



March 8, 2013

Ms. Kate Whitney
Utility Division
Montana Public Service Commission
1701 Prospect Avenue
PO Box 2022601
Helena, Montana 59620-2601

**Re: Docket No. D2012.5.49 Electric Tracker
NorthWestern Energy's Responses to MCC Set 3 (046-057) Data Requests**

Dear Ms. Whitney:

Enclosed for filing is a copy of NorthWestern Energy's response to MCC Set 3 (046-057) data requests. This set of data request responses has been mailed to the service list in this docket and hand delivered to the PSC and MCC. They have been efiled with the PSC.

Should you have questions please contact Joe Schwartzberger at (406) 497-3362.

Sincerely,

A handwritten signature in cursive script that reads "Nedra Chase".

Nedra Chase
Administrative Assistant

Enclosures

CERTIFICATE OF SERVICE

I hereby certify that a copy of NorthWestern Energy's responses to MCC Set 3 Data Requests (046-057) in Docket D2012.5.49 Electric Tracker has been served by mailing a copy thereof by first class mail, postage prepaid to the service list in this Docket and hand delivered to the PSC and MCC. These responses have also been efiled with the PSC.

Date: March 8, 2013



Nedra Chase
Administrative Assistant
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D2012.5.49**

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NorthWestern Energy
Docket D2012.5.49
Electric Tracker
Montana Consumer Counsel (MCC)

MCC Set 3 (046-057)

Data Requests served February 20, 2013

MCC-046 RE: Over-collected Lost Revenues
 Witness: William M. Thomas

You state in your testimony at page WMT-10, lines 12-14 that NWE proposes to credit the over-collected lost revenue amount, resulted from the SBW evaluation, in the 2013-2014 electric tracker. Please explain why customers should not receive the credit in this proceeding, 2012-2013 electric tracker.

RESPONSE:

NorthWestern is indifferent to whether the credit is done as part of this proceeding or in the next tracker proceeding. NorthWestern regularly performs true-ups of expenses in each tracker (including carrying charges) and is only suggesting this credit can be done in the course of normal business in the upcoming 2013-2014 electric tracker. As a practical matter, given the procedural schedule in this docket, the over-collected revenue will have to be included in the next docket.

NorthWestern Energy
Docket D2012.5.49
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Montana Consumer Counsel (MCC)

MCC Set 3 (046-057)

Data Requests served February 20, 2013

MCC-047 RE: DSM Program Cost-Effectiveness
Witness: William M. Thomas

Please indicate the specific table or page in the SBW Evaluation (Exhibit __ (MHB-1a)) where the levelized costs of DSM acquired during the five-year period from (1) the Program Administrator perspective (PAC) of \$0.011/kWh and (2) the Total Resource Cost perspective (TRC) of \$0.025/kWh are shown as stated in your testimony on page WMT-11, lines 1-6.

RESPONSE:

The values of \$0.011/kWh and \$0.025/kWh were sourced from results of calculations in a spreadsheet workbook (Impact Result Tables – Tracker 113012.xlsm) provided by SBW at the end of November 2012. These values are for electric energy savings from all electric DSM programs including those funded with USB money. These values were the ones available at the time of preparation and final review of Thomas Supplemental Testimony. It was expected at that time that these values would also be included in the Baker Direct Testimony in Exhibit __ (MHB-1a).

Subsequent to filing of this testimony, SBW updated its levelized cost calculations. These updated values are contained in the material provided in the updated response to Data Request PSC-033; refer to electronic copies of two spreadsheet workbooks from SBW, Inc. (Impact Result Tables - Tracker FINAL 01-29-13 and Impact Result Tables - Calendar FINAL 01-29-13). These workbooks contain the updated values of interest in this data request, and which are summarized in the following table:

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MCC-047 cont'd

File Name	Worksheet Tab	Based on TRC		Based on PAC		Notes
		Cell #	Value (\$/kwh)	Cell #	Value (\$/kwh)	
Impact Result Tables - Tracker FINAL 01-29-13.xlsm	PortfolioLevCostAllYears	AO40	0.026	AP40	0.016	All Programs Electric Supply-DSM
Impact Result Tables - Tracker FINAL 01-29-13.xlsm	PortfolioLevCostAllYears	AO120	0.041	AP120	0.023	All Programs Electric
Impact Result Tables - Calendar FINAL 01-29-13.xlsm	PortfolioLevCostAllYears	AO40	0.028	AP40	0.016	All Programs Electric Supply-DSM
Impact Result Tables - Calendar FINAL 01-29-13.xlsm	PortfolioLevCostAllYears	AO120	0.042	AP120	0.024	All Programs Electric

A summary of the levelized costs for all calendar years appears as Table 649 on page 828 of Exhibit (MHB-1a). This table presents the impact results, including levelized costs (\$0.028/kwh and \$0.016/kwh), for the calendar period 2007-2011.

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MCC Set 3 (046-057)

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MCC-048 RE: Exhibit__(WMT-5)
Witness: William M. Thomas

Please provide an electronic copy of Exhibit__(WMT-5), with all supporting worksheets, including those used in updating lost revenue amounts for Tracker 2006-07 through Tracker 2010-11.

RESPONSE:

See the file in the folder labeled "MCC-048" on the attached CD.

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MCC Set 3 (046-057)

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MCC-049 RE: Exhibit__(WMT-3-S)
Witness: William M. Thomas

Please provide an electronic copy of Exhibit__(WMT-3-S), with all supporting worksheets.

RESPONSE:

See the file in the folder labeled "MCC-049" on the CD attached to MCC-048.

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MCC Set 3 (046-057)

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MCC-050 RE: Exhibit__(WMT-3-S)
Witness: William M. Thomas

On page 6 of 21 of Exhibit__(WMT-3-S), a note states that 1.0 was used because the actual Net Adjusted Energy Savings from SBW were entered in Tab 3. Please provide the values of the Adjusted Energy Savings that would have been used in Tab 3, if the SBW's B-T-G factor of 0.89 were used.

RESPONSE:

The specific spreadsheet workbook file referred to in this response is Exhibit__(WMT-3-S) UPDATED Electric DSM Lost Revenues 12 mth actual 2010-13 with backup.xlsx.

NorthWestern assumes that the "B-T-G factor" in this question means the Net to Gross factor. Usually, Tab 3 of the lost revenue calculation spreadsheet workbook does not use net adjusted energy savings. Tab 3 uses gross reported energy savings, typically on line 6. Net adjusted energy savings are developed on Tabs 7, 8 and 9 using the adjustment factor (Net-To-Gross factor) and then multiplied against various transmission and distribution rates to derive lost revenues.

Net Adjusted Savings were provided by SBW for the 2010-2011 tracker period in the amount of 6.88 aMW. Because these are net adjusted savings, the Net-to-Gross Factor (Adjustment Factor) on Tab 6 was set to 1.0 to avoid a "double net adjustment" to the energy savings ultimately used on Tabs 7, 8 and 9.

In Exhibit__(WMT-3-S) the values of 3.38 and 3.44 were entered into Tab 3 cells E6 and G6 respectively. If these values were adjusted to reflect a 0.89 Net-to-Gross factor, the values would change to:

- $3.38 \times 0.89 = 3.01$
- $3.44 \times 0.89 = 3.06$

If these values are used, the Adjustment Factor on Tab 6 should remain at 1.0.

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MCC Set 3 (046-057)

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MCC-051 RE: Exhibit__(WMT-5)
Witness: William M. Thomas

Please explain each difference between the updated DSM Lost Revenue amounts shown for Tracker 2009-10 and 2010-11 in Exhibit__(WMT-5) and those shown in Exhibit__(WMT-3-S), page 1 of 21.

RESPONSE:

Exhibit__(WMT-5) is a summary sheet presenting values developed in various other spreadsheet workbooks as noted in columns D and J of this exhibit. Exhibit__(WMT-3-S) contains pasted values for tracker 2009-2010 that originated from a spreadsheet workbook used in Docket No. D2009.5.62.

To explain the differences it is necessary to return to the relevant workbooks (Exhibits) that feed values to Exhibit__(WMT-5) and Exhibit__(WMT-3-S). The attached table presents the values for key inputs used in each of the relevant spreadsheet workbooks for each time period. The differences are shown in bold.

For the 2009-2010 tracker period, the differences in total lost revenues calculated by the spreadsheet workbooks are the result of different Net to Gross Adjustment Factors, changes to the percentage of energy savings attributed to residential and commercial customers (different transmission/distribution rates apply to each customer class), and different reported gross energy savings. These input values contribute to a difference in the net adjusted energy savings that is then used in the final calculation of lost revenues.

In isolation (all other things remaining the same), lower net adjusted energy savings translates to lower lost revenues. Because general service transmission and distribution (T&D) rates for commercial accounts are higher than residential T&D rates, a higher percentage of energy savings attributable to commercial customers will increase lost revenues.

For the 2010-2011 time period, Exhibit__(WMT-5) differs from Exhibit__(WMT-3-S) in accumulated gross reported energy savings used for the calculation of lost revenues associated with CU-4. This difference began back in the January-June 2009 period where the original gross reported energy savings were 3.34 aMW; the updated amount is 2.98 aMW. A lower reported gross savings translates to a lower net adjusted savings and somewhat lower lost revenues for CU-4.

Tracker Period	Exhibit__(WMT-5)			Exhibit__(WMT-3-S)		
	Specific source workbook:			Specific source workbook:		
2009-10	Recon-SBW-Exhibit__(WMT-3-Rev) Electric DSM Lost Revenues UPDATED final orig.xls			Exhibit__(WMT-3-Rev) Electric DSM Lost Revenues UPDATED final orig.xls		
	Worksheet Tab	Cell(s)	Value(s)	Worksheet Tab	Cell(s)	Value(s)
Net-To-Gross Adjustment Factors used						
Residential	6. Adjustment Factors	C9	100%	6. Adjustment Factors	C14	87.2%
Commercial	6. Adjustment Factors	C14	100%	6. Adjustment Factors	C19	82.4%
Residential % of savings	3. Res & CI Energy Savings	I14	63.7%	3. Res & CI Energy Savings	I14	67.4%
Commercial % of savings	3. Res & CI Energy Savings	I15	36.3%	3. Res & CI Energy Savings	I15	32.6%
Gross Reported Savings (incremental aMW)	3. Res & CI Energy Savings	I7	7.59	3. Res & CI Energy Savings	I7	8.33
Net Adjusted Savings (cumulative kwh)	7. Calc Lost Revenues	G110	106,317,594	7. Calc Lost Revenues	G110	101,437,454
2009-10 Lost Revenues	1. DSM LR Summary	B8	\$ 3,937,687	1. DSM LR Summary		\$ 3,778,987
2010-11	Recon-SBW-Exhibit__(WMT-3-Rev) Electric DSM Lost Revenues 2010-11 with backup.xlsx			Exhibit__(WMT-3-S) UPDATED Electric DSM Lost Revenues 12 MTH ACTUAL 2010-13 with backup.xlsx		
	Worksheet Tab	Cell(s)	Value(s)	Worksheet Tab	Cell(s)	Value(s)
Net-To-Gross Adjustment Factors used						
Residential	6. Adjustment Factors	C14	100%	6. Adjustment Factors	C9	100%
Commercial	6. Adjustment Factors	C19	100%	6. Adjustment Factors	C14	100%
Residential % of savings	3. Res & CI Energy Savings	E17, G17	75.3%	3. Res & CI Energy Savings	E17, G17	75.3%
Commercial % of savings	3. Res & CI Energy Savings	E18, G18	24.7%	3. Res & CI Energy Savings	E18, G18	24.7%
Gross Reported Savings (incremental aMW)						
July-Dec 2010	3. Res & CI Energy Savings	E7	3.38	3. Res & CI Energy Savings	E6	3.38
Jan-June 2011	3. Res & CI Energy Savings	G7	3.44	3. Res & CI Energy Savings	G6	3.44
2010-11 total			6.82			6.82
CU-4 Related Cumulative Gross Reported Savings 2010-11 total (cumulative aMW)	8. CU-4 Related LRs	H8	17.82	8. CU-4 Related LRs	H7	17.45
2010-11 Lost Revenues						
July-Dec 2010						
Montana T&D	1. DSM LR Summary	B7	\$ 506,637	1. DSM LR Summary	B6	\$ 506,637
Colstrip Unit #4	1. DSM LR Summary	C7	\$ 801,843	1. DSM LR Summary	C6	\$ 781,429
Dave Gates Mill Creek Station	1. DSM LR Summary	D7	\$ -	1. DSM LR Summary	D6	\$ -
Total	1. DSM LR Summary	E7	\$ 1,308,480	1. DSM LR Summary	E6	\$ 1,288,066
Jan-June 2011						
Montana T&D	1. DSM LR Summary	B8	\$ 1,036,898	1. DSM LR Summary	B7	\$ 1,036,898
Colstrip Unit #4	1. DSM LR Summary	C8	\$ 801,843	1. DSM LR Summary	C7	\$ 781,429
Dave Gates Mill Creek Station	1. DSM LR Summary	D8	\$ 69,335	1. DSM LR Summary	D7	\$ 69,335
Total	1. DSM LR Summary	E8	\$ 1,908,077	1. DSM LR Summary	E7	\$ 1,887,662
2010-11 total			\$ 3,216,557			\$ 3,175,728

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Docket D2012.5.49
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Montana Consumer Counsel (MCC)**

MCC Set 3 (046-057)

Data Requests served February 20, 2013

MCC-052 RE: Deviation from Scheduled Load and Supply
Witness: Casey E. Johnston

Please provide a spreadsheet, in electronic format, of NWE BA operations showing (a) Interchanged Schedules, (b) actual tie line flow and (c) the associated imbalance for each hour in the last 12 months, as discussed in your testimony at page CEJ-4, lines 3-9.

RESPONSE:

See the file in the folder labeled "MCC-052 & MCC-053" on the CD attached to MCC-048.

**NorthWestern Energy
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Electric Tracker
Montana Consumer Counsel (MCC)**

MCC Set 3 (046-057)

Data Requests served February 20, 2013

MCC-053 RE: Deviation from Scheduled Load and Supply
Witness: Casey E. Johnston

Please provide a spreadsheet, in electronic format, showing (a) BA Area Control Error ("ACE") and (b) regulation services provided to NWE by David Gates Generating Station ("DGGS") for each hour in the last 12 months.

RESPONSE:

See the file in the folder labeled "MCC-052 & MCC-053" on the CD attached to MCC-048.

**NorthWestern Energy
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MCC Set 3 (046-057)

Data Requests served February 20, 2013

MCC-054 RE: Intra-Hour Schedule Adjustments
Witness: Casey E. Johnston

Please provide a spreadsheet, in electronic format, showing all 30-minute intra-hour schedule adjustments made by NWE for the month(s) when imbalances were at the highest during the last 12 months.

RESPONSE:

NWE Transmission did not make any intra-hour schedule adjustments for the months when imbalances were at the highest during the last 12 months.

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MCC Set 3 (046-057)

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MCC-055 RE: NWE participation in I-TAP
 Witness: Kevin J. Markovich

- (a) Please state whether NWE default supplier has participated in the intra-hour market during the tracker period 2011-2012 and/or if it is participating during the current tracker period.
- (b) If your answer to (a) is affirmative, please provide a table showing all transactions NWE has made in the intra-hour market, the quantity and cost of such transactions.
- (c) If NWE has participated in the intra-hour market, please provide a detailed table showing the extent to which such participation has reduced hourly imbalances.

RESPONSE:

- (a) Yes. The Intra-Hour Transaction Accelerator Platform (I-TAP) began as a Columbia Grid initiative and was developed by utilities in the western United States to make intra-hour trading easier and more efficient. NorthWestern Energy was an original member of the group that developed I-TAP. On November 14, 2011, I-TAP was implemented and the trading platform (WebExchange) reached commercial operation. Activity on WebExchange was limited and the market is not developing as planned. Less than 10,000 MW was traded on the platform from November 14, 2011 to June 2012. All of the transactions have been for full one-hour schedules.

The utilities that created this system, which included NorthWestern, are continuing efforts to increase participation in the hopes of developing an intra-hour market. A technical steering committee has been formed and is working on enhancements to WebExchange. NorthWestern has a representative on this committee and is committed to the development of a half-hour market.

- (b) See attached.
- (c) NWE has not performed the analysis.

Transactions

Duration: (07/2011 - 06/2012)

ID	Counterparty	Transaction	Origin	Status	Product Class	Product Type	Location	Pricing	Confirmed Time	Start Time	Stop Time	MW	Price
5	TPWP	Sale	Internal	Confirmed	Energy	G-F	MidC	Fixed	11/14/2011 13:45	11/14/2011 15:00	11/14/2011 16:00	25	19
32	PGEM	Purchase	Internal	Confirmed	Energy	G-F	MidC	Fixed	11/21/2011 11:14	11/21/2011 13:00	11/21/2011 14:00	25	28

NorthWestern Energy
Docket D2012.5.49
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MCC Set 3 (046-057)

Data Requests served February 20, 2013

MCC-056 RE: Use of Basin Creek for Intra-hour Scheduling
 Witness: Kevin J. Markovich

In reference to your testimony at page KJM-6, lines 1-15:

- (a) Please explain in detail any mechanisms NWE has considered regarding the allocation of costs if Basin Creek were dispatched on an intra-hour basis for the benefit of the entire BA.
- (b) Please explain in detail whether the allocation mechanism used for regulation services from DGGs could apply to the allocation of Basin Creek costs to all customers.
- (c) If Basin Creek were dispatched on an intra-hour basis, please explain whether it would then not be considered as an NWE Energy Supply asset and its costs would not be properly included as part of the energy tracker.
- (d) If under intra-hour dispatch Basin Creek could still supply energy to regulated supply customers, how much capacity could be assigned to the energy tracker.

RESPONSE:

- (a) Summary level discussions have centered on fixed capacity charges, number of starts, allocations of charges, and market clearing prices.
- (b) NWE has not performed the analysis.
- (c) If Basin Creek were dispatched on an intra-hour basis solely for the benefit of NWE Energy Supply customers, then it would be an Energy Supply asset and all its costs would go into the electric tracker. If Basin Creek were dispatched for the benefit of the entire BA, then only those costs attributable to NWE Energy Supply customers should go in the electric tracker.
- (d) The capacity that could be assigned to the energy tracker is the portion that could still supply energy to regulated supply customers.

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Montana Consumer Counsel (MCC)**

MCC Set 3 (046-057)

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MCC-057 RE: Wind Integration
Witness: Kevin J. Markovich

In reference to your testimony at page KJM-7, lines 6-11, please state and explain the benefits that intra-hour scheduling will bring to wind forecasting.

RESPONSE:

Intra-hour scheduling will allow for correction of schedules that are based on wind forecasts made prior to the hour. The wind forecast itself will not be affected.