



201 South Main, Suite 2300
Salt Lake City, Utah 84111

December 8, 2014

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

Wyoming Public Service Commission
2515 Warren Avenue, Suite 300
Cheyenne, Wyoming 82002

Attn: Chris Petrie, Chief Counsel

RE: IN THE MATTER OF THE APPLICATION OF ROCKY MOUNTAIN POWER
TO UPDATE ELECTRIC SERVICE SCHEDULE NO. 111 – HOME ENERGY
SAVINGS PROGRAM

Dear Mr. Petrie:

Rocky Mountain Power (the “Company”) hereby submits for filing an original and three copies of proposed changes to Schedule 111 – Home Energy Savings Program. In addition, the Company has also provided this Application to the Wyoming Public Service Commission (the “Commission”) pursuant to its electronic filing requirements. The Company respectfully requests an effective date for proposed tariff Schedule No. 111 on or before February 16, 2015. The Company has enclosed a check in the amount of \$5.00 for the Commission’s filing fee.

The following tariff sheets are included as Attachment A:

First Revision of Sheet No. 111-2	Schedule 111	Home Energy Savings Program
First Revision of Sheet No. 111-3	Schedule 111	Home Energy Savings Program
First Revision of Sheet No. 111-4	Schedule 111	Home Energy Savings Program
First Revision of Sheet No. 111-5	Schedule 111	Home Energy Savings Program
First Revision of Sheet No. 111-6	Schedule 111	Home Energy Savings Program

The Company respectfully requests that all formal correspondence and requests for additional information regarding this filing be addressed to the following:

By E-mail (preferred): datarequest@pacificorp.com
michael.snow@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah, Suite 2000
Portland, OR 97232

Wyoming Public Service Commission

December 8, 2014

Page 2

Informal inquiries may be directed to Michael Snow, DSM Regulatory Projects Manager, at (801) 220-4214.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathryn Hymas". The signature is written in a cursive style with a large initial "K".

Kathryn Hymas
Vice President, Demand Side Management

Enclosures

Daniel E. Solander
201 South Main, Suite 2300
Salt Lake City UT 84111
Telephone: (801) 220-4014
FAX: (801) 220-3299
Email: daniel.solander@pacificorp.com

Attorney for Rocky Mountain Power

BEFORE THE WYOMING PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE)	DOCKET NO. 20000-____-ET-14
APPLICATION OF ROCKY)	
MOUNTAIN POWER TO UPDATE)	Record No. (_____)
ELECTRIC SERVICE SCHEDULE NO.)	
111 – HOME ENERGY SAVINGS)	
PROGRAM)	

COMES NOW, Rocky Mountain Power (the “Company”), and hereby applies to the Wyoming Public Service Commission (the “Commission”) for authority to update Electric Service Schedule 111 – Home Energy Savings Program (the “Program”). If approved, the Program will be expanded to include new qualifying equipment, retire existing measures, and modify savings and incentives for various existing measures. The proposed changes are designed to increase energy savings acquisition by providing residential customers more opportunities to participate and by aligning incentives with market costs. This Application does not introduce financial subsidies between customer classes. Changes to the Program do not alter how costs are captured and tracked between sectors or how the Company tracks and recovers residential sector program costs.

In support of this Application, the Company states as follows:

1. Rocky Mountain Power is a division of PacifiCorp, an Oregon corporation, which provides electric service to retail customers through its Rocky

Mountain Power division in the states of Wyoming, Utah, and Idaho, and through its Pacific Power division in the states of Oregon, California, and Washington.

2. Rocky Mountain Power is a regulated public utility in the state of Wyoming and is subject to the Commission's jurisdiction with respect to its prices and terms of electric service to retail customers in Wyoming. The Company serves over 135,000 customers and has approximately 1,500 employees in Wyoming. Rocky Mountain Power's principal place of business in Wyoming is 2840 East Yellowstone Highway, Casper, Wyoming, 82602.

3. Communications regarding this filing should be addressed to:

Stacy Splittstoesser
Wyoming Regulatory Affairs Manager
Rocky Mountain Power
1807 Capitol Ave., Suite 200A
Cheyenne, WY 82001
E-mail: stacy.splittstoesser@pacificorp.com

Michael Snow
DSM Regulatory Projects Manager
Rocky Mountain Power
201 South Main Street, Suite 2000
Salt Lake City, UT 84111
Telephone: (801) 220-4214
E-mail: michael.snow@PacifiCorp.com

Daniel E. Solander
Senior Counsel
Rocky Mountain Power
201 South Main Street, Suite 2300
Salt Lake City, Utah 84111
E-mail: daniel.solander@pacificorp.com

In addition, the Company respectfully requests that all data requests regarding this matter be addressed to:

By e-mail (preferred): datarequest@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah St, Suite 2000
Portland, OR 97232

Informal inquiries may be directed to Michael Snow, at (801) 220-4214.

BACKGROUND

4. Rocky Mountain Power has offered its current portfolio of energy efficiency incentive programs in Wyoming for five years. Over this time period, the Company has continued to refine and adjust these programs in order to maintain and/or improve relevancy, performance, and economics.¹ Like the Program offered in the Company's other service areas, the Wyoming Program is designed and managed to target Wyoming specific resource opportunities in the promotion of electric energy efficiency.

5. The identification of savings opportunities, screening of those opportunities for their cost-effectiveness, development and refinement of Demand Side Management ("DSM") programs to acquire kilowatt-hour savings, and the acquisition process of energy savings is an integral part of utility least-cost resource planning and operations. In the Company's most recent conservation resource potential assessment² ("Potential Study"), the findings suggests that 21 percent of the Company's overall

¹ On November 1, 2010, the Company filed an Application in Docket No. 20000-383-EA-10 requesting approval of changes to the Company's portfolio of DSM programs, including changes to the Program to improve customer participation and align program qualifications with evolving federal energy codes and standards. These changes were approved by the Commission effective October 1, 2011. In addition, the Company continues to monitor and adjust Program measure efficiency baselines, like those for residential lighting measures, to account for continually evolving codes and standards such as those of the 2007 Energy Independence and Security Act.

² Assessment of Long-Term, System-Wide Potential for Demand-Side and Other Supplemental Resources, 2013-2032 Volume I (Potential Study), page 75. Link to the Potential Study:
www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Demand_Side_Management/DSM_Potential_Study/PacifiCorp_DSMPotential_FINAL_Vol%20I.pdf

opportunity for savings³ associated with energy efficiency resources (through 2032) resides in the Company's Wyoming service area.⁴

6. Information from the Potential Study is used to inform the development of the Company's biennial Integrated Resource Plan ("IRP"), where the savings opportunities identified from energy efficiency investments are economically evaluated for their cost-competitiveness against other resource options available to the Company. Through the IRP process, the Company develops its least-cost, least-risk portfolio of resource acquisition plans and other investments that best meet customers' long-term energy needs and public policy requirements.

7. The Company's 2013 IRP, filed April 30, 2013, selected a total of 7,003 gigawatt hour ("GWh") of cost-effective energy efficiency to be acquired from the nearly 9,300 GWh offered as available.⁵ Of the 7,003 GWh selected, 13 percent⁶ of the resource savings reside in the Company's Wyoming service area.⁷

8. The characterization of savings from energy efficiency as a planning resource and its acquisition through utility programs is valuable to all parties. Net power costs account for roughly one-third of Wyoming's revenue requirement. The cost of acquiring savings through the Company's Wyoming portfolio of DSM programs on

³ Excludes savings opportunities in Oregon where a separate study is performed.

⁴ The Potential Study, Table 52, page 75, shows that Wyoming loads account for 1,191 GWh of the roughly 5,676 GWh of Achievable Technical Potential prior to screening for its economic viability or cost-effectiveness to acquire.

⁵ Resources offered and selected through the twenty-year planning horizon 2013-2032.

⁶ Represents the percent of overall opportunity that was deemed achievable and selected as cost-effective.

⁷ *Id.*

average costs less than \$0.03 per kilowatt hour (“kWh”)⁸ compared to the average cost of new generation resources at \$0.065 per kWh and higher.⁹

9. Wyoming’s DSM portfolio results through 2013 are estimated to return long term net benefits of \$30.5 million in reduced supply-side resource costs and long-term net benefits to DSM participants of \$38.8 million.¹⁰

10. The reduced supply-side costs benefit participants and non-participants alike. These lower costs translate into lower electric bills over time than would otherwise occur without the acquisition of these resources.

11. As shown in Figure 1, the Program has been successful in acquiring cost-effective energy efficiency savings. The Program is the largest source of savings in most years for the Company, contributing 21 to 37 percent of total portfolio savings in Wyoming. The Company believes the Program has been an effective component of the Company’s DSM portfolio in Wyoming. In 2013, the Program increased savings 28 percent above year-end results for 2012.

[the rest of this page is intentionally left blank]

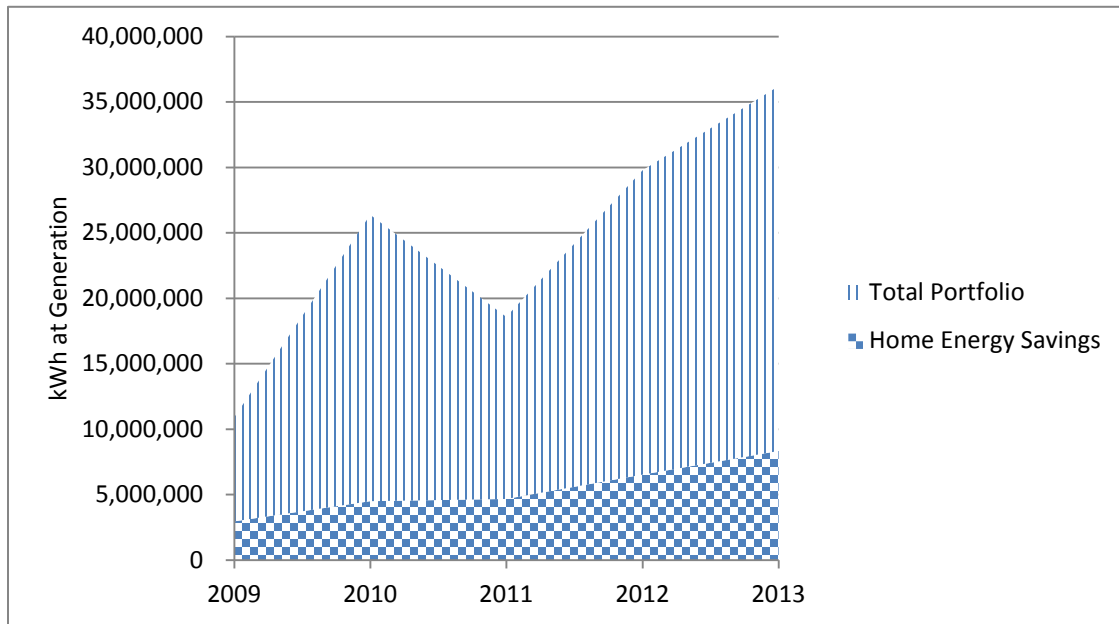
⁸ 2013 Wyoming Annual Report Portfolio Level Utility Cost-Effectiveness results (levelized).

⁹ U.S. Energy Information Administration, Levelized Cost of New Generation Resources in the Annual Energy Outlook 2014, April 17, 2014, Table 1 - Estimated levelized cost of new generation resources, for plants entering service in 2019,

http://www.eia.gov/forecasts/aeo/electricity_generation.cfm.

¹⁰ Wyoming Comprehensive Demand-Side Management Review Report, January 1, 2009 – December 31, 2011, filed July 2, 2012. Reference page 6 results (net benefits of the Utility Cost Test and Participant Cost Test) added to the same table results found in the Wyoming Annual Demand-Side Management Review Report for 2012, page 6, filed April 30, 2013 and in the Wyoming Annual Demand-Side Management Review Report for 2013, page 6, filed April 30, 2013. Both reports can be accessed through the following web address: <http://www.pacificorp.com/es/dsm/wyoming.html>.

Figure 1 – Home Energy Savings Results, 2009-2013



12. For 2014, the Company expects the savings for the Program to decline by upwards of 22 percent due to lower than expected lighting and multifamily project activity. To improve the performance of the Program, the Company is proposing modifications to add new energy efficiency opportunities, expand delivery channels, make administrative changes and align incentives with revised measure costs, savings estimates and standards. Proposed changes involve modifying existing equipment qualifications, adjusting incentives for existing measures, changing delivery channels for a few existing measures, adding new measures, adding new delivery channels, and retiring a few measures. All changes are designed to increase participation and energy savings while maintaining or enhancing program cost-effectiveness.

DISCUSSION AND UPDATES

13. The Company believes that it is necessary to modify the Program to address new technologies, changing market conditions, and to expand to new segments of

the market. Revisions to the Program tariff sheets are included as Attachment A. The changes proposed in this Application are designed to improve the energy efficiency acquisition results of the Program. Major changes involve adding new delivery channels, mail-by request and direct install, shifting room air conditioners from a downstream customer incentive to an upstream buy-down incentive, adjustments to lighting incentives, and adding incentives for light-emitting diodes (“LED”) bulbs. Due to the breadth of changes to the prescriptive incentives in the Program, detailed tables of the changes are provided as Attachment B.

PROGRAM IMPROVEMENTS

14. The Program currently uses upstream and downstream incentives to acquire energy savings. Upstream incentives are paid to manufacturers or retailers to lower the cost of a product sold at retail. The Program currently uses upstream incentives for compact fluorescent light (“CFL”) bulbs. Downstream incentives are post-purchase or post-installation incentives provided to customers and/or trade allies. Downstream incentives are currently used by the Program for all non-lighting measures such as appliances and weatherization.

15. This Application proposes to add two new delivery channels, mail-by request and direct install, to provide new opportunities for customers to participate in the Program. The direct install of measures is designed to cover 100 percent of the product and installation cost of a measure. The first new delivery channel will, if approved, offer direct installation of duct sealing for manufactured homes with ducted electric heating systems. A Company survey of residential customers in 2014 in Wyoming with around 4,000 respondents found approximately 12 percent live in manufactured homes.

Extrapolating the survey results, out of approximately 112,000 residential customers in Wyoming 13,455 customers live in manufactured homes. The survey results indicate around 3.8 percent of customers heat their home with a central electric ducted furnace or are using an air-source heat pump with electric strip heat as back-up. The Company estimates there are several hundred customers living in manufactured homes heated with electric ducted systems, either furnaces or heat pumps. These are the customers and homes the Program will target with direct installed duct sealing. Energy savings are achieved by sealing the ductwork to reduce heat loss from the ducts which improves the delivery of heated area to the conditioned space.

16. The second new proposed delivery channel is direct install of CFLs, LEDs, and plumbing measures as part of in-home visits, such as during direct installation of duct sealing in manufactured homes or during quality assurance inspections of contractor-installed measures such as insulation, windows, heating and cooling systems. For direct install plumbing measures the Program proposes adding low flow showerheads and aerators. The Program randomly inspects a minimum of five percent of contractor installed measures. Each inspection provides an opportunity to acquire additional energy savings from directly installed CFLs, LEDs, or plumbing measures. Water heat fuel type will be verified as electric prior to installation by Program staff and/or contractors. No direct install work will occur without a customer's approval.

17. The proposed Program changes also include offers for mail-by request kits containing lighting and plumbing measures. The primary channel to advertise the kits will be business reply cards with a postage paid return order form. Customers will also be able to order kits online or by calling a toll free number. Upwards of 80 percent of

participating customers are expected to use the business reply cards. The mail-by request delivery channel may also include instances in which a customer directly requests a kit from program trade allies, field staff, or other approved program agents. This includes, but is not limited to, in-home visits and public events.

18. The 2014 residential customer survey indicates nearly 34 percent of customers in Wyoming, approximately 37,688 customers, have electric water heat which provides a sizable savings opportunity for introducing plumbing measures such as low-flow aerators and showerheads. Only customers who self-identify that they have electric water heat will receive kits with plumbing measures.

19. The revised Program offerings will include eight configurations of the kits. The Basic and CFL only kits will be free to customers. The difference between the level 1 and 2 kits is that the level 2 kits are for customers with two bathrooms and will receive two showerheads and two bath aerators. As part of the screening process, customers who identify that they have electric water heat will be able to select a one or two showerhead kit based on the number of showers they have.

20. Customers will have the option to purchase higher quality items to include in the kits, specifically LEDs in place of CFLs and an upgraded showerhead. The customer payment covers a portion of the incremental cost of the upgraded kits. The Program covers the majority of the costs for the upgraded kits. Without the customer co-payment, higher cost items like LEDs would not be cost-effective and as a result would not be available in the kits.

21. The Better kits, as shown in Table 1 below, have an upgraded showerhead and will cost the customer \$4.99 after the Program pays an incentive to the kit supplier of

\$11.82 for the Better 1 kit and \$21.37 for the Better 2 kit to buy down the cost of the measures. The Best kits, also shown in Table 1 below, will contain aerators, the upgraded showerhead, and four general purpose 60-W replacement LEDs and will cost the customer \$19.99 after the Program pays an incentive to the kit supplier of \$30.34 for the Best 1 kit and \$39.89 for the Best 2 kit. The LED only kits will include four general purpose 60-W replacement LEDs with the Program providing an incentive of \$18.69 to bring down the price of the bulbs so the customer will pay \$19.99 (~\$5/bulb). The Program covers the equipment cost and additional expenses for postage, shipping, and handling of the kits, all of which are included in the cost-effectiveness analysis. The incentives provided and the customer portion may vary over time as product prices change or the products offered changes. A summary of all kit contents and kit costs by type are listed in Table 1 below:

Table 1 – Quantity of Kit Contents and Kit Costs by Type

Kit Type	Quantity of Components					Unit Kit Costs	
	13W CFL Spiral	10W LED A-Lamp	1.5 GPM Kitchen Aerator	0.5 GPM Bath Aerator	1.5 GPM Shower head	Cost Paid by Customer	Cost Paid by Program
Basic 1	4	0	1	1	1	-	\$11.39
Basic 2	4	0	1	2	2	-	\$15.52
Better 1	4	0	1	1	1*	\$4.99	\$11.82
Better 2	4	0	1	2	2*	\$4.99	\$21.37
Best 1	0	4	1	1	1*	\$19.99	\$30.34
Best 2	0	4	1	2	2*	\$19.99	\$39.89
CFL Only	4	0	0	0	0	-	\$5.48
LED Only	0	4	0	0	0	\$19.99	\$18.69

*Better & Best kits contain premium showerheads

22. With today’s information on product costs, discounted bulbs purchased through our retail partners tend to be more cost-effective than those mailed out in the kits. Therefore, the kits are designed to encourage customers to buy more CFLs and LEDs

through our retail partners. The Program proposes to offer no more than 4 bulbs in the kits to increase the likelihood all bulbs received are installed and not placed in storage. The 4 bulb limit will apply to all five versions of the kits: Basic (4 CFLs), Better (4 CFLs), Best (4 LEDs), CFL Only (4 CFLs) and LED Only (4 LEDs). The number of bulbs in the kits may be revised over time based on customer feedback and changes in product prices. Customers will be limited to only one kit per household to encourage high installation rates of every item in the kits and to decrease the likelihood of items being stored or discarded.

23. The Program's kit vendor will operate a toll free number, available during standard business hours, to take kit orders and address customer service issues. The kit vendor is prepared to address the following scenarios: (1) a customer has questions about the kit or its contents, (2) a customer receives a damaged kit, and/or (3) a customer receives a kit with defective content(s). In the event of a defective or damaged product or kit, a replacement product or replacement kit will be shipped to the customer at no cost. All products are warranted for two years. To minimize costs, the kit contents will direct customers to the Program website for more information on choosing the right bulb, where to buy more CFL and LED bulbs, and information on proper CFL disposal.¹¹

24. The proposed Program changes include modifying the language under Provisions of Service for item number 4 on Sheet No. 111.2 to add the new delivery channels, mail-by request, and direct install. A summary of measures that will be offered via mail-by request and/or direct install are listed in Table 2 below.

¹¹ See www.homeenergysavings.net/homeowner/category/light-bulbs/in/wyoming/energy-efficient-light-bulbs.

Table 2 – Measures with Mail-by Request & Direct Install Delivery Channels

Measure Type	Mail-By Request	Direct Install
CFL & LED General Purpose Bulbs	✓	✓
CFL Specialty Bulbs	✓	✓
Low Flow Showerheads	✓	✓
Low Flow Aerators	✓	✓
Manufactured Homes Duct Sealing	N/A	✓

25. Delivery channels for room air conditioners are proposed to be changed from the current downstream customer incentive to an upstream incentive to retailers and/or manufacturers. In an effort to encourage higher adoption of high efficiency room air conditioners, the Program proposes shifting the incentive from a downstream, post purchase rebate to an upstream buy-down. By shifting to upstream, the Program intends to reduce the incentive from \$30 to an “up to” maximum of \$20 per unit. The upstream buy down for room air conditioners will be operated the same as the upstream buy-down for light bulbs. By shifting to an upstream incentive for room air conditioners, the Program is expected to have a greater influence on retailer stocking practices thereby increasing the sale of high efficiency units.

26. On April 16, 2015, the federal standard for electric storage tank water heaters will be increased for all equipment sizes, requiring units 55 gallons and above to have an energy factor of 1.92 or higher, and requiring units smaller than 55 gallons to achieve an energy factor of 0.94 or higher. Standard electric water heater technology cannot achieve the efficiency levels required by the federal standard so incentives for all sizes of standard electric water heaters will be retired from the program after

April 15, 2015. Incentives will be provided only for units purchased on or before April 15, 2015. The April 2015 federal standard also applies to heat pump water heaters which are currently offered by the Program. Due to the April 2015 federal standard changes, heat pump water heaters that do not exceed the new federal standard will no longer be offered incentives after April 15, 2015. At this time only heat pump water heating technology is the only electric water heat technology capable of meeting the new federal standard. As the adoption of heat pump water heaters continues to grow it is important for the Program to continue to support the technology to encourage quality installations.

27. Heat pump water heaters use an electric compressor system to transfer heat from outside of the unit to the water in the tank rather than generating heat directly similar to how a refrigerator works, but in reverse. The Program has offered incentives for heat pump water heaters since October 2011. For heat pump water heaters, the Program proposes modifying the qualification criteria from ENERGY STAR to the Northwest Energy Efficiency Alliance’s Northern Climate Specification.¹² The Northern Climate Specification requires manufacturers meet the ENERGY STAR criteria but also requires the unit to provide high levels of consumer satisfaction and energy performance in cooler, northern climates. Due to customer interest, the Program proposes allowing self-installs of heat pump water heaters. Customers performing a self-install are eligible for the customer incentive, but are not eligible for the contractor incentive.

28. The proposed Program changes will clarify the incentives for CFL bulbs. In the current tariff, incentives for CFLs are shown under the column heading “Customer Incentive.” While customers benefit from discounted bulbs at select retailers, the

¹² <http://neea.org/northernclimatespec/>

customers do not directly receive the incentive. The incentives for CFLs are provided upstream to retailers and/or manufacturers. Table 3 below summarizes the current lighting incentive structure in the tariff (Schedule 111.3).

Table 3 – Current Tariff Lighting Incentives

Bulb Type	Description	Customer Incentive	Dealer or Contractor Incentive
CFL	General Purpose Lighting, Energy Star qualified	Available for \$2.50 (or less) at selected retailers	NA
CFL	Specialty Lighting, Energy Star qualified	Available for \$14.00 (or less) at selected retailers	NA

29. What are listed in the customer incentive column in the tariff are not incentives but are not-to-exceed retail prices for the bulbs. To meet or stay below the not-to-exceed retail price the Program uses “up to” maximum incentives paid to retailers and/or manufacturers. The maximum incentive and not-to-exceed retail prices currently used by the Program were provided in the November 1, 2010 application (Docket No. 20000-383-EA-10). Table 4 below displays the current Program lighting incentives and pricing targets.

Table 4 – Current Tariff Lighting Incentives and Maximum Incentives

CFL Incentive Amounts and Not-To-Exceed Prices			
Category	Description	Maximum Incentive Amount	Not-To-Exceed Retail Price
General Purpose	Bare Spiral	\$1.50	\$2.50
Specialty	Globe	\$1.75	\$8.00
Specialty	Reflector	\$2.25	\$8.00
Specialty	3-Way	\$2.25	\$8.00
Specialty	A-Lamp	\$1.75	\$8.00
Specialty	CFL Candelabra	\$1.75	\$6.00
Specialty	Cold Cathode	\$2.25	\$6.00
Specialty	Dimmable	\$3.50	\$14.00
Specialty	Outdoor Lamp	\$2.25	\$8.00

30. The current tariff sheet specifies the not-to-exceed retail price for CFLs but doesn't specify a maximum incentive. The Program proposes removing the not-to-exceed retail price for incentivized CFL bulbs from the tariff and shift to using the "up to" maximum incentive in the tariff. The Program proposes to change the column heading "Dealer or Contractor Incentive" to "Mid-Market Incentive" and show the "up to" or maximum incentive the Program can provide to retailers and/or manufacturers for CFLs. This will provide greater clarity in the tariff by showing the maximum incentive paid to retailers and/or manufacturers as shown below in Table 5 under "Mid-Market Incentive."

Table 5 – Proposed Lighting Incentives

Bulb Type	Customer Incentive	Mid-Market Incentive
CFL, General Purpose, ENERGY STAR qualified	NA	Up to \$3.00
CFL, Specialty, ENERGY STAR qualified	NA	Up to \$4.00
LED, General Purpose, Specialty, ENERGY STAR qualified	NA	Up to \$23.00
<i>Note: Incentives cover all delivery channels, upstream, mail-by request and direct install.</i>		

31. The incentive for general purpose CFLs is proposed to be raised from \$1.50 to \$3.00 to cover the full cost of CFL incentives for the new delivery channels, mail-by request and direct install channels. The incentive for specialty CFLs is proposed to be raised from a range of \$1.75-\$3.50 to \$4.00 to cover all types of specialty CFL bulbs and the full cost of incentives for mail-by request and direct install channels.

32. Along with changes in how the lighting incentives are displayed in the tariff, the Program proposes to add incentives for LEDs. LEDs use a semi-conductor to illuminate electrons in a specific direction, using light and energy more efficiently. LED lighting products are rapidly proliferating in the market place as manufacturers close the gap on price, quality and aesthetics with conventional lighting products like incandescent,

halogens and CFL bulbs. LEDs use upwards of 90 percent less energy than incandescent bulbs. The Program proposes to offer an incentive up to \$23.00 to make LED bulbs more cost competitive with traditional light bulbs. With the growth of LEDs prices are dropping, but the range of products continues to rapidly expand so the Program needs a high incentive to cover a broad range of products and price points. The \$23.00 incentive also allows the program to provide LED bulbs through the mail-by request and direct install channels. LED bulbs must be ENERGY STAR qualified to receive incentives for all delivery channels.

33. The proposed Program changes will add upstream incentives to retailers and/or manufacturers for selling advanced power strips using infrared motion sensors. Advanced power strips replace conventional power strips and save energy by limiting plug loads when no activity is detected for a set period of time. Advanced power strips offer the same benefits as standard power strips such as surge protection. Configurations of advanced power strips vary, but typical features are always-on outlets and outlets that are controlled by the sensor. Devices that need constant power such as a cable box or modem are plugged in to the always-on outlets, and a TV, speakers, game consoles or other devices that can be powered off are plugged in to the outlets controlled by the sensors. The proposed Program changes will require that a qualifying power strip must have an infrared sensor and automatically shut off the plug loads when no motion or reduced load is detected for a period of time. The proposed Program changes will only offer upstream incentives for this measure through participating retailers and manufacturers. Advanced power strips with infrared sensors can cost upwards of \$75.

The Program proposes to offer up to a \$50 incentive to retailers and/or manufacturers for selling advanced power strips with infrared sensors.

34. The Program proposes offering an incentive for new ENERGY STAR manufactured homes that are installed in the Company's Wyoming service territory. According to the Manufactured Housing Institute 264 manufactured homes were shipped to Wyoming in 2013.¹³ The market is small but it provides an opportunity for the Program to assist customers choosing to purchase and live in a manufactured home. Although there are no qualifying manufacturers in Wyoming at this time, there are several qualifying manufacturers in other states that regularly ship to Wyoming (currently including Champion, Fleetwood, Kit Homes, and Marlette). Manufacturers must have their production facilities inspected and certified to produce ENERGY STAR certified manufactured homes. As part of the inspection process done by ENERGY STAR the home design plans are reviewed and must meet ENERGY STAR design guidelines. Once certified, manufacturers must follow ENERGY STAR guidelines for producing and installing homes to maintain its certification. ENERGY STAR manufactured homes are substantially more energy efficient than a typical manufactured home due to upgraded building thermal envelope, specific ductwork placement and maximum leakage level, space heating and cooling equipment efficiency and hot water heater efficiency. To qualify ENERGY STAR manufactured homes installed in the Company's Wyoming service territory the Program will verify:

- The participating manufacturer's plant has been certified to produce ENERGY STAR qualified manufactured homes

¹³ www.manufacturedhousing.org, manufactured home shipments by state (1990 – 2013).

(current list available at: http://www.research-alliance.org/pages/es_plant_list.htm)

- The ENERGY STAR site installation checklist is complete and the manufactured home is permanently sited in the Company's Wyoming service territory (Sample available here: https://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/SampleSiteInstallationChecklist.pdf?9761-671c)
- The home has received an ENERGY STAR label/certification

The Program proposes to offer a \$1,000 incentive for electrically-heated homes and \$500 incentive for gas-heated homes with central air conditioning.

35. The Program proposes adding incentives for natural gas furnaces with an annual fuel utilization efficiency ("AFUE") of 95 percent or higher equipped with an electrically commutated motor ("ECM"). An ECM is a variable speed motor allowing it to automatically adjust speed, thus saving electricity compared to a standard permanent split capacitor motor, which only operates at full speed. A furnace with an ECM blower fan will provide electric savings in both heating and cooling seasons. The Program proposes to offer a customer incentive of \$200 and a contractor incentive of \$50. In addition, the Program proposes offering an incentive of \$100 to the customer and a \$50 contractor incentive for retrofitting a furnace with an ECM.

36. Additional program changes to measures, incentives, and equipment specifications are covered in Attachment A.

COST-EFFECTIVENESS ANALYSIS

37. The Company's economic analysis of the proposed changes show the Program is expected to remain cost-effective under four of the five cost effectiveness tests utilizing current avoided costs produced from the Company's 2013 IRP. Results of

the Ratepayer Impact Measure are less than 1.0 which is typical for many energy efficiency programs and indicates there may be upward pressure on rates.

38. Summary program level results are provided in Table 6 below, and details on input assumptions and additional measure category results are provided in Attachment C.

Table 6 – Cost-Effectiveness Summary: 2015 – 2016

Benefit/Cost Test Performed	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conversation Adder	\$0.0448	\$3,142,664	\$6,294,714	\$3,152,050	2.00
Total Resource Cost Test (TRC) No Adder	\$0.0448	\$3,142,664	\$5,722,467	\$2,579,804	1.82
Utility Cost Test (UCT)	\$0.0394	\$2,764,246	\$5,722,467	\$2,958,221	2.07
Rate Impact Test (RIM)		\$11,017,438	\$5,722,467	(\$5,294,971)	0.52
Participant Cost Test (PCT)		\$1,785,772	\$13,008,396	\$11,222,624	7.28
Lifecycle Revenue Impacts (\$/kWh)				\$0.000018411	
Discounted Participant Payback (years)				n/a	

39. Cost-effectiveness was assessed using the decrement values generated by the 2013 IRP as the avoided costs. These values can be found on pages 358-359 of Volume 2 of the 2013 IRP dated April 30, 2013.

40. Net-to-gross factors and realizations rates were directly drawn or derived from the 2011 and 2012 evaluation of the Program and applied to the unit energy savings. The cost-effectiveness analysis includes the 2015-2016 period in order to provide a complete and accurate as possible forecast of Program cost-effectiveness after the changes go into effect at the beginning of 2015. Generally, the maximum amounts for “up to” incentives are used for the cost-effectiveness analysis to provide the most conservative scenario, however, for some measures, a historic average or planned incentive level was used to more accurately represent projected Program costs. Tables 7-9 of Attachment C include measure category results. Measure category cost-effectiveness

does not include administrative costs given the challenges of allocating these costs to individual measures. Total Program administrative costs are included in the Program level cost-effectiveness.

41. Cost effectiveness results provided meet the standards in the October 3, 2008 commission order in Docket No. 20000-264-EA-06; specifically cost effectiveness is calculated at the individual program level.¹⁴ The Company, in response to stakeholder requests for additional granularity, has provided results at the measure category level which exceeds the program level standard, but inclusion of these results is not intended by the Company to redefine the program level standard.

42. The electronics measure category has sub-optimal cost effectiveness test results in 2015. These results are being driven by measure cost, realization rate and net-to-gross assumptions for the flat panel television measure which this filing proposes to retire. The proposal to retire this measure is based on updated information on baseline and equipment saturations and information from the last Program evaluation. This proposed action, mirrors, at a measure category, anticipated company actions with respect to a program that is found to be under-performing, specifically, “if a program is found to be under-performing, the Company will be responsible for improving it or cancelling it, subject to Commission approval.”¹⁵ The 2015 measure category results, which reflect forecasted incentive redemptions for 90 days after the effective date of the approved changes, are not forecasted to adversely impact overall Program cost effectiveness. Results for the electronics category in 2016 are positive and reflect the addition of advanced power strips, though the forecasted participation is modest and forecasted

¹⁴ Paragraph 17 and 20.

¹⁵ *Id.*, paragraph 20.

results for the 2015-2016 period primarily reflect 2015 activity. The prospective Program and measure category cost-effectiveness results support the proposed changes in this Application. The Program, with the proposed changes specified herein, is forecast to pass four of the five cost-effectiveness tests and yields an attractive levelized cost of energy of \$0.0417/kWh from the Utility Cost Test perspective.

STAKEHOLDER INVOLVMENT

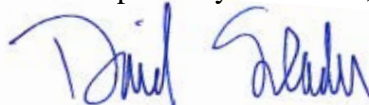
43. On November 10, 2014, the Company discussed the proposed Program changes with the Wyoming DSM Advisory Group (“Advisory Group”) and with Commission Staff (“Staff”). Comments received were supportive of the proposed changes. A draft application was provided to the Advisory Group and Staff on December 1, 2014 for review and comment. The Company received comments from the Office of Consumer Advocate (“OCA”) on the draft application December 2, 2014. The Company responded to address OCA’s comments on the same date. No other comments or concerns were raised by the Advisory Group or Staff.

CONCLUSION

WHEREFORE, the Company respectfully requests that the Commission issue an order approving the attached Electric Service Schedule No. 111 – Home Energy Savings Program to be effective on or before February 16, 2015.

DATED this 8th day of December, 2014.

Respectfully submitted,



Daniel E. Solander
Attorney for PacifiCorp

ATTACHMENT A

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-2
Canceling Original Sheet No. 111-2

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Provisions of Service

1. Qualifying Equipment or Services application forms and detailed participation procedures and installation requirements will be listed on the program web site, accessible through the Company's web site.
2. Incentive availability by Qualifying Equipment or Service is listed in Table 1.
3. Customers have 90 days after the date of purchase or installation to submit a complete post purchase application and request an incentive.
4. Except for point of purchase buy down, retailer mark-down, mail-by request, direct install or pre-purchase offer and approval, incentives paid directly to participants will be in the form of a check issued within 45 days of Program Administrator's receipt of a complete and approved incentive application.
5. Manufacturers, retailers, contractors, and dealers who provide program services will be required to sign and abide by the terms of participation agreements.
6. Equipment and services receiving an incentive under this program are not eligible for incentives under other Company programs. Equipment and services receiving an incentive under other Company programs are not eligible for incentives under this program.
7. Company and/or Program Administrator will employ a variety of quality assurance techniques during the delivery of the program. They may differ by equipment or service type and may include, but are not limited to, pre and post installation inspections, phone surveys, retailer invoice reconciliations and confirmation of customer and equipment eligibility.
8. Company may verify or evaluate the energy savings of installed equipment or services. Verification or evaluation may include, but are not limited to, telephone survey, site visit, billing analysis, pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.
9. The following definitions apply to Tables 1.

AFUE	Annual Fuel Utilization Efficiency	HSPF	Heating Seasonal Performance
CAC	Central Air Conditioning	Factor	
CFL	Compact Florescent Lamp	IMEF	Integrated Modified Energy Factor
CFM	Cubic Feet per Minute	LED	Light Emitting Diode
CEE	Consortium for Energy Efficiency	MEF	Modified Energy Factor
ECM	Electronically Commutated Motor	SF	Square foot/feet
EF	Energy Factor	SEER	Seasonal Energy Efficiency Ratio
		SHGC	Solar Heat Gain Coefficient

(continued)

Issued by
Jeffrey K. Larsen, Vice President, Regulation

Issued: December 8, 2014

Effective: With service rendered
On and after February 16, 2015

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-3
 Canceling Original Sheet No. 111-3

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1

Equipment or Service	Customer Incentive	Mid-Market Incentive	Contractor Required	Participation Procedure
Existing Homes				
Appliances				
Clothes Washer, MEF \geq 3.2 <i>Due to ENERGY STAR changes the specification will change to integrated modified energy (IMEF) starting on March 7, 2015. See program website for details.</i>	\$50	NA	No	Post purchase application
Refrigerator, CEE Tier 2 or higher	\$75	NA	No	Post purchase application
Freezer, ENERGY STAR qualified	\$40	NA	No	Post purchase application
Efficient Lighting				
<i>Reduced price efficient lighting offer may end early if entire efficient lighting allocation is sold.</i>				
CFL - General Purpose, ENERGY STAR qualified	NA	Up to \$3	No	Purchase at select retailers Direct Install Mail-by Request
CFL - Specialty, ENERGY STAR qualified	NA	Up to \$4	No	Purchase at select retailers Direct Install Mail-by Request
LED - General Purpose, ENERGY STAR qualified	NA	Up to \$23	No	Purchase at select retailers Direct Install Mail-by Request
LED - Specialty, ENERGY STAR qualified	NA	Up to \$23	No	Purchase at select retailers
Fixtures, ENERGY STAR qualified, <i>Torchiere and portable fixtures do not qualify.</i>	\$10 (capped at 50% of the product cost)	NA	No	Post purchase application
Consumer Electronics				
Advanced Power Strips, Infrared Sensing	NA	Up to \$50	No	Purchase at select retailers
Electric Water Heating				
<i>Due to the federal standard change the electric water heater incentives will be retired after April 15, 2015. Incentives will be provided only for units purchased or installed on or before April 15, 2015. Heat pump water heaters that do not meet the new federal standard will no longer be eligible for incentives after April 15, 2015.</i>				
Electric Water Heater: 25 – 44.9 gallon tank, EF \geq 0.94 45 – 54.9 gallon tank, EF \geq 0.95 55 – 74.9 gallon tank, EF \geq 0.93 75 – 99.9 gallon tank, EF \geq 0.92 100 – 120 gallon tank, EF \geq 0.85	\$50	NA	No	Post purchase application
Heat Pump Water Heater, Northern Climate Specification Qualified <i>Customers who perform self-installs are only eligible for the customer incentive.</i>	Up to \$300	\$100	No	Post purchase application

(continued)

Issued by
 Jeffrey K. Larsen, Vice President, Regulation

Issued: December 8, 2014

Effective: With service rendered
 On and after February 16, 2015

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-4
 Canceling Original Sheet No. 111-4

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1 (continued)

Equipment or Service	Customer Incentive	Mid-Market Incentive	Contractor Required	Participation Procedure
Weatherization				
<i>Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes.</i>				
Floor Insulation, Single & Multi Family R _{initial} ≤ R-18 R _{final} ≥ R-30 (or fill cavity)	Electrically Heated Home: \$0.50/SF Electrically Cooled Home: NA	NA	No	Post purchase application
Attic/Ceiling Insulation, Single Family R _{initial} ≤ R-20 R _{final} ≥ R-49	Electrically Heated Home: \$0.50/SF Electrically Cooled Home: \$0.10/SF	NA	No	Post purchase application
Attic/Ceiling Insulation, Multi Family R _{initial} ≤ R-20 R _{final} ≥ R-49	Electrically Heated Home: \$0.50/SF Electrically Cooled Home: \$0.08/SF	NA	No	Post purchase application
Wall Insulation, Single & Multi Family R _{initial} ≤ R-10 R _{final} ≥ R-13 (or fill wall cavity)	Electrically Heated Home: \$0.75/SF Electrically Cooled Home: \$0.15/SF	NA	No	Post purchase application
Air Sealing <i>Electrically heated homes only.</i>	\$0.30/sf	NA	Yes	Post purchase application
Windows				
<i>Electrically heated homes only.</i>				
Windows, U-factor ≤ 0.30	\$1.00/SF	NA	No	Post purchase application
Heating, Ventilation and Air Conditioning				
Central Air Conditioner, ≥ 15 SEER, with best practice installation and proper sizing	\$50	\$75	Yes	Post purchase application
Room Air Conditioners, ENERGY STAR qualified	NA	Up to \$20	NA	Purchase at select retailers
Evaporative Coolers, Tier 1 2,000 – 3,499 CFM	\$100	NA	No	Post purchase application
Evaporative Coolers, Tier 2 ≥ 3,500 CFM <i>Customers who perform self-installs are only eligible for the customer incentive.</i>	\$200	\$50	No	Post purchase application

(continued)

Issued by
 Jeffrey K. Larsen, Vice President, Regulation

Issued: December 8, 2014

Effective: With service rendered
 On and after February 16, 2015

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-5
Canceling Original Sheet No. 111-5

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1 (continued)

Equipment or Service	Customer Incentive	Mid-Market Incentive	Contractor Required	Participation Procedure
Heating, Ventilation, and Air Conditioning (continued)				
Duct Sealing and Insulation, Single Family <i>Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes.</i>	Electrically Heated Home: \$600 Electrically Cooled Home: \$25	Electrically Heated Home: \$200 Electrically Cooled Home: \$25	Yes	Post purchase application
Duct Sealing and Insulation, Multi Family <i>Electrically heated homes only.</i>	\$300	\$100	Yes	Post purchase application
Duct Sealing, Single Family <i>Electrically heated homes only.</i>	\$300	\$100	Yes	Post purchase application
Duct Sealing, Multi Family <i>Electrically heated homes only.</i>	\$150	\$50	Yes	Post purchase application
Manufactured Homes Duct Sealing, <i>Electrically heated homes only.</i>	NA	Up to \$750	Yes	Direct Install
Heat Pump Upgrade HSPF \geq 9.0 SEER \geq 15	\$500	\$250	Yes	Post purchase application
Heat Pump Conversion HSPF \geq 9.0 SEER \geq 15	\$1,250	\$250	Yes	Post purchase application
Heat Pump Best Practice Installation and Sizing	\$200	\$200	Yes	Post purchase application
Ductless Heat Pump – Single Family <i>Single or Multi-Head Units:</i> HSPF \geq 9.5 SEER \geq 16	\$1,000	\$300	Yes	Post purchase application
Ductless Heat Pump – Multi Family <i>Single or Multi-Head Units:</i> HSPF \geq 9.5 SEER \geq 16	\$600	\$200	Yes	Post purchase application
95% AFUE Gas Furnace with ECM <i>Customer may only apply for one ECM incentive: 95% AFUE gas furnace with ECM or ECM on existing furnace.</i>	\$200	\$50	Yes	Post purchase application
ECM on Existing Furnace <i>Customer may only apply for one ECM incentive: 95% AFUE gas furnace with ECM or ECM on existing furnace.</i>	\$100	\$50	Yes	Post purchase application
Whole Home Upgrade Package <i>Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes. Requirements for each individual measure must be met.</i>	Bonus Incentive: Electrically Heated Home: \$1,000 Electrically Cooled Home: \$500	NA	No	Post purchase application

(continued)

Issued by
Jeffrey K. Larsen, Vice President, Regulation

Issued: December 8, 2014

Effective: With service rendered
On and after February 16, 2015

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-6
Canceling Original Sheet No. 111-6

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1 (continued)

Equipment or Service	Customer Incentive	Mid-Market Incentive	Contractor Required	Participation Procedure
New Homes				
<i>Incentives for new homes are available to either customer or home builder/manufacturer, but not both.</i>				
New Homes, prescriptive path	Electrically Heated Home: \$1,500 Electrically Cooled Home: \$500		No	Post purchase application
New Manufactured Home, ENERGY STAR certified	Electrically Heated Home: \$1,000 Electrically Cooled Home: \$500		No	Post purchase application
Plumbing				
Low Flow Showerheads, Flow Rate \leq 2.0 GPM	NA	Up to \$31	No	Direct Install Mail-by Request
Low Flow Aerators, Flow Rate \leq 1.5 GPM	NA	Up to \$5	No	Direct Install Mail-by Request

Issued by
Jeffrey K. Larsen, Vice President, Regulation

Issued: December 8, 2014

Effective: With service rendered
On and after February 16, 2015

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-2
Canceling Original Sheet No. 111-2

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Provisions of Service

1. Qualifying Equipment or Services application forms and detailed participation procedures and installation requirements will be listed on the program web site, accessible through the Company's web site.
2. Incentive availability by Qualifying Equipment or Service is listed in Table 1.
3. Customers have 90 days after the date of purchase or installation to submit a complete post purchase application and request an incentive.
4. Except for point of purchase buy down, retailer mark-down, mail-by request, direct install or pre-purchase offer and approval, manufacturer's or retailer mark-downs or buy-downs, incentives paid directly to participants will be in the form of a check issued within 45 days of Program Administrator's receipt of a complete and approved incentive application.
5. Manufacturers, retailers, contractors, and dealers who provide or market program services will be required to sign and abide by the terms of participation agreements.
6. Equipment and services receiving an incentive under this program are not eligible for incentives under other Company programs. Equipment and services receiving an incentive under other Company programs are not eligible for incentives under this program.
7. Company and/or Program Administrator will employ a variety of quality assurance techniques during the delivery of the program. They may differ by equipment or service type and may include, but are not limited to, pre and post installation inspections, phone surveys, retailer invoice reconciliations and confirmation of customer and equipment eligibility.
8. Company may verify or evaluate the energy savings of installed equipment or services. Verification or evaluation may include, but are not limited to, telephone survey, site visit, billing analysis, pre- and post-installation of monitoring equipment as necessary to quantify actual energy savings.
9. The following definitions apply to Tables 1.

AFUE Annual Fuel Utilization Efficiency
CAC Central Air Conditioning
CFL Compact Florescent Lamp
CFM Cubic Feet per Minute
CEE Consortium for Energy Efficiency
ECM Electronically Commutated Motor
EF Energy Factor

HSPF Heating Seasonal Performance
Factor
IMEF Integrated Modified Energy Factor
LED Light Emitting Diode
MEF Modified Energy Factor
SF Square foot/feet
SEER Seasonal Energy Efficiency Ratio
SHGC Solar Heat Gain Coefficient

Issued by

Jeffrey K. Larsen, Vice President, Regulation ~~& Government Affairs~~

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

WY_111-2.LEG

Dkt -No. 20000- 405-ETR-144

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-2
Canceling Original Sheet No. 111-2

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

~~9.~~

CAC ——— Central Air Conditioning
CFL ——— Compact Florescent Lamp
CFM ——— Cubic Feet per Minute
EEF ——— Consortium for Energy Efficiency
EF ——— Energy Factor
HSPF ——— Heating Seasonal Performance Factor
MEF ——— Modified Energy Factor
SEER ——— Seasonal Energy Efficiency Ratio
SHGC ——— Solar Heat Gain Coefficient
TXV ——— Thermal Expansion Valve

(continued)

Issued by

Jeffrey K. Larsen, Vice President, Regulation & ~~Government Affairs~~

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

WY_111-2.LEG

Dkt -No. 20000- 405-ETR-144

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-3
Canceling Original Sheet No. 111-3

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1

Equipment or Service	Customer Incentive	Dealer or Contractor Mid-Market Incentive	Contractor Required	Participation Procedure
Existing Homes				
Appliances				
<u>Clothes Washer, MEF > 3.2</u> <i>Due to ENERGY STAR changes the specification will change to integrated modified energy (IMEF) starting on March 7, 2015. See program website for details.</i> Clothes Washer, MEF 2.46+, see list on program website — Note 1	\$50	NA	No	Post purchase application
<u>Clothes Washer Recycling</u> , see additional requirements on website — Note 1 and 2	NA	\$50	No	Post-purchase application
<u>Refrigerator, CEE Tier 2 or higher</u> Refrigerator, Energy Star qualified, see list on program website	\$7520	NA	No	Post purchase application
<u>Freezer, ENERGY STAR qualified</u> Freezer, Energy Star qualified, see list on program website	\$4020	NA	No	Post purchase application
<u>Dishwasher, CEE Tier 2</u> , see list on program website — Note 1	\$20	NA	No	Post purchase application
Efficient Lighting				
<i>Reduced price efficient lighting offer may end early if entire efficient lighting allocation is sold.</i> Efficient Lighting, Fixtures, Ceiling Fans				
<u>CFL - General Purpose, ENERGY STAR qualified</u> General Purpose Lighting, Energy Star qualified, see list on program website — Note 3	Available for \$2.50 (or less) at selected retailers NA	NA Up to \$3	No	<u>Purchase at select retailers</u> <u>Direct Install</u> <u>Mail-by Request</u> Purchase at selected retailers
<u>CFL - Specialty, ENERGY STAR qualified</u> Specialty Lighting, Energy Star qualified, see list on program website — Note 3	Available for \$14.00 (or less) at selected retailers NA	NA Up to \$4	No	<u>Purchase at select retailers</u> <u>Direct Install</u> <u>Mail-by Request</u> Purchase at selected retailers
<u>LED - General Purpose, ENERGY STAR qualified</u>	NA	Up to \$23	No	<u>Purchase at select retailers</u> <u>Direct Install</u> <u>Mail-by Request</u>
<u>LED - Specialty, ENERGY STAR qualified</u>	NA	Up to \$23	No	<u>Purchase at select retailers</u>
<u>Fixtures, ENERGY STAR qualified</u> <i>Torchiere and portable fixtures do not qualify.</i> Fixtures, Energy Star qualified, see list on program website — Note 4	\$10 (capped at 50% of the product cost) \$20	NA	No	Post purchase application
<u>Ceiling Fan, with an integrated light kit or separate qualified light kit that can be added to ceiling fan, Energy Star qualified</u> , see list on program website	\$20	NA	No	Post purchase application
Consumer Electronics				
<u>Flat Panel Televisions, Energy Star qualified</u> , see list on program website	\$50	NA	No	Post-purchase application

Issued by
 Jeffrey K. Larsen, Vice President, Regulation & Government Affairs

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-3
Canceling Original Sheet No. 111-3

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

<u>Advanced Power Strips, Infrared Sensing</u>	NA	Up to \$50	No	Purchase at select retailers
Monitors, Energy Star qualified, see list on program website	\$5	NA	No	Post purchase application
Desktop Computers, Energy Star qualified, see list on program website	\$10	NA	No	Post purchase application
Electric Water Heating				
<i>Due to the federal standard change the electric water heater incentives will be retired after April 15, 2015. Incentives will be provided only for units purchased or installed on or before April 15, 2015. Heat pump water heaters that do not meet the new federal standard will no longer be eligible for incentives after April 15, 2015.</i>				
<u>Electric Water Heater:</u> <u>25 – 44.9 gallon tank, EF ≥ 0.94</u> <u>40 – 49 gallon tank ≥ .93 EF</u>	<u>\$50</u> <u>\$75</u>	<u>NA</u> <u>NA</u>	<u>No</u> <u>No</u>	<u>Post purchase application</u> <u>Post purchase application</u>
<u>45 – 54.9 gallon tank, EF ≥ 0.95</u> <u>55 – 74.9 gallon tank, EF ≥ 0.93</u> <u>75 – 99.9 gallon tank, EF ≥ 0.92</u> <u>100 – 120 gallon tank, EF ≥ 0.85</u> <u>50 – 65 gallon tank ≥ .91 EF</u>	<u>\$75</u>	<u>NA</u>	<u>No</u>	<u>Post purchase application</u> <u>Post purchase application</u>
<u>Heat Pump Water Heater,</u> <u>Northern Climate Specification Qualified</u> <u>Customers who perform self-installs are only eligible for the customer incentive.</u> <u>≥ 66-gallon tank ≥ .89 EF</u> <u>See additional installation requirements on website</u>	<u>Up to \$300</u> <u>\$75</u>	<u>\$100</u> <u>NA</u>	<u>No</u> <u>No</u>	<u>Post purchase application</u> <u>Post purchase application</u>
<u>Heat Pump Water Heater, Energy Star qualified, see additional installation requirements on website</u>	<u>\$150</u>	<u>\$100</u>	<u>Yes</u>	<u>Post purchase applications for customer and dealer</u>

(continued)

Issued by
 Jeffrey K. Larsen, Vice President, Regulation & ~~Government Affairs~~

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

WY_111-3.LEG

Dkt -No. 20000-405-ETR-144

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-4
Canceling Original Sheet No. 111-4

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1 (continued)

Equipment or Service	Customer Incentive	Dealer or Contractor Mid-Market Incentive	Contractor Required	Participation Procedure
Weatherization				
<i>Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes.</i>				
Insulation				
<u>Floor Insulation, Single & Multi Family</u> $R_{initial} < R-18$ $R_{final} > R-30$ (or fill cavity) Floor Insulation, electrically heated homes only, pre-existing R-18 or less, min. installation of R-30 or greater, see additional installation requirements on website	Electrically Heated Home: \$0.50/SF Electrically Cooled Home: NA\$0.50/SF	NA	No	Post purchase application
<u>Attic/Ceiling Insulation, Single Family</u> $R_{initial} < R-20$ $R_{final} > R-49$ Attic/Ceiling Insulation, electrically heated homes only, pre-existing R-20 or less, min. installation of R-30 or greater to final insulation of R-49, see additional installation requirements on website — Note 5	Electrically Heated Home: \$0.50/SF Electrically Cooled Home: \$0.10/SF\$0.50/SF	NA	No	Post purchase application
<u>Attic/Ceiling Insulation, Multi Family</u> $R_{initial} < R-20$ $R_{final} > R-49$ Attic/Ceiling Insulation, electrically cooled homes only, pre-existing R-20 or less, min. installation of R-30 or greater to final insulation of R-49, see additional installation requirements on website — Note 5	Electrically Heated Home: \$0.50/SF Electrically Cooled Home: \$0.08/SF\$0.15/SF	NA	No	Post purchase application
<u>Wall Insulation, Single & Multi Family</u> $R_{initial} < R-10$ $R_{final} > R-13$ (or fill wall cavity) Wall Insulation, electrically heated homes only, pre-existing R-10 or less, min. installation of R-13 or greater, see additional installation requirements on website — Note 5	Electrically Heated Home: \$0.75/SF Electrically Cooled Home: \$0.15/SF\$0.60/SF	NA	No	Post purchase application
<u>Air Sealing</u> <u>Electrically heated homes only.</u>	\$0.30/sf	NA	Yes	Post purchase application
Wall Insulation, electrically cooled homes only, pre-existing R-10 or less, min. installation of R-13 or greater, see additional installation requirements on website — Note 5	\$0.30/SF	NA	No	Post purchase application
Homes with electric heating or electric cooling, incentive for installing any two of attic/ceiling, wall and/or floor at the same time, see additional installation requirements on website — Note 6	\$200	NA	No	Post purchase application
Windows				
<i>Electrically heated homes only.</i>				
<u>Windows</u> , U-factor ≤ 0.30 Windows, electrically heated homes only, U-factor of ≤ 0.30 , see additional installation requirements on website	\$1.00/SF	NA	No	Post purchase application

Issued by

Jeffrey K. Larsen, Vice President, Regulation & Government Affairs

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-4
Canceling Original Sheet No. 111-4

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

<u>Central Air Conditioner, > 15 SEER, with best practice installation and proper sizing</u>	<u>\$50</u> \$250	<u>\$75</u> \$25	<u>Yes</u> Yes	<u>Post purchase application</u> <u>Post-purchase applications for customer and dealer</u>
<u>Central Air Conditioner, min. SEER 15+ TXV, see additional installation requirements on website</u>				
<u>Central Air Conditioner Proper Sizing, min. SEER 13+ TXV, see additional installation requirements on website</u>	<u>\$50</u>	<u>\$25</u>	<u>Yes</u>	<u>Post-purchase applications for customer and dealer</u>
<u>Central Air Conditioner Proper Installation, min. SEER 13+ TXV, see additional installation requirements on website</u>	<u>\$50</u>	<u>\$75</u>	<u>Yes</u>	<u>Post-purchase applications for customer and dealer</u>
<u>Central Air Conditioner Tune-up, see additional installation requirements on website</u>	<u>\$20</u>	<u>NA</u>	<u>Yes</u>	<u>Post-purchase applications for customer and dealer</u>
<u>Room Air Conditioners, ENERGY STAR qualified</u> <u>Room Air Conditioners, Energy Star qualified, see list on program website</u>	<u>NA</u> \$25	<u>Up to \$20</u> NA	<u>NANA</u>	<u>Purchase at select retailers</u> <u>Post-purchase application</u>
<u>Evaporative Coolers, Tier 1</u> <u>2,000 – 3,499 CFM</u>	<u>\$100</u>	<u>NA</u>	<u>No</u>	<u>Post purchase application</u>
<u>Evaporative Coolers, Tier 2</u> <u>> 3,500 CFM</u> <u>Customers who perform self-installs are only eligible for the customer incentive.</u>	<u>\$200</u>	<u>\$50</u>	<u>No</u>	<u>Post purchase application</u>

(continued)

Issued by

Jeffrey K. Larsen, Vice President, Regulation & ~~Government Affairs~~

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

WY_111-4.LEG

Dkt -No. 20000-405-ETR-144

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-5
Canceling Original Sheet No. 111-5

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1 (continued)

Equipment or Service	Customer Incentive	Dealer or Contractor Mid-Market Incentive	Contractor Required	Participation Procedure
Heating, Ventilation, and Air Conditioning (continued)				
Evaporative Coolers Permanently Installed, min. 3,500 CFM, see additional installation requirements on website — Note 7	\$150	\$400	No	Post-purchase applications for customer and dealer
Evaporative Coolers Portable, min. 2,000 CFM, see additional installation requirements on website — Note 7	\$75	NA	No	Post purchase application for customer
<u>Duct Sealing and Insulation, Single Family</u> <i>Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes. Duct Sealing and Insulation, electrically heated homes only, see additional installation requirements on website — Note 5, 8</i>	<u>Electrically Heated Home: \$600</u> <u>Electrically Cooled Home: \$25</u>	<u>Electrically Heated Home: \$200</u> <u>Electrically Cooled Home: \$25</u>	<u>Yes</u> <u>Yes</u>	<u>Post purchase application</u> <u>Post-purchase applications for customer and dealer</u>
<u>Duct Sealing and Insulation, Multi Family</u> <i>Electrically heated homes only. Duct Sealing and Insulation, electrically cooled homes only, see additional installation requirements on website — Note 5, 8</i>	<u>\$300</u> <u>\$275</u>	<u>\$100</u> <u>\$75</u>	<u>Yes</u> <u>Yes</u>	<u>Post purchase application</u> <u>Post-purchase applications for customer and dealer</u>
<u>Duct Sealing, Single Family</u> <i>Electrically heated homes only.</i>	<u>\$300</u>	<u>\$100</u>	<u>Yes</u>	<u>Post purchase application</u>
<u>Duct Sealing, Multi Family</u> <i>Electrically heated homes only.</i>	<u>\$150</u>	<u>\$50</u>	<u>Yes</u>	<u>Post purchase application</u>
<u>Manufactured Homes Duct Sealing</u> <i>Electrically heated homes only.</i>	<u>NA</u>	<u>Up to \$750</u>	<u>Yes</u>	<u>Direct Install</u>
<u>Heat Pump Upgrade</u> HSPF > 9.0 SEER > 15 Heat Pump Upgrade, upgrade existing heat pump to 8.2+ HSPF + TXV, see additional installation requirements on website	<u>\$500</u> <u>\$300</u>	<u>\$250</u> <u>\$400</u>	<u>Yes</u> <u>Yes</u>	<u>Post purchase application</u> <u>Post-purchase applications for customer and dealer</u>
<u>Heat Pump Conversion</u> HSPF > 9.0 SEER > 15 Heat Pump Conversion, replace baseboard heating or electric furnace with 8.2+ HSPF heat pump with TXV, 5 tons or less, see additional installation requirements on website	<u>\$1,250</u> <u>\$400</u>	<u>\$250</u> <u>\$100</u>	<u>Yes</u> <u>Yes</u>	<u>Post purchase application</u> <u>Post-purchase applications for customer and dealer</u>
<u>Heat Pump</u> Best Practice Installation and Sizing Heat Pump Best Practice Installation and Sizing, see additional installation requirements on website	<u>\$200</u> <u>\$100</u>	<u>\$200</u> <u>\$100</u>	<u>Yes</u> <u>Yes</u>	<u>Post purchase application</u> <u>Post-purchase applications for customer and dealer</u>
<u>Ductless Heat Pump – Single Family</u> <i>Single or Multi-Head Units:</i> HSPF > 9.5 SEER > 16	<u>\$1,000</u>	<u>\$300</u>	<u>Yes</u>	<u>Post purchase application</u>

Issued by
 Jeffrey K. Larsen, Vice President, Regulation & Government Affairs

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-5
Canceling Original Sheet No. 111-5

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Ductless Heat Pump – Multi Family	\$600	\$200	Yes	Post purchase application
<i>Single or Multi-Head Units: HSPF > 9.5 SEER > 16</i>				
95% AFUE Gas Furnace with ECM	\$200	\$50	Yes	Post purchase application
<i>Customer may only apply for one ECM incentive: 95% AFUE gas furnace with ECM or ECM on existing furnace.</i>				
ECM on Existing Furnace	\$100	\$50	Yes	Post purchase application
<i>Customer may only apply for one ECM incentive: 95% AFUE gas furnace with ECM or ECM on existing furnace.</i>				
Whole Home Upgrade Package	Bonus Incentive: Electrically Heated Home: \$1,000 Electrically Cooled Home: \$500	NA	No	Post purchase application
<i>Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes. Requirements for each individual measure must be met.</i>				
Heat Pump Tune-up, see additional installation requirements on website	\$100	\$25	Yes	Post-purchase applications for customer and dealer
Ductless Heat Pump – Single Head, 9.0+ HSPF, 16+ SEER, see additional installation requirements on website	\$500	\$100	Yes	Post-purchase applications for customer and dealer
New Homes – Note 9				
Refrigerator, Energy Star qualified, see list on program website	\$20	NA	No	Post-purchase application
Dishwasher, CEE Tier 2, see list on program website – Note 4	\$20	NA	No	Post-purchase application
Floor Insulation, electrically heated homes only, min. installation of R-30, see additional installation requirements on website	\$0.35/SF	NA	No	Post-purchase application
Attic/Ceiling Insulation, electrically heated homes only, min. installation of R-60, see additional installation requirements on website	\$0.15/SF	NA	No	Post-purchase application
Wall Insulation, electrically heated only, min. installation of R-26, see additional installation requirements on website	\$0.35/SF	NA	No	Post-purchase application
Windows, electrically heated homes only, U-factor of ≤ 0.30, see additional installation requirements on website	\$1.00/SF	NA	No	Post-purchase application

(continued)

Issued by
 Jeffrey K. Larsen, Vice President, Regulation & Government Affairs

Issued: ~~October 5, 2012~~ December 8, 2014

Effective: With service rendered

On and after February 16, 2015 ~~October 22, 2012~~

WY_111-5.LEG

Dkt -No. 20000-405-ETR-144

ROCKY MOUNTAIN POWER

First Revision of Sheet No. 111-6
Canceling Original Sheet No. 111-6

P.S.C. Wyoming No. 14

Home Energy Savings Program Schedule 111

Table 1 (continued)

Equipment or Service	Customer Incentive	Dealer or Contractor Incentive	Contractor Required	Participation Procedure
New Homes – Note 9 (continued)				
Heat Pump with Best Practice Installation and Sizing, 9.5+ HSPF, 14.5+ SEER, with TXV, 5 tons or less, see additional installation requirements on website	\$450	\$150	Yes	Post purchase applications for customer and dealer
Ductless Heat Pump – Multi-Head, 9.0+ HSPF, 16+ SEER, see additional installation requirements on website	\$500	\$100	Yes	Post purchase applications for customer and dealer
Evaporative Coolers Permanently Installed, min. 3,500 CFM, see additional installation requirements on website – Note 7	\$150	\$100	No	Post purchase applications for customer and dealer

Note 1: Available to customers with either electric or gas water heat.
 Note 2: Payment of incentive to retailer requires customer to submit incentive application for a new qualified clothes washer.
 Note 3: Reduced price efficient lighting offer may end early if entire efficient lighting allocation is sold.
 Note 4: Torchieres or portable fixtures are not eligible for incentives.
 Note 5: Customers with both electric heat and electric cooling are only eligible for incentives for electrically heated homes.
 Note 6: An additional incentive of \$200/customer will be paid if two areas (any combination of attic/ceiling, wall and/or floor) in the same residence are insulated in accordance with program specifications at the same time and are submitted on the same incentive application.
 Note 7: To qualify permanently installed evaporative coolers must be the primary source of cooling in the home and have a minimum 3,500 cubic feet per minute (CFM). Portable evaporative coolers must be portable and have a minimum 2,000 CFM.
 Note 8: To qualify for duct sealing and insulation incentives, home must have ducted electric heating system or ducted unitary cooling equipment serving 80% of the floor area.
 Note 9: Customer incentives for new homes are available to either customer or home builder but not both.

Equipment or Service	Customer Incentive	Mid-Market Incentive	Contractor Required	Participation Procedure
New Homes				
<i>Incentives for new homes are available to either customer or home builder/manufacturer, but not both.</i>				
<u>New Homes, prescriptive path</u>	<u>Electrically Heated Home: \$1,500</u> <u>Electrically Cooled Home: \$500</u>		<u>No</u>	<u>Post purchase application</u>
<u>New Manufactured Home, ENERGY STAR certified</u>	<u>Electrically Heated Home: \$1,000</u> <u>Electrically Cooled Home: \$500</u>		<u>No</u>	<u>Post purchase application</u>
Plumbing				
<u>Low Flow Showerheads, Flow Rate < 2.0 GPM</u>	<u>NA</u>	<u>Up to \$31</u>	<u>No</u>	<u>Direct Install</u> <u>Mail-by Request</u>
<u>Low Flow Aerators, Flow Rate < 1.5 GPM</u>	<u>NA</u>	<u>Up to \$5</u>	<u>No</u>	<u>Direct Install</u> <u>Mail-by Request</u>

Issued by
 Jeffrey K. Larsen, Vice President, Regulation & Government Affairs

Issued: ~~October 5, 2012~~ December 8, 2014 Effective: With service rendered
 On and after February 16, 2015 ~~October 22, 2012~~

ATTACHMENT B

ATTACHMENT B

**EXPLANATION OF MEASURE CHANGES FOR
SCHEDULE 111 – HOME ENERGY SAVINGS PROGRAM**

Measure Name	Description of Change	Measure Summary
Clothes Washers	<p><u>Type of Change:</u> Modify qualification criteria</p> <p><u>Reason for Change:</u> Align with increasing industry standards and RTF</p>	<p><u>Current Qualifications:</u> MEF \geq 2.46</p> <p><u>Revised Qualifications:</u> MEF \geq 3.2</p> <p><u>Current Incentive Amount (unchanged):</u> \$50 (customer)</p> <p><u>Notes:</u> On March 7, 2015 the ENERGY STAR specification will switch from using a modified energy factor (MEF) for quantifying the energy used by clothes to an integrated modified energy factor (IMEF). IMEF differs from MEF in that it includes low-power mode energy consumption. Starting March 7, 2015 the Program will switch to using IMEF.</p>
Clothes Washer Recycling	<p><u>Type of Change</u> Remove an existing measure</p>	<p><u>Retirement</u> The measure will be retired until more reliable energy savings can be determined. There has been no activity for this measure and no savings have been reported for this measure.</p>
Refrigerators	<p><u>Type of Change:</u> Modify qualification criteria Modify incentive</p> <p><u>Reason for Change:</u> To increase participation and align with increasing industry standards and RTF.</p>	<p><u>Current Qualifications:</u> ENERGY STAR Qualified</p> <p><u>Revised Qualifications:</u> CEE Tier 2 or higher</p> <p><u>Current Incentive Amount:</u> \$20 (customer)</p> <p><u>Revised Incentive Amount:</u> \$75 (customer)</p>

Measure Name	Description of Change	Measure Summary
Freezers	<p><u>Type of Change:</u> Modify incentive</p> <p><u>Reason for Change:</u> To increase participation.</p>	<p><u>Current Qualifications (unchanged):</u> ENERGY STAR Qualified</p> <p><u>Current Incentive Amount:</u> \$20 (customer)</p> <p><u>Revised Incentive Amount:</u> \$40 (customer)</p>
Dishwashers	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired due to very low unit energy savings making the measure not cost-effective.</p>
CFLs	<p><u>Type of Change:</u> Modify delivery methods Change incentive amounts.</p> <p><u>Reason for Change:</u> To align incentives with RTF and EISA-impacted savings values, and to add new delivery models for the purpose of continuing to capture lighting savings</p>	<p><u>Current Qualifications (unchanged):</u> ENERGY STAR</p> <p><u>Current Maximum Incentive Amount:</u> Varies by bulb type. Each bulb type has a not-to-exceed retail price.</p> <p><u>Revised Maximum Incentive Amount:</u> General Purpose: \$3 Specialty: \$4 <i>No not-to-exceed retail price</i></p> <p><u>Current Delivery Methods:</u> Upstream</p> <p><u>Revised Delivery Methods:</u> Upstream Mail by Request Direct Install</p>
LEDs	<p><u>Type of Change:</u> Add new measure</p> <p><u>Description of Measure:</u> High efficient lighting that utilizes solid state technology.</p>	<p><u>Proposed Qualifications:</u> ENERGY STAR</p> <p><u>Proposed Maximum Incentive Amount:</u> All bulbs: \$23 <i>No not-to-exceed retail price</i></p> <p><u>Proposed Delivery Methods:</u> Upstream (general purpose and specialty) Mail by Request (general purpose only) Direct Install (general purpose only)</p>

Measure Name	Description of Change	Measure Summary
CFL and LED Light Fixtures	<p><u>Type of Change:</u> Change incentive amount</p> <p><u>Reason for Change:</u> To align incentives with market trends and decreasing product costs.</p>	<p><u>Current Qualifications (unchanged):</u> ENERGY STAR</p> <p><u>Current Incentive Amount:</u> \$20</p> <p><u>Revised Incentive Amount:</u> \$10 (capped at 50% of product cost))</p> <p><u>Current Delivery Methods (unchanged):</u> Downstream</p> <p><u>Notes:</u> Torchiere and portable products are not qualified.</p>
Ceiling Fans	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired due to very low unit energy savings making the measure not cost-effective.</p>
Flat Panel Televisions	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired due to very high market saturation.</p>
Computer Monitors	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired due to very low unit energy savings and very low participation making the measure not cost-effective.</p>
Desktop Computers	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired due to very low unit energy savings and very low participation making the measure not cost-effective.</p>
Advanced Power Strips	<p><u>Type of change:</u> Add a new RTF measure</p> <p><u>Description of measure:</u> Infrared sensing power strips shut off power to controlled devices when no activity is detected for a set period of time</p>	<p><u>Planned Qualification:</u> Power strip must have infrared sensor and automatically shut off the plug loads when no motion or reduced load is detected for a period of time.</p> <p><u>Planned Incentive Amount:</u> Up to \$50</p> <p><u>Planned Delivery Methods:</u> Upstream</p>

Measure Name	Description of Change	Measure Summary
<p>Electric Water Heaters</p>	<p><u>Type of Change:</u> Modify qualification criteria and incentive amounts Add in automatic retirement date for measure</p> <p><u>Reason for Change:</u> Align qualification criteria with the RTF and reduce the measure incentive to improve cost-effectiveness.</p> <p>On April 16, 2015 the federal standard for electric storage tank water heaters will be increased for all equipment sizes, requiring units 55 gallons and above to have an EF of 1.92 or higher, and requiring units smaller than 55 gallons to achieve an EF 0.94 or higher.</p>	<p><u>Current Qualifications:</u> 40-49 gal units: EF \geq 0.93 50-65 gal units: EF \geq 0.91 \geq 66 gal units: EF \geq 0.89</p> <p><u>Revised Qualifications:</u> 25-44.9 gal units: EF \geq 0.94 45-54.9 gal units: EF \geq 0.95 55-74.9 gal units: EF \geq 0.93 75-99.9 gal units: EF \geq 0.92 100-120 gal units: EF \geq 0.85</p> <p><u>Current Incentive Amount:</u> \$75 (customer)</p> <p><u>Revised Incentive Amount:</u> \$50 (customer)</p> <p><u>Measure Retirement:</u> Due to the federal standard change all electric water heater incentives will be retired after April 15, 2015. Incentives will be provided only for units purchased or installed on or before April 15, 2015.</p>

Measure Name	Description of Change	Measure Summary
Heat Pump Water Heaters	<p><u>Type of change:</u> Modify incentive amount Add in automatic retirement date for measure</p> <p><u>Reason for Change:</u> High incremental cost of this technology has resulted in low market up-take. Due to high unit energy savings with RTF, the Company will offer a higher incentive amount to drive more participation. The Program proposes an “up to” incentive so that the incentive can be decreased with market demand and as the price for the equipment drops.</p> <p>On April 16, 2015 the federal standard for electric storage tank water heaters will be increased for all equipment sizes, requiring units 55 gallons and above to have an EF of 1.92 or higher and requiring units smaller than 55 gallons to achieve an EF 0.94 or higher.</p>	<p><u>Current Qualifications:</u> Energy Star qualified</p> <p><u>Revised Qualifications:</u> Northern Climate Specification Qualified</p> <p><u>Current Incentive Amount:</u> \$150 (customer) \$100 (contractor)</p> <p><u>Revised Incentive Amount:</u> Up to \$300 (customer) \$100 (contractor)</p> <p><u>Retirement:</u> Due to the federal standard units that do not meet the new standard will no longer be offered incentives after April 15, 2015.</p>
Floor Insulation	<p><u>Type of change:</u> Modify qualifications</p> <p><u>Reason for change:</u> To allow customers with older homes and shorter floor joists who cannot fit R-30 insulation into their crawl spaces to participate in the program.</p>	<p><u>Current Qualifications:</u> $R_{\text{initial}} \leq 18$ $R_{\text{final}} \geq 30$</p> <p><u>Revised Qualifications:</u> $R_{\text{initial}} \leq 18$ $R_{\text{final}} \geq 30$ or fill cavity</p> <p><u>Current Incentive Amount (unchanged):</u> \$0.50 for electric heat NA for electric cooling</p> <p><u>Notes:</u> Incentive is paid based on square footage of floor space insulated. Measure can be installed by customer or contractor.</p>

Measure Name	Description of Change	Measure Summary
Attic/Ceiling Insulation	<p><u>Type of change:</u> Modify incentive amount</p> <p><u>Reason for change:</u> To align with low electricity savings associated with homes that do not have electric heat.</p>	<p><u>Current Qualifications (unchanged):</u> $R_{\text{initial}} \leq 20$ $R_{\text{final}} \geq 49$</p> <p><u>Current Incentive Amount:</u> \$0.50/sf for electric heat \$0.15/sf for electric cooling</p> <p><u>Revised Incentive Amount:</u> \$0.50/sf for electric heat (single & multi-family) \$0.10/sf for electric cooling (single family) \$0.08/sf for electric cooling (multi-family)</p> <p><u>Notes:</u> Incentive is paid based on square footage of attic space insulated. Measure can be installed by customer or contractor.</p>
Wall Insulation	<p><u>Type of change:</u> Modify incentive amount</p> <p><u>Reason for change:</u> To align with low electricity savings associated with homes that do not have electric heat.</p>	<p><u>Current Qualifications (unchanged):</u> $R_{\text{initial}} \leq 10$ $R_{\text{final}} \geq 13$ or fill cavity</p> <p><u>Current Incentive Amount:</u> \$0.60/sf for electric heat \$0.30/sf for electric cooling</p> <p><u>Revised Incentive Amount:</u> (single & multi-family) \$0.75/sf for electric heat \$0.15/sf for electric cooling</p> <p><u>Notes:</u> Incentive is paid based on square footage of wall space insulated. Measure can be installed by customer or contractor.</p>
Insulation Bonus	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired and replaced with a whole-home upgrade package.</p>

Measure Name	Description of Change	Measure Summary
Air Sealing	<u>Type of Change:</u> Add new measure	<u>Planned Qualifications:</u> Air seal entire home per program manual Installation completed by contractor Electrically heated home <u>Planned Incentive Amount:</u> \$0.30/sf <u>Planned Delivery Methods:</u> Downstream <u>Notes:</u> Incentive is paid based on area of conditioned space of the home
Central Air Conditioner	<u>Type of change:</u> Modify qualification criteria and incentive amounts <u>Reason for change:</u> To increase participation and to better align incentives with savings garnered from the measure	<u>Current Qualifications:</u> ≥ 15 SEER, with TXV <u>Revised Qualifications:</u> ≥ 15 SEER, with proper installation and sizing: Meet airflow/refrigerant requirements 350 CFM/ton of airflow Refrigerant charge within +/- 3 degrees of target subcooling Equipment properly sized per program requirements <u>Current Incentive Amount:</u> \$250 (customer) \$25 (contractor) <u>Revised Incentive Amount:</u> \$50 (customer) \$75 (contractor)
Central Air Conditioner Proper Sizing	<u>Type of Change:</u> Remove an existing measure	<u>Retirement:</u> The measure will be retired and combined with the Central Air Conditioner Measure
Central Air Conditioner Proper Installation	<u>Type of Change:</u> Remove an existing measure	<u>Retirement:</u> The measure will be retired and combined with the Central Air Conditioner Measure

Measure Name	Description of Change	Measure Summary
Room Air Conditioners	<p><u>Type of Change:</u> Modify delivery method and incentive amount.</p> <p><u>Reason for Change:</u> To drive more participation, decrease incentive costs, and decrease administrative costs</p>	<p><u>Current Qualifications (unchanged):</u> ENERGY STAR Qualified</p> <p><u>Current Incentive Amount:</u> \$25.00</p> <p><u>Revised Incentive Maximum Amount:</u> Up to \$20.00</p> <p><u>Current Delivery Methods:</u> Downstream</p> <p><u>Revised Delivery Methods:</u> Upstream</p>
Evaporative Coolers	<p><u>Type of Change:</u> Incentive amount</p> <p><u>Reason for Change:</u> Align incentives with associated savings and to allow customer self-installations to increase participation. Merge portable and permanently installed evaporative coolers into one measure separated by tiers.</p>	<p><u>Current Qualifications (unchanged):</u> Tier 1: 2,000 – 3,499 CFM Tier 2: \geq 3,500 CFM (For Tier 2, unit must be the primary cooling source)</p> <p><u>Current Incentive Amount:</u> Tier 1: \$75 (customer) Tier 2: \$150 (customer) \$100 (contractor)</p> <p><u>Revised Incentive Amount:</u> Tier 1: \$100 (customer)</p> <p>Tier 2: \$200 (customer) \$50 (contractor)</p> <p><u>Notes:</u> Customers performing self-installs are not eligible for contractor incentive.</p>

Measure Name	Description of Change	Measure Summary
Duct Sealing & Insulation	<p><u>Type of Change:</u> Modify incentive and qualifications</p> <p><u>Reason for change:</u> To align with savings and to drive participation To add multi-family-specific incentives</p>	<p><u>Current Qualifications (unchanged):</u> $R_{\text{existing}} \leq 2$ Must add at least R-8 to ducts Both services performed at same time 80% of home served by electric heat or cooling</p> <p><u>Current Incentive Amount:</u> Electrically heated homes: \$375 (customer) \$75 (contractor) Electrically cooled homes: \$275 (customer) \$75 (contractor)</p> <p><u>Revised Incentive Amount:</u> Electrically heated homes, single-family: \$600 (customer) \$200 (contractor)</p> <p>Electrically cooled homes, single-family: \$25 (customer) \$25 (contractor)</p> <p>Electrically heated homes, multi-family: \$300 (customer) \$100 (contractor)</p> <p><u>Notes:</u> Services can be performed by multiple contractors.</p>
Duct Sealing	<p><u>Type of Change:</u> Add new measure</p> <p><u>Description of measure:</u> To provide increased opportunities for participation and to allow customers who already have duct insulation to reduce their duct leakage</p>	<p><u>Planned Qualification:</u> Must have ducted electric heating system serving at least 80% of the home's floor area. Installation completed by contractor</p> <p><u>Planned Incentive Amount:</u> Single Family: \$300 (customer) \$100 (contractor)</p> <p>Multi-Family: \$150 (customer) \$50 (contractor)</p> <p><u>Planned Delivery Methods:</u> Downstream</p>

Measure Name	Description of Change	Measure Summary
Manufactured Homes Duct Sealing	<p><u>Type of Change:</u> Add a new RTF measure</p>	<p><u>Planned Qualification:</u> Must have ducted electric heating system serving at least 80% of the home's floor area. Installation to be completed by contractor.</p> <p><u>Planned Incentive Amount:</u> Up to \$750 (contractor)</p> <p><u>Planned Delivery Methods:</u> Direct Install</p> <p><u>Notes:</u> Contractor will be reimbursed for actual job costs at no cost to the customer. Costs may include surcharge for mileage and duct testing, and other job expenses.</p>
Heat Pump Upgrade	<p><u>Type of Change:</u> Modify incentive and qualifications</p> <p><u>Reason for change:</u> To increase requirements to shift the market to higher efficiency equipment and to increase customer participation</p>	<p><u>Current Qualifications:</u> ≥ 8.2 HSPF TXV</p> <p><u>Revised Qualifications:</u> ≥ 9.0 HSPF ≥ 15 SEER</p> <p><u>Current Incentive Amount:</u> \$300 (customer) \$100 (contractor)</p> <p><u>Revised Incentive Amount:</u> \$500 (customer) \$250 (contractor)</p>
Heat Pump Conversion	<p><u>Type of Change:</u> Modify incentive and qualifications</p> <p><u>Reason for change:</u> To increase requirements to shift the market to higher efficiency equipment and to increase customer participation</p>	<p><u>Current Qualifications:</u> ≥ 8.2 HSPF TXV</p> <p><u>Revised Qualifications:</u> ≥ 9.0 HSPF ≥ 15 SEER</p> <p><u>Current Incentive Amount:</u> \$400 (customer) \$100 (contractor)</p> <p><u>Revised Incentive Amount:</u> \$1,250 (customer) \$250 (contractor)</p>

Measure Name	Description of Change	Measure Summary
Heat Pump Best Practice Installation and Sizing	<p><u>Type of Change:</u> Modify incentive</p> <p><u>Reason for change:</u> To increase customer participation</p>	<p><u>Current Qualifications (unchanged):</u> Install new heat pump per program requirements.</p> <p><u>Current Incentive Amount:</u> \$100 (customer) \$100 (contractor)</p> <p><u>Revised Incentive Amount:</u> \$200 (customer) \$200 (contractor)</p>
Heat Pump Tune-up	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> The measure will be retired due to very low unit energy savings and very low participation making the measure not cost-effective.</p>
Ductless Heat Pump	<p><u>Type of Change:</u> Modify incentive and qualifications</p> <p><u>Reason for change:</u> To increase program participation and encourage multi-family installations.</p>	<p><u>Current Qualifications:</u> ≥ 16 SEER ≥ 9 HSPF Single-Head Units Only</p> <p><u>Revised Qualifications:</u> ≥ 9.5 HSPF ≥ 16 SEER Single or Multi-head Units</p> <p><u>Current Incentive Amount:</u> \$500 (customer) \$100 (contractor)</p> <p><u>Revised Incentive Amount:</u> Single-family: \$1,000 (customer) \$300 (contractor)</p> <p>Multi-family: \$600 (customer) \$200 (contractor)</p>

Measure Name	Description of Change	Measure Summary
95% AFUE Gas Furnace with ECM	<u>Type of Change:</u> Add a new measure	<u>Planned Qualifications:</u> Install a new gas or propane furnace that has a 95% or higher Annual Fuel Utilization Efficiency (AFUE) with an Electronically Commutated Motor (ECM) per program requirements. <u>Planned Incentive Amount:</u> \$200 (customer) \$50 (contractor) <u>Planned Delivery Methods:</u> Downstream <u>Notes:</u> Customer may only apply for one ECM incentive: 95% AFUE gas furnace with ECM or ECM on existing furnace.
ECM on Existing Furnace	<u>Type of Change:</u> Add a new measure	<u>Planned Qualifications:</u> Replace existing gas or propane furnace motor with an Electronically Commutated Motor (ECM) per program requirements. <u>Planned Incentive Amount:</u> \$100 (customer) \$50 (contractor) <u>Planned Delivery Methods:</u> Downstream <u>Notes:</u> Customer may only apply for one ECM incentive: 95% AFUE gas furnace with ECM or ECM on existing furnace.

Measure Name	Description of Change	Measure Summary
<p>Whole Home Upgrade Package</p>	<p><u>Type of Change:</u> Add a bonus incentive for installing multiple measures</p> <p><u>Description of Bonus:</u> Customers who install several measures together are eligible for a bonus incentive. Each element of the combined measure must meet the qualifications of the individual measure.</p>	<p><u>Planned Qualifications:</u> Customer must install complete each of the following per program requirements.</p> <p>Electrically cooled homes:</p> <ul style="list-style-type: none"> • ECM Retrofit or 95% Furnace with ECM • Tier 2 Evaporative Cooler or Central Air Conditioner (must be ducted) • Duct Sealing & Insulation • Whole-home attic or wall insulation <p>Electrically heated homes:</p> <ul style="list-style-type: none"> • Heat Pump or Ductless Heat Pump • Duct Sealing or Duct Sealing & Insulation (for ducted heat pumps) • Whole-home attic or wall or floor insulation • Air sealing <p><u>Planned Bonus Incentive Amount:</u> Electrically-heated homes: \$1,000 (customer) Electrically-cooled homes: \$500 (customer)</p>
<p>New Homes, Stand-alone measures</p>	<p><u>Type of Change:</u> Remove an existing measure</p>	<p><u>Retirement:</u> These stand-alone measures will be retired and replaced with a comprehensive whole home prescriptive checklist</p> <p>Retiring new homes measures:</p> <ul style="list-style-type: none"> • Refrigerator • Dish washer • Insulation (floor, attic, and wall) • Windows • Heat Pump • Ductless Heat Pump • Evaporative Cooler

Measure Name	Description of Change	Measure Summary
<p>New Homes, prescriptive path</p>	<p><u>Type of Change:</u> Add a new measure</p>	<p><u>Planned Qualifications:</u> All Homes:</p> <ul style="list-style-type: none"> • Attic insulation \geq R-49 • Floor insulation \geq R-30 • Wall insulation \geq R-20 • Windows u-Value \leq 0.30 • Duct insulation \geq R-8 (for ducted systems) • Duct Leakage (for ducted systems): \leq 100 CFM @ 25 Pa • Max air infiltration: 4 ACH @ 50 Pa • Programmable thermostat • At least 80% of sockets contain CFL or LED bulb <p>Electrically-heated homes:</p> <ul style="list-style-type: none"> • Heat Pump or Ductless Heat Pump (HSPF \geq 9; SEER \geq 15) <p>Electrically-cooled homes:</p> <ul style="list-style-type: none"> • Central Air Conditioner (SEER > 15) • > 95% AFUE Gas Furnace with ECM <p><u>Planned Incentive Amount:</u> Electrically-heated homes: \$1,500 (Customer OR Builder) Electrically-cooled homes: \$500 (Customer OR Builder)</p> <p><u>Planned Delivery Methods:</u> Downstream</p> <p><u>Notes:</u> Homes with electric heat and cooling may only qualify for the electric heat incentive</p>

Measure Name	Description of Change	Measure Summary
New Manufactured Homes ENERGY STAR	<u>Type of Change:</u> Add a new RTF measure	<u>Planned Qualifications:</u> Home must receive ENERGY STAR certification by incorporating an energy-efficient building enclosure design, air-distribution system, and equipment. <u>Planned Incentive Amount:</u> Electrically-heated homes: \$1,000 (customer or mid-market) Electrically-cooled homes: \$500 (customer or mid-market) <u>Notes:</u> Homes with electric heat and cooling may only qualify for the electric heat incentive
Low Flow Showerheads	<u>Type of change:</u> Add a new RTF measure <u>Description of measure:</u> A device that constricts the flow rate of water in showers, consequentially reducing the load on a hot water heater	<u>Planned Qualification:</u> Unit Flow Rate \leq 2.00 GPM <u>Planned Incentive Amount:</u> Up to \$31 for all delivery methods <u>Planned Delivery Methods:</u> Mail by Request Direct Install
Low Flow Faucet Aerators	<u>Type of change:</u> Add a new measure <u>Description of measure:</u> A device that constricts the flow rate of water in sinks/faucets, consequentially reducing the load on a hot water heater	<u>Planned Qualification:</u> Unit Flow Rate \leq 1.50 GPM <u>Planned Incentive Amount:</u> Up to \$5 for all delivery methods <u>Planned Delivery Methods:</u> Mail by Request Direct Install

ATTACHMENT C

Memorandum

To: Don Jones Jr., PacifiCorp/Rocky Mountain Power

From: David Basak, Navigant

Date: November 25, 2014

Re: Program Design Cost Effectiveness for the Wyoming Home Energy Savers Program

Navigant has developed this memo in response to PacifiCorp’s proposed Home Energy Savers Program cost effectiveness modeling needs in the state of Wyoming.

This memo presents the cost effectiveness results of individual analysis runs and a compilation of combined years for the state of Wyoming. Each scenario is analyzed using modeled assumptions provided by PacifiCorp. These scenarios utilize the following assumptions:

- ***Avoided Costs:*** Navigant utilized the “East” decrement value stream provided in the 2013 PacifiCorp Integrated Resource Plan. PacifiCorp identified measure types (i.e., cooling, lighting, and whole house) which were used to determine the appropriate decrement stream and load shape when calculating avoided costs. The measures types are as follows:
 - › *Cooling Measures* – East Cooling Decrement and load shape
 - › *Lighting Measures* – East Lighting Decrement and load shape
 - › *Whole House Measures* – East Whole House Decrement and load shape
 - › *Plug Loads Measures* – East Plug Load Decrement and load shape
 - › *Water Heating Measures* – East Water Heating Decrement and load shape
- ***Modeling Inputs:*** Navigant utilized individual measure savings and administration costs provided by PacifiCorp in the file *WY_HES_StateSavingsSummary_10-20-2014.xlsx*.
- ***Energy Rates:*** Navigant utilized the 2013 rates provided by PacifiCorp and applied an escalation of 1.9% to arrive at estimated rates for PY2015 and PY2016.

This memo will begin by addressing the program level results for PY2015 and 2016 for the Wyoming Home Energy Savers Program. The cost-effectiveness inputs are as follows:

Table 1 –Cost Effectiveness Analysis Inputs

Parameters	2015	2016
Discount Rate for all B/C Tests	6.88%	6.88%
Line Loss Factor - Energy (%)	9.51%	9.51%
Residential Energy Rate (\$/kWh)	\$0.108	\$0.110
Net-to-Gross Ratio	Varies	Varies
Escalation Rate	1.9%	1.9%

Table 2 –Annual Program Costs for PY 2015 and 2016 (Source: PacifiCorp)

Scenario	Incentives (\$)	Program Admin (\$)	Internal Admin (\$)	Total Program Cost (\$)
Program Year 2015	\$606,288	\$636,044	\$47,000	\$1,289,332
Program Year 2016	\$800,986	\$625,955	\$47,893	\$1,474,834
Total PY 2015 and 2016	\$1,407,274	\$1,261,999	\$94,893	\$2,764,166

Table 3 –Annual Program Savings at Site for PY 2015 and 2016 in kWh (Source: PacifiCorp)

Scenario	Gross Annual Energy Savings at Site (kWh)	Net Annual Energy Savings at Site (kWh)
Program Year 2015	6,336,932	4,231,573
Program Year 2016	8,246,091	5,749,129
Total PY 2015 and 2016	14,583,023	9,980,702

The PY2015 and 2016 program level cost/benefits results are as follows:

Table 4 –PY 2015 Program Level Cost/Benefit Test Results (Admin Costs Included)

Benefit/Cost Test Performed	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conversation Adder	\$0.0546	\$1,477,434	\$2,385,574	\$908,141	1.61
Total Resource Cost Test (TRC) No Adder	\$0.0546	\$1,477,434	\$2,168,704	\$691,270	1.47
Utility Cost Test (UCT)	\$0.0476	\$1,289,332	\$2,168,704	\$879,372	1.68
Rate Impact Test (RIM)		\$4,433,924	\$2,168,704	(\$2,265,220)	0.49
Participant Cost Test (PCT)		\$794,390	\$5,247,996	\$4,453,607	6.61
Lifecycle Revenue Impacts (\$/kWh)				\$0.000019099	
Discounted Participant Payback (years)				n/a	

Table 5 –PY 2016 Program Level Cost/Benefit Test Results (Admin Costs Included)

Benefit/Cost Test Performed	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conversation Adder	\$0.0386	\$1,665,230	\$3,909,140	\$2,243,910	2.35
Total Resource Cost Test (TRC) No Adder	\$0.0386	\$1,665,230	\$3,553,763	\$1,888,533	2.13
Utility Cost Test (UCT)	\$0.0342	\$1,474,834	\$3,553,763	\$2,078,929	2.41
Rate Impact Test (RIM)		\$6,583,434	\$3,553,763	(\$3,029,671)	0.54
Participant Cost Test (PCT)		\$991,382	\$7,760,319	\$6,768,937	7.83
Lifecycle Revenue Impacts (\$/kWh)				\$0.000017927	
Discounted Participant Payback (years)				n/a	

Table 6 –PY2015 and 2016 Program Level Cost/Benefit Test Results (Admin Costs Included)

Benefit/Cost Test Performed	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conversation Adder	\$0.0448	\$3,142,664	\$6,294,714	\$3,152,050	2.00
Total Resource Cost Test (TRC) No Adder	\$0.0448	\$3,142,664	\$5,722,467	\$2,579,804	1.82
Utility Cost Test (UCT)	\$0.0394	\$2,764,166	\$5,722,467	\$2,958,301	2.07
Rate Impact Test (RIM)		\$11,017,358	\$5,722,467	(\$5,294,891)	0.52
Participant Cost Test (PCT)		\$1,785,772	\$13,008,316	\$11,222,544	7.28
Lifecycle Revenue Impacts (\$/kWh)				\$0.000018410	
Discounted Participant Payback (years)				n/a	

The measure category cost/benefits results for the combination of single/multi-family and manufactured homes are as follows:

Table 7 – Measure Category Results for Program Year 2015 (No Admin Costs Included)

Wyoming HES Program Measure Category	Program Year	P-TRC Benefits (\$)	P-TRC Costs (\$)	P-TRC Test	TRC Benefits (\$)	TRC Costs (\$)	TRC Test	Utility PV Benefits (\$)	Utility PV Costs (\$)	Utility Cost Test	Ratepayer PV Benefits (\$)	Ratepayer PV Costs (\$)	RIM Test	Part. PV Benefits (\$)	Part. PV Cost (\$)	Part. Cost Test
Appliance	2015	\$164,652	\$102,441	1.61	\$149,684	\$102,441	1.46	\$149,684	\$84,265	1.78	\$149,684	\$275,278	0.54	\$366,869	\$102,441	3.58
Electronics	2015	\$6,419	\$25,467	0.25	\$5,836	\$25,467	0.23	\$5,836	\$11,200	0.52	\$5,836	\$21,074	0.28	\$28,515	\$25,467	1.12
HVAC	2015	\$591,462	\$101,143	5.85	\$537,693	\$101,143	5.32	\$537,693	\$146,727	3.66	\$537,693	\$856,819	0.63	\$1,330,170	\$101,143	13.15
Lighting	2015	\$1,004,613	\$493,783	2.03	\$913,285	\$493,783	1.85	\$913,285	\$304,928	3.00	\$913,285	\$1,722,771	0.53	\$2,486,224	\$493,783	5.04
New Homes	2015	\$5,323	\$4,206	1.27	\$4,839	\$4,206	1.15	\$4,839	\$2,000	2.42	\$4,839	\$8,283	0.58	\$9,854	\$4,206	2.34
Plumbing	2015	\$404,555	\$20,317	19.91	\$367,777	\$20,317	18.10	\$367,777	\$15,345	23.97	\$367,777	\$580,786	0.63	\$722,146	\$20,317	35.54
Weatherization	2015	\$182,145	\$37,755	4.82	\$165,586	\$37,755	4.39	\$165,586	\$29,428	5.63	\$165,586	\$242,948	0.68	\$242,948	\$37,755	6.43
Whole Home	2015	\$26,406	\$9,277	2.85	\$24,005	\$9,277	2.59	\$24,005	\$12,395	1.94	\$24,005	\$42,921	0.56	\$61,269	\$9,277	6.60
Total	2015	\$2,385,574	\$794,390	3.00	\$2,168,704	\$794,390	2.73	\$2,168,704	\$606,288	3.58	\$2,168,704	\$3,750,880	0.58	\$5,247,996	\$794,390	6.61

Table 8 – Measure Category Results for Program Year 2016 (No Admin Costs Included)

Wyoming HES Program Measure Category	Program Year	P-TRC Benefits (\$)	P-TRC Costs (\$)	P-TRC Test	TRC Benefits (\$)	TRC Costs (\$)	TRC Test	Utility PV Benefits (\$)	Utility PV Costs (\$)	Utility Cost Test	Ratepayer PV Benefits (\$)	Ratepayer PV Costs (\$)	RIM Test	Part. PV Benefits (\$)	Part. PV Cost (\$)	Part. Cost Test
Appliance	2016	\$164,253	\$52,490	3.13	\$149,321	\$52,490	2.84	\$149,321	\$82,695	1.81	\$149,321	\$275,681	0.54	\$377,955	\$52,490	7.19
Electronics	2016	\$58	\$45	1.30	\$53	\$45	1.18	\$53	\$50	1.06	\$53	\$142	0.37	\$204	\$45	4.52
HVAC	2016	\$732,805	\$166,911	4.39	\$666,186	\$166,911	3.99	\$666,186	\$214,420	3.11	\$666,186	\$1,110,277	0.60	\$1,707,465	\$166,911	10.23
Lighting	2016	\$1,176,952	\$561,433	2.10	\$1,069,957	\$561,433	1.91	\$1,069,957	\$362,278	2.95	\$1,069,957	\$2,082,650	0.52	\$2,962,850	\$561,433	5.28
New Homes	2016	\$5,323	\$4,206	1.27	\$4,839	\$4,206	1.15	\$4,839	\$2,000	2.42	\$4,839	\$8,402	0.58	\$10,003	\$4,206	2.38
Plumbing	2016	\$620,881	\$31,171	19.92	\$564,438	\$31,171	18.11	\$564,438	\$23,535	23.98	\$564,438	\$907,821	0.62	\$1,128,882	\$31,171	36.22
Weatherization	2016	\$1,182,462	\$165,850	7.13	\$1,074,966	\$165,850	6.48	\$1,074,966	\$103,613	10.37	\$1,074,966	\$1,511,113	0.71	\$1,511,113	\$165,850	9.11
Whole Home	2016	\$26,406	\$9,277	2.85	\$24,005	\$9,277	2.59	\$24,005	\$12,395	1.94	\$24,005	\$43,501	0.55	\$62,198	\$9,277	6.70
Total	2016	\$3,909,140	\$991,382	3.94	\$3,553,763	\$991,382	3.58	\$3,553,763	\$800,986	4.44	\$3,553,763	\$5,909,586	0.60	\$7,760,319	\$991,382	7.83

Table 9 – Measure Category Results for Program Years 2015 and 2016 (No Admin Costs Included)

Wyoming HES Program Measure Category	Program Year	P-TRC Benefits (\$)	P-TRC Costs (\$)	P-TRC Test	TRC Benefits (\$)	TRC Costs (\$)	TRC Test	Utility PV Benefits (\$)	Utility PV Costs (\$)	Utility Cost Test	Ratepayer PV Benefits (\$)	Ratepayer PV Costs (\$)	RIM Test	Part. PV Benefits (\$)	Part. PV Cost (\$)	Part. Cost Test
Appliance	2015 and 2016	\$328,904	\$154,930	2.12	\$299,004	\$154,930	1.98	\$299,004	\$166,960	1.79	\$299,004	\$550,958	0.54	\$744,464	\$154,930	4.81
Electronics	2015 and 2016	\$6,478	\$25,512	0.25	\$5,889	\$25,512	0.23	\$5,889	\$11,250	0.52	\$5,889	\$21,216	0.28	\$28,719	\$25,512	1.13
HVAC	2015 and 2016	\$1,324,267	\$268,054	4.94	\$1,203,879	\$268,054	4.49	\$1,203,879	\$361,147	3.33	\$1,203,879	\$1,967,096	0.61	\$3,037,635	\$268,054	11.33
Lighting	2015 and 2016	\$2,181,565	\$1,055,216	2.07	\$1,983,241	\$1,055,216	1.88	\$1,983,241	\$667,206	2.97	\$1,983,241	\$3,775,420	0.53	\$5,449,074	\$1,055,216	5.16
New Homes	2015 and 2016	\$10,646	\$8,413	1.27	\$9,678	\$8,413	1.15	\$9,678	\$4,000	2.42	\$9,678	\$16,685	0.58	\$19,857	\$8,413	2.36
Plumbing	2015 and 2016	\$1,025,436	\$51,488	19.92	\$932,215	\$51,488	18.11	\$932,215	\$38,879	23.98	\$932,215	\$1,488,607	0.63	\$1,851,039	\$51,488	35.95
Weatherization	2015 and 2016	\$1,364,607	\$203,605	6.70	\$1,240,552	\$203,605	6.09	\$1,240,552	\$133,042	9.32	\$1,240,552	\$1,754,061	0.71	\$1,754,061	\$203,605	8.62
Whole Home	2015 and 2016	\$52,811	\$18,553	2.85	\$48,010	\$18,553	2.59	\$48,010	\$24,790	1.94	\$48,010	\$86,421	0.56	\$123,466	\$18,553	6.65
Total	2015 and 2016	\$14,977,256	\$4,653,048	3.22	\$13,615,687	\$4,653,048	2.93	\$13,615,687	\$3,461,368	3.93	\$13,615,687	\$22,982,400	0.59	\$30,800,450	\$4,653,048	6.62