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MEMORANDUM

To: Utah Public Service Commission

From: Utah Division of Public Utilities
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Date: July 16, 2009

Ref: Docket No. 09-035-T10. Advice Filing 09-09 – Schedule 110 – Energy Star New Homes Program

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RECOMMENDATION (approval)

The Division of Public Utilities (Division) recommends that the Commission approve the proposed Tariff changes to Schedule 110, the Energy Star New Homes Program that includes modifications to the associated replacement sheets 110.1, 110.2, 110.3, and 110.4.

ISSUE

Rocky Mountain Power (Company) filed proposed Tariff revisions for Schedule 110, the Energy Star New Homes Program on June 24, 2009. The filing also includes a cost-effectiveness analysis in support of the recommended schedule modifications and a program evaluation plan.

The Company's proposed modifications to the Energy Star New Homes Program are intended to maintain Energy Star program participation given the current economic conditions in Utah. The changes are also designed to improve penetration of efficient lighting measures, link advanced building practices, and increase participation from the multi-family housing market. The proposed modifications are also intended to be consistent with similar incentives offered through

Questar Gas Company's New Homes program. The Company will re-evaluate and revise the program to reflect changes that might be necessary in the event the Utah State Legislature adopts the 2009 International Energy Conservation Code (IECC). The Company requested an effective date of July 24, 2009. This memo constitutes the Division's response to the Commission's Action Request issued on June 30, 2009.

DISCUSSION

The Energy Star New Homes Program, as defined in the Company's Electric Service Schedule No. 110, was developed to provide financial incentives to qualified builders to employ energy efficient construction practices in new residential housing. These incentives are offered to licensed builders certified within the federal Environmental Protection Agency's Energy Star Builders' national registry.

The tariff offers a variety of incentives to builders who install energy efficient cooling systems and high efficiency insulation, windows, lighting, and appliances in new residential homes. The purpose of the program is to reduce residential electric loads, particularly during the peak summer period.

The Company proposes modifying the tariff to maintain and increase participation in the existing Energy Star New Homes program, especially from the multi-family housing market, and increase penetration of efficient lighting. The proposed program modifications are summarized as follows:

Applicable Structure Types

1. Change in the type of qualifying newly constructed residences from structures with three stories or less to those with five stories or less, in all territory served by the Company in Utah on Schedules 1, 2 and 3.

2. Package/Measures eligible for incentives must include high efficiency and correctly sized cooling equipment, performance-based air distribution systems and Energy Star lighting components.

Single Family Incentives

1. Consolidate the four Tiers in the 2008 program into three Tiers to simplify the marketing messages, participation requirements, and program administration.
2. Tier 1: Increase the incentive by $50 from $200 to $250 and include installation of Compact Fluorescent Light Bulbs in 50% of all light sockets. (The current tariff specifies installing five CFLs).
3. Tier 2: Add installation of Compact Fluorescent Light Bulbs in 75% of all light sockets. (The current tariff specifies installing 20 CFLS).
4. Tier 3: Remove Tier 3 of the 2008 program and modify Tier 4 of the 2008 program to increase the incentive from $700 to $800 to encourage more builders to consider building to Tier 3 standards. Must meet standards for federal homebuilders tax credit (new home surpasses International Energy Conversation Code standards by 50%, with at least 20% of energy savings coming from building shell measures). Increase the efficiency rating of air conditioning equipment from 14 SEER to 15 SEER and increase window U-value solar heat gain coefficient requirements from 0.35 U-value to 0.30 U-value. Add installation of Compact Fluorescent Light Bulbs in 90% of all light sockets. (The current tariff specifies installing 20 CFLs and three ENERGY STAR pin-based lighting fixtures).
5. Modify five Plus Measures:
   - A) Replace the reference to "ducted high efficiency evaporative cooling system" with "premium evaporative cooling system;"
   - B) Increase the incentive for " Installation of whole house fan system" Plus Measure from $100 to $200;
   - C) Increase the incentive for lighting upgrade to 90% Energy Star Compact Fluorescent Light Bulbs rather than the addition of 15 CFLs (Tier 1 only – from base of 50% CFLs) from $50 to $75.
   - D) Increase the incentive for "Lighting upgrade of an Energy Star Fixture(s)" Plus Measure from $20 to $50.

E) Increase the incentive for "Energy Star ceiling fan with Gossamer blade design" Plus Measure from $10 to $75.

The builder incentive level for Tier 2 remains unchanged at $300, in spite of increased lighting requirements from the 2008 program year. The additional $50 incentive of Tier 2 over the Tier 1 incentives is offered to encourage the installation of additional lighting in Tier 2. The proposed lighting change for Tier 1 requires 50% CFLs, while Tier 2 requires 75%.

Multi-Family Incentives

1. Change the number of contiguous units within a structure that qualify for multi-family incentives from structures with six units or greater to structures with five units or greater.
2. Change the multi-family tier offerings from a single tier offering to a two tier offering based on the number of units per structure. Tier 1 qualifying structures would include 5 – 12 contiguous units, with a $300 incentive applied; Tier 2 structures would include those with 13 or more contiguous units, with a $200 incentive applied.
3. Require the installation of CFLs in 50% of all light sockets for both multi-family Tiers 1 and 2.
4. Modify Plus Measures as follows:
   A) Remove the 2008 program "Lighting Upgrade" Plus Measures and replace these with a new Plus Measure: "Lighting Upgrade to 90% ENERGY STAR CFLs (from base of 50% CFLs)." The incentive for this measure is $35.
   B) Replace the $10 incentive for "Energy Star ceiling fan with Gossamer blade design," with a new measure that offers a $100 incentive for "Installation of 14 SEER HVAC equipment."

The proposed changes appear to be focused on moving the market more quickly toward SEER 14 or even SEER 15 air conditioning equipment and more efficient lighting. Hence, the results appear to be consistent with the objective of reducing electricity usage and subsequent load in peak demand periods. In addition, the proposed changes will ensure consistency with the federal Energy Star Program as well as Questar's New Homes program. These modifications appear to be reasonable and consistent with DSM objectives.

The Division investigated the proposed program changes by carefully reviewing the estimated costs and expected savings. The Division also evaluated the underlying assumptions and calculations of the cost benefit analysis performed by the Cadmus Group, formerly known as Quantec.

The cost effectiveness analysis for the program was calculated using Cadmus' Demand Impact and Cost Effectiveness model. Even with the proposed incentive modifications, the program remains cost effective. The results show that, although some of the individual measures did not pass the Total Resource Cost Test (TRC), at the program level, the program passed the TRC Test (1.162), the Utility Cost Test (1.174) and the Participant Cost Test (156.890), but did not pass the Utah Rate Impact (URIM) Test (0.995). The Company noted that because retail rates are set to recover both production (avoided) costs and other operating costs, the retail rate is typically higher than the avoided cost. According to the Company, it is the magnitude of the difference between retail rates and avoided costs as they relate to the calculation of URIM for this project that causes the program to not pass the URIM test. However, the Division argues that since the URIM test results are very close to 1.0, (for which a program need not necessarily achieve a cost effective result), and since the Company has shown that the program is cost effective under the other required tests, it has sufficiently demonstrated that the program is in compliance with Commission-ordered cost effectiveness criteria.

CONCLUSION

The Division concludes that the proposed program is cost-effective and is consistent with the Commission's goals to promote cost-effective DSM programs. Therefore, the Division recommends that the Commission approve the Company's proposed modifications to Electric Service Schedule 110.

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