

December 29, 2022

VIA ELECTRONIC FILING

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

Attn: Gary Widerburg
Commission Secretary

RE: Advice No. 22-07
Proposed Changes to Schedule 140, Non-Residential Energy Efficiency Program
Docket No. 22-035-T13

Enclosed for electronic filing are the proposed tariff sheets associated with Tariff P.S.C.U. No. 50 of PacifiCorp, d.b.a. Rocky Mountain Power (the “Company”), applicable to electric service in the State of Utah. Pursuant to the requirement of Rule R746-405-2(D), the Company states that the proposed tariff sheets do not constitute a violation of state law or Commission rule. The Company respectfully requests an effective date of February 1, 2023 for these changes.

Second Revision of Sheet No. 140.2	Schedule 140	Non-Residential Energy Efficiency
First Revision of Sheet No. 140.3	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.4	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.8	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.9	Schedule 140	Non-Residential Energy Efficiency

The purpose of this filing is to propose changes to the Non-Residential Energy Efficiency Program (“Program”) administered through Electric Service Schedule No. 140. These tariff changes align with targets illustrated in the table below, filed in the Demand Side Management November 1st Deferred Account and Forecast Report on November 1, 2022, in Docket No. 22-035-37.

2023 Budget and Savings Forecast

***	2023 MWh Savings Forecast	2023 Budget Forecast
Wattsmart Business	211,384	\$36,000,000

DESCRIPTION OF CHANGES

Proposed adjustments are listed below, with further explanation provided in subsequent sections. It should be noted that the sections below only include offerings with proposed changes, and any current unchanged offerings are omitted from the tables and sections below.

1. Adjust, discontinue, and add incentives and offerings throughout the Program; and
2. Expand the Market program incentive structure to include market actors.

Table 1a – Lighting System Retrofits

- **Exterior Lighting** – It is proposed to increase the maximum incentive for non-prescriptive exterior lighting to \$0.80.
 - **Networked Controls** – It is proposed to add a new offering for Networked Lighting Controls (“NLC”) for interior and exterior lighting retrofits. Networked controls serve as an additional solution and option for customers beyond basic controls, enabling the opportunity for networked controls on a circuit or fixture level.
- **Lighting Controls Commissioning** – It is proposed to add a new offering for controls commissioning with a maximum incentive of \$0.17 per Watt (“W”) Controlled. The initially offered incentive amounts will be set at \$0.17 for small and medium businesses, and \$0.15 for large businesses.

Maximum “up to” Incentives for Lighting System Retrofits

Category		Current Maximum “up to” Incentive	Proposed Maximum “up to” Incentive
Exterior Lighting	Non-Prescriptive	\$0.75/W Reduced	\$0.80/W Reduced
Lighting Controls Commissioning		\$0/W Controlled	\$0.17/W Controlled

Offered Incentives for Lighting System Retrofits

Category		Eligibility Requirements	Current Offered Incentive			Proposed Incentive		
			Small	Medium	Large	Small	Medium	Large
Interior (Non-prescriptive)	New Fixtures	No Controls	\$0.60	\$0.40	\$0.40	\$0.66	\$0.66	\$0.60
		Basic Controls	\$0.75	\$0.55	\$0.55	\$0.77	\$0.77	\$0.70
		Area/Circuit Level NLCs	\$0.00	\$0.00	\$0.00	\$1.10	\$1.10	\$1.00
		Fixture Level ANLCs	\$1.30	\$1.10	\$1.10	\$1.32	\$1.32	\$1.20
	Retrofit Kits	No Controls	\$0.30	\$0.30	\$0.30	\$0.66	\$0.66	\$0.60
		Basic Controls	\$0.45	\$0.35	\$0.35	\$0.77	\$0.77	\$0.70
		Area/Circuit Level NLCs	\$0.00	\$0.00	\$0.00	\$1.10	\$1.10	\$1.00
	Controls Only	Fixture Level ANLCs	\$1.00	\$0.90	\$0.90	\$1.32	\$1.32	\$1.20
		Basic Controls	\$0.20	\$0.20	\$0.20	\$0.50	\$0.50	\$0.45
Area/Circuit Level NLCs		\$0.00	\$0.00	\$0.00	\$0.66	\$0.66	\$0.60	
Exterior (Non-prescriptive)	New Fixtures	Fixture Level ANLCs	\$0.80	\$0.80	\$0.80	\$0.83	\$0.83	\$0.75
		No Controls	\$0.35	\$0.25	\$0.25	\$0.39	\$0.39	\$0.35
		Basic Exterior Dimming	\$0.55	\$0.45	\$0.45	\$0.55	\$0.55	\$0.50
	Retrofit Kits	Advanced Networked Dimming	\$0.00	\$0.00	\$0.00	\$0.77	\$0.77	\$0.70
		No Controls	\$0.15	\$0.15	\$0.15	\$0.39	\$0.39	\$0.35
		Basic Exterior Dimming	\$0.40	\$0.35	\$0.35	\$0.55	\$0.55	\$0.50
	Controls Only	Advanced Networked Dimming	\$0.00	\$0.00	\$0.00	\$0.77	\$0.77	\$0.70
Basic Exterior Dimming		\$0.40	\$0.40	\$0.40	\$0.39	\$0.39	\$0.35	
Lighting Controls Commissioning		Advanced Networked Dimming	\$0.00	\$0.00	\$0.00	\$0.66	\$0.66	\$0.60

Table 1b – New Construction/Major Renovation Lighting Incentives

- **Interior/Exterior Lighting (Major renovation only)** – Interior and exterior lighting incentives for new construction and major renovation were discontinued in March 2022 in favor of the Whole Building New Construction (“WBNC”) offering. It is proposed to reestablish these offerings for facilities that are only renovating their lighting systems. Facilities that are newly constructed or renovating more than their lighting system can earn incentives through the existing WBNC offer. The maximum and initially offered incentives will be set at the same amounts.

Maximum and Offered Incentives for New Construction/Major Renovation Lighting

Equipment Type	Category	Current Maximum/Offered Incentive	Proposed Maximum/Offered Incentive
Interior Lighting (Major lighting renovation only)	Troffer	\$0.00	\$10/Fixture
	Linear Ambient	\$0.00	\$10/Fixture
	Highbay	\$0.00	\$20/Fixture
	Other (not listed above)	\$0.00	\$0.50/Fixture Wattage
	Advanced Lighting Controls	\$0.00	\$0.80/W controlled
Exterior Lighting (Major lighting renovation only)	Advanced Lighting Controls	\$0.00	\$0.40/W controlled

Table 2 – Motor Incentives

- **Green Motor Rewind** – It is proposed to increase the maximum “up to” incentive to \$2/horsepower (“hp”), and split the offered incentive between customers and vendors at \$1.00 each.

Maximum “up to” Incentives for Motors

Equipment Type	Current Maximum “up to” Incentive	Proposed Maximum “up to” Incentive
Green Motor Rewinds	\$1/horsepower	\$2/horsepower

Offered Incentives for Motors

Equipment Type	Proposed Incentive	
	Customers	Vendors
Green Motor Rewinds	\$1.00	\$1.00

Table 3a – HVAC Incentives

- **Unitary Commercial Air Conditioners and Heat Pumps** – It is proposed to discontinue and adjust incentives for the equipment sizes specified in the table below due to increased federal standards. Select incentives may be re-instated in the future based on updated standards.

Offered Incentives for HVAC

Equipment Type	Size category	Current Offered Incentive	Proposed Offered Incentive
Unitary Commercial Air Conditioners, Air-Cooled	≥ 65,000 Btu/hr and ≤ 760,000 Btu/hr	\$50/ton	\$0/ton
Unitary Commercial Heat Pumps, Air-Cooled	< 65,000 Btu/hr (three phase)	\$25/ton	\$0/ton
	≥ 65,000 Btu/hr and < 240,000 Btu/hr	\$25/ton	\$50/ton

	≥ 240,000 Btu/hr	\$25/ton	\$0/ton
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Table 3b – Other HVAC Incentives

- **Advanced Rooftop Unit Controls** – It is proposed to add a new offering for advanced rooftop control units that are less than five tons to give participants additional options.

Offered Incentives for HVAC Equipment

Equipment Type	Size Parameters	Current Offered Incentive	Proposed Offered Incentive
Advanced Rooftop Unit Control (Retrofit)	< 5 ton	\$0	\$500
Advanced Rooftop Unit Control (New RTU)	< 5 ton	\$0	\$400
Advanced Rooftop Unit Control (DCV Only)	< 5 ton	\$0	\$300

Table 11 – Incentives for Wastewater, Oil and Gas, Fleet Vehicle, and Other Refrigeration Energy Efficiency Measures

- **Engine block heater control** – It is proposed to add a new measure for engine block heater controls, with the maximum and initially offered incentives set at \$150 and \$125, respectively, per controller.

Incentives for Wastewater, Oil and Gas, Fleet Vehicle, and Other Refrigeration Energy Efficiency Measures

Equipment Type	Current Maximum “up to” Incentive	Currently Offered Incentive	Proposed Maximum “up to” Incentive	Proposed Offered Incentive
Engine block heater control	\$0 per controller	\$0 per controller	\$150 per controller	\$125 per controller

Table 13a –Market Incentives Lighting

Currently, the Company’s Mid-Market program, now referred to as the Market program, is structured to only offer incentives to end-use customers. The Company proposes to expand the Market program to a broader structure for prescriptive lamps and fixtures, which will allow the Market program to provide incentives at the most effective point(s) in the supply chain to influence the market.

- **A-Lamps, Decorative Lamps, Downlight Kits, PAR/BR Reflector Lamps** – It is proposed to discontinue these offerings due to federal standards and market adoption.
- **MR-16 Reflector Lamps, Pin-Based Lamps, Linear Replacement Lamps, HID Replacement lamps, Wall Pack Fixtures, Troffer Kit/Fixture, Linear Ambient Kit/Fixture** – It is proposed to adjust offerings under these equipment types to better align with current measure research, market conditions, and the expanded market structure discussed above.

Maximum “up to” Incentives for Market Lighting

Equipment Type	Category	Current Maximum “up to” Incentive	Proposed Maximum “up to” Incentive
LED	A-Lamps	\$10/Lamp	\$0/Lamp
	Decorative Lamps	\$10/Lamp	\$0/Lamp
	Downlight Kits	\$15/Fixture	\$0/Fixture

Offered Incentives for Market Lighting

Measure Category	Equipment	Current Offered Incentive (Per lamp, fixture, kit)		Proposed Incentive (Per lamp, fixture, kit)	
		Distributor	Customer	Distributor	Customer
Reflector Lamps	MR-16 Reflector Lamp	\$0	\$4	\$1.00	\$1.00
Pin-based Lamps	PLC Pin-based Lamp < 10W	\$0	\$4	\$1.25	\$1.25
	PLC Pin-based Lamp ≥ 10W	\$0	\$4	\$2.00	\$2.50
	PLL Lamp	\$0	\$6	\$2.50	\$3.00
Linear Replacement Lamps	TLED Lamp – Type A/B Dual Mode	\$0	\$3	\$1.50	\$2.00
	TLED Lamp – Type A with Driver	\$0	\$3	\$4.00	\$4.00
	TLED Lamp – Type B	\$0	\$3	\$1.50	\$1.50
	TLED Lamp – Type C	\$0	\$3	\$3.50	\$3.50
	TLED Lamp – Type C with available Continuous Dimming	\$0	\$5	\$4.00	\$4.50
HID Replacement Lamps	HID Replacement Lamp < 40 W	\$0	\$10	\$10.00	No Change
	HID Replacement Lamp ≥ 40 W and < 70 W	\$0	\$25	\$12.00	\$12.00
	HID Replacement Lamp ≥ 70 W and < 140 W	\$0	\$35	\$20.00	No Change
	HID Replacement Lamp ≥ 140 W	\$0	\$50	\$30.00	No Change
Wall Pack Fixtures	Wall Pack Fixture > 20 W and < 75 W	\$0	\$20	\$5.00	No Change
	Wall Pack Fixture ≥ 75 W	\$0	\$30	\$5.00	\$25.00
Troffer Kit/Fixture	Troffer Kit	\$0	\$18	\$10.00	No Change
Linear Ambient Kit/Fixture	Linear Ambient Kit	\$0	\$9.50	\$5.00	No Change

Table 13b – Mid-Market Incentives-HVAC

- **Unitary Commercial Air Conditioners** – It is proposed to discontinue/adjust incentives for the equipment sizes specified in the table below due to increased federal standards. Select incentives may be re-instated in the future based on updated standards.

Offered Incentives for Mid-Market HVAC

Equipment Type	Size category	Current Offered Incentive	Proposed Offered Incentive
Unitary Commercial Air Conditioners, Air-Cooled	≥ 65,000 Btu/hr and < 135,000 Btu/hr	\$50/ton	\$0/ton
	≥ 65,000 Btu/hr and < 135,000 Btu/hr	\$100	\$80
	≥ 135,000 Btu/hr ≤ 760,000 Btu/hr	\$50/ton	\$0/ton

Table 14 – HVAC Check-up Incentives

- **Maintenance Agreement** – It is recommended to rename the measure to “RTU Maintenance Agreement” to specify the agreement is for rooftop units only.
- **Chiller Maintenance Agreement** – It is proposed to add a new offering to encourage the regular inspection maintenance of existing chillers. The maximum and initially offered incentives will be set at \$10 and \$5, respectively, per ton.
- **Thermostat** – It is proposed to increase the maximum and offered incentive amounts to \$250 and \$150, respectively, to account for current market prices for eligible thermostats.

Maximum “up to” Incentives for HVAC Check-up

Measure	Current Maximum “up to” Incentive	Proposed Maximum “up to” Incentive
RTU Maintenance Agreement	\$75/RTU	No change
Chiller Maintenance Agreement	\$0/ton	\$10/ton
Thermostat	\$50/Thermostat	\$250/Thermostat

Offered Incentives for HVAC Check-up

Measure	Current Offered Incentive	Proposed Incentive
RTU Maintenance Agreement	\$75/RTU	No change
Chiller Maintenance Agreement	\$0/ton	\$5/ton
Thermostat	\$50/Thermostat	\$150/Thermostat

COST-EFFECTIVENESS

The cost effectiveness analysis for the Wattsmart Business Program, attached hereto as Exhibit B, was based on the maximum “up to” incentive levels. The table below, pulled from Exhibit B, presents the expected cost effectiveness of the Program for 2023 assuming the proposed changes in this filing. Additional details and inputs are included in Exhibit B. Sensitivity analyses are also included as Exhibits C and D. The Program is expected to remain cost effective from the Utility Cost Test perspective under all scenarios.

Cost-Effectiveness Test	Levelized \$/kWh	NPV Costs	NPV Benefits	Net Benefits	Benefit/Cost Ratio
Utility Cost Test (UCT)	0.0318	\$25,376,012	\$44,655,863	\$19,279,851	1.76
Total Resource Cost Test (TRC) No Adder	0.0580	\$46,217,153	\$44,655,863	-\$1,561,290	0.97
Total Resource Cost Test (PTRC) + Conservation Adder	0.0580	\$46,217,153	\$49,121,449	\$2,904,296	1.06
Participant Cost Test (PCT)		\$44,069,059	\$96,860,601	\$52,791,542	2.20
Rate Impact Test (RIM)		\$104,609,169	\$44,655,863	-\$59,953,306	0.43
Lifecycle Revenue Impacts (\$/kWh)					\$0.0003710

STAKEHOLDER COLLABORATION

On October 27, 2022, the Company discussed these proposed changes with the DSM Steering Committee. On December 15, 2022, the Company circulated a draft of this advice letter to Steering Committee members for initial review and comment prior to submitting to the Commission for approval.

Public Service Commission of Utah

December 29, 2022

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

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

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

Informal inquiries regarding this matter may be directed to me at (801) 220-4214.

Sincerely,

A handwritten signature in blue ink that reads "Michael S. Snow". The signature is written in a cursive style with a long horizontal flourish at the end.

Michael S. Snow
Manager, Regulatory Affairs

Enclosures

cc: Division of Public Utilities
 Office of Consumer Services

EXHIBIT A
PROPOSED TARIFFS
LEGISLATIVE VERSION

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued
INCENTIVES:¹

Category	Incentive "up to"	Percent Project Cost Cap	1-Year Simple Payback Cap for Projects ²	Other Limitations
Prescriptive Incentives *	See Tables 1a-11	See Tables 1a-11	See Tables 1a-11	See Tables 1a-11
Small Business Enhanced	Determined by Company with not-to-exceed amounts as shown in Table 12	Up to 90%	No	Available to all Schedule 6, 6A, and 23 customers meeting eligibility requirements. Qualifying equipment must be installed by an approved contractor/vendor
Mid-market Incentives	Determined by Company with not-to-exceed amounts as shown in Table 13	N/A	No	Incentives available to different market actors in the supply chain, including manufacturers, distributors, contractors and end-use customers at the point of purchase through approved distributors/retailers or via a post-purchase customer application process
HVAC Check-up Incentives	Determined by Company with not-to-exceed amounts as shown in Table 14	N/A	No	Qualifying equipment must be installed by an approved contractor/vendor.
Whole Building New Construction Incentive	Determined by Company with not-to-exceed amounts as shown in Table 15	N/A	No	Building types not eligible: multifamily, refrigerated warehouse, data center, laboratory, clean room, supermarket, hospital.
Custom Non-Lighting Incentives for qualifying measures not on the prescriptive list. ³	\$0.15 per annual kWh savings	70%	Yes	N/A
Energy Management	\$0.02 per kWh annual savings	N/A	No	N/A
Energy Project Manager Co-Funding	\$0.025 per kWh annual savings	100% of salary and eligible overhead	No	Minimum 1,000,000 kWh through qualified measures
Bill Credit ⁴	80% of eligible project costs	80%	No	Customers with minimum 1 MW peak or annual usage of 5,000,000 kWh**

¹ The customer or Owner may receive only one financial incentive from the Company per measure. Financial incentives include energy efficiency incentive payments, bill credits, and energy management payments. Energy Project Manager Co-Funding is available in addition to the project incentives.

² The 1 year simple payback cap means incentives will not be available to reduce the simple payback of a project below one year. If required, individual measure incentives will be adjusted downward pro-rata so the project has a simple payback after incentives of one year.

³ Project Cost and 1-Year Simple Payback Caps do not apply to New Construction and Major Renovation projects that are subject to state energy code.

⁴ To qualify for the bill credit option, a project must have a projected payback period of between 1 and 8 years. The Company may accept a project with a projected payback period in excess of eight years if project benefits satisfy the Commission's approved cost-effectiveness test. New Construction, lighting retrofits and Pre-payment projects are not eligible for bill credit.

(continued)

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FILED: November 10, 2021 December 29, 2022
2022 February 1, 2023

EFFECTIVE: January 1,



P.S.C.U. No. 51

~~First~~**Second** Revision of Sheet No. 140.2
Canceling ~~First Revision of Original~~ Sheet No. 140.2

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued

*Incentives for measures contained in Tables 1a-11 are restricted to the amounts shown in Tables 1a-11 or the appropriate bill credit amount.

**Customers may aggregate accounts to achieve minimum requirements.

(continued)

Issued by authority of Report and Order of the Public Service Commission of Utah in Docket No. ~~22~~**24**-035-
~~T13~~**T13**

FILED: ~~November 10, 2024~~**December 29, 2022**
~~2022~~**February 1, 2023**

EFFECTIVE: ~~January 1,~~

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued

QUALIFYING MEASURE: Qualifying measures are any measures which, when installed in an eligible facility, result in verifiable electric energy efficiency improvement compared to a baseline as determined by the Company. The baseline will be determined with reference to existing equipment, applicable state or federal energy or building codes, industry standard practice and other relevant factors.

QUALIFYING ENERGY MANAGEMENT: Operational improvements which, when implemented in an eligible facility, result in electric energy savings compared to current operations as determined by the Company.

MINIMUM EQUIPMENT EFFICIENCY: Retrofit Energy Efficiency Projects must meet minimum equipment efficiency levels and equipment eligibility requirements in the Tables below to be eligible for an Incentive or monthly Bill Credit available under the Schedule.

PRIOR ENERGY SERVICE PAYMENT PROGRAM PARTICIPATION REQUIREMENTS: This tariff does not affect Energy Service Charges currently outstanding. All obligations including those pursuant to an executed Energy Services Agreement shall remain in effect until the Energy Efficiency Payment with interest is repaid in full.

GENERAL RULES AND PROVISIONS:

1. Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Company may establish specifications regarding electric efficiency or energy management measures to be affected under this schedule, and may conduct inspections and/or verification to insure that such specifications are met.
2. Detailed program descriptions, Frequently Asked Questions, Qualifying Equipment or Services, incentive amounts, application forms and participation procedures are accessible through the program's website at www.wattsmart.com.
3. "Up to" amounts represent the minimum/maximum range approved by the Commission. Actual offered incentives within their respective minimum/maximum ranges are posted on the program's website. Actual offered incentive "~~Up to~~" amounts may change within their minimum/maximum ranges with a minimum 45 days' notice, which will be prominently displayed on the program website and will be communicated to participating retailers, distributors, and Trade Allies.
4. Offered incentive amounts may be capped at a percentage of qualifying equipment cost. Qualifying equipment costs are subject to Company approval.
5. Qualified equipment lists and other eligibility criteria are posted on the Utah energy efficiency program section of the Company's website.
6. Incentives included in the ~~mid-market~~ Market incentive tables are available through Company-approved retailers/distributors or a customer application process. Incentives may also be available to other market actors in the supply chain, including manufacturers, distributors, and contractors.

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~~0422-035-T13~~

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P.S.C.U. No. 51

First Revision of Sheet No. 140.3
Canceling Original Sheet No. 140.3

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued

(continued)

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~~0422-035-T13~~

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ELECTRIC SERVICE SCHEDULE NO. 140 - Continued
Table 1a - Lighting System Retrofits

Measure	Category		Maximum Incentive "up to"
Lighting System Retrofit	Interior Lighting	Prescriptive	See Mid -Market table
		Non-Prescriptive	\$1.50/W Reduced
	Exterior Lighting	Prescriptive	See Mid -Market table
		Non-Prescriptive	\$ 0.80 <u>0.75</u> /W Reduced
	Controlled Environment Agriculture		\$0.05/kWh
	Controls-Only		\$0.80/W Controlled
	<u>Lighting Controls Commissioning</u>		<u>\$0.17/W Controlled</u>
Custom		\$0.85/W Reduced	

Table 1b – New Construction/Major Renovation Lighting Incentives⁵

Measure	Category	Incentive "up to"
Interior Lighting <u>(Major Lighting Renovation Only)</u>	Troffer	\$10/Fixture
	Linear Ambient	\$10/Fixture
	Highbay	\$20/Fixture
	Other (not listed above)	\$0.50/Fixture Wattage
	Advanced Lighting Controls	\$0.80/W controlled
Exterior Lighting <u>(Major Lighting Renovation Only)</u>	Advanced Lighting Controls	\$0.40/W controlled
Controlled Environment Agriculture		\$0.05/kWh

Table 2 - Motor Incentives

Equipment Type	Incentive "up to"
Electronically Commutated Motor	\$1/watt or \$100/horsepower based on application
Variable Frequency Drives	\$200/horsepower
Green Motor Rewinds	\$1 <u>2</u> /horsepower

Table 3a – HVAC Incentives

Equipment Type	Customer Incentive "up to"
Unitary Commercial Air Conditioners	\$75/ton
Packaged Terminal Air Conditioners (PTAC)	\$25/ton
Packaged Terminal Heat Pumps (PTHP) (Heating & Cooling Mode)	\$50/ton
Unitary Commercial Heat Pumps	\$75/ton

⁵ ~~Interior and Exterior Lighting in Table 1b for New Construction/Major Renovation will be discontinued effective March 31, 2022.~~

(continued)

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~~—22-035-T13~~

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P.S.C.U. No. 51

~~First~~**Second** Revision of Sheet No. 140.4
Canceling ~~Original~~**First Revision of** Sheet 140.4

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued

Heat Pump Loop	\$125/ton
Variable Refrigerant Flow Heat Pumps	\$150/ton

(continued)

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~~—22-035-T13~~

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1, 2023

EFFECTIVE: ~~January-February~~

ELECTRIC SERVICE SCHEDULE NO. 140 – Continued
Table 10 – Compressed Air Incentives

Equipment Category	Incentive “up to”
Low Pressure Drop Filter Replacement	\$2/scfm
Receiver Capacity Addition	\$3/gal above 2 gallons per scfm
Cycling Refrigerated Dryer	\$2/scfm
Variable Frequency Drive Controlled Compressor	\$0.15/kWh annual energy savings
Zero Loss Condensate Drain	\$100 each
Outside Air Intake	\$6/horsepower
Compressed air end use reduction	\$0.15/kWh annual energy savings

Table 11 - Incentives for Wastewater, Oil and Gas, Fleet Vehicle, and Other Refrigeration Energy Efficiency Measures

Equipment Type	Incentive “up to”
Adaptive refrigeration control	\$0.15/kWh annual energy savings
Fast acting door	\$0.15/kWh annual energy savings
<u>Engine block heater control</u>	<u>\$150 per controller</u>
Oil and gas pump off controller	\$1,500 per controller
Wastewater – low power mixer	\$0.15/kWh annual energy savings

Small Business Enhanced (Retrofit only)

Incentives and participation for small business enhanced offerings may include but not be limited to lighting, plug load, HVAC measures, and areas being canvassed. Participating customers are required to pay for up to 50% of the qualifying equipment costs.

Table 12 – Incentives for Small Business Enhanced (Retrofit only)

Eligible Customer Rate Schedules	Eligibility Requirements	Incentive “up to”	Customer Co-pay “up to”	
			Minimum	Maximum
6	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	50%
6a	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	50%
23		\$5,000 per facility	10%	50%

(continued)

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P.S.C.U. No. 51

~~First~~**Second** Revision of Sheet No. 140.8
Canceling ~~Original~~**First Revision** of Sheet No. 140.8

ELECTRIC SERVICE SCHEDULE NO. 140 – Continued

(continued)

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February 1, 2023

EFFECTIVE: ~~January~~

ELECTRIC SERVICE SCHEDULE NO. 140 – Continued
Table 13a – ~~Mid~~Market Incentives -Lighting

Measure	Category	Incentive “up to”
LED	A Lamps	\$10/Lamp
	Reflector Lamps	\$15/Lamp
	Pin-based Lamps	\$12/Lamp
	Decorative Lamps	\$10/Lamp
	Downlight Kits	\$15/Fixture
	Linear Replacement Lamps	\$11/Lamp
	HID Replacement Lamps	\$110/Lamp
	Wall Pack Fixture	\$30/Fixture
	Troffer Kit/Fixture	\$30/Fixture
	Linear Ambient Kit/Fixture	\$20/Fixture

Table 13b – ~~Mid~~Market Incentives –HVAC

Measure	Customer/Mid Market Incentive “up to”
Unitary Commercial Air Conditioners	\$100/Ton

Table 14 – HVAC Check-up Incentives

Measure	Incentive “up to”
RTU Maintenance Agreement	\$75/RTU
Chiller Maintenance Agreement	\$10/ton
Thermostats	\$250/Thermostat
Economizer	\$150/RTU
Refrigerant	\$35/Ton RTU Capacity

Table 15 – Whole Building New Construction Incentives

Measure	Incentive “up to”
Early Engagement Design Charrette	\$2,500/project
Design Phase	\$0.35/sq-ft
Construction Phase	\$0.24/kWh
Performance Phase	\$0.05/kWh

EXHIBIT A
PROPOSED TARIFFS
CLEAN VERSION

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued
INCENTIVES:¹

Category	Incentive "up to"	Percent Project Cost Cap	1-Year Simple Payback Cap for Projects ²	Other Limitations
Prescriptive Incentives *	See Tables 1a-11	See Tables 1a-11	See Tables 1a-11	See Tables 1a-11
Small Business Enhanced	Determined by Company with not-to-exceed amounts as shown in Table 12	Up to 90%	No	Available to all Schedule 6, 6A, and 23 customers meeting eligibility requirements. Qualifying equipment must be installed by an approved contractor/vendor
Market Incentives	Determined by Company with not-to-exceed amounts as shown in Table 13	N/A	No	Incentives available to different market actors in the supply chain, including manufacturers, distributors, contractors and end-use customers.
HVAC Check-up Incentives	Determined by Company with not-to-exceed amounts as shown in Table 14	N/A	No	Qualifying equipment must be installed by an approved contractor/vendor.
Whole Building New Construction Incentive	Determined by Company with not-to-exceed amounts as shown in Table 15	N/A	No	Building types not eligible: multifamily, refrigerated warehouse, data center, laboratory, clean room, supermarket, hospital.
Custom Non-Lighting Incentives for qualifying measures not on the prescriptive list. ³	\$0.15 per annual kWh savings	70%	Yes	N/A
Energy Management	\$0.02 per kWh annual savings	N/A	No	N/A
Energy Project Manager Co-Funding	\$0.025 per kWh annual savings	100% of salary and eligible overhead	No	Minimum 1,000,000 kWh through qualified measures
Bill Credit ⁴	80% of eligible project costs	80%	No	Customers with minimum 1 MW peak or annual usage of 5,000,000 kWh**

*Incentives for measures contained in Tables 1a-11 are restricted to the amounts shown in Tables 1a-11 or the appropriate bill credit amount.

**Customers may aggregate accounts to achieve minimum requirements.

¹ The customer or Owner may receive only one financial incentive from the Company per measure. Financial incentives include energy efficiency incentive payments, bill credits, and energy management payments. Energy Project Manager Co-Funding is available in addition to the project incentives.

² The 1 year simple payback cap means incentives will not be available to reduce the simple payback of a project below one year. If required, individual measure incentives will be adjusted downward pro-rata so the project has a simple payback after incentives of one year.

³ Project Cost and 1-Year Simple Payback Caps do not apply to New Construction and Major Renovation projects that are subject to state energy code.

⁴ To qualify for the bill credit option, a project must have a projected payback period of between 1 and 8 years. The Company may accept a project with a projected payback period in excess of eight years if project benefits satisfy the Commission's approved cost-effectiveness test. New Construction, lighting retrofits and Pre-payment projects are not eligible for bill credit.

(continued)

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued

QUALIFYING MEASURE: Qualifying measures are any measures which, when installed in an eligible facility, result in verifiable electric energy efficiency improvement compared to a baseline as determined by the Company. The baseline will be determined with reference to existing equipment, applicable state or federal energy or building codes, industry standard practice and other relevant factors.

QUALIFYING ENERGY MANAGEMENT: Operational improvements which, when implemented in an eligible facility, result in electric energy savings compared to current operations as determined by the Company.

MINIMUM EQUIPMENT EFFICIENCY: Retrofit Energy Efficiency Projects must meet minimum equipment efficiency levels and equipment eligibility requirements in the Tables below to be eligible for an Incentive or monthly Bill Credit available under the Schedule.

PRIOR ENERGY SERVICE PAYMENT PROGRAM PARTICIPATION REQUIREMENTS: This tariff does not affect Energy Service Charges currently outstanding. All obligations including those pursuant to an executed Energy Services Agreement shall remain in effect until the Energy Efficiency Payment with interest is repaid in full.

GENERAL RULES AND PROVISIONS:

1. Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Company may establish specifications regarding electric efficiency or energy management measures to be affected under this schedule, and may conduct inspections and/or verification to insure that such specifications are met.
2. Detailed program descriptions, Frequently Asked Questions, Qualifying Equipment or Services, incentive amounts, application forms and participation procedures are accessible through the program's website at www.wattsmart.com.
3. "Up to" amounts represent the minimum/maximum range approved by the Commission. Actual offered incentives within their respective minimum/maximum ranges are posted on the program's website. Actual offered incentive amounts may change within their minimum/maximum ranges with a minimum 45 days' notice, which will be prominently displayed on the program website and will be communicated to participating retailers, distributors, and Trade Allies.
4. Offered incentive amounts may be capped at a percentage of qualifying equipment cost. Qualifying equipment costs are subject to Company approval.
5. Qualified equipment lists and other eligibility criteria are posted on the Utah energy efficiency program section of the Company's website.
6. Incentives included in the Market incentive tables are available through Company-approved retailers/distributors or a customer application process. Incentives may also be available to other market actors in the supply chain, including manufacturers, distributors, and contractors.

(continued)

Issued by authority of Report and Order of the Public Service Commission of Utah in Docket No. 22-035-T13

FILED: December 29, 2022

EFFECTIVE: February 1, 2023

ELECTRIC SERVICE SCHEDULE NO. 140 - Continued
Table 1a - Lighting System Retrofits

Measure	Category		Incentive "up to"
Lighting System Retrofit	Interior Lighting	Prescriptive	See Market table
		Non-Prescriptive	\$1.50/W Reduced
	Exterior Lighting	Prescriptive	See Market table
		Non-Prescriptive	\$0.80/W Reduced
	Controlled Environment Agriculture		\$0.05/kWh
	Controls-Only		\$0.80/W Controlled
	Lighting Controls Commissioning		\$0.17/W Controlled
Custom		\$0.85/W Reduced	

Table 1b – New Construction/Major Renovation Lighting Incentives

Measure	Category	Incentive "up to"
Interior Lighting (Major Lighting Renovation Only)	Troffer	\$10/Fixture
	Linear Ambient	\$10/Fixture
	Highbay	\$20/Fixture
	Other (not listed above)	\$0.50/Fixture Wattage
	Advanced Lighting Controls	\$0.80/W controlled
Exterior Lighting (Major Lighting Renovation Only)	Advanced Lighting Controls	\$0.40/W controlled
Controlled Environment Agriculture		\$0.05/kWh

Table 2 - Motor Incentives

Equipment Type	Incentive "up to"
Electronically Commutated Motor	\$1/watt or \$100/horsepower based on application
Variable Frequency Drives	\$200/horsepower
Green Motor Rewinds	\$2/horsepower

Table 3a – HVAC Incentives

Equipment Type	Incentive "up to"
Unitary Commercial Air Conditioners	\$75/ton
Packaged Terminal Air Conditioners (PTAC)	\$25/ton
Packaged Terminal Heat Pumps (PTHP) (Heating & Cooling Mode)	\$50/ton
Unitary Commercial Heat Pumps	\$75/ton
Heat Pump Loop	\$125/ton
Variable Refrigerant Flow Heat Pumps	\$150/ton

(continued)

ELECTRIC SERVICE SCHEDULE NO. 140 – Continued
Table 10 – Compressed Air Incentives

Equipment Category	Incentive “up to”
Low Pressure Drop Filter Replacement	\$2/scfm
Receiver Capacity Addition	\$3/gal above 2 gallons per scfm
Cycling Refrigerated Dryer	\$2/scfm
Variable Frequency Drive Controlled Compressor	\$0.15/kWh annual energy savings
Zero Loss Condensate Drain	\$100 each
Outside Air Intake	\$6/horsepower
Compressed air end use reduction	\$0.15/kWh annual energy savings

Table 11 - Incentives for Wastewater, Oil and Gas, Fleet Vehicle, and Other Refrigeration Energy Efficiency Measures

Equipment Type	Incentive “up to”
Adaptive refrigeration control	\$0.15/kWh annual energy savings
Fast acting door	\$0.15/kWh annual energy savings
Engine block heater control	\$150 per controller
Oil and gas pump off controller	\$1,500 per controller
Wastewater – low power mixer	\$0.15/kWh annual energy savings

Small Business Enhanced (Retrofit only)

Incentives and participation for small business enhanced offerings may include but not be limited to lighting, plug load, HVAC measures, and areas being canvassed. Participating customers are required to pay for up to 50% of the qualifying equipment costs.

Table 12 – Incentives for Small Business Enhanced (Retrofit only)

Eligible Customer Rate Schedules	Eligibility Requirements	Incentive “up to”	Customer Co-pay “up to”	
			Minimum	Maximum
6	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	50%
6a	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	50%
23		\$5,000 per facility	10%	50%

(continued)

ELECTRIC SERVICE SCHEDULE NO. 140 – Continued
Table 13a – Market Incentives -Lighting

Measure	Category	Incentive “up to”
LED	Reflector Lamps	\$15/Lamp
	Pin-based Lamps	\$12/Lamp
	Linear Replacement Lamps	\$11/Lamp
	HID Replacement Lamps	\$110/Lamp
	Wall Pack Fixture	\$30/Fixture
	Troffer Kit/Fixture	\$30/Fixture
	Linear Ambient Kit/Fixture	\$20/Fixture

Table 13b – Market Incentives –HVAC

Measure	Incentive “up to”
Unitary Commercial Air Conditioners	\$100/Ton

Table 14 – HVAC Check-up Incentives

Measure	Incentive “up to”
RTU Maintenance Agreement	\$75/RTU
Chiller Maintenance Agreement	\$10/ton
Thermostats	\$250/Thermostat
Economizer	\$150/RTU
Refrigerant	\$35/Ton RTU Capacity

Table 15 – Whole Building New Construction Incentives

Measure	Incentive “up to”
Early Engagement Design Charrette	\$2,500/project
Design Phase	\$0.35/sq-ft
Construction Phase	\$0.24/kWh
Performance Phase	\$0.05/kWh

EXHIBIT B



MEMORANDUM

To: Jennifer Rosenthal, Rocky Mountain Power
From: Dimitry Burdjalov and Andy Hudson, Applied Energy Group
CC: Clay Monroe, Rocky Mountain Power
Date: December 9, 2022
Re: Utah Wattsmart Business Program Cost-Effectiveness Analysis, Expected Case Participation – PY2023

AEG estimated the cost-effectiveness of Rocky Mountain Power's Wattsmart Business Program in the state of Utah based on Program Year (PY) 2023 costs and savings estimates developed by implementers, checked by AEG, and confirmed by Rocky Mountain Power. This memo provides cost-effectiveness results at the program level for the base (expected participation) case. The program passes the Utility Cost Test (UCT), PacifiCorp Total Resource Cost Test (PTRC), and the Participant Cost Test (PCT) under these conditions.

This memo provides analysis inputs and results in the following tables:

- Table 1: Cost-Effectiveness Analysis Inputs
- Table 2: Annual Program Costs by Program Year, Nominal - PY2023
- Table 3: Annual Savings in kWh by Program Year - PY2023
- Table 4: Benefit/Cost Ratios by Program Year - PY2023
- Table 5: Wattsmart Business Program Cost-Effectiveness Results, PY2023
- Table 6: Wattsmart Business Measure Category Level Cost-Effectiveness Results, PY2023



The following assumptions were utilized in the analysis:

- **Avoided Costs:** Hourly values provided by Rocky Mountain Power based on the 2021 Integrated Resource Plan (IRP) Preferred Portfolio, converted into annual values using Utah load shapes from the same IRP.
- **Modeling Inputs:** measure savings, costs, measure lives, incentive levels, program delivery, and portfolio costs were based on estimates developed by implementers, developed or reviewed by AEG, or provided by Rocky Mountain Power.
- **Other Economic Assumptions:** Discount rate, line loss, retail rate, and inflation rate values were provided by Rocky Mountain Power and are presented in Table 1 below.

The following tables summarize cost-effectiveness assumptions and results for the Utah Wattsmart Business Program. The cost-effectiveness analysis inputs are shown in Table 2 and Table 3 below. Tables 4 and 5 present the cost-effectiveness results of the Wattsmart Business program for 2023. All results are presented in 2023 dollars.¹ Table 6 presents results at the measure category level for 2023.

Table 1: Cost-Effectiveness Analysis Inputs

Parameter	PY2023
Discount Rate	6.92%
Commercial Line Loss	5.86%
Commercial Energy Rate (\$/kWh)	\$0.081
Inflation Rate ¹	2.28%

Table 2: Annual Program Costs by Program Year, Nominal - PY2023

Program Year	Program Delivery	Utility Admin	Incentives	Total Utility Costs	Gross Customer Costs
2023	\$6,780,573	\$967,995	\$17,627,443	\$25,376,012	\$44,069,059

Table 3: Annual Savings in kWh by Program Year - PY2023

Program Year	Gross kWh Savings at Site	Realization Rate	Adjusted Gross kWh Savings at Site	Net to Gross Ratio	Net kWh Savings at Site	Measure Life
2023	95,136,379	96.91%	92,193,616	87%	80,558,988	14

¹ To align with annual budget expectations, cost-effectiveness inputs are presented in nominal dollars.



Table 4: Benefit/Cost Ratios by Program Year - PY2023

Program Year	UCT	TRC	PTRC	PCT	RIM
2023	1.76	0.97	1.06	2.20	0.43

Table 5: Wattsmart Business Program Cost-Effectiveness Results, PY2023

Cost-Effectiveness Test	Levelized \$/kWh	NPV Costs	NPV Benefits	Net Benefits	Benefit/Cost Ratio
Utility Cost Test (UCT)	0.0318	\$25,376,012	\$44,655,863	\$19,279,851	1.76
Total Resource Cost Test (TRC) No Adder	0.0580	\$46,217,153	\$44,655,863	-\$1,561,290	0.97
Total Resource Cost Test (PTRC) + Conservation Adder	0.0580	\$46,217,153	\$49,121,449	\$2,904,296	1.06
Participant Cost Test (PCT)		\$44,069,059	\$96,860,601	\$52,791,542	2.20
Rate Impact Test (RIM)		\$104,609,169	\$44,655,863	-\$59,953,306	0.43
Lifecycle Revenue Impacts (\$/kWh)					\$0.0003710

Table 6: Wattsmart Business Measure Category Level Cost-Effectiveness Results, PY2023

Program	Measure Category	Utility Benefits (\$)	Utility Costs (\$)	Utility Cost Test	TRC Benefits (\$)	TRC Costs (\$)	TRC Test	P-TRC Benefits (\$)	P-TRC Costs (\$)	P-TRC Test	Participant PV Benefits (\$)	Participant PV Costs (\$)	PCT Test	Ratepayer PV Benefits (\$)	Ratepayer PV Costs (\$)	RIM Test
Wattsmart Business	Additional Measures	\$21,334	\$34,355	0.62	\$21,334	\$66,105	0.32	\$23,468	\$66,105	0.36	\$66,103	\$65,000	1.02	\$21,334	\$70,457	0.30
Wattsmart Business	Agriculture	\$34,367	\$25,839	1.33	\$34,367	\$39,214	0.88	\$37,804	\$39,214	0.96	\$76,023	\$37,500	2.03	\$34,367	\$89,362	0.38
Wattsmart Business	Building Shell	\$3,130,671	\$2,270,290	1.38	\$3,130,671	\$4,617,040	0.68	\$3,443,738	\$4,617,040	0.75	\$6,519,568	\$4,365,000	1.49	\$3,130,671	\$6,989,858	0.45
Wattsmart Business	Compressed Air	\$443,451	\$135,994	3.26	\$443,451	\$218,869	2.03	\$487,796	\$218,869	2.23	\$666,877	\$162,500	4.10	\$443,451	\$724,872	0.61
Wattsmart Business	Energy Management	\$288,797	\$215,949	1.34	\$288,797	\$211,402	1.37	\$317,676	\$211,402	1.50	\$772,836	\$59,315	13.03	\$288,797	\$949,242	0.30
Wattsmart Business	Food Service Equipment	\$35,675	\$10,000	3.57	\$35,675	\$17,100	2.09	\$39,243	\$17,100	2.29	\$63,238	\$18,000	3.51	\$35,675	\$63,238	0.56
Wattsmart Business	HVAC	\$2,230,257	\$1,593,072	1.40	\$2,230,257	\$1,844,647	1.21	\$2,453,282	\$1,844,647	1.33	\$8,617,445	\$4,392,017	1.96	\$2,230,257	\$8,617,445	0.26
Wattsmart Business	Irrigation	\$1,819,970	\$544,500	3.34	\$1,819,970	\$753,066	2.42	\$2,001,967	\$753,066	2.66	\$3,741,072	\$1,091,400	3.43	\$1,819,970	\$3,741,072	0.49
Wattsmart Business	Lighting	\$34,910,697	\$12,633,940	2.76	\$34,910,697	\$29,718,523	1.17	\$38,401,766	\$29,718,523	1.29	\$69,524,629	\$30,089,433	2.31	\$34,910,697	\$69,524,629	0.50
Wattsmart Business	Motors	\$1,740,645	\$885,888	1.96	\$1,740,645	\$1,705,003	1.02	\$1,914,710	\$1,705,003	1.12	\$6,812,809	\$3,788,895	1.80	\$1,740,645	\$6,812,809	0.26

EXHIBIT C



MEMORANDUM

To: Jennifer Rosenthal, Rocky Mountain Power
From: Dimitry Burdjalov and Andy Hudson, Applied Energy Group
CC: Clay Monroe, Rocky Mountain Power
Date: December 9, 2022
Re: Utah Wattsmart Business Program Cost-Effectiveness Analysis, High Case Participation – PY2023

AEG estimated the cost-effectiveness of Rocky Mountain Power's Wattsmart Business Program in the state of Utah based on Program Year (PY) 2023 costs and savings estimates developed by implementers, checked by AEG, and confirmed by Rocky Mountain Power. This memo provides cost-effectiveness results at the program level for the high (+10% participation) case. The program passes the Utility Cost Test (UCT), PacifiCorp Total Resource Cost Test (PTRC), and the Participant Cost Test (PCT) under these conditions.

This memo provides analysis inputs and results in the following tables:

- Table 1: Cost-Effectiveness Analysis Inputs
- Table 2: Annual Program Costs by Program Year, Nominal - PY2023
- Table 3: Annual Savings in kWh by Program Year - PY2023
- Table 4: Benefit/Cost Ratios by Program Year - PY2023
- Table 5: Wattsmart Business Program Cost-Effectiveness Results, PY2023
- Table 6: Wattsmart Business Measure Category Level Cost-Effectiveness Results, PY2023



The following assumptions were utilized in the analysis:

- **Avoided Costs:** Hourly values provided by Rocky Mountain Power based on the 2021 Integrated Resource Plan (IRP) Preferred Portfolio, converted into annual values using Utah load shapes from the same IRP.
- **Modeling Inputs:** measure savings, costs, measure lives, incentive levels, program delivery, and portfolio costs were based on estimates developed by implementers, developed or reviewed by AEG, or provided by Rocky Mountain Power.
- **Other Economic Assumptions:** Discount rate, line loss, retail rate, and inflation rate values were provided by Rocky Mountain Power and are presented in Table 1 below.

The following tables summarize cost-effectiveness assumptions and results for the Utah Wattsmart Business Program. The cost-effectiveness analysis inputs are shown in Table 2 and Table 3 below. Tables 4 and 5 present the cost-effectiveness results of the Wattsmart Business program for 2023. All results are presented in 2023 dollars.¹ Table 6 presents results at the measure category level for 2023.

Table 1: Cost-Effectiveness Analysis Inputs

Parameter	PY2023
Discount Rate	6.92%
Commercial Line Loss	5.86%
Commercial Energy Rate (\$/kWh)	\$0.081
Inflation Rate ¹	2.28%

Table 2: Annual Program Costs by Program Year, Nominal - PY2023

Program Year	Program Delivery	Utility Admin	Incentives	Total Utility Costs	Gross Customer Costs
2023	\$6,780,573	\$967,995	\$19,390,187	\$27,138,756	\$48,475,965

Table 3: Annual Savings in kWh by Program Year - PY2023

Program Year	Gross kWh Savings at Site	Realization Rate	Adjusted Gross kWh Savings at Site	Net to Gross Ratio	Net kWh Savings at Site	Measure Life
2023	104,650,017	96.91%	101,412,978	87%	88,614,887	14

¹ To align with annual budget expectations, cost-effectiveness inputs are presented in nominal dollars.



Table 4: Benefit/Cost Ratios by Program Year - PY2023

Program Year	UCT	TRC	PTRC	PCT	RIM
2023	1.81	0.98	1.08	2.20	0.43

Table 5: Wattsmart Business Program Cost-Effectiveness Results, PY2023

Cost-Effectiveness Test	Levelized \$/kWh	NPV Costs	NPV Benefits	Net Benefits	Benefit/Cost Ratio
Utility Cost Test (UCT)	0.0318	\$27,138,756	\$49,121,449	\$21,982,693	1.81
Total Resource Cost Test (TRC) No Adder	0.0580	\$50,064,012	\$49,121,449	-\$942,562	0.98
Total Resource Cost Test (PTRC) + Conservation Adder	0.0580	\$50,064,012	\$54,033,594	\$3,969,583	1.08
Participant Cost Test (PCT)		\$48,475,965	\$106,546,661	\$58,070,696	2.20
Rate Impact Test (RIM)		\$114,295,229	\$49,121,449	-\$65,173,780	0.43
Lifecycle Revenue Impacts (\$/kWh)					\$0.0003710

Table 6: Wattsmart Business Measure Category Level Cost-Effectiveness Results, PY2023

Program	Measure Category	Utility Benefits (\$)	Utility Costs (\$)	Utility Cost Test	TRC Benefits (\$)	TRC Costs (\$)	TRC Test	P-TRC Benefits (\$)	P-TRC Costs (\$)	P-TRC Test	Participant PV Benefits (\$)	Participant PV Costs (\$)	PCT Test	Ratepayer PV Benefits (\$)	Ratepayer PV Costs (\$)	RIM Test
Wattsmart Business	Additional Measures	\$23,468	\$37,355	0.63	\$23,468	\$72,280	0.32	\$25,815	\$72,280	0.36	\$72,713	\$71,500	1.02	\$23,468	\$74,068	0.32
Wattsmart Business	Agriculture	\$37,804	\$27,089	1.40	\$37,804	\$41,802	0.90	\$41,585	\$41,802	0.99	\$83,626	\$41,250	2.03	\$37,804	\$95,715	0.39
Wattsmart Business	Building Shell	\$3,443,738	\$2,450,290	1.41	\$3,443,738	\$5,031,715	0.68	\$3,788,112	\$5,031,715	0.75	\$7,171,525	\$4,801,500	1.49	\$3,443,738	\$7,461,815	0.46
Wattsmart Business	Compressed Air	\$487,796	\$143,794	3.39	\$487,796	\$234,957	2.08	\$536,576	\$234,957	2.28	\$733,565	\$178,750	4.10	\$487,796	\$783,760	0.62
Wattsmart Business	Energy Management	\$317,676	\$219,904	1.44	\$317,676	\$214,901	1.48	\$349,444	\$214,901	1.63	\$850,120	\$65,246	13.03	\$317,676	\$1,022,571	0.31
Wattsmart Business	Food Service Equipment	\$39,243	\$11,000	3.57	\$39,243	\$18,810	2.09	\$43,167	\$18,810	2.29	\$69,562	\$19,800	3.51	\$39,243	\$68,562	0.57
Wattsmart Business	HVAC	\$2,453,282	\$1,752,380	1.40	\$2,453,282	\$2,029,112	1.21	\$2,698,611	\$2,029,112	1.33	\$9,479,189	\$4,831,218	1.96	\$2,453,282	\$9,319,882	0.26
Wattsmart Business	Irrigation	\$2,001,967	\$598,950	3.34	\$2,001,967	\$828,373	2.42	\$2,202,163	\$828,373	2.66	\$4,115,179	\$1,200,540	3.43	\$2,001,967	\$4,060,729	0.49
Wattsmart Business	Lighting	\$38,401,766	\$13,897,334	2.76	\$38,401,766	\$32,690,376	1.17	\$42,241,943	\$32,690,376	1.29	\$76,477,092	\$33,098,376	2.31	\$38,401,766	\$75,213,698	0.51
Wattsmart Business	Motors	\$1,914,710	\$974,477	1.96	\$1,914,710	\$1,875,503	1.02	\$2,106,181	\$1,875,503	1.12	\$7,494,090	\$4,167,785	1.80	\$1,914,710	\$7,405,502	0.26

EXHIBIT D



MEMORANDUM

To: Jennifer Rosenthal, Rocky Mountain Power
From: Dimitry Burdjalov and Andy Hudson, Applied Energy Group
CC: Clay Monroe, Rocky Mountain Power
Date: December 9, 2022
Re: Utah Wattsmart Business Program Cost-Effectiveness Analysis, Low Case Participation – PY2023

AEG estimated the cost-effectiveness of Rocky Mountain Power's Wattsmart Business Program in the state of Utah based on Program Year (PY) 2023 costs and savings estimates developed by implementers, checked by AEG, and confirmed by Rocky Mountain Power. This memo provides cost-effectiveness results at the program level for the Low (-10% participation) case. The program passes the Utility Cost Test (UCT), PacifiCorp Total Resource Cost Test (PTRC), and the Participant Cost Test (PCT) under these conditions.

This memo provides analysis inputs and results in the following tables:

- Table 1: Cost-Effectiveness Analysis Inputs
- Table 2: Annual Program Costs by Program Year, Nominal - PY2023
- Table 3: Annual Savings in kWh by Program Year - PY2023
- Table 4: Benefit/Cost Ratios by Program Year - PY2023
- Table 5: Wattsmart Business Program Cost-Effectiveness Results, PY2023
- Table 6: Wattsmart Business Measure Category Level Cost-Effectiveness Results, PY2023



The following assumptions were utilized in the analysis:

- **Avoided Costs:** Hourly values provided by Rocky Mountain Power based on the 2021 Integrated Resource Plan (IRP) Preferred Portfolio, converted into annual values using Utah load shapes from the same IRP.
- **Modeling Inputs:** measure savings, costs, measure lives, incentive levels, program delivery, and portfolio costs were based on estimates developed by implementers, developed or reviewed by AEG, or provided by Rocky Mountain Power.
- **Other Economic Assumptions:** Discount rate, line loss, retail rate, and inflation rate values were provided by Rocky Mountain Power and are presented in Table 1 below.

The following tables summarize cost-effectiveness assumptions and results for the Utah Wattsmart Business Program. The cost-effectiveness analysis inputs are shown in Table 2 and Table 3 below. Tables 4 and 5 present the cost-effectiveness results of the Wattsmart Business program for 2023. All results are presented in 2023 dollars.¹ Table 6 presents results at the measure category level for 2023.

Table 1: Cost-Effectiveness Analysis Inputs

Parameter	PY2023
Discount Rate	6.92%
Commercial Line Loss	5.86%
Commercial Energy Rate (\$/kWh)	\$0.081
Inflation Rate ¹	2.28%

Table 2: Annual Program Costs by Program Year, Nominal - PY2023

Program Year	Program Delivery	Utility Admin	Incentives	Total Utility Costs	Gross Customer Costs
2023	\$6,780,573	\$967,995	\$15,864,699	\$23,613,267	\$39,662,153

Table 3: Annual Savings in kWh by Program Year - PY2023

Program Year	Gross kWh Savings at Site	Realization Rate	Adjusted Gross kWh Savings at Site	Net to Gross Ratio	Net kWh Savings at Site	Measure Life
2023	85,622,741	96.91%	82,974,255	87%	72,503,089	14

¹ To align with annual budget expectations, cost-effectiveness inputs are presented in nominal dollars.



Table 4: Benefit/Cost Ratios by Program Year - PY2023

Program Year	UCT	TRC	PTRC	PCT	RIM
2023	1.70	0.95	1.04	2.20	0.42

Table 5: Wattsmart Business Program Cost-Effectiveness Results, PY2023

Cost-Effectiveness Test	Levelized \$/kWh	NPV Costs	NPV Benefits	Net Benefits	Benefit/Cost Ratio
Utility Cost Test (UCT)	0.0318	\$23,613,267	\$40,190,277	\$16,577,009	1.70
Total Resource Cost Test (TRC) No Adder	0.0580	\$42,370,295	\$40,190,277	-\$2,180,018	0.95
Total Resource Cost Test (PTRC) + Conservation Adder	0.0580	\$42,370,295	\$44,209,304	\$1,839,010	1.04
Participant Cost Test (PCT)		\$39,662,153	\$87,174,541	\$47,512,387	2.20
Rate Impact Test (RIM)		\$94,923,109	\$40,190,277	-\$54,732,832	0.42
Lifecycle Revenue Impacts (\$/kWh)					\$0.0003710

Table 6: Wattsmart Business Measure Category Level Cost-Effectiveness Results, PY2023

Program	Measure Category	Utility Benefits (\$)	Utility Costs (\$)	Utility Cost Test	TRC Benefits (\$)	TRC Costs (\$)	TRC Test	P-TRC Benefits (\$)	P-TRC Costs (\$)	P-TRC Test	Participant PV Benefits (\$)	Participant PV Costs (\$)	PCT Test	Ratepayer PV Benefits (\$)	Ratepayer PV Costs (\$)	RIM Test
Wattsmart Business	Additional Measures	\$19,201	\$31,355	0.61	\$19,201	\$59,930	0.32	\$21,121	\$59,930	0.35	\$59,492	\$58,500	1.02	\$19,201	\$66,847	0.29
Wattsmart Business	Agriculture	\$30,931	\$24,589	1.26	\$30,931	\$36,627	0.84	\$34,024	\$36,627	0.93	\$68,421	\$33,750	2.03	\$30,931	\$83,010	0.37
Wattsmart Business	Building Shell	\$2,817,604	\$2,090,290	1.35	\$2,817,604	\$4,202,365	0.67	\$3,099,364	\$4,202,365	0.74	\$5,867,611	\$3,928,500	1.49	\$2,817,604	\$6,517,901	0.43
Wattsmart Business	Compressed Air	\$399,106	\$128,194	3.11	\$399,106	\$202,782	1.97	\$439,016	\$202,782	2.16	\$600,190	\$146,250	4.10	\$399,106	\$665,984	0.60
Wattsmart Business	Energy Management	\$259,917	\$211,995	1.23	\$259,917	\$207,902	1.25	\$285,909	\$207,902	1.38	\$695,552	\$53,383	13.03	\$259,917	\$875,913	0.30
Wattsmart Business	Food Service Equipment	\$32,108	\$9,000	3.57	\$32,108	\$15,390	2.09	\$35,318	\$15,390	2.29	\$56,914	\$16,200	3.51	\$32,108	\$57,914	0.55
Wattsmart Business	HVAC	\$2,007,231	\$1,433,765	1.40	\$2,007,231	\$1,660,182	1.21	\$2,207,954	\$1,660,182	1.33	\$7,755,700	\$3,952,815	1.96	\$2,007,231	\$7,915,008	0.25
Wattsmart Business	Irrigation	\$1,637,973	\$490,050	3.34	\$1,637,973	\$677,759	2.42	\$1,801,770	\$677,759	2.66	\$3,366,965	\$982,260	3.43	\$1,637,973	\$3,421,415	0.48
Wattsmart Business	Lighting	\$31,419,627	\$11,370,546	2.76	\$31,419,627	\$26,746,671	1.17	\$34,561,590	\$26,746,671	1.29	\$62,572,166	\$27,080,489	2.31	\$31,419,627	\$63,835,560	0.49
Wattsmart Business	Motors	\$1,566,581	\$797,299	1.96	\$1,566,581	\$1,534,503	1.02	\$1,723,239	\$1,534,503	1.12	\$6,131,528	\$3,410,006	1.80	\$1,566,581	\$6,220,117	0.25