

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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IN THE MATTER OF NorthWestern Energy's)	REGULATORY DIVISION
Application for Approval of Unreflected Gas)	
Cost Account Balance and Projected Gas Cost,)	DOCKET NO. D2013.5.34
and Gas Transportation Adjustment Clause)	
Balance)	

IN THE MATTER OF NorthWestern Energy's)	REGULATORY DIVISION
Application for Approval of Unreflected Gas)	
Cost Account Balance and Projected Gas Cost)	DOCKET NO. D2014.5.47
and Gas Transportation Adjustment Clause)	
Balance)	

FACT SHEET

TO: Commissioners, Kate Whitney, Justin Kraske, Jeremiah Langston, Will Rosquist,
and Eric Eck

FROM: Neil Templeton and Dagan Lynch

DATE: May 13, 2015

Prior to a public hearing on a docketed matter before the Public Service Commission (Commission), Regulatory Division staff on the work team prepare a Fact Sheet that summarizes the application and the prefiled testimony. The hearing in this docket is scheduled to begin Tuesday, May 19, 2015, in Helena.

Introduction and Procedural Background

On May 31, 2013, NorthWestern Energy (NorthWestern) filed an application before the Montana Public Service Commission (PSC or Commission) for approval of a natural gas rate change that: a) reflects rate treatment for the balance in Unreflected Gas Cost for the 12-month period ending June 30, 2013; b) reflects rate treatment for amortization of the Gas Transportation Adjustment Clause (GTAC) balance as of April 30, 2013; c) extinguishes the unit amortizations in the current rate schedules, approved in Order No. 7218b in Docket D2012.5.48; and d) reflects the projected load, supply and related natural gas costs for the 12-month tracker period from July

2013 through June 2014. The difference between the June 1, 2013 approved rate and the July 1, 2013 proposed rate is an increase for a typical residential customer using 100 therms per month of \$3.94 per month or \$47.28 per year (an overall increase of 4.77% on the total bill).

NorthWestern also requested approval to continue to collect the costs of its interest in the Bear Paw field in tracker filings until the utility makes a Bear Paw revenue requirement filing with the Commission.

The application included the direct testimony of John Smith, Patrick DiFronzo, William Thomas, Michael Baker, Marjorie McRae, and Faith DeBolt.

On June 18, 2013 the Commission issued *Interim Order No. 7282*, approving NorthWestern's proposed rates on an interim basis. The Commission also allowed NorthWestern to continue to reflect the costs of its interest in Bear Paw on an interim basis as a part of future tracker filings until such time that a Bear Paw revenue requirement filing is processed before the Commission.

On June 19, 2013, the Commission issued a *Notice of Application and Intervention Deadline*. The Commission granted intervention to the Montana Consumer Counsel (MCC) August 2, 2013. On September 25, 2013, the Commission issued *Procedural Order 7282a*.

On July 18, 2013, William Thomas and John Smith filed supplemental testimony on behalf of NorthWestern to correct minor errors in the application and update for actual costs.

On November 27, 2013, George Donkin filed direct testimony on behalf of MCC.

On December 19, 2013, the Commission directed NorthWestern to file supplemental testimony regarding Commission Findings of Fact ¶ 40-79 in *Order No. 7219h* involving true-up of lost revenues and the lost revenue adjustment policy that may be applicable to the natural gas tracker application and proceeding. The Commission authorized staff to modify *Procedural Order 7282(a)* to accommodate additional deadlines for testimony and discovery, as necessary.

On March 14, 2014, NorthWestern filed a motion to defer proceedings and consolidate the docket with the 2014 natural gas tracker. On June 10, 2014, the Commission granted the motion and consolidated Docket No. D2013.5.34 with Docket No. D2014.5.47.

On May 29, 2014 NorthWestern filed its 2014 natural gas annual tracker application, which was assigned Docket No. D2014.5.47 and consolidated with the previous year's tracker. NorthWestern requested approval of a natural gas rate change that: a) reflects rate treatment for the balance in Unreflected Gas Cost for the 12-month period ending June 30, 2014; b) reflects

rate treatment for amortization of the GTAC balance as of April 30, 2014; c) extinguishes the unit amortizations in the current rate schedules, approved in Interim Order No. 7282 in Docket D2013.5.34; and d) reflects the projected load, supply and related natural gas costs for the 12-month tracker period from July 2014 through June 2015. NorthWestern also requested approval to continue to collect the cost of its interest in Bear Paw and Devon natural gas fields on an interim basis until such time that a revenue requirement filing is processed by the Commission. The projected natural gas supply rate for the 12-month period starting July 1, 2014 is \$0.49645 per therm, compared with the rate for the 12-month period starting July 1, 2013 of \$0.425044 per therm, which is a total increase of \$0.071406 per therm.

On June 16, 2014 the Commission issued a *Notice of Application and Intervention Deadline* in the consolidated dockets. On June 17, 2014, the Commission issued *Interim Order No. 7282b* approving the proposed rates for interim purposes.

On September 4, 2014, the Commission issued *Procedural Order 7282c*.

On December 5, 2014, John Smith and Joe Schwartzberger filed supplemental testimony on the issues raised by the Commission December 2013, as well as providing information regarding the allocation of production and costs from its Bear Paw and Devon natural gas production assets.

Commission staff suspended *Procedural Order 7282c* on October 23, 2014. Commission staff amended Order 7282c on January 27, 2015, and again on March 19, 2015, to set deadlines.

On March 18, 2015, MCC filed the direct testimony of George Donkin.

On April 24, 2015, NorthWestern filed the rebuttal testimony of Pat DiFronzo and Joe Schwartzberger, and also filed a motion to reserve issue and strike testimony of George Donkin. MCC responded to this motion on May 11, 2015.

On April 21, 2015, the Commission issued a *Notice of Public Hearing* for a May 19, 2015, hearing.

Summary of NorthWestern's Prefiled Direct and Supplemental Testimony

John M. Smith

John Smith is NorthWestern's manager of Montana gas operations. In his 2013 and 2014 testimony, he testified as to each tracker year's natural gas market, supply and costs and the projected costs for the following 12-month period.

In Docket D2013.5.34 (2013 tracker), Smith's initial testimony was based on 10 months actual and two months estimated natural gas costs. In July 2013, Smith provided updated supplemental testimony of 12 months actual natural gas costs for the tracker period.

Smith stated that the 12-month actual total net natural gas cost on Exhibit__(JMS-1S), is \$5,132,000 lower than projected by NorthWestern in Docket No. D2012.5.48. The balance in the deferred account as of June 30, 2013 was an over-collection of \$(610,818). Smith stated NorthWestern did not propose to establish a rate based on the deferred account balance of \$(610,818), but would set this amount as the beginning balance in the deferred account for the 2013-2014 tracking period.

Smith testified that Bear Paw revenues, costs, and volumes related to the Bear Paw acquisition were included initially in the November 2012 monthly natural gas tracker which was filed on October 17, 2012. In June 2013, the deferred account was increased by \$754,519 to account for third party payments made from November 2012 through May 2013. Also in June, the deferred account was increased by \$115,322 for the June production payment. The total amount booked in June for Bear Paw third party purchases was \$869,841.

Smith stated there was a delay in booking the expenses to the deferred account due to an error in the methodology of the payments being made to third party working interest partners, but he said the error has been corrected.

According to Smith, there are additional fixed cost revenue requirement rate components for Battle Creek production of \$0.12370/Dkt and for Bear Paw production of \$0.18170/Dkt. Also, there is a "Battle Creek Under-collection Rate" component equal to \$0.02574/Dkt or \$0.002574/therm. These amounts have been added to the projected gas cost of \$3.47390/Dkt for core and firm utility gas contract customers, resulting in a total combined rate of \$3.80504/Dkt or \$0.380504/therm.

Smith testified in his supplemental testimony that NorthWestern had originally estimated the DSM lost revenues amount for the 2013-2014 tracker period to be \$1,536,013; however, NorthWestern had since determined that the DSM lost revenue amount should be adjusted to \$600,922 and NorthWestern corrected the deferred account in July 2013. Smith noted that the July 2013 DSM lost revenue amount was now a positive \$908,268. The testimony of William H. Thomas discusses the DSM lost revenues in more detail.

Smith also provided pre-filed direct testimony in D2014.5.47 (2014-2015 tracker). His initial testimony was based on 10 months actual and two months estimated natural gas costs. In December 2014, Smith filed supplemental testimony in these consolidated dockets to update the actual natural gas market, supply and costs for the 2013 and 2014 tracker periods and to revise the gas supply cost data for the actual months of July, August and September 2014. He also provided exhibits to explain corrections to the monthly natural gas tracker filings to reflect the proper accounting and allocations related to NorthWestern's acquisition of the NFR and Devon gas production assets that were included in the November 2012 and December 2013 monthly tracker filings.

Regarding the 12-month tracker period ending June 30, 2013, Smith stated the updated actual total net natural gas cost from July 2012 through June 2013 is \$5,353,000 lower than NorthWestern projected in Docket D2012.5.48, rather than NorthWestern's original estimate that the amount would be \$5,132,000 lower, a difference of about \$220,000. Regarding the tracker period ending June 30, 2014, Smith stated the updated actual total net natural gas cost is \$6,593,000 lower than projected in Docket D2013.5.34, rather than NorthWestern's original estimate that the amount would be \$6,593,000 lower, a difference of about \$948,000.

Regarding the months of July, August and September 2014, Smith said the updated gas cost for those months is \$4,591,949, which is different from the \$4,578,264 that was reported for those months in the November 2014 monthly tracker filing.

Smith testified the updated balance in the deferred account as of September 30, 2014, is an over-collection of \$(2,770,067). The \$(2,770,067) represents an increase to the previous over collection amount of \$(1,154,881). According to Smith, the increase of \$(1,154,881) corrected the deferred account balance since November 2012. Smith stated NorthWestern will adjust the deferred account balance by increasing the over-collection amount by \$(1,154,881). Smith testified that when this change was made in the January 2015 monthly tracker filing, the impact would be a reduction to the natural gas supply rate of approximately \$.10/Dkt.

Patrick J. DiFronzo

Patrick DiFronzo is NorthWestern's manager of regulatory affairs. His prefiled direct testimony in both dockets D2013.5.34 and in D2014.5.47 addressed the UGCA balance, the GTAC rate, and the unit rate adjustments/proposed rates for the time periods July 2012 through June 2013 and July 2013 through June 2014.

In Docket D2013.5.34, NorthWestern proposed an adjustment to the UGCA of \$327,399. The adjustment will result in a charge to customers. In Docket D2014.5.47, NorthWestern proposes an adjustment to the UGCA of \$1,294,582, which will result in a charge to customers.

DiFronzo stated that in both dockets NorthWestern is not proposing to adjust the deferred natural gas supply rate.

DiFronzo testified in Docket D2013.5.34 that NorthWestern proposed to amortize the GTAC amount of \$(684,472). In Docket D2014.5.47, NorthWestern proposes to amortize the GTAC amount of \$(505,141).

In both dockets DiFronzo stated NorthWestern will continue to collect the fixed cost rate for Battle Creek of \$0.1237/Dkt.

William M. Thomas

William Thomas filed testimony on NorthWestern's natural gas energy efficiency programs in the consolidated dockets. In Docket No. D2013.5.34, Thomas filed direct testimony on May 31, 2013 and supplemental testimony on July 8, 2013. He filed supplemental testimony to identify and correct an error in the calculation of accumulated natural gas energy savings. Thomas also filed direct testimony in D2014.5.47 on May 29, 2014. Thomas retired from NorthWestern subsequent to this and filed no further testimony in the consolidated dockets. His testimony is currently sponsored by Joe Schwartzenberger, who filed supplemental and rebuttal testimony regarding NorthWestern's natural gas energy efficiency programs.

Thomas described NorthWestern's natural gas demand-side management (DSM) programs. The programs include supply programs and universal system benefits (USB) programs. The supply tracker that is the subject of the current consolidated dockets is designed to recover expenditures only from the supply programs. Expenditures related to NorthWestern's USB programs are recovered through a separate tracker. However, the lost revenues associated with NorthWestern's USB programs are currently recovered within the supply tracker, along with supply program lost revenues. The table below shows targeted and reported savings, budgets and expenditures for these programs in 2005-2015

Natural Gas DSM Targets, Reported Savings, Budgets, and Spending								
Period	Target Savings¹ (Dkt)			Reported Savings¹ (Dkt)			Supply Program² Expense	
	USB	DSM	Total	USB	DSM	Total	Budget	Expenditure
2005-06	N/A	96,277	96,277	42,177	128,761	170,938	\$ 1,125,000	\$ 1,015,679
2006-07	N/A	114,526	114,526	42,393	70,058	112,451	800,000	608,000
2007-08	N/A	114,526	114,526	58,482	74,198	132,680	698,030	679,677
2008-09	60,000	115,000	175,000	60,904	76,102	137,006	738,440	1,808,655
2009-10	60,000	150,000	210,000	70,706	107,491	178,197	2,300,000	2,202,948
2010-11	60,000	150,000	210,000	79,371	186,310	265,681	2,435,365	2,857,253
2011-12	60,000	150,000	210,000	60,447	100,695	161,142	2,606,266	2,502,930
2012-13	60,000	150,000	210,000	28,048	73,520	101,568	3,834,360	2,387,270
2013-14	60,000	150,000	210,000	29,881	39,805	69,686	3,134,789	1,392,484
2014-15	60,000	150,000	210,000				1,037,769	

1: Includes Savings from Natural Gas Supply Programs and USB Programs
2: Does not includes USB Program budget or expenditures

The supply programs include six programs; the business partners program, the residential new and existing construction programs, the commercial new and existing construction programs, and the Northwest Energy Efficiency Alliance (NEEA) program. The USB programs are three: the energy audit program, the builder operator certification program, and the free weatherization and fuel switch program. Reported savings from these programs is shown below.

Reported Natural Gas Savings in 2012-2013 (Dekatherms)			
	USB Program Savings	Supply Program Savings	Total Program Savings
Energy Audit for the Home or Business	14,346	-	14,346
Business Partners Program	-	6,859	6,859
Builder Operator Certification	130	-	130
Northwest Energy Efficiency Alliance (NEEA)	-	2,616	2,616
Free Weatherization Program & Fuel Switch	12,820	-	12,820
Residential New Construction Program	-	343	343
Residential Existing Construction Program	-	52,743	52,743
Commercial New Construction Program	-	1,074	1,074
Commercial Existing Construction Program	-	11,811	11,811
Total¹	27,296	75,447	102,743
Reported Natural Gas Savings in 2013-2014 (Dekatherms)			
	USB Program Savings	Supply Program Savings	Total Program Savings
Energy Audit for the Home or Business	14,570	-	14,570
Business Partners Program	-	2,261	2,261
Builder Operator Certification	1,356	-	1,356
Northwest Energy Efficiency Alliance (NEEA)	-	9,182	9,182
Free Weatherization Program & Fuel Switch	10,083	-	10,083
Residential New Construction Program	-	490	490
Residential Existing Construction Program	-	22,819	22,819
Commercial New Construction Program	-	2,117	2,117
Commercial Existing Construction Program	-	4,549	4,549
Total²	26,009	41,417	67,426
1: Updated using NWE updated response to DR MCC-021			
2: Updated using NWE updated response to DR MCC-044			

Prior to the 2012-2013 period, a 2007 program evaluation performed by Nexant provided factors used to estimate reported savings from the supply and USB programs. A subsequent evaluation was performed by SBW Consulting, Inc. (SBW) in 2012. SBW delivered a report to NorthWestern in January 2013 to support modification of reported savings in 2007-2011, and

inform reported savings in 2012-2014 as shown above. The modifications are described in the report and in supplemental testimony sponsored by SBW witnesses.

The table below shows NorthWestern's reported energy savings for its natural gas supply and USB programs in 2006-2011, SBW's evaluated, or gross, savings (that equal net savings assuming a net to gross factor of 1), SBW's estimates of free ridership and spillover, and net savings assuming that free ridership and spillover effects are used to adjust evaluated savings.

Reported and SBW Evaluated DSM Program Savings 2006-2011							
<i>Natural Gas Supply Programs</i>							
Program	Reported Savings (Dkt)	Evaluated Savings (Dkt)	Realized Savings Rate	Free Rider Rate	Spillover Rate	Net to Gross Factor	Adjusted Savings (Dkt)
E+ Business Partners	5,526	6,286	1.14	0.07	-	0.93	5,819
E+ Commercial Existing Gas Rebate	31,529	13,880	0.44	0.38	0.01	0.62	8,626
E+ Commercial New Gas Rebate	5,054	4,904	0.97	-	0.03	1.03	5,054
E+ Residential Existing Gas Rebate	422,732	245,019	0.58	0.14	0.01	0.87	212,564
E+ Residential New Gas Rebate	1,224	1,308	1.07	0.49	0.00	0.51	673
NEEA Initiatives	93,007	77,241	0.83	-	-	1.00	77,241
Total Natural Gas Supply Programs	559,072	348,638	0.62			0.89	309,977
<i>Natural Gas USB Programs</i>							
Program	Reported Savings (Dkt)	Evaluated Savings (Dkt)	Realized Savings Rate	Free Rider Rate	Spillover Rate	Net to Gross Factor	Adjusted Savings (Dkt)
Building Operator Certification	17,436	35,355	2.03	-	-	1.00	35,355
DEQ Appliance	894	1,606	1.80	-	-	1.00	1,606
E+ Audit Home or Business	181,798	75,401	0.41	0.12	-	0.88	66,392
E+ Free Weatherization/Fuel Switch	132,862	132,862	1.00	-	-	1.00	132,862
Total Natural Gas USB Programs	332,990	245,223	0.74			0.96	236,215

SBW defined net savings as gross savings adjusted for free ridership, spillover, and leakage. SBW estimated free ridership rates using self-report participant surveys. The surveys asked participants a series of questions to learn how participants would have acted in the absence of the program, and how the program influenced them. SBW assessed participant intent to carry out projects without program funds or support, program influence in participation and upgrade decisions, and how installed efficiency projects might have differed if the participant had not received program incentives.

SBW estimated spillover using a combination of survey and on-site research. Self-report surveys asked participants whether they installed efficiency measures in addition to measures

provided by the program, and if so, the surveys asked the extent to which NorthWestern's DSM activities had influenced them to install additional measures. If respondents considered NorthWestern to be influential in this decision, SBW checked on the actual energy efficiency of the measures during on-site research.

SBW found its estimates of free ridership in NorthWestern programs to be comparable to the estimates of other program administrators. However, the report lists several difficulties in estimating free ridership. The report asserts that it has been established that people are willing to pay more to avoid a loss than to attain a gain. The report argues that if a participant is asked whether they would have installed the measure without program assistance, the participant answers yes in seeking to avoid the loss of the measure they are currently enjoying, and is classified as a free rider.

The SBW report also asserts that cognitive psychologists have established that people are likely to attribute successful outcomes to their own virtue, and to attribute unsuccessful outcomes to external factors. Because of this, if a measure is successful, participants are likely to answer that they are the sort of person that installs energy efficient measures, with or without a program. The report states that cognitive dissonance is experienced when an individual acts in a manner that is inconsistent with stated beliefs or intentions. If a participant answered that they would not have participated without program assistance, the report argues that the participant might experience cognitive dissonance. The report states that loss aversion, attribution theory, and cognitive dissonance suggest that self-report surveys tend to overestimate free ridership.

The SBW report asserts that spillover is more difficult to estimate than free ridership due to difficulties in identifying unincented efficiency actions, calculating baseline energy consumption, and knowing when efficiency actions are attributable to programs. SBW claimed that its spillover estimator underestimates spillover, and it finds "reasons to believe that the spillover generated by yesterday's programs are likely observed in the free ridership estimate of today's programs." (p. 860).

The report states that a review of net to gross (NTG) practices in 31 jurisdictions found that 42% did not require an NTG adjustment, equivalent to an NTG value of 1. The report recommends that NorthWestern use an NTG value of 1 to estimate program net benefits and cost effectiveness. This practice implies that spillover effects offset free ridership and that the net effect of free ridership and spillover on gross savings is nil.

For most programs, SBW estimated annual gross savings using site inspections, customer interviews, and engineering analysis. For some programs, it estimated savings using a critical review of prior evaluation work. As a first step to evaluate impacts for most programs, SBW reviewed project files to determine whether the documents were consistent with program tracking records. It compared program tracking data to file information regarding relevant parameters such as installed units and wattages in order to identify data errors.

The report states that SBW also reviewed NorthWestern's estimates of prescriptive savings, including examination of prior studies and efficiency program development. In cases where SBW determined that UES savings adjustments were appropriate, it submitted revised values to NorthWestern's project manager for review and comment. SBW examined the engineering algorithms NorthWestern used to estimate savings. If SBW found the algorithms unreasonable, it developed appropriate and defensible alternatives to improve the rigor and accuracy of savings estimates.

SBW conducted site visits to verify that program measures were installed correctly and producing energy savings. During site visits SBW gathered data to confirm or adjust savings estimates. If evaluated savings differed from reported savings, SBW attempted to document a rationale for the difference.

For the energy audit programs, SBW estimated direct and indirect energy and demand savings. NorthWestern-installed measures provided direct savings, audit recommendations without incentives provided indirect savings. SBW combined a telephone survey of 2010-11 audit participants with site visit interviews and follow-up telephone interviews to gather the data needed to estimate direct and indirect savings.

SBW reviewed NorthWestern's reported savings from NEEA initiatives, including spreadsheet summaries documenting methods and savings. SBW also reviewed NEEA sponsored evaluations that are relevant to NorthWestern's reported savings. Using information from this review, SBW calculated savings realization rates for each measure and for each program year. It calculated an average realization rate for the initiatives and applied this estimate to adjust NorthWestern's reported savings.

The report evaluates the cost effectiveness of the programs using four standard tests, or ratios of benefits to costs. The tests include the total resource cost (TRC), program administrator cost (PAC), ratepayer impact measure (RIM), and societal cost (SC) tests. The numerator, or

benefits component of the TRC, PAC, and RIM tests equals the utility's discounted avoided supply cost. In the SC test the discounted avoided supply cost is scaled up by 10% in each year to internalize the external environmental costs of electric generation.

The denominator, or costs component of the PAC test equals the sum of program administration and marketing costs and incentive costs. This test reflects the ratio of benefits to costs from the utility perspective. The RIM test adds the cost of lost revenues from reduced sales to the PAC test costs. This adjustment reflects the impact to ratepayers of lost revenue recovery.

The denominators in the TRC and SC tests are equivalent, equaling the sum of program administration and marketing costs, participant and spillover device costs, and free rider incentive costs. These two tests compare economic benefits and costs of the measures, with the SC test including avoided environmental costs as a benefit in the numerator.

The table below shows test values from SBW's evaluation of NorthWestern's natural gas DSM programs.

NorthWestern Natural Gas Supply and USB Programs Evaluation of Program Cost Effectiveness						
Program	Program Type	SBW Evaluated Savings (Dkt)	Total Resource Cost Test	Program Admin Cost Test	Ratepayer Impact Measure Test	Societal Cost Test
E+ Business Partners	Supply	10,473	1.44	2.04	1.62	1.58
E+ Commercial Existing Gas Rebate	Supply	17,620	0.87	1.39	1.16	0.95
E+ Commercial New Gas Rebate	Supply	5,586	3.12	3.72	2.52	3.44
E+ Residential Existing Gas Rebate	Supply	232,572	0.68	1.00	0.80	0.75
E+ Residential New Gas Rebate	Supply	1,443	0.48	1.27	1.09	0.53
NEEA Initiatives	Supply	75,724	NA	NA	4.41	NA
Building Operator Certification	USB	36,223	NA	NA	2.43	NA
DEQ Appliance	USB	1,606	NA	NA	5.40	NA
E+ Audit Home or Business	USB	78,509	1.01	1.01	0.80	1.11
E+ Free Weatherization/Fuel Switch	USB	117,486	2.10	2.10	1.61	2.31
All Natural Gas DSM Programs		<u>577,242</u>	1.28	1.60	1.20	1.41
Source: SBW Report, p. 826, Table 648						

Michael H. Baker

Michael Baker is a Principal of SBW. He stated that SBW conducted a comprehensive evaluation of NorthWestern's electric and natural gas DSM and USB programs. It performed an

impact evaluation of program energy savings, including cost-benefit analysis, and it performed a process evaluation of NorthWestern's program marketing and delivery.

Baker sponsored SBW's report and supporting appendices in Exhibit_(MHB-1a) and Exhibit_(MHB-1b). The report presents the methodology, findings, and recommendations from an impact and process evaluation of NorthWestern's DSM portfolio, including USB programs. The evaluation covers 24 programs in the period July 1, 2006 through December 31, 2011.

Marjorie R. McRae

Marjorie McRae is a Principal of Research Into Action, Inc. (RIA). She filed supplemental testimony in order to support SBW's process evaluation and market assessment of NorthWestern's DSM portfolio, including USB and electric supply efficiency programs. The evaluation covered 24 programs in the period July 1, 2006 through December 31, 2011.

McRae testified that "SBW assessed NWE's program processes and obtained market feedback on programs in the context of a comprehensive third-party evaluation of NWE's DSM and USB programs." She said that she was responsible for process evaluation and market feedback, estimating free ridership and leakage, and for telephone survey research to support the estimation of spillover.

McRae stated that RIA reviewed program documents, interviewed NorthWestern staff and program contractors, and surveyed program participants, non-participants, vendors, installers, and other allies. She said RIA determined free ridership values and potential spillover using survey responses. She asserted that it followed standard practices in free ridership and spillover estimation, and that its estimated free ridership and spillover values in NorthWestern's programs are comparable to those found in respectable evaluations of similar programs.

McRae recommended a net-to-gross ratio equal to one, basing this decision on known limitations to standard estimation practices that confound the effects of free ridership and spillover, causing overestimates of free ridership and underestimates of spillover. She said that many jurisdictions running energy efficiency programs recognize that free ridership and spillover are offsetting phenomena. McRae also recommended that NorthWestern monitor product markets and conduct market saturation studies to assess market transformation, and to exit transformed markets in order to mitigate free ridership impacts.

She stated that her program process and market effects findings are included in Exhibit_(MHB-1a) and Exhibit_(MHB-1b) sponsored by Michael Baker. She asserted that NorthWestern staff or other parties did not attempt to bias these findings.

Faith DeBolt

Faith DeBolt is an SBW analyst. She filed supplemental testimony to support SBW's economic assessment of NorthWestern's DSM and USB portfolio. She testified that she directed the assessment of the cost-effectiveness of these programs. To this end, she compiled and analyzed economic data from NorthWestern's program tracking system. She stated that her team also analyzed program impact realization rates and statistical data under Michael Baker's direction, and analyzed market effects data – including free rider and spillover results – under Marjorie McRae's direction.

DeBolt testified that her team's findings regarding program economics are included in Baker's Exhibit_(MHB-1a) and Exhibit_(MHB-1b). She asserted that NorthWestern staff or other parties did not attempt to bias these findings.

Joe Schwartzberger

Joe Schwartzberger filed supplemental testimony to correct and update Thomas' testimony regarding proposed lost revenues. He also responded to the Commission's December 19, 2013 notice of additional issue to update lost revenues in the direction of Final Order 7219h that was issued in Docket No. D2012.5.49.

Among other changes, Schwartzberger adjusted lost revenues for the removal of savings from conservation investments in NorthWestern's own facilities, and for direction given in Final Order 7219h to reduce savings in the DEQ appliance program. He did not adjust savings and lost revenues to incorporate the effect of SBW's free ridership and spillover studies, because that part of Final Order 7219h is currently under adjudication in District Court.

The table below shows actual and projected lost revenues from 2006-07 through 2014-15.

Post SBW Evaluation Natural Gas Lost Revenues			
Time Period	Montana T&D	Battle Creek	Total DSM Lost Revenue
Tracker 2006-07	\$ 476,420	\$ -	\$ 476,420
Tracker 2007-08	728,973	-	728,973
Tracker 2008-09	332,826	-	332,826
Tracker 2009-10	781,471	-	781,471
Tracker 2010-11	392,559	-	392,559
Tracker 2011-12	504,444	-	504,444
Total 2006-2012	\$ 3,216,693	\$ -	\$ 3,216,693
Tracker 2012-13	\$ 599,876	\$ 2,494	\$ 602,370
Tracker 2013-14	146,303	7,694	153,997
Tracker 2014-15	489,326	19,106	508,432

The table below illustrates an overcollection of lost revenues of \$480,040 in tracker periods 2006-07 through 2011-12.

Comparison of Natural Gas DSM Lost Revenues Pre and Post SBW Evaluation				
Time Period	Pre-SBW Lost Revenue	Post-SBW Lost Revenue	Over & (Under) Collections	Pct Diff
Tracker 2006-07	\$ 364,950	\$ 476,420	\$ (111,470)	-30.54%
Tracker 2007-08	641,802	728,973	(87,171)	-13.58%
Tracker 2008-09	369,175	332,826	36,349	9.85%
Tracker 2009-10	791,614	781,471	10,143	1.28%
Tracker 2010-11	553,828	392,559	161,269	29.12%
Tracker 2011-12	975,364	504,444	470,920	48.28%
	\$ 3,696,733	\$ 3,216,693	\$ 480,040	12.99%

*Summary of MCC's prefiled testimony***George L. Donkin**

George Donkin filed direct testimony on behalf of MCC in the consolidated dockets. He filed on November 27, 2013 and March 18, 2015. In his first filing he primarily addressed gas cost savings and lost revenues associated with NorthWestern's USB program natural gas efficiency investments. In his second filing he updated his USB testimony and also addressed NorthWestern's recovery of fixed costs associated with its Battle Creek, NSF, and Devon natural gas production assets.

Donkin compared the discounted value of future gas cost savings from NorthWestern's 2012-13 USB natural gas program to combined program costs and lost revenue expense. He derived future gas cost savings of \$1,379,845 using a discount rate of 7.48%, and \$1,075,365 using a discount rate of 10.51%.¹ He compared this to a total cost to ratepayers of \$1,858,680.² He stated that ratepayers are no longer receiving positive net present value benefit from NorthWestern's natural gas USB programs. (15:11-14).

Because of these reduced program benefits, and because he considered lost revenue recovery to be a form of single-issue ratemaking that reduces business risk, Donkin recommended that the Commission deny NorthWestern's request to recover lost revenues associated with its natural gas USB programs in 2012-13 and future periods. (15:10-16:2).

In direct testimony filed on March 18, 2015, Donkin affirmed his previous position and provided updated versions of his exhibits to reflect the acquisition of new data. He testified that current year USB expenses were far greater in program periods 2012-13 and 2013-14. Because of this, the USB programs were less cost effective in these periods than in prior periods.

Donkin testified that because the USB programs are funded through legislative mandate, a disallowance of USB related lost revenues should not produce a disincentive for NorthWestern to pursue cost effective USB programs. He also stated that his exhibits demonstrate that NorthWestern's USB activity in recent years fails to pass a cost-benefit test, a test that he said is included in the Department of Revenue's public purpose definitions.

¹ Donkin assumed annual savings of 28,048 Dkt/year for 20 years, and an estimated 2013-14 gas cost of \$3.55/Dkt, escalated at a constant annual rate of 4.0%/year. He based 7.48% on the rate that NorthWestern used to calculate its deferred account costs, and 10.51% on the rate used by NorthWestern to calculate gas storage costs. (11:1-13).

² Includes \$1,692,380 in direct 2012-13 program expenses, and \$166,300 in estimated lost revenue expense.

Donkin also addressed the rates designed to recover fixed costs from NorthWestern's owned natural gas production assets. The assets include Battle Creek, Bear Paw (NFR), and Devon. These fixed cost rates are calculated separately for each asset and are included in the gas tracker.

Donkin noted that the expected NFR revenue requirement declines from \$4.7 million in 2012 to \$3.4 million in 2015, and the expected Devon revenue requirement declines from \$17.9 million in 2013 to \$15.7 million in 2015.³ Because of annual declines in revenue requirements, Donkin recommended that the Commission direct NorthWestern to make a filing as soon as possible that presents actual cost of service support for authorized rates. If gas cost revenues collected from the interim bridge rates have exceeded approved cost-based rates, he stated that the differences should be refunded to ratepayers. In addition, he testified that the bridge rates should be replaced in the tracker by rates based upon current fixed cost revenue requirements.

Donkin clarified his position on setting natural gas production asset rates in response to data request PSC-046(b). He asserted that: "NWE's annual revenue requirement and unit rates for Battle Creek, Bear Paw, and Devon should not be established in a general rate case; rather, they should be adjusted annually in NWE's annual gas tracker filings. This is essential if ratepayers are to realize the results over time from the net present value cost comparisons, levelized cost comparisons, and cross-over point assumptions, that were used by NWE and presented to and considered by MCC and the Commission for the purpose of accepting as reasonable the acquisitions of the Battle Creek, Bear Paw, and Devon gas producing properties."

Donkin clarified his proposal to issue refunds in response to data request PSC-047. He stated that individual test year cost data for each property for each year should be compared with corresponding fixed cost revenue collections, that any excess in collection should be refunded to ratepayers, and that actual annual declining revenue requirements should be used.

Summary of NorthWestern's Prefiled Rebuttal Testimony

Patrick DiFronzo

DiFronzo provided rebuttal testimony in response to MCC witness Donkin. He disagreed with Donkin's suggestion that the Battle Creek tracker rate was based on an estimated fixed cost

³ Donkin referred to worksheets provided by NorthWestern in response to data requests PSC-041 and PSC-042.

revenue requirement. According to DiFronzo, the current fixed cost rate of Battle Creek is neither an interim rate nor a rate in place as part of the bridging concept; rather, it is a fixed cost unit rate that was approved by the Commission. DiFronzo stated this fixed revenue rate should remain in place until the next general case is filed and should not be adjusted for prior periods as this would be retroactive rate making.

DiFronzo agreed with Donkin that the Devon and Bear Paw natural gas assets should be adjusted for actual cost of service, but not until NorthWestern files with the Commission for review and approval of the acquisitions of Devon and Bear Paw. He said NorthWestern plans to file for those reviews as part of a natural gas rate case in 2016. DiFronzo also agreed with Donkin that customers should receive a refund if interim rates exceed final Commission-approved rates.

Joe Schwartzberger

Schwartzberger noted that NorthWestern had filed a motion to reserve issue and strike portions of Donkin's testimony related to natural gas USB program expense and lost revenues. As the Commission had not ruled on the motion, he rebutted Donkin's computations, analysis, and final recommendations regarding lost revenue recovery from USB programs.

Schwartzberger asserted that Donkin did not provide an estimate of USB lost revenues in 2013-14, and that his estimate of 2012-13 lost revenues is flawed because it did not account for lost revenues resulting from previous years' activities, did not account for the zero reset on April 1, 2013 due to the rate adjustment in Docket No. D2012.9.94, and did not use 12 months of actual data. Schwartzberger stated that lost revenues in 2012-13 are \$31,485, and that total lost revenues in 2012-13 and 2013-14 are \$81,547. He compared this to Donkin's estimate of \$166,300 in 2012-13 alone.

Schwartzberger contested Donkin's argument that NorthWestern is statutorily required to promote its USB programs, and hence the disallowance of lost revenues should not impact the level of program funding. Schwartzberger testified that NorthWestern should not be penalized for following the law, and also referred to Pat Corcoran's direct testimony in the LRAM docket.

Schwartzberger disagreed that NorthWestern's 2012-13 and 2013-14 USB activities were not cost effective. Schwartzberger did not agree that a strict resource value metric should be applied to USB programs. He argued that USB programs were established to a vehicle for public policy directives that may not meet market standards of cost effectiveness. He asserted

that NorthWestern's USB programs provide benefits beyond the value of gas cost savings. For example, the Weatherization program makes energy bills more manageable for NorthWestern's low income customers, and provides for correction of safety issues. The Energy Audit program provides ancillary customer education benefits.

Schwartzenberger asserted that Donkin used average natural gas commodity costs to value gas cost savings, rather than long-run avoided costs as in typical DSM analysis. He noted that Donkin did not account for environmental benefits associated with savings. He also asserted that Donkin did not consider the impact of changes to the Weatherization program or the SBW recommended downward adjustments to reported savings from the Energy Audit program.

Schwartzenberger testified that in Final Order 6679e the Commission authorized an increase in the natural gas USB charge in part to increase funding to the Energy Audit and Weatherization programs. He stated that the order found the funding allocation percentages to be reasonable, fair, and equitable. He also stated that since the issue of the order, NorthWestern convened a collaborative with other interested parties in part to discuss the Weatherization program. As a result, in 2013 and 2014 the weatherization costs funded by NorthWestern increased but funded weatherization of fewer homes. This contributed to a decrease in natural gas savings attributed to the program. In addition, program expense increased due to a change in accounting for administrative costs, and an increase in the contract price of audits. In concert, these changes explain part of the reduced program efficiency in 2013 and 2014.

Schwartzenberger also testified that Montana statute and rules do not specify criteria to be used to determine cost effectiveness for natural gas USB programs. Furthermore, the term only applies to energy conservation programs, and not to low income weatherization. He concluded that if the Commission ultimately defines cost effective criteria, the criteria must provide NorthWestern a reasonable opportunity to pursue natural gas USB activities consistent with statute, Commission rules, and Commission precedent.

Schwartzenberger provided an alternative cost-benefit analysis to reflect twenty years of savings from all periods from 2006-07 through 2012-13. In his analysis, the net present value of gas cost savings exceeds the net present value of program expenses by \$7.3 million using a discount rate of 7.48%, and by \$4.3 million using a discount rate of 10.51%.