



State of Utah  
Department of Commerce  
Division of Public Utilities

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## **ACTION REQUEST RESPONSE**

To: Utah Public Service Commission

From: Division of Public Utilities  
Chris Parker, Director  
Energy Section  
Artie Powell, Manager  
Sam Liu, Utility Analyst  
Carolyn Roll, Utility Analyst

Date: June 25, 2012

Re: Docket No. 12-035-T07, RMP Advice No. 12-08, Proposed Changes to Schedule 110–New Homes Program, DPU’s Review and Recommendation – Approval.

### **RECOMMENDATION (Approval)**

The Division of Public Utilities (Division) recommends that the Public Service Commission (Commission) approve Rocky Mountain Power’s (Company) changes to the tariff sheets for Schedule 110, and tariff title from the “ENERGY STAR New Homes Program” to the “New Homes Program” (Program), with an effective date of July 1, 2012. The Division recommends that the Commission approve the Company’s proposed modifications to the Program in order to solve the Program’s marginal cost effectiveness issue that was raised in Docket No. 11-035-T11.

### **ISSUE**

The Company’s ENERGY STAR New Homes Program, Schedule 110, is currently designed to align with EPA’s ENERGY STAR Versions 2.0, 2.5 and 3.0 guidelines for new homes. On May 22, 2012, the Commission issued an Action Request for the Division to provide comments on its proposed Tariff changes, Electric Service Schedule 110 – ENERGY STAR New Homes Program. The Company proposes that with the changes to the ENERGY STAR New Homes

program that it proceeds under a new name the “New Homes Program”. Changes are included in the following tariff sheets: 110.1, 110.2 (single-family, v 2.0), 110.3 (multi-family, v 2.0), 110.4 (single-family, v 2.5 or v 3.0), 110.5 (multi-family, v 2.5 or v 3.0), 110.10, and B.1, as well as adds tariff sheets 110.6 and 110.7 (standalone measures for single-family), 110.8 and 110.9 (standalone measures for multi-family). This memorandum represents the Division’s response to the Commission’s Action Request.

## **DISCUSSION**

On November 9, 2011, the Division recommended the Commission approve the Company’s proposed modifications to the Program with a qualification. The Division expressed concern with the overall Program’s marginal Utility Cost Test. On November 15, 2011, the Company, the Division and Office of Consumer Services (Office) met to discuss the tariff modifications to improve estimated Program cost effectiveness. The Company explained that setting incentives is typically a balancing act which considers the incentive level high enough to influence market behavior, and therefore achieve a reasonable level of savings, while at the same time maintaining a positive cost-beneficial economic program. The Company will continue to assess incentives for all its demand-side management programs regularly to ensure they are set at an appropriate level. The Company and Division agreed that Program incentives should remain as originally proposed by the Company; the Office did not raise any objections to this agreement.

Tariff sheets revisions detailed descriptions of Program measures and requirements with remarks to the ENERGY STAR Program guidelines which included tariff tables 1, 2, 3, 4, 5 and 6. Incentives in Tables 1 (for single-family) and 2 (for multi-family) are eligible for all ENERGY STAR qualified v2.0 homes permitted before November 16, 2011 and submitted before July 1, 2012, and incentives in Tables 3 (for single-family) and 4 (for multi-family) are eligible for all ENERGY STAR qualified v2.5 or v3.0 homes permitted on or after November 16, 2011 and submitted January 1, 2012. All qualifying homes must have a qualifying air conditioner or evaporative cooler.

Builders may choose to install any of the prescriptive measures on a stand-alone basis in Tables 5 (single-family) and 6 (multi-family) or in combination with one of the “Whole Home”

measure. The prescriptive measures include exterior wall upgrades (R-20 insulation), R-5 windows, 80% ENERGY STAR lighting, high efficiency air conditioning (15 SEER/12.5 EER) or, premium evaporative equipment (whole-house or non whole-house), geothermal heat pump, high efficiency refrigerator (10% > ENERGY STAR), high efficiency dishwasher (EF 0.75+), air-conditioning equipment installed quality installation standards (HVAC-QI) rater certified or contractor certified, or with an electronically commutated motor (ECM) motor for the furnace fan.

The “Whole Home” measure in Tables 5 and 6 includes (1) the 2009 International Energy Conservation Code (IECC 2009), a home be constructed to meet IECC 2009 code with builder checklists or Home Energy Rating System (HERS) rater certified, (2) ENERGY STAR Version 2.5 qualified home, (3) ENERGY STAR Version 3.0 qualified home, and (4) High Performance Home, a home to be designed and tested at a HERS index score of 50 or less, meet ENERGY STAR Version 3.0 guidelines.

The Company hired Navigant Consulting to do the New Homes Program cost effectiveness analysis. The analysis is based on expected participation for 2012 through 2014. Six Program design scenarios are provided; three Participation levels of (high (+10%), expected, and low (-10%)), and two CO<sub>2</sub> Cost/Ton Scenarios, medium carbon IRP decrement values and no carbon decrement values.

The Company provided the Navigant Analysis based on expected participation with IRP medium carbon decrement value (Scenario 1) for 2012 through 2014 that showed a 1.24 Utility Cost Test (UCT). This is an improvement over the 1.02 under the same scenario (Scenario 2a, medium carbon IRP cost, medium participation) of the previous filing on November 9, 2011. The 1.02 UTC was calculated for ENERGY STAR Version 2.5. One possibility is that the slightly better Benefit/Cost ratio is simply the result of the Company proposing additional measures that can be taken in combination with the ENERGY STAR homes or as a stand-alone measure which will improve the participation. The Company’s proposed program will expand the current offerings through incentives for new home construction that meet ENERGY STAR guidelines, exceed ENERGY STAR guidelines or install energy efficient equipment but do not attain ENERGY

STAR certification. Adding new program measures besides ENERGY STAR will help to compensate the expected decrease in builder participation due to stricter ENERGY STAR Version 3.0 standards. While better than 1.02, the 1.24 ratio itself is not particularly high and the details in the report show other ratios that are lower or less than 1.0. Based on the cost effective ratios provided by the Company for 6 scenarios, an approximate 95% confidence interval yields a range of 1.02 to 1.26. The Division notes that Navigant did not run a scenario with a high carbon tax. This scenario presumably would have had a higher ratio than the base case. However, scenario 2 with a high participation rate and medium carbon tax is at 1.3. It is not clear that the additional scenario would have improved the overall results. Under scenarios 3 and 6 with low participation, the average UCT is a marginal 1.075.

While recommending approval of the Program, the Division continues to be concerned with the relatively low margin of error regarding the program's cost effectiveness.. Therefore, the Division recommends that the Company be required to track and report participation quarterly. Additionally, the Division recommends that the Advisory group be instructed to review the program to see if additional measures or changes will help improve the programs overall cost effectiveness.

The Division agrees with the Office's recommended changes to the tariff sheets; to remove the ENERGY STAR in the program name designation on Tariff Sheets 110.2 and 110.4 and change the submission requirement date to January 1, 2013 on Tariff Sheet 110.4.

## **CONCLUSION**

The Division recommends that the Commission approve the Company's changes to tariff sheets for Schedule 110, the New Homes Program, with the recommended changes and an effective date of July 1, 2012.

CC: Michele Beck, OCS  
Dave Taylor, RMP  
DSM Service List