

GARY R. HERBERT Governor

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MICHELE BECK Director

- To: Public Service Commission
- From: Office of Consumer Services Michele Beck, Director Cheryl Murray, Utility Analyst
- Date: June 18, 2018
- Subject: In the Matter of Rocky Mountain Power's Demand-Side Management 2017 Annual Energy Efficiency and Peak Load Reduction Report – Docket No. 18-035-19.

# **CONFIDENTIAL MATERIAL REDACTED**

On May 18, 2018 Rocky Mountain Power (Company) filed with the Public Service Commission (Commission) its Demand-Side Management 2017 Annual Energy Efficiency and Peak Load Reduction Report (2017 Report). The 2017 Report is filed pursuant to the Commission's February 16, 2017 order in Docket No. 17-035-04.

On May 18, 2018 the Commission issued a Notice of Filing and Comment Period establishing June 18 and July 3 as the dates by which parties may submit comments and reply comments, respectively. In keeping with the established schedule following are comments of the Office of Consumer Services (Office).

# Reporting Requirements

Appendix 1 of the 2017 Report includes a check list of sorts identifying eleven reporting requirements as modified in Docket No. 17-035-04 as well as the location within the 2017 Report or attached Appendices where the information can be found (Report Reference).

The Office found the check list to be helpful in locating the majority of the required information. We will not provide comments on each requirement but note a few areas where we believe additional information will be helpful in future reports.

The first five requirements were readily located from the Report Reference on the check list.

Requirement 6: The Company shall perform cost effectiveness tests using avoided costs from planned assumptions. Report Reference, Appendix 2. Appendix 2, Utah Cost Effectiveness, contains the 2017 Utah Cost-Effectiveness Results as performed by Navigant

Appendix 2 does not include any references to avoided costs, however, the Navigant Memorandum does identify the decrements it used in the cost effective analysis. When questioned, the Company stated that the decrement values are from the Integrated Resource Plan (IRP) and are based on avoided costs. Since the requirement is to perform cost effectiveness tests using avoided costs, the Office suggests that a sentence disclosing this information would be an appropriate addition to the report.

*Requirement 7*: The Company shall provide cost effectiveness results with associated decrement values and program expenditures for the year's performance of the Company's Class 1 programs, subject to the confidentiality requirements of Utah Administrative Code R746-100-16. Report Reference - Confidential Appendix 8.

Confidential Appendix 8 contains the cost effectiveness results for the Company's load control programs. A specific \$/kW number is used to evaluate each program. The Office inquired as to where the "decrement values" in Requirement 7 can be found in Appendix 8. The Company responded that the \$xx/kW identified as being used to test cost effectiveness are the decrement/avoided cost values. The Company stated its intent to include a statement or other clarifying language referencing the decrement/avoided costs in the appendix for the 2018 report. The Office supports the inclusion of clarifying language.

The	Office	notes	that	the	[BEGIN	CONFIDENTIAL]	
							[END CONFIDENTIAL]

As a potential future addition to Class 1 DSM programs the Company states that it issued an RFP to investigate the possibility to use smart thermostats for demand response and the RFP proposals are currently being reviewed and evaluated.

*Requirement 9:* The Company shall provide Class 1 program data regarding loads available for curtailment, actual curtailment achieved, and program expenditures. Report Reference – Peak Reduction section.

The Office notes that program expenditures for Class 1 programs are confidential and are provided in Confidential Appendix 8 rather than in the Peak Reduction section.

*Requirement 10:* The Company shall include published evaluations that have not previously been provided in an Annual Report, and also include a schedule of current and upcoming evaluations. Report Reference - Evaluation section. Evaluation section at page 45 of the 2017 Report includes a link to access the evaluation report as well as the following table:

Program	Years Evaluated	Evaluator	Progress Status	
Home Energy Savings	2015 - 2016	Cadmus	Completed	
Low Income Weatherization	2013 - 2015	Opinion Dynamics	Completed	
wattsmart Business	2014 - 2015	Cadmus	Completed	
Home Energy Reports	2016 - 2017	AEG	In Progress	
wattsmart Business	2015 - 2016	Cadmus	In Progress	
A/C Cool Keeper & Irrigation Load Control	2016 - 2017	ADM	In Progress	

In earlier sections of the 2017 Report the expected year for publication of the evaluations of the various programs in progress is provided. The Office suggests that in future reports the Company include that information in the Progress Status section of the table. Additionally, Appendix 6 contains a summary of the evaluators' recommendations and the Company's response to those recommendations. This information is also provided in the program evaluation reports but the Office appreciates the inclusion in annual reports as well.

#### Cost Effectiveness Tests

Navigant provided the cost effectiveness analysis for Rocky Mountain Power. Appendix 2 contains the estimated cost-effectiveness for the overall energy efficiency portfolio and component sectors, as well as the Utah Home Energy Savings Program, the Home Energy Reporting Program<sup>1</sup>, Low-Income Weatherization, and Wattsmart Business Program.

Table 3 – Benefit/Cost Ratios by Portfolio Type							
Measure Group	PTRC	TRC	UCT	RIM	PCT		
DSM Portfolio with Load Control Programs	2.18	1.98	2.23	0.89	3.31		
Total Energy Efficiency Portfolio	1.89	1.72	2.86	0.66	3.07		
C&I Programs	1.93	1.75	3.24	0.77	2.53		
Residential Programs	1.92	1.74	2.24	0.47	5.36		
Load Control Programs	PASS	PASS	PASS	PASS	n/a		

The Benefit/Cost Ratios by Portfolio Type are as follows:

The Measure Groups pass all cost effectiveness tests except the RIM test; only the load control programs pass the RIM test.

## Home Energy Reports

The Office observes that Home Energy Reports has a UCT benefit/cost ratio of 1.02.<sup>2</sup> The Office is concerned about having a program with such a low benefit in the ongoing portfolio. It appears that the primary benefits from this program may have already been captured. The Office acknowledges that the Company expects the new vendor to provide an enhanced customer experience which may improve the program's performance. The Office recommends that the Company work with the Steering Committee to evaluate whether the new vendor improves the program enough to warrant keeping it in the portfolio.

The Office recognizes that the contract with the prior vendor was set to expire December 2017 and that the evaluation for Home Energy Reports is scheduled to be published in 2018. However, the timing of the program evaluation and the selection of a new vendor raises concerns. As a matter of best practice, the Company should have results of an evaluation to inform decisions made in an RFP including the evaluation of recent vendors' performance as well as a fundamental evaluation regarding whether a

<sup>&</sup>lt;sup>1</sup> Cost-effectiveness for the Home Energy Reporting Program was provided both with and without the contractor close-out costs incurred due to program provider change.

<sup>&</sup>lt;sup>2</sup> The benefit cost is 0.91 if the close out costs from changing vendors is included in the evaluation.

program should be maintained in the portfolio. The Office recommends that in the future the Company should better coordinate the timing of program evaluations to take place in advance of RFPs regarding the administration of such programs.

#### Performance and Comparison

As in 2016, expenditures for 2017 decreased while first year energy savings and capacity reduction increased year over year. Residential energy efficiency savings increased approximately 32% from 2016.<sup>3</sup>

Total Expenditures for 2017 were \$55.8 million compared to \$60.4 million in 2016, with capacity reductions of 71 MW and 65 MW, respectively. First year energy savings for 2017 were 372,945 MWh compared to 334,147 MWh for 2016. Lifetime savings for 2017 are projected at 3,889,755 MWh. Net benefits based on the projected value of the energy savings over the life of the individual measures are estimated at \$139.8 million.

These numbers indicate that the energy efficiency programs are achieving increased energy savings at reduced cost to rate payers.

Table 2 below is provided in response to the Company's requirement to report Class 1 capacity reduction, estimated Class 2 megawatt savings during system peak, and Class 2 megawatt-hour savings achieved, all compared against the Integrated Resource Plan targets and forecast targets submitted in the applicable DSM November 1<sup>st</sup> Deferred Account and Forecast Report.

<sup>&</sup>lt;sup>3</sup> The Residential portfolio is comprised of wattsmart Homes, Home Energy Reports, and Low Income Weatherization.

Utah 2017 DSM Programs	2015 IRP for 2017 (Gross - at Gen)		2017 Forecast (Gross - at Gen)		2017 Actual (Gross - at Gen)	
	MWH	MW	MWH	MW	MWH	MW
Class 1 - Load Control Programs						
A/C Load Control		115		115		112
Irrigation Load Control		20		20		21
Total Class 1		135		135		133
Class 2 - Residential Programs						
Low Income			250	-	256	-
Home Energy Reports			53,566	10	55,274	10
watts mart Homes			78,240	15	86,478	17
Total Residential Class 2	N/A		132,056	25	142,008	27
Class 2 - Non-Residential Programs						
wattsmart Business			251,954	48	230,937	44
Total Non-Residential Class 2	N/A		251,954	48	230,937	44
Total Class 2	333,400	58	384,010	73	372,945	71
Total Class 2 w/incremental HER						
savings			330,444	62	319,112	

Table 2 2017 Forecast to Actual Savings Comparison

Comparing 2017 actual Class 1 Load Control Programs to the 2015 IRP for 2017, and the 2017 Forecast reveals a 2 MW underperformance. (135MW, 135MW, 133MW, respectively)

The comparison of total Class 2 shows 2017 actual at 71 MW whereas the Forecast was 73 MW and the projection from the 2015 IRP for 2017 was 58 MW. Thus, actual performance was 13 MW greater than the 2015 IRP for 2017 projection but 2 MW lower than the 2017 Forecast.

#### **General Comments**

The Office found the 2017 Report to be informative and generally easy to follow and understand. As identified above and in our recommendations that follow the Office believes there are a few areas where adding clarifying language could be beneficial to the reader's understanding of the results presented in the reports.

### Recommendation

The Office recommends that the Commission approve the Demand-Side Management 2017 Annual Energy Efficiency and Peak Load Reduction Report. The Office further recommends that the Commission impose the following requirements on future reports. The Company should be required to:

- 1) include an explanation of the connection between the decrements used in the cost effectiveness analysis and avoided cost;
- 2) explain the variation in the cost effectiveness evaluation of the Cool Keeper measure;
- 3) include the expected year of publication of evaluations in the Progress Status column of evaluation reports; and
- 4) coordinate the timing of program evaluations to occur in advance of RFPs regarding the administration of such programs.

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