW of regulating reserve capacity procured by the supply function to integrate wind resources in the retail supply portfolio.
- e. Please identify any new QF wind projects with which NWE is negotiating contracts and for which an executed contract is imminent. For these QFs identify the size and projected commercial operation date of each project and explain how wind integration costs will be addressed in the contracts.

RESPONSE:

- a. While NWE has explored the operational and technical aspects of curtailment of wind energy production with Invenergy, NWE has not quantified the amount of regulating reserves (if any) that would be achievable in conjunction with a curtailment program at Judith Gap.

The purchase power agreement between Invenergy (Judith Gap) and NWE contains a keep whole provision for any energy that NWE may curtail. This

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-027 (con't)

means NWE is obligated to pay for any energy that Judith Gap would have otherwise produced at the then current contract rate, plus, the value of any associated production tax credits (PTCs) on an after-tax basis that Judith Gap would have otherwise received. Under current contract and PTC rates, curtailment energy (energy paid for but not received) is estimated to cost approximately \$56 -\$70 per megawatt hour. Additional costs to accomplish curtailment at Judith Gap, if any, and the value of renewable energy credits to NWE, are not included in the values.

- b. There were three issues associated with Energy Supply acquiring 31 MW of regulation for the 2009 and 2010 time period. Note that during 2007, Energy Supply had 25 MW of regulation under contract for 9 months and 15 MW for three months.

Issue 1. The Transmission Function informed the Supply Function that because of CPS2 compliance concerns, the Supply Function needed to obtain 10 MW of additional regulation for the 3 months that it only had 15 MW under contract. Thus, 25 MW became the new base level of regulation specifically for Energy Supply's existing intermittent resources.

Issue 2. During July and August of 2008 Energy Supply, at the urgent request of Transmission, sought and acquired 10 MW of additional regulation for a portion of each of those months.

Issue 3. Energy Supply was processing the QF queue which contained in excess of 150 MW, including responding to requests from developers for QF contracts, most of which was from potential wind generation. In addition, Energy Supply in late summer 2008 issued a community renewable RFP which was believed to also likely result in additional wind generation being acquired.

It was the expectation that Energy Supply, from the actions outlined in Issue 3 above, would have some additional quantity of wind as part of its 2009 portfolio. An additional 15 to 20 MW of additional wind was expected to be part of the portfolio and thus would require approximately 3 to 4 MW of additional regulation resource. As discussed in the Mill Creek Generation Facility Docket D2008.8.95, the regulation market is illiquid and thus it was necessary to contract for regulation in advance to ensure sufficient regulating

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

reserves were available to accommodate the expected new wind. Energy Supply did not want a situation where it was refusing to sign QF wind contracts because of a lack of regulation. In addition to the projected additional wind, because of the need to acquire 10 MW of additional regulation during portions of July and August of 2008, it was decided to contract for 2 to 3 MW of additional regulation to meet concerns regarding CPS2 compliance. Also see attached documents.

- c. Energy Supply did not issue an RFP. However, in the Transmission RFP responses, Avista responded indicating that they wished to continue with similar contracts with Energy Supply. As such, Energy Supply conducted negotiations with Avista for continued service in 2008 and then again in 2009/2010 delivery periods. In addition, because of the extremely limited response in the Transmission's RFP for regulation, Energy Supply contacted directly those respondents and negotiated a contract with another party (Powerex) for the amount that Avista was unable to provide.
- d. Energy Supply does not receive specific information about the hourly or daily use or operation of regulation contracts. The Transmission Function is responsible for implementing these contracts. The capacity of all of the regulation contracts (including the contracts that Transmission and Supply have executed) is required to meet mandatory reliability criteria. All capacity must be available at all times. As a result, the 31 MW regulating reserve capacity from Energy Supply is being utilized at all times to provide appropriate regulation.
- e. The only Wind QF contract negotiations that are imminent at this time are two renewal contracts that have already reached commercial operation. These are Mission Creek at 65 kW and Montana Marginal at 195 kW. NWE has proposed to use the percent of capacity allocation that the Commission approved in the UMGF Docket D2009.1.4.

Dkt. No. D2008.5.45/D2009.5.62

PSC Set 1 – 027(b)

Attachment 1



Michael R. Cashell
Chief Transmission Officer
Telephone: (406) 497-4575
Fax: (406) 497-2150
Cell: (406) 490-4011
michael.cashell@northwestern.com

NorthWestern Corporation
d/b/a NorthWestern Energy
40 East Broadway Street
Butte, MT 59701
Telephone: (406) 497-3000
www.northwesternenergy.com

March 13, 2008

Mr. John Hines
Chief Energy Supply Officer
NorthWestern Energy
40 E. Broadway
Butte, MT 59701

Dear Mr. Hines

NorthWestern's Energy Supply Function ("ESF") has procured and/or self provided Regulating Reserves for the purpose of wind integration of resources in the Energy Supply portfolio in 2006, 2007 and again in 2008. The arrangements ESF has made for the integration of wind to the system have been critical to mitigating reliability concerns associated with the variable nature of your contracted wind generation resources. The purpose of this letter, however, is inform the ESF that the NorthWestern Transmission Function ("TF") has determined that the Regulating Reserve resource that has been provided by ESF is insufficient for May, June and the first half of July of 2008 ("Deficient Period"). As you are aware, ESF has procured only 15 MW of Regulating Reserve Service from Avista for the Short Months while it has 25 MW of the service in the remaining months of the year. Consequently, the ESF should immediately undertake to procure an additional 10 MW of Regulating Reserve services.

The TF understands that at the time you procured a supply of Regulating Reserves for 2008 only 15 MW of the services was available during the Deficient Period. In fact, the same circumstances existed when ESF procured Regulating Reserves for 2007 and a short term purchase of Regulating Reserves was made by ESF to partially fill this need. That said, the TF believes it is prudent utility practice and consistent with applicable reliability standards to require that the ESF acquire an additional 10 MW of Regulating Reserve services in the Deficient Period to assure that 25 MW of Regulating Reserve is available to integrate the ESF's wind resource year-round. Additionally, the ESF should keep the foregoing in mind when procuring Regulating Reserve for 2009 and beyond. It should be noted that at some times in the past, the Basin Creek generation facility has been manually dispatched under the Memorandum of Understanding between ESF and TF in order to attempt to deal with the sudden loss or increase in wind generation. While that operation of Basin Creek has sometimes been helpful, it does not replace nor meet the automatic generation control reliability associated with Regulating Reserve service.

TF's recent experiences in procuring Regulating Reserves (RFPs for 2007 and 2008 requirements) for the rest of the Balancing Authorities' needs suggest that you should contact Powerex, BPA and Avista for the additional Regulating Reserves required for Judith Gap wind integration. NorthWestern Transmission is already technically enabled to integrate

LETTER: Mr. John Hines
DATE: March 13, 2008
PAGE: 2 of 2

Regulating Reserves from any of these parties since we have in the past or are currently receiving the service from these entities.

The ESF should move quickly to procure the additional Regulating Reserves that the TF is requiring you to supply to the Balancing Authority as described above. Once you have identified your source of the Regulating Reserve service, the TF will work with you to assure that it is properly integrated into the other services used in the Balancing Authority. Keep in mind that the service must be substantially the same as that which you are already purchasing from Avista in order to meet the TF technical requirements.

If you have any questions or would like to discuss this matter further, please contact me at 406-497-4575.

Sincerely,



Mike Cashell
Chief Transmission Officer

Moran, Connie C

From: Cashell, Michael R
Sent: Wednesday, August 27, 2008 7:51 AM
To: Cashell, Michael R; Hines, John; Markovich, Kevin J
Cc: Johnston, Casey E; Williams, Ted D
Subject: RE: Increase in Regulating Reserve Request

John/Kevin - as we discussed yesterday, we have experienced very volatile operation of the intermittent generation resource on our system again in August and we have been, in our view, in danger of violation of mandatory NERC operating criteria unless action was taken to acquire additional regulation service. As the preliminary data that we shared with you indicates, in our view, it is the wind resource that is causing the incremental need for regulation. We also discussed that a more in-depth analysis should be considered to determine the scope of the incremental regulation needs and I agree that we should continue to pursue that.

Thank you for working with us to arrange with your regulation service provider to acquire an additional 10 MW of regulation service from 8/27 through the end of the month. While it was difficult to acquire and not readily available, the effort that we took to get the extra service was critical to the reliable operation of the NorthWestern system.

Mike

Mike Cashell
Chief Transmission Officer
NorthWestern Energy
(W) 406-497-4575
(C) 406-490-4011
Email: michael.cashell@northwestern.com

From: Cashell, Michael R
Sent: Wednesday, July 23, 2008 7:29 PM
To: Hines, John; Fine, David E
Cc: Cashell, Michael R; Johnston, Casey E; Williams, Ted D
Subject: Increase in Regulating Reserve Request

John/Dave - as a result of recent very volatile operation of NorthWestern Supply function (NWS) intermittent resources so far in July, NorthWestern Transmission (NWMT) has dropped below compliance levels for Control Performance Standard 2 (CPS2) - below 90%. As a result, we feel that prompt corrective action must be taken by NWS to allow NWMT to attempt to return to compliance before the end of the month (the point at which monthly compliance is measured). This situation has come on very suddenly, which is the reason for the request for immediate action.

NWMT's request is that NWS provide at least 10 MW of additional regulating reserves that can be integrated into NWMT's transmission system as soon as possible. It would be best if this additional service is procured from a party that is already providing service to NorthWestern as that will expedite the process from a technical perspective. Unless there are other options available to NWS, such as intermittent resource curtailment, NWMT believes this is the only option available to attempt to meet CPS2 compliance by month's end.

Please respond to me as soon as possible so that we can coordinate an effective action plan. Thank you in advance for your cooperation.

8/7/2009

Mike

Mike Cashell
Chief Transmission Officer
NorthWestern Energy
(W) 406-497-4575
(C) 406-490-4011
Email: michael.cashell@northwestern.com

8/7/2009

Moran, Connie C

From: Cashell, Michael R
Sent: Wednesday, July 23, 2008 7:29 PM
To: Hines, John; Fine, David E
Cc: Cashell, Michael R; Johnston, Casey E; Williams, Ted D
Subject: Increase in Regulating Reserve Request

John/Dave - as a result of recent very volatile operation of NorthWestern Supply function (NWS) intermittent resources so far in July, NorthWestern Transmission (NWMT) has dropped below compliance levels for Control Performance Standard 2 (CPS2) - below 90%. As a result, we feel that prompt corrective action must be taken by NWS to allow NWMT to attempt to return to compliance before the end of the month (the point at which monthly compliance is measured). This situation has come on very suddenly, which is the reason for the request for immediate action.

NWMT's request is that NWS provide at least 10 MW of additional regulating reserves that can be integrated into NWMT's transmission system as soon as possible. It would be best if this additional service is procured from a party that is already providing service to NorthWestern as that will expedite the process from a technical perspective. Unless there are other options available to NWS, such as intermittent resource curtailment, NWMT believes this is the only option available to attempt to meet CPS2 compliance by month's end.

Please respond to me as soon as possible so that we can coordinate an effective action plan. Thank you in advance for your cooperation.

Mike

Mike Cashell
Chief Transmission Officer
NorthWestern Energy
(W) 406-497-4575
(C) 406-490-4011
Email: michael.cashell@northwestern.com

8/7/2009

From: Hines, John
Sent: Friday, February 01, 2008 1:32 PM
To: Markovich, Kevin J
Cc: Gates, David G (VP); Hines, John
Subject: Regulation Resource

Kevin,

Supply has been offered, through a competitive Request For Proposals process, the ability to renew its existing 25 / 15 MW regulation resource contract with Avista. Energy Supply also has been provided the option to slightly increase the amount of regulation resource it purchases from Avista. The length of this proposed contract would be 2 years, from 2009 - 2010 and the proposed price is at the existing rate plus 5%, a rate that is less than transmission's current tariff for regulation resource. While at this time the 25 MW / 10 MW contract and the operation of Basin appears to adequately address the regulation resource needs associated with the inclusion of Judith Gap Wind in NWE's supply portfolio, given the expected addition of additional intermittent resources to the supply portfolio in 2008 - 2010, it is prudent to attempt to acquire 6 additional megawatts at the same terms and conditions. The 6 MW addition is an estimate of additional need given that NWE will likely be required to purchase wind generation QFs and meet the 2010 statutory obligation of the Community Renewable Standard section of the Renewable Portfolio Act. Because Montana Public Service Commission regulatory processes and NWE acquisition mechanisms will not be completed prior to when Supply must decide on whether to enter into a contract with Avista, the precise total amount of future regulation reserves necessary to meet additional wind generation sources is impossible to state.

A total of 31 MW / 21 MW contract is a reasonable hedge given this uncertainty.

Please work with Avista to complete contract negotiations with the 31 MW / 21 MW configuration in a manner similar to your involvement last year. Thanks,

John

John D. Hines
Chief Supply Officer
NorthWestern Energy
wk. 406.449.8333
cell 406.459.2157
John.Hines@northwestern.com

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27,, 2009

PSC-028

Regarding: DSM activity

Witness: Thomas

- a. What DSM program activities were most responsible for helping the Company exceed its DSM acquisition targets in the 07-08 and 08-09 tracker years?
- b. Please explain whether the Missoula Green Blocks program partly explains why the Company exceeded its DSM acquisition target in the 08-09 tracking period.
- c. Please list the currently staffed positions within the DSM function and explain whether there are any unfilled positions.
- d. Please explain whether NWE has any plans to expand internal DSM staff or contractors.
- e. Please provide the estimated average cost of saved energy (\$/MWh) for the Energy Supply DSM resources acquired in both the 07-08 and 08-09 tracker periods.

RESPONSE:

- a. The primary reason NorthWestern exceeded its DSM goals is that greater numbers of customers voluntarily participated in the DSM programs and made decisions to adopt and install DSM measures using program services. All DSM program activities are needed and important to meeting or exceeding annual DSM targets. In Exhibit (WMT-1) of both dockets, Table A presents results by individual DSM and USB program. Simple inspection of these figures might suggest that some programs (e.g., Lighting, Business Partners, NEEA) are more important than other programs because they deliver larger DSM amounts during the tracking periods. DSM resource is acquired in very small increments from very large numbers of customers. The volume and proportion of specific, individual DSM measures that are installed in a given tracking period will likely change and shift in future years depending on technology, customer economics, market saturation and energy codes. Because of this, NorthWestern believes that no single, or small group of, DSM programs or factors can be pronounced more or less important in the production of DSM needed to reach its aggressive annual goals.

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27,, 2009

PSC-028 (con't)

- b. The Missoula Green Blocks Program made a very minor contribution to the overall DSM Program results. This program produced reported annual energy savings of 0.0057 aMW in the 08-09 tracking period.
- c. The currently staffed functions within the NorthWestern Energy DSM function are:
- Manager of Regulatory Support Services (1 person)
 - Senior DSM Engineer (2 persons)
 - DSM Engineer (1 person)
 - DSM Consultant (1 person)
 - Administrative Professional (0.5 full time equivalent)

There are no unfilled positions.

- d. NorthWestern has no plans at this time to expand internal staff or contractors.
- e. The estimated levelized cost of saved energy for the Energy Supply DSM resources acquired in the 07-08 tracker period (4.55 aMW) is \$8.99/MWh.

The estimated levelized cost of saved energy for the Energy Supply DSM resources acquired in the 08-09 tracker period (5.58 aMW) is \$10.94/MWh.

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-029

Regarding: Exhibit_(FVB-1) 07-08, 08-09, 09-10

Witness: Bennett

- a. Please explain how the Basin Creek operating reserve credit values in the tracker spreadsheets, p 4 of 5, are determined.
- b. Please explain how the Basin Creek wind firming credit values in the tracker spreadsheets, p 4 of 5, are determined.
- c. For the annual tracker periods 07-08 and 08-09, please provide the actual average cost of natural gas used to fuel Basin Creek.
- d. For the annual tracker period 09-10, please provide the estimated average cost of natural gas used to fuel Basin Creek.
- e. For each of the annual tracker periods 07-08, 08-09, and 09-10, please identify the portfolio contracts/resources which cause NWE to incur the operating reserve costs shown on p 4 of 5 of the tracker spreadsheets.

RESPONSE:

- a. The operating reserve credit was calculated using 21 MW of capacity, which was later adjusted to 27 MW times the hours in the month times the current rate. During the tracker period the rate was adjusted from \$12.50 per MW to \$18 per MW based on an invoice received. The original Basin Creek invoices are unchanged. This is just a reallocation to represent its use for operating reserves.
- b. NWE's Transmission Function tracks the MWhs from dispatching the Basin Creek generating plant when necessary to help integrate wind. The monthly MWhs are provided to NWE's Accounting Function which books the value of the energy at the average Mid-C price. The original Basin Creek invoices are unchanged. This is just a reallocation to represent its use for wind.
- c. The average cost of gas to fuel Basin Creek in the 07-08 annual tracker period was \$7.098/Dkt. For the 08-09 annual tracker period the average price was \$5.772/Dkt.

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-029 (con't)

- d. This estimate was based on the prior year's tracker values.
- e. NorthWestern is required to carry reserves of 5% for hydro and wind resources and 7% for thermal units. These volumes change on a daily basis depending on wind output and outages. Below is a summary of contract/resources on which NWE is required to carry reserves:

Wind 0-135 MWs @ 5% = 0 – 7 MWs of Reserves
Horseshoe Bend 0-9 MWs @ 5% = 0 – 1 MW of Reserves

Broadwater QF 3 MWs/Tiber 5MW @ 5% = 1 MW of Reserves

QF Thermal units 97 MWs @ 7% = 7 MW of Reserves
Basin 0-52 MWs @ 7% = 0 - 4 MW of Reserves
Colstrip 222MWs @ 7% = 16 MW of Reserves

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27,, 2009

PSC-030

Regarding: CU4 replacement purchases, financial swaps

Witness: Markovich/Bennett

- a. On pp 5-6 of his testimony Mr. Markovich describes market purchases to replace the baseload energy from CU4. Please provide the details of these market purchases: who are the counter parties, what are the contract durations, what are the contract quantities, what are the contract prices, when were they procured?
- b. Please quantify the net impact on the forecast of total supply portfolio costs for the 2009-2010 tracker period of the extended outage at CU4.
- c. Regarding the hypothetical fixed for float swap described on p. 12 of Mr. Markovich's testimony, please explain whether NWE must pay ABC bank for the ability to lock in the 2011 forward price of electricity at \$60. If so, what is the basis for the payment and how does NWE determine whether the payment is a cost-effective way to lock in the price?
- d. What incentive does a bank have to enter into a financial fixed for float swap? Is the bank essentially betting that the future price will be lower than the fixed price in the contract so that NWE will have to pay it the difference?
- e. In other dockets NWE has indicated that 80% - 90% of its hourly spot market purchases are related to balancing variable energy output from Judith Gap. See, for example, NWE's response to data request PSC-033, Docket No. D2008.12.146. Please confirm that these hourly spot market purchases are embedded in the net non-base transactions described in Frank Bennett's testimony on p. 11 (Docket D2009.5.62), which were 1,878,300 mwh in the 08-09 tracking period.

RESPONSE:

- a. As part of its overall portfolio management, as well as in response to the Colstrip Unit 4 outage, on 4-9-2009, NWE purchased 50 MWs of Heavy Load (HL) power from PPL at \$16.50/MWh for the month of May, and on 4-16-2009, NWE purchased 50 MWs of HL power from Powerex at \$18.75/MWh for the month of June.

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-030 (con't)

- b. As explained in Mr. Markovich's testimony, NWE does not paint MWHs for individual resources. This makes the requested computation of the net impact a very speculative calculation. Multiple factors influence the requested computation, including but not limited to:
- The validity of the current market forecast,
 - The assumption that all variable operation and maintenance (O&M) costs can be avoided,
 - The assumption that all fuel costs can be avoided, and
 - The assumption that all power lost at Colstrip Unit 4 would have to be replaced.

When the notice of the extended outage was received, NWE evaluated the net impact. Considering all of the factors that affect this computation, an estimate of this impact is: an increase of \$1.7 M in supply costs offset by a decrease in CU4 variable costs of \$1.6 M, totaling an approximate \$150,000 net increase.

- c. No payment is required.
- d. The bank is betting that the price will be lower. Yes.
- e. Yes, the net Non-base transactions include the hourly spot market purchases of which the volume has been updated for actual values to 1,761,394 MWh in Exhibit__(FVB-2_Rev_1).08-09 attached to PSC-001(b).

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27,, 2009

PSC-031

Regarding: Financial swaps

Witness: Markovich

- a. Referring to part e of the previous data request, is it possible to determine what portion of the 1,878,300 mwh net non-base transactions are related to hourly balancing of loads and resources and what portion is related to longer term hedging activity? If so, please provide that information.
- b. Please provide NWE's current overall mark-to-market position on its existing natural gas financial swaps.
- c. Please explain whether NWE's current overall mark-to-market position on its existing natural gas financial swaps poses, or may pose, any credit problems for NWE and, if so, explain those problems.
- d. Please explain how NWE's natural gas financial swaps affect the monthly tracker. For example, assume NWE has a contract for physical natural gas supply at an index price in 2009 and has financially swapped the index price for a fixed price. How does NWE reflect the price of the physical natural gas in the monthly trackers, at the swapped fixed price or the actual index price?
- e. Using the same example from part d of this data request, if the monthly tracker reflects the swapped fixed price, but the actual index price is higher than the swapped fixed price, are NWE's actual outlays greater than its rate revenue for the swapped volumes until financial settlement on the swapped price occurs? If so, how are carrying costs treated?

RESPONSE:

- a. Approximately 224,000 net megawatt-hours of the net non-base transactions are composed of hourly energy purchases with the remainder composed of term purchases.
- b. The current mark-to-market natural gas position on financial swaps is (\$19,300,671.16) as of 8/8/2009. This position changes on a daily basis depending on the current natural gas-index.

NorthWestern Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27, 2009

PSC-031 (con't)

- c. One issue that NWE has experienced is that if a majority of the financial swaps are with one counterparty, the margin that must be posted when prices move down significantly reduces the credit available from that counterparty. This situation may result in the loss of this counterparty for other transactions until the credit and margin situation improve.
- d. The index purchase with the original seller is accounted for as an index purchase. The net of the fixed price purchase and the index sale is accounted for with the swap counterparty. The two index transactions effectively zero out and the cost that remains is the fixed price cost.
- e. If the Index price is higher than the fixed price, NWE's cash outlay would be reduced by the difference in the value of the fixed price less the Index price. If NWE buys one unit at \$5.50 (index price) and simultaneously swaps for fixed at \$5.00, the result would be a purchase and a sale at \$5.50 and a purchase at \$5.00. NWE and its customers are better off than had they just paid index. All costs entered into the monthly tracker are estimated as close as possible to reflect what will be seen on the actual invoices in the following month. To the extent that actuals vary from estimates, an actual to estimate true-up is performed each month correcting the previous month. The purchase gas costs in the monthly tracker are estimated and accounted for in the month that the gas is received. The actual cash that is paid to counterparties is paid in the following month after the invoices have been received. There is an interest impact on the relative position of the deferred account balance. If NWE is under-collected, 12.26% interest is added to the deferred account. If NWE is over-collected, it refunds 12.26% interest to customers. There is no carrying cost applied to the timing of physical delivery and cash outlay to the counterparties, due to the fact that costs are estimated to occur upon delivery.

North Western Energy
Docket D2008.5.45 and D2009.5.62
Electric Supply Deferred Cost Account Balance
and
Projected Electric Supply Cost

Montana Public Service Commission (PSC)
Set 1 (001-032)

Data Requests Service Date July 27,, 2009

PSC-032

Regarding: QF-1 tariff-related costs in 08-09 tracker
Witness: Bennett

Please explain the QF-1 cost for August 2008 (i.e., \$105.644 per MWh), is this a function of QFs selecting the Option 2 rates in the QF-1 tariff schedule?

RESPONSE:

The resulting calculation is due to both a mixture of Option 2 rates and prior period accounting adjustments booked during the August 2008 tracker month.

