

TO: COMMISSIONERS AND ADVISORS
FROM: DARREN KEARNEY AND KRISTEN EDWARDS
SUBJECT: DOCKET GE15-002: NORTHWESTERN ENERGY DEMAND SIDE
MANAGEMENT PLAN
DATE: SEPTEMBER 14, 2015

STAFF MEMORANDUM

Overview

In docket GE12-001, the Commission approved a two year pilot Demand Side Management (DSM) plan for NorthWestern Energy (NWE). In the instant filing, NWE proposes to change the Energy Efficiency Adjustment Rates for electric and gas service. During the first year of offering its Energy Efficiency Programs, NWE experienced less participation than originally anticipated and over-recovered energy efficiency expenses from its customers. NorthWestern proposes to reduce its Energy Efficiency Adjustment rates for both Electric and Gas services as a result of the over-recovery that occurred during the year.

In addition to reducing rates, NWE proposes to reduce its budget for year 2 of the program (2015-16) and split the budget at 66% electric and 34% gas (rather than the 50/50 split that was used for Year 1). Finally, NWE also proposes remove, add, and change certain DSM program measures.

Staff Analysis

Year 1 Results: The first thing the Commission may note is that there is a lack of Year 1 Total Resource Cost (TRC) test measures included in the filing to determine the cost effectiveness of the DSM program. While NWE did provide a summary of Year 1 energy savings in its report, the company identified¹ that the information required to perform the TRC test at the program level is not available at this time.

It should be noted that Staff is not concerned about the lack of TRC test results in this filing for a couple of reasons. First, NWE identified in its DSM plan approved by the Commission that the company “intends to commence program evaluation activities no later than the first half of year 4 of DSM program operation.”² The company further stated that “it will not have the benefit of the results of program evaluations of DSM program activity in South Dakota in the first few years of implementation.”³ Second,

¹ See NWE's response to Staff Data Request 1-9

² See last paragraph on page 13 of NWE's DSM program filed on April 4, 2014 in docket GE12-001

³ See last paragraph on page 33 of NWE's DSM program filed on April 4, 2014 in docket GE12-001

even if NWE did have the information available to conduct a TRC cost/benefit test for its DSM program, Staff believes that the results of Year 1 TRC tests would likely be of little value to review the effectiveness of the program since it takes a few years to ramp up DSM program participation. In short, it is Staff's opinion that cost/benefit results for Year 1 would likely not be reflective of the DSM program's effectiveness.

Ensuring DSM programs are cost effective is a high priority for Staff and NWE's DSM program will be scrutinized by Staff in the future as cost/benefit results become available. At this time, however, NWE's DSM program is too new to properly consider its cost-effectiveness.

Year 1 Budget and Actual Expenses: As shown in the table below, NWE came in under budget in Year 1 of its DSM Plan. The large majority of underspending occurred as a result of not realizing the expected amount of rebate participation, where NWE only spent \$104,743 of the \$900,000 budgeted for rebates.

NorthWestern Energy South Dakota DSM Program Budget and Spending Actual + Estimate			
	2014-15 Budget	2014-15 Actual + Estimated¹	Total Unspent
Contractor Expenses (DNV GL)			
Residential Audit Program			
Program Startup (contractor cost):			
Two vehicles (approximate, at cost)	\$ 66,000	\$ 43,884	\$ 22,116
RECAP & Database Development (T&M, not to exceed)	\$ 50,000	\$ 71,825	\$ (21,825)
In-home audits	\$482,638	\$ 482,638	\$ -
Program Subtotal	\$ 598,638	\$ 598,347	\$ 291
Residential/Commercial Electric & Natural Gas Rebate Programs			
Program Startup (contractor cost)	\$ 16,692	\$ 16,692	\$ -
Outside Services:	\$ 236,900	\$ 236,900	\$ -
Program Subtotal	\$ 253,592	\$ 253,592	\$ -
Contractor Expenses (DNV GL) Total	\$ 852,230	\$ 851,939	\$ 291
NorthWestern Energy Expenses:			
Rebates	\$ 900,000	\$ 104,743	\$ 795,257
Admin/non-labor (Travel, office supplies, etc.)	\$ 16,000	\$ 14,090	\$ 1,910
Advertising	\$ 274,560	\$ 128,342	\$ 146,208
NorthWestern Energy Expenses Total	\$ 2,042,780	\$ 1,099,115	\$ 943,665
Total Estimated Budget	\$ 2,042,780	\$ 1,099,115	\$ 943,665
1. Spending is actual through May 31, 2015 and estimated through June 30, 2015			

Year 2 Proposed Budget: The table below shows NWE's proposed budget for Year 2 of the DSM Plan. The company proposes a Year 2 budget with rebates totaling \$400,000 and this, in turn, results in a reduction of \$500,000 for rebates from the budget originally approved in docket GE12-001.

2015-16 Proposed Budget (Year 2)					
	Approved in GE12-001	Revised Proposed Budget	Proposed Budget Variance	Proposed Electric	Proposed Gas
Contractor Expenses					
Residential Audit Program					
Program Startup Costs:					
Two Vehicles	\$ -	\$ -	\$ -	\$ -	\$ -
RECAP and Database Develop	\$ -	\$ -	\$ -	\$ -	\$ -
In-home Audits	\$ 433,440	\$ 433,440	\$ -	\$ 216,720	\$ 216,720
Program Subtotal	\$ 433,440	\$ 433,440	\$ -	\$ 216,720	\$ 216,720
Res/Comm Elec and Gas Rebate					
Program Startup	\$ 11,692	\$ 11,692	\$ -	\$ 8,184	\$ 3,508
Outside Services	\$ 266,150	\$ 266,150	\$ -	\$ 186,305	\$ 79,845
Program Subtotal	\$ 277,842	\$ 277,842	\$ -	\$ 194,489	\$ 83,353
Contractor Expenses Total	\$ 711,282	\$ 711,282	\$ -	\$ 411,209	\$ 300,073
NWE Expenses					
Rebates	\$ 900,000	\$ 400,000	\$ (500,000)	\$ 328,000	\$ 72,000
Admin/non-labor (travel, supplies)	\$ 8,000	\$ 8,000	\$ -	\$ 4,000	\$ 4,000
Advertising	\$ 267,550	\$ 267,551	\$ 1	\$ 167,110	\$ 100,441
NWE Total	\$ 1,175,550	\$ 675,551	\$ (499,999)	\$ 499,110	\$ 176,441
Total Estimated Budget	\$ 1,886,832	\$ 1,386,833	\$ (499,999)	\$ 910,319	\$ 476,514

Year 2 Proposed Rates: As a result of underspending in program year 1 and reducing the rebate budget in program year 2, NWE proposes a rate reduction for program year 2. The company proposes an electric Energy Efficiency Adjustment rate of \$0.0005/kWh and a gas Energy Efficiency Adjustment rate of -\$0.0007/therm. Customer bill impacts from the proposed rates are shown in the table below. On average, electric customers will observe reduced monthly bill impacts from \$0.78 per month to \$0.49 per month for residential customers and from \$5.28 per month to \$3.30 per month for commercial/industrial customers. On average, gas customers will observe a credit on their bills of \$0.05 per month for Residential and \$0.29 per month for commercial/industrial.

Average Monthly Bill Impacts (Electric)							
	kWh Usage	Year 1		Year 2		Year 2 Change	
		DSM Rate (\$/kWh)	DSM Charge	DSM Rate (\$/kWh)	DSM Charge	DSM Rate (\$/kWh)	DSM Charge
Residential	976	\$ 0.0008	\$ 0.78	\$0.0005	\$0.49	(\$0.0003)	(\$0.29)
Comm./Indust.	6,596	\$ 0.0008	\$ 5.28	\$0.0005	\$3.30	(\$0.0003)	(\$1.98)

Average Monthly Bill Impacts (Gas)							
	therm Usage	Year 1		Year 2		Year 2 Change	
		DSM Rate (\$/therm)	DSM Charge	DSM Rate (\$/therm)	DSM Charge	DSM Rate (\$/therm)	DSM Charge
Residential	66	\$ 0.0167	\$ 1.10	(\$0.0007)	(\$0.05)	(\$0.0174)	(\$1.15)
Comm./Indust.	410	\$ 0.0167	\$ 6.85	(\$0.0007)	(\$0.29)	(\$0.0174)	(\$7.13)

Year 2 Program Changes: In this filing, NWE proposes to remove, add, and modify individual program measures and the program changes are identified in the company's response to Staff Data Request 1-7. Upon initial review of the filing Staff questioned how NWE was able to identify measures to add, remove, or modify if cost/benefit tests are not available. This question prompted a conference call between Staff and NWE DSM program managers to explain the process used when reviewing individual measures each year. After walking through the process with NWE, Staff is comfortable with the approach NWE uses to review its individual measures. The process is explained in NWE's response to Staff Data Request 1-8, which identifies that changes in avoided costs and individual measure energy savings drive the change in measures offered. Staff does not have any concerns with the proposed DSM program changes for Year 2.

Staff Concern

Similar to Staff's memorandum filed in docket GE12-001,⁴ Staff maintains its concern regarding cross subsidization of DSM expenses between Residential and Commercial/Industrial customer classes. Based on the Energy Efficiency Adjustment rate design and budget design, there is the opportunity for the Commercial/Industrial class to pay for DSM expenses associated with the Residential class. However, given that it is early in NWE's DSM Program life, Staff is not requesting that NWE develop separate Energy Efficiency Adjustment rates for Commercial/Industrial and Residential Classes at this time. As the company continues to build participation levels in both customer classes during Year 2, Staff believes a better understanding of actual DSM expenses associated with each customer class will develop. Once this occurs, NWE will be able to establish either specific Energy Efficiency Adjustment Rates by customer class or a budget that minimizes cross subsidization. Staff will review NWE's next DSM filing to determine if rate design or budget design should be changed to minimize cross subsidization based on customer participation in the DSM programs.

Staff Recommendation

After reviewing NWE's filing and responses to Staff's data requests, Staff recommends the following:

- 1) The Commission approve NorthWestern Energy's Year 1 report;
- 2) The Commission approve NorthWestern Energy's proposed Year 2 budget and program changes;
- 3) The Commission allow for a Year 2 spending flexibility up to 30% over the approved Year 2 budget;

⁴ See last paragraph on page 4 of Staff's Memo filed on May 8, 2014 in docket GE12-001

- 4) The Commission cap the Year 2 electric and gas performance incentive based on the lesser of Year 2 actual spending or Year 2 approved budget; and
- 5) The Commission approve NorthWestern Energy's proposed electric and gas Energy Efficiency Adjustment rates for Year 2 and tariff sheets, with an effective date of October 1, 2015.