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May 22, 2012

***VIA ELECTRONIC FILING  
AND OVERNIGHT DELIVERY***

Public Service Commission of Utah  
Heber M. Wells Building, 4<sup>th</sup> Floor  
160 East 300 South  
Salt Lake City, UT 84114

Attn: Gary Widerburg  
Commission Secretary

RE: Advice No. 12-08  
Proposed Changes to Schedule 110 ENERGY STAR New Homes Program

Enclosed for filing are an original and two copies of proposed tariff sheets associated with Tariff P.S.C.U No. 48 of PacifiCorp, d.b.a. Rocky Mountain Power, applicable to electric service in the State of Utah. Pursuant to the requirement of Rule R746-405D, Rocky Mountain Power (the "Company") states that the proposed tariff sheets do not constitute a violation of state law or Commission rule. The Company will also provide an electronic version of this filing to [psc@utah.gov](mailto:psc@utah.gov). The Company respectfully requests an effective date of July 1, 2012 for these changes.

Fifth Revision of Sheet No. B.1		Electric Service Schedules
Second Revision of Sheet No. 110.1	Schedule 110	ENERGY STAR New Homes Program
Second Revision of Sheet No. 110.2	Schedule 110	ENERGY STAR New Homes Program
Second Revision of Sheet No. 110.3	Schedule 110	ENERGY STAR New Homes Program
Second Revision of Sheet No. 110.4	Schedule 110	ENERGY STAR New Homes Program
First Revision of Sheet No. 110.5	Schedule 110	ENERGY STAR New Homes Program
First Revision of Sheet No. 110.6	Schedule 110	ENERGY STAR New Homes Program

Original of Sheet No. 110.7	Schedule 110	ENERGY STAR New Homes Program
Original of Sheet No. 110.8	Schedule 110	ENERGY STAR New Homes Program
Original of Sheet No. 110.9	Schedule 110	ENERGY STAR New Homes Program
Original of Sheet No. 110.10	Schedule 110	ENERGY STAR New Homes Program

The purpose of this filing is to propose changes to the ENERGY STAR New Homes program and advancing it under the New Homes program (“Program”), which will be administered through Schedule 110. The Program is currently designed to align with ENERGY STAR Versions 2, 2.5 and 3 for new homes. Through this filing the Company is proposing to expand the Program through incentives for new home construction that meet ENERGY STAR guidelines, exceed ENERGY STAR guidelines or install energy efficient equipment but do not achieve ENERGY STAR certification. The proposed Program will expand the current offerings through the addition of whole home options such as IECC 2009, ENERGY STAR Version 3, and a high performance home option that exceeds ENERGY STAR standards. Prescriptive high performance energy efficiency measures are also being added as a qualifying option. This comprehensive approach is an effort to increase energy savings, lower the Program delivery cost per unit of energy savings, and to expand the Program to more new home builders. Adding new program measures in addition to ENERGY STAR will help to offset the expected decrease in builder participation due to more stringent ENERGY STAR standards in 2012.

### **New Homes Program Proposed Tariff Changes**

In recommending approval of the most recent Program changes in Docket No. 11-035-T11, the Division and Commission stated their concern for the Program’s marginal cost effectiveness. The Company acknowledges this concern and as a result proposes several modifications to the Program in order to address Program cost effectiveness in the short term, while planning for improved long-term cost effectiveness. As a result, the Company proposes to expand the ENERGY STAR New Homes program to encompass additional above energy code measures that will increase participation and electric energy savings in the Program. The Program name as well as tariff title will be changed from the ENERGY STAR New Homes Program to the New Homes Program.

In order to align Program requirements with the national initiatives and improve administration and cost effectiveness the following changes are proposed:

- Whole Home Measures: Builders may select one of the following to qualify for whole house measure incentives:
  - ENERGY STAR Versions 2.5 and 3

- The High Performance Home measure, which requires a home to be designed and tested at a Home Energy Rating System (HERS) index score of 50 or less and meet ENERGY STAR Version 3 guidelines
- Construct to the 2009 International Energy Conservation Code (2009 IECC) (builder or rater certification option), separate from ENERGY STAR, and in addition to the High Performance Home measure
- Prescriptive Measures: Builders may choose to install any of the following measures on a stand-alone basis or in combination with a whole home measure.
  - Air-conditioning equipment installed per Rocky Mountain Power's Air Conditioning Quality Installation standards (HVAC-QI) as published on the Company's Website at: <http://www.rockymountainpower.net/res/sem/epi/utah/esnh.html>.
    - Rater Certified measure
    - Contractor Certified measure
  - Air-conditioning equipment installed with an electronically commutated motor in the furnace, per Rocky Mountain Power's HVAC-QI published on the Company's website.
    - Rater Certified measure option
    - Contractor Certified measure option
  - R-20 insulation installed in 2x6 wall framing
  - R-5 Windows (Not offered for multi-family due to sub-optimal cost and savings)
  - ENERGY STAR qualified lighting (CFL, LED, pin-based florescent) installed in 80% of RESNET qualified locations. There are three incentive levels based on square footage for single-family homes and three incentive levels based on square footage for multi-family homes.
  - High efficiency air conditioning (15 SEER/12.5 EER) installed with a thermal expansion valve. Current ENERGY STAR 2 and ENERGY STAR 2.5 plus measures require 14 SEER, but marginal cost effectiveness performance warranted change.
  - Evaporative cooler incentives for ducted and non-ducted premium evaporative equipment. Qualifying equipment will align with the Company's Home Energy Savings and/or Cool Cash program requirements. Measure costs, savings, and incentives have been adjusted to improve cost effectiveness.
  - Ground Source Heat Pump (GSHP) for ENERGY STAR Qualified equipment. Measure costs, savings, and incentives have been adjusted to improve cost effectiveness.
  - High efficiency refrigerator that is 10% more energy efficient than ENERGY STAR guidelines. Qualifying equipment will align with the Company's Home Energy Savings Program requirements.

- High efficiency dishwasher (EF 0.75+). Qualifying equipment will align with the Company’s Home Energy Savings Program requirements.

**Program Cost Effectiveness**

Program cost effectiveness calculations based on expected participation (Scenario 1) for 2012 through 2014 resulted in a 1.24 Utility Cost Test (UTC). Total Program cost effectiveness results for each year are: 2012 (1.24 UTC); 2013 (1.19 UTC); and 2014 (1.29 UTC). The 2012-2014 (Scenario 1) “expected” scenario is used as a baseline for the following sensitivity analysis.

Table 1 below summarizes results from the Benefit/Cost analysis for the New Homes Program for 2012-2014. Table 1, scenarios 1-6 measure the Program assumptions with the current state energy code requirements as a baseline (2006 IECC.) Scenarios 1 and 4 respectively represent 2012-2014 expected program participation with medium carbon IRP decrement values and no carbon decrement values. Scenarios 2 and 3 represent high (+10%) and low (-10%) participation in relation to scenario 1 expected with medium carbon values. Scenarios 5 and 6 represent high (+10%) and low (-10%) participation in relation to scenario 4 expected with no carbon values. In total, six Program design scenarios are provided. For more information see Attachment A for single-family and multi-family measure level details for 2012, 2013, and 2014.

The six scenarios provide a high and low sensitivity to the Company’s estimate of Program participation as well as various IRP decrement values. The cost effectiveness and sensitivity study specifically provide results based on estimated Program costs and energy savings for the each year from 2012 through 2014.

Program administrative and incentive budgets and energy savings are projections based on new homes market analysis and recent historic Program participation trends. Modeling inputs utilize individual measure savings and administration costs. The savings are for climate zone 5 and utilize the 2006 IECC as a baseline. Multiple benefit/cost tests are reported including: PacifiCorp Total Resource Cost Test (PTRC), Total Resource Cost Test (TRC), Utility Cost Test (UCT), Rate Impact Test (RIM), and Participant Cost Test (PCT).

**Table 1 – 2012-2014 Overall Program Cost Effectiveness Summary of Single and Multi-Family Programs – Scenario 1-6**

<b>Scenario</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Participation</b>	Expected	High	Low	Expected	High	Low
<b>IRP Decrement Value</b>	Medium Carbon	Medium Carbon	Medium Carbon	No Carbon	No Carbon	No Carbon
<b>Housing Type</b>	SF/MF	SF/MF	SF/MF	SF/MF	SF/MF	SF/MF
<b>PTRC</b>	0.65	0.67	0.63	0.56	0.57	0.54
<b>TRC</b>	0.59	0.61	0.57	0.51	0.52	0.49
<b>UCT</b>	1.24	1.30	1.16	1.06	1.11	0.99
<b>RIM</b>	0.56	0.57	0.54	0.48	0.49	0.46

<b>PCT</b>	1.79	1.79	1.79	1.79	1.79	1.79
<b>Levelized Cost</b>	\$0.18	\$0.17	\$0.18	\$0.18	\$0.17	\$0.18

The estimated increase in new home starts in 2012 will likely provide an opportunity to increase participation in the New Homes Program, which as a result may improve cost effectiveness.<sup>1</sup>

### Implementation Plan

The Company has summarized the implementation plan in Table 2 below, that provides builders with time to adjust to new Program incentives, while retaining the incentive structure for homes that were built within the existing incentive structure. The implementation plan retains the existing incentive structures depending on the version of ENERGY STAR for which the home qualified and introduces a timeline for homes that are not constructed to an ENERGY STAR standard but still qualify under new program guidelines.

**Table 2 – Implementation Plan (Applicable Incentive Offer)**

<i>Home Efficiency Level</i>	<b>Permit Date</b>		
	<i>Before 11/16/11</i>	<i>Between 11/16/11 &amp; Tariff effective date</i>	<i>After Tariff effective date</i>
ENERGY STAR v2	Table 1 or 2	Table 1 or 2	Table 1 or 2
ENERGY STAR v2.5	Table 1 or 2	Table 3 or 4	Table 5 or 6
ENERGY STAR v3	Table 1 or 2	Table 3 or 4	Table 5 or 6
Non-ENERGY STAR	No Incentive	No Incentive	Table 5 or 6

Tables referenced in the implementation plan are included in the Schedule 110 tariff.

The Company discussed the New Homes program adoption requirements and its impacts to the Company's Program with its Demand-Side Management (DSM) Advisory Group on December 7, 2011 and again on May 9, 2012, with a draft of this filing provided for comment on May 4, 2012. Through the second half of 2011 and early 2012 the Company met with builders and raters (third-party firms hired by builders to assess compliance with ENERGY STAR guidelines) to discuss the Program design and potential changes. Additionally, several one-on-one meetings with builders and raters occurred to discuss potential changes and impacts on the ENERGY STAR market.

The Company undertook an effort to review and update the analytical foundation for the Program, recognizing better housing stock and building practice information are now available, after six years of Program operation (2005 – 2011), as well as more recent impact evaluations. Analytical assumptions supporting the reported energy savings were revised using REM/Rate (Version 12.85) simulation software, which aligns with the analysis tools used by the national ENERGY STAR Program. Prototype homes (single-family and multi-family) for the three Utah climate zones were developed and information from the recent impact evaluations about

<sup>1</sup>Attachment B - Governor's Economic Outlook 2012 Report. State of Utah, Office of Planning and Budget. p.31, <http://www.governor.utah.gov/dea/EconSummaries/2012EconomicOutlook.pdf>.

common Utah housing size and features were included. Measure cost and life assumptions were also updated.

## **Conclusion**

The Company is proposing additional new homes measures that can be taken in combination with the ENERGY STAR homes or as a stand-alone measure, which will improve the participation and cost effectiveness of the Program.

Further communications about these changes and the proposed effective date will be provided to builders and raters via email, the Company's website, and through direct outreach to key Program partners via the Program administrator's outreach staff.

The New Homes program is funded through the Schedule 193 Demand Side Management Rate Adjustment. The Company is not recommending an adjustment to the Demand Side Management Rate Adjustment in this proposal.

It is respectfully requested that all formal correspondence and staff requests regarding this matter be addressed to:

By E-mail (preferred):      [datarequest@pacificorp.com](mailto:datarequest@pacificorp.com)  
   [beau.brown@pacificorp.com](mailto:beau.brown@pacificorp.com)

By regular mail:                      Data Request Response Center  
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Informal inquiries regarding this matter may be directed to Beau Brown, Regulatory Manager DSM, at (503) 813-6489.

Sincerely,

Carol L. Hunter  
Vice President, Services  
Enclosures

cc:      Division of Public Utilities  
            Office of Consumer Services