

State of Utah Department of Commerce Division of Public Utilities

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ACTION REQUEST RESPONSE

To: Public Service Commission

From: Division of Public Utilities

Chris Parker, Director Artie Powell, Energy Section Manager Thomas Brill, Technical Consultant Sam Liu, Utility Analyst Carolyn Roll, Utility Analyst

Date: May 10, 2012

Re: Advice No. 12-05 Docket No. 12-035-T04 – Schedule 115 – Commercial and Industrial Energy Efficiency Incentives Optional for Qualifying Customers – FinAnswer Express, Division's Recommendation - Approval

RECOMMENDATION (Approval)

The Division of Public Utilities (Division) recommends that the Commission approve Rocky Mountain Power's (RMP or Company) proposal to modify the FinAnswer Express program (Schedule 115), with an effective date of May 19, 2012.

ISSUE

On April 19, 2012, RMP filed proposed changes to its Schedule 115. The program also offers customer incentives for energy efficiency measures not listed in program incentive tables. The current program offers incentives for lighting, motors, heating ventilation and air conditioning (HVAC), and a short list of other measures. Incentives are available for both retrofit projects and



new construction/major renovation projects. On April 20, 2012, the Commission issued an Action Request to the Division to investigate the proposed changes, and review the Tariff for compliance. This memorandum is the Division's response to the Commission's Action Request.

DISCUSSION

In its Advice Letter No. 12-05, filed with the Commission on April 19, 2012, the Company proposed modifications to the FinAnswer Express program in order to align the FinAnswer Express program with upcoming changes to codes, standards, third-party specifications, and new market data and to increase the comprehensiveness of the program while maintaining or improving cost effectiveness. Detailed tables outline and present each measure and proposed change, as well as describe the reason for the proposed change.

Lighting Incentives

The U.S. Department of Energy (DOE) has implemented efficiency standards for lighting products that the lowest-cost and least-efficient fluorescent lighting options from the market to compliant with Congress passed the Energy Independence and Security Act (EISA) 2007. Linear fluorescent lighting is going through a major transition as a result of long anticipated federal lighting standards that begin July 14, 2012. Florescent T8 and T5 High Output (T5HO) lamps have shown greater lumen and longer lifespan than in the past and replaced many outdated T12 and other in-efficient High-Intensity Discharge (HID) light products for Commercial and Industrial Lighting. The older style T12 lamps will be banned by July 14, 2012. When the new standards take effect, general service fluorescent lamps manufactured or imported for sale in the United State will need to meet higher efficacy (lumen/watt) requirements. These changes will have a significant effect on the FinAnswer Express program in the next three years. The Company is encouraging customers with existing T12 or older T8 linear fluorescent lighting to retrofit to higher efficiency lighting before Federal lighting standards take effect July 14, 2012. During 2014, the Company expects to increase the deemed baseline for T12 retrofits, thereby decreasing the available savings for this type of project, which results in a decrease in overall program savings compared to 2013. Therefore, the incentive upgrade to Standard T8 fixtures is

reduced from \$5 per lamp installed to \$3 and to Premium T8 fixtures is reduced from \$10 per lamp installed to \$7. The incentive for Standard T8 Fluorescent will no longer be available after July 14, 2012.

High-bay T8 and T5HO (High Output) fluorescents with electronic ballasts are required to have a Ballast Factor (BF) less than or equal to 1.2, offering an incentive to upgrade old HID light sources such as metal halide and high-pressure sodium lamps, change incentives from \$45 to \$20 per lamp. Ceramic Metal Halide (CMH) incentives change from the existing \$25, \$100, and \$120 to \$35 per fixture, with all wattages having the same incentive. Pulse Start Metal Halide (PSMH) incentives change from \$60, \$75, and \$100 and reduce to \$60 per fixture, with all wattages having the same incentive.

Cold Cathode Lamps (screw-in lamps) for some companies, such as Pacific Gas and Electric and Con Edison, have requirements for incentives, must be 2 - 8 Watt Cold Cathode Lamps with incentive of \$4.00 per Lamp which must replace incandescent lamps are 10 Watts or greater. Most of the watts of Cold Cathode lamp with a screw base available on the market are between 2 and 8 Watts. Cold Cathode Fluorescent Lamp with a screw base should be excluded in this measurement.

The Light-Emitting Diode (LED) is one of today's most energy-efficient and rapidly-developing lighting technologies. LEDs emit almost no heat. Especially ENERGY STAR rated LED products use at least 75 percent less energy, and last 25 times longer than incandescent lighting¹. The Company proposed the list of LED for General Illuminate Incentives: Integral Screw-in Lamp \$10 per Lamp; Recessed Downlight \$10 per Fixture; Outdoor Area and Roadway \$100 per Fixture; Parking Garage \$100 per Fixture; and High and Low Bay (illuminate a variety of areas) \$100 per Fixture. The proposed changes for LED lighting define the eligibility criteria for

¹ http://www.energystar.gov/index.cfm?c=ssl.pr_commercial

incentives as Fixtures that comply with Design Lights Consortium² or ENERGY STAR LED³ performance requirements on their list of qualifying products.

Lighting Controls - Occupancy Control sensor, changes the incentive increase from \$30 per sensor to \$75, but eligibility requirements include Passive Infrared (PIR), Dual Tech (ultrasonic and passive infrared) or Integral Occupancy Sensor increase from \$25 per sensor to \$75; Daylighting Control sensor, proposed the incentive of \$75; Advanced Daylighting Control which must incorporate both an Occupancy sensor and Daylighting sensor operating as part of the same control sequence in the same space, proposed the incentive of \$150; and Dimming Ballast that dims 50 percent or more of the Fixture and controlled by a qualifying Occupancy or Daylighting Control, the proposed the incentive of \$15 per Ballast. Lighting Controls and LED replacing incandescent or neon or fluorescent Sign for Non-General Illuminate Incentives as follow – LED Exit Sign, \$15 per Sign; LED Message Center Sign, \$5 per Lamp; LED Channel Letter Sign, \$5 per Linear Foot; and LED Marquee/Cabinet Sign, \$5 per Linear Foot.

Motor Incentives for National Electric Manufacturers Association (NEMA) Premium Efficiency Motors purchased on or after December 19, 2010 are not available.

HVAC Incentives

For HVAC equipment measures that are required by the Federal efficiency standards. On January 6, 2012 the Consortium for Energy Efficiency (CEE) Board of Directors approved revisions to the CEE Commercial Unitary Air Conditioners and Heat Pumps Specification. Current rate schedule's minimum efficiency requirements are based on CEE specifications. For Unitary Commercial Air Conditioners and Heat Pumps, the Company updated measure costs and revised eligibility requirements to align with the new CEE high-efficiency specification, and proposed to list the CEE tier in incentive table rather than the Efficiency Rating except Packaged Terminal Air Conditioners and Heat Pumps.

² http://www.designlights.org/

³ http://www.energystar.gov/index.cfm?c=ssl.pr_commercial

The Company proposed to reduce incentives by \$25 per ton, and to list the CEE tier in the Tiers 1 and 2 and provide \$50 and \$75/ton incentives, respectively. The key barriers to increasing market penetration of efficient Commercial Unitary Air Conditioning and Heat Pump equipment is first cost. Building developers/owners may lack the incentive to purchase higher priced, energy efficient equipment since they are not responsible for energy bills for that equipment. Efficiency program promoting high efficiency AC and HP equipment are often designed to address the first cost purchasing barrier by offering financial incentives to mitigate the incremental price associated with energy efficient equipment relative to standard models.

Mechanical and Other Energy Efficiency Measure Incentives

The current "Mechanical and Other Energy Efficiency Measures" table will be replaced with a new incentive table for Other HVAC, Food Service Equipment, and Office Equipment Incentive. The Company added new Building Envelope Incentives measures table to the FinAnswer Express program to increase participation and the comprehensiveness of the program and streamline program administration. New Mechanical and Other Energy Efficiency Measures (EEM) table provides the number of new measures in each category.

Additional New Measure Categories

The Company is also requesting approval to add new measures in the following measure categories:

Appliance Incentives

This measure table includes commercial clothes washers, residential clothes washers used in a business, electric storage water heaters and room air conditioners. Appliance incentives align with the Company's Home Energy Savings program.

Irrigation Incentives

This incentive table includes individual sprinkler components, water distribution equipment and Variable Frequency Drive (VEDs) on irrigation pumps.

Farm/Dairy Equipment Incentives

The incentives for this category includes automatic milker takeoffs, VFD's for dairy vacuum pumps, milk precoolers, agricultural engine block heater timers, circulating fans, heat reclaimers, high-efficiency ventilation systems, and programmable ventilation controllers.

Compressed Air Incentives

This incentive table includes low-pressure drop filters, addition of receiver capacity, refrigerated cycling dryers, VFD-controlled air compressors, zero-loss condensate drains, and outside air intake.

The Company has provided the cost-effectiveness tests from the Cadmus study for FinAnswer Express program by using the 2011 IRP 69 percent East System Load Factor decrement. The Company used the \$19/ton Medium Carbon Tax scenario stream of values for this analysis. Project Total Utility Costs for the 3-year time period 2012 – 2014 totaled \$15,687,209, and Incentives for these three years amounted to \$6,936,817, with total kWh savings of 112,696,965 kWh. The results of this benefit-cost analysis indicate that all five of the standard cost-benefit tests are passed. Using the same 2011 IRP 69 percent East System Load Factor decrement, the Company also assessed a Low Carbon cost effectiveness scenario. The benefit cost ratio for four of the five tests were lower under the Low Carbon scenario. (The rate impact test had a ratio less that 1.0 and was 0.88.) The Division notes, however, that in the Cadmus Group document Attachments A and B the Medium Carbon and Low Carbon scenarios are not explicitly stated (although in the Company's Advice Letter, on page 13, it appears that the Company used \$19/ton for the Medium Carbon scenario). The Division also finds that Table 1 in Attachments A and B to be identical. Similarly, Table 2 in Attachments A and B are identical. Neither the Company's advice letter nor the CADMUS memo attempt to explain how the inputs and outputs appear to be identical between the two scenarios and yet achieve different test measures. The Division recommends that the Company provide a clarification of this apparent discrepancy.

The modifications proposed herein were discussed with the DSM Advisory Group during the meetings on January 24 and February 8, 2012, with a draft filing provided to the DSM Advisory Group for comment on March 22, 2012. The Division has reviewed the proposed program and tariff modification and concludes that the measure qualification and incentive changes, as well as the administrative and language changes, are appropriate and the program is still cost-effective with these changes. The Division recommends the Commission approve the Company's proposed changes.

CONCLUSION

The Division recommends that the Commission approve the Company proposal to modify the FinAnswer Express (Schedule 115) program, with an effective date of May 19, 2012. The Division also recommends that the Company provide a clarification of the benefit/cost analysis and results.

CC: Michele Beck, OCS Dave Taylor, RMP