

July 10, 2017

# VIA ELECTRONIC FILING

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

Attn: Gary Widerburg Commission Secretary

RE: Advice No. 17-10 Proposed Changes to Schedule 140, Non-Residential Energy Efficiency Program Docket No. 17-035-T09

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 August 10, 2017 for these changes.

Eighth Revision of Sheet No. B.1		Tariff Index
Third Revision of Sheet No. 140.4	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.5	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.6	Schedule 140	Non-Residential Energy Efficiency
Third Revision of Sheet No. 140.7	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.8	Schedule 140	Non-Residential Energy Efficiency
Fifth Revision of Sheet No. 140.9	Schedule 140	Non-Residential Energy Efficiency
Third Revision of Sheet No. 140.10	Schedule 140	Non-Residential Energy Efficiency
Third Revision of Sheet No. 140.11	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.12	Schedule 140	Non-Residential Energy Efficiency
First Revision of Sheet No. 140.13	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.14	Schedule 140	Non-Residential Energy Efficiency
Third Revision of Sheet No. 140.15	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.16	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.17	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.18	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.19	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.20	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.21	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.22	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.23	Schedule 140	Non-Residential Energy Efficiency
Second Revision of Sheet No. 140.24	Schedule 140	Non-Residential Energy Efficiency
Fifth Revision of Sheet No. 140.25	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, specifically to restructure the form and value of lighting incentives. These tariff changes align with targets illustrated in Figure 1 below, and filed in the Demand Side Management November 1<sup>st</sup> Deferred Account and Forecast Report on November 1, 2016, in Docket No. 16-035-30. Proposed changes to the Schedule 140 tariff sheets are included as Exhibit A. It should be noted that Sheet Nos. 140.7 through 140.26 are only included in order to shift the sheet numbering down as a result of the changes being made to sheets 140.4 through 140.6.

# Figure 1 – 2017 Budget and Savings Forecast from Nov 1st Report

***	2017 MWH Savings Forecast	2017 Budget Forecast
wattsmart Business	251,954	\$ 44,862,171

# **DESCRIPTION OF CHANGES**

Proposed adjustments are listed below, with further explanation provided in subsequent sections.

1. Restructure lighting retrofit incentives.

# **Restructured Lighting Retrofit Offering**

# **Program Overview**

The intent and need of this restructuring is in response to the continual market changes with LED lighting and to evolve towards lighting controls with lighting retrofits for increased energy efficiency. It is proposed to combine control measures from Table 1b with lighting retrofit measures in Table 1a within Schedule 140, to create a single offering structure for interior and exterior lighting retrofits that promotes controllability. While replacement lamps currently offered through Table 1a are a good option, replacement lamps typically provide lower savings, life, and costs than full fixture replacements. This new combined approach is intended to augment prudent spending on lighting incentives by paying for energy savings that adopt basic or advanced controls, while still allowing customers to select LED products that best fit their lighting needs and budgets.

As LEDs have entered the mainstream lighting market, LED lighting options have become more varied in application, efficiency, quality, and price. During this market transition, the following changes have occurred:

- Improvements in LED efficiency/efficacy;
- Rapid price shifts;
- Development of various LED types and applications;
- Growing disparity between good/better/best products;
- Increasing controllability, enabling significant advances in lighting control systems; and
- Widespread market acceptance of LED technology.

Customers now have access to a broad selection of lighting upgrade options ranging from basic lamp replacements to full system redesign with new fixtures and advanced controls. The proposed Table 1a below is designed to address the market's transition.

# **Incentives**

The incentives listed in Table 1a below include the maximum amounts within Schedule 140, as well as the initially offered incentive amounts to be given to customers once these modifications become effective. The offered incentives will be maintained on the Company's website, and updated through the 45-day notice process as needed, consistent with current Program offerings.

Measure	Category	Eligibili	Offered Incentive	Maximum Incentive "up to"	
			Advanced Controls	\$0.15/kWh	
	<b>.</b>	Full Fixture Replacement	Basic Controls	\$0.12/kWh	
Lighting System – Retrofits	Interior Lighting		Without Controls	\$0.10/kWh	\$0.20/kWh
	Lighting	Fixture Retrofit Kits	With Controls	\$0.10/kWh	
			Without Controls	\$0.08/kWh	
	Exterior	Full Fixture Replacement	Advanced Dimming Controls	\$0.08/kWh	
			Without Controls	\$0.05/kWh	
		Fixture Retrofit Kits	Advanced Dimming Controls	\$0.07/kWh	\$0.15/kWh
	Lighting		Without Controls	\$0.04/kWh	
			Advanced Dimming Controls	\$0.07/kWh	
		Street Lighting	Without Controls	\$0.04/kWh	

 Table 1a – Lighting System Retrofits

**Full Fixture Replacement.** Full fixture replacements are a lighting system upgrade where the entire existing fixture, including lamps, reflectors, ballasts/drivers, housing, etc. are removed and new fixtures are installed. These replacements have the highest savings and lighting performance potential among the offerings in Table 1a.

**Fixture Retrofit Kit.** Fixture retrofit kits are a lighting system upgrade that keeps existing fixture housing and modifies fixture components to incorporate new lighting. Kits have good savings and light performance potential.

**Pole Lighting.** The exterior pole lighting measure previously grouped with street lighting from the current Table 1a in Schedule 140 will be treated as non-street lighting going forward and grouped with the exterior lighting incentives from the proposed Table 1a above.

**Street Lighting.** The street lighting measure from the current Table 1a in Schedule 140 will be retained as its own line item in the proposed Table 1a above, but with a new option for adding advanced dimming controls. The street lighting sector's transition to LEDs has outpaced the rest of the market. By maintaining this measure separately, street lighting incentives can be adjusted specifically for this sector based on its transition pace.

Advanced Controls. Advanced lighting controls provide the highest savings potential by networking with other fixtures and building operating systems. They employ at least two control strategies, and enable each fixture to be programmed to achieve specific settings and control strategies.

**Lighting Control Strategies.** Control strategies work by using different methods to either turn lights off or dim lights to save energy. Popular strategies include:

- <u>Occupancy sensing</u>: The occupancy control strategy uses sensors to determine if a room or space is occupied. If the sensors do not detect an occupant for a set amount of time, the control will either turn off or dim the lights to the minimum light needed for safety. Occupancy controls are particularly effective at saving energy in spaces that are not used consistently, such as break rooms, closet/storage spaces, conference rooms, bathrooms and large warehouse spaces.
- <u>Daylight harvesting</u>: The daylight harvesting control strategy uses sensors to determine the amount of daylight in an area. The control then adjusts the amount of light provided by the fixture to provide only the amount of light needed accounting for the available daylight. If there is enough daylight, the fixture is dimmed significantly or turned off, while if no daylight is present, the fixture is not dimmed at all. Daylighting controls are effective in areas that receive an abundance of natural light, such as areas near windows or skylights.
- <u>Tuning</u>: The tuning control strategy uses fixture settings to dim lighting areas or individual fixtures to match the needs of the space or individual occupant's needs. Tuning controls can be effective in almost any scenario and are especially effective when each fixture can be tuned to account for the different lighting preferences of people in an area.

**Basic Controls.** Basic lighting controls increase lighting energy savings by using one or two control strategies, but are not networked and only communicate with a single group of lights. Some of the most common basic lighting controls are occupancy sensors that dim or turn off lights when an area becomes unoccupied, or daylighting controls that dim or turn off lights when there is sufficient daylight in an area.

Eligible control strategies for basic and advanced controls will change over time as market prices for materials change and new technologies become available. All lighting and control equipment is certified by organizations such as ENERGY STAR and/or Design Lights Consortium ("DLC"), and by the wattsmart Business program. Qualified equipment lists and a Lighting Catalog detailing eligibility requirements of full fixture replacements and fixture retrofit kits will be maintained on the Company website.

# Customer Participation Process

Incentives for full fixture replacements and retrofit kit lighting system upgrades require preapproval. Customers can participate by contacting an approved wattsmart Business vendor to first get an assessment of their current lighting system. Approved vendors will facilitate the pre-

approval process by performing an assessment and recommending improvements that customers may choose to install. This is the program process that has been in place for lighting retrofits for several years.

# Program Website

A draft of webpage content is attached hereto as Exhibit B. Webpage content is intended to capture relevant information and requirements associated with the new lighting incentive structure. The website will also include additional information and links that may be relevant. Information contained on the website will be updated concurrently with any program or qualifying equipment changes and whenever else may be appropriate. Information to be provided on the website may include, but not be limited to, the following:

- Lighting System Retrofit Offering Description;
- Qualifying Equipment;
- Lighting Catalog;
- Full Fixture Replacements;
- Fixture Retrofit Kits;
- Advanced Controls;
- Basic Controls;
- Control Strategies;
- Replacement Lamps;
- Participation Process;
- Benefits of Participation;
- Eligibility Requirements;
- Approved wattsmart Business vendors; and
- Offered Incentives.

# **MID-MARKET INCENTIVES**

The TLED and Fluorescent relamp offerings in the current Table 1a in Schedule 140 going forward will only be available through the mid-market channel. TLEDs have become more popular and are more readily available, making them ideal for a mid-market offering. Originally, the mid-market channel for the Program only offered Type A TLEDs as they were the most common TLED on the market, and were manufactured to operate on existing fluorescent lamp ballasts. However, due to their growing popularity and availability, the mid-market channel will expand TLED eligibility going forward to allow all DLC qualified TLED configurations.

# STAKEHOLDER FEEDBACK

On June 13, 2017, the Company met with the DSM Steering Committee to discuss the market changes with LED lighting that were happening, and the intent to restructure lighting incentives within wattsmart Business. On June 30, 2017, a draft filing package for these changes was shared with the DSM Steering Committee, and the Company responded to some minor inquiries from Steering Committee members.

# **COST EFFECTIVENESS**

The proposed changes in this filing are not expected to materially impact cost-effectiveness of the Program.

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,

ill S Snow

Michael S. Snow Manager, DSM Regulatory Affairs

Enclosures

cc: Division of Public Utilities Office of Consumer Services

# Exhibit A



# ELECTRIC SERVICE SCHEDULES STATE OF UTAH

Schedule 1	No.	Sheet No.
80	Summary of Effective Rate Adjustments	80
91	Surcharge To Fund Low Income Residential Lifeline Program	91
92	Low Income Residential Lifeline Program Surcharge Refund Credit	92
94	Energy Balancing Account (EBA) Pilot Program	94.1-94.10
98	REC Revenue Adjustment	98
105	Irrigation Load Control Program	105.1 - 105.2
107	Solar Incentive Program	107.1 - 107.6
111	Residential Energy Efficiency	111.1 - 111.6
114	Air Conditioner Direct Load Control Program (Cool Keeper Program)	114.1 - 114.5
118	Low Income Weatherization	118.1 - 118.6
135	Net Metering Service	135.1 - 135.5
140	Non-Residential Energy Efficiency	140.1 - 140.25
193	Demand Side Management (DSM) Cost Adjustment	193.1 - 193.2
196	Sustainable Transportation and Energy Plan (STEP) Cost Adjustment	196.1 - 196.2
	Pilot Program	
300	Regulation Charges	300.1 - 300.4

Schedule Numbers not listed are not currently used.

\*These Schedules are not available to new customers or premises.



# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Measure	Category	Eligibility Requirements		Maximum Incentive "up to"
			Advanced Controls	
		Full Fixture Replacement	Basic Controls	
	Interior Lighting	Replacement	Without Controls	\$0.20/kWh
		Eintune Detrofit Kite	With Controls	
Lighting System		Fixture Retrolit Kits	Without Controls	
	Exterior Lighting	Full Fixture Replacement	Advanced Dimming Controls	\$0.15/kWh
Retrofits			Without Controls	
		Fixture Retrofit Kits	Advanced Dimming Controls	
			Without Controls	
		Street Lighting	Advanced Dimming Controls	
			Without Controls	

### Table 1a - Lighting System Retrofits

### Notes for Table 1a:

- 1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.
- 2. Incentives are capped at 70 percent of Energy Efficiency Project Costs and will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy Efficiency Project costs are subject to Company approval.
- 3. Eligible retrofit lighting equipment is defined in qualified equipment lists posted on the Utah energy efficiency program section of the Company's website.

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# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 1b – Lighting Controls and Non-General Illuminance Incentives (Retrofit Only)

Measure	Category	Eligibility Requirements	Incentive "up to"
	Occupancy Control	PIR, Dual Tech, or Integral Sensor	\$0.30/Watt controlled
Interior Lighting Control	Daylighting Control         Must control interior fixtures with Continuous, Stepped, or Bi-level ballast or automated control that dims 50% or more of the fixture in response to daylight.		\$0.34/Watt controlled
	Advanced Daylighting Control	Must incorporate both an occupancy sensor and daylighting sensor operating as part of the same control sequence in the same interior space.	\$0.38/Watt controlled
Exterior Lighting Control	Exterior Dimming Control	Must control LED technology in an exterior lighting application. Control must be integral to LED fixture or fixture- mounted and reduce fixture power by 75% or more for a minimum of 6 hrs per night or when the space has been unoccupied for 15 minutes or less.	\$0.34/Watt controlled

(Continued)



# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 1b – Non-General Illuminance Incentives (Retrofit Only)

Measure	Category	Eligibility Requirements	Incentive "up to"
	Exit Sign	LED or photoluminescent replacing incandescent or fluorescent	\$15/Sign
Non-General Illuminance	LED Message Center Sign	LED replacing existing incandescent signage	\$5/Lamp
	LED Channel Letter Sign	LED replacing existing neon or fluorescent signage	\$5/Linear Foot
	LED Marquee/Cabinet Sign	LED replacing existing fluorescent signage	\$5/Linear Foot
	LED Case Lighting – Reach-in Case	LED replacing fluorescent lamp in refrigerated cases. LED must be listed on qualified equipment list.	\$10/linear foot
	LED Case Lighting – Open Case		\$10/linear foot
	Refrigerated Case Occupancy Sensor	Installed in existing refrigerated case with LED lighting	\$1/linear foot
Custom	Custom	Not listed above	\$0.15/kWh annual energy savings

### Notes for Table 1b:

1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.

2. Incentives are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy Efficiency Project Costs are subject to Company approval.

3. Incentives for Advanced Daylighting Controls may not be combined with Occupancy Control or Daylighting Control incentives.

4. Watt controlled refers to the total wattage of lighting fixtures down circuit from the control.

5. Qualified equipment lists for measures referenced in the above table are posted on the Utah energy efficiency program section of the Company's website.

PIR = Passive Infrared Dual Tech = Sensors combining ultrasonic and passive infrared LED - Light-emitting Diode

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# Second Revision of Sheet No. 140.6 Canceling First Revision of Sheet No. 140.6

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 1c – New Construction/Major Renovation Lighting Incentives

Measure	Category	Eligibility Requirements	Incentive "up to"
Interior Lighting*	Lighting and Lighting Control	<ol> <li>The total connected interior lighting power for New Construction/Major Renovation projects must be at least 10% lower than the interior lighting power allowance calculated under the applicable version of the state energy code. For New Construction/Major Renovation projects not included in the state energy code, the total connected lighting power must be at least 10% lower than common practice as determined by the Company.</li> <li>Energy savings is subject to approval by the Company</li> </ol>	\$0.08/kWh annual energy savings
	Induction Fixture	All Wattages, New Fixtures Only	\$75/Fixture
	LED Outdoor Pole/Roadway, decorative	<75W; LED must be listed on qualified equipment list	\$75/Fixture
	LED Outdoor Pole/Roadway	200W; LED must be listed on qualified equipment list	\$100/fixture
		>200W; LED must be listed on qualified equipment list	\$400/fixture
	LED Canopy/Soffit	LED must be listed on qualified equipment list	\$125/fixture
	LED Wall Packs	< 50 Watts; LED must be listed on qualified equipment list	\$50/fixture
		≥50 Watts; LED must be listed on qualified equipment list	\$75/fixture
Exterior Lighting	LED Flood Lights	<100 Watts; LED must be listed on qualified equipment list	\$75/fixture
	LED Flood Lights	≥100 Watts; LED must be listed on qualified equipment list	\$150/fixture
	CFL Wall Pack	All Wattages, Hardwire Fixtures Only	\$30/Fixture
	Custom	Not listed above	\$0.08/kWh annual energy savings
	Exterior Dimming Control	Must control LED technology in an exterior lighting application. Control must be integral to LED fixture or fixture-mounted and reduce fixture power by 75% or more for a minimum of 6 hrs per night or when the space has been unoccupied for 15 minutes or less. e	\$0.34/Watt controlled**

\*Project Cost Caps of 70% and 1-Year Simple Payback Caps apply to New Construction and Major Renovation projects that are not subject to state energy code. 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.

\*\* Exterior lighting controls required by the applicable version of the state energy code are not eligible for incentives.

CFL – Compact Fluorescent Lamp LED - Light-Emitting Diode

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# Third Revision of Sheet No. 140.7 Canceling Second Revision of Sheet No. 140.7

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 2 - Motor Incentives

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Incentive "up to"
Electronically	$\leq$ 1 horsepower	Refrigeration application		\$0.50/watt
(ECM)		HVAC application		\$50/horsepower
Variable- Frequency Drives (HVAC fans and pumps)	≤ 100 horsepower	HVAC fans and pumps	See Note 2	\$65/horsepower
Green Motor Rewinds	$\geq$ 15 and $\leq$ 5,000 horsepower		Must meet GMPG Standards	\$1/horsepower Refer to Note 3

### Notes for Table 2:

- 1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 2. Throttling or bypass devices, such as inlet vanes, bypass dampers, three-way valves, or throttling valves must be removed or permanently disabled to qualify for HVAC fan or pump VFD incentives. VFDs required by or used to comply with the applicable version of the energy code are not eligible for incentives. Savings will only be realized for installations where a variable load is present.
- 3. For Green Motor Rewinds, the participating electric motor service center is paid \$2/horsepower for eligible Green Motor Rewinds. A minimum of \$1/horsepower is paid by the service center to the Customer as a credit on the motor rewind invoice. The balance is retained by the service center. Green Motor Rewind motors that are installed or placed in inventory may qualify for an incentive.

ECM = Electronically Commutated Motor GMPG = Green Motors Practices Group HVAC = Heating, Ventilation and Air Conditioning NEMA = National Electrical Manufacturer's Association VFD = Variable Frequency Drive

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# Second Revision of Sheet No. 140.8 Canceling First Revision of Sheet No. 140.8

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Category	Minimum Efficiency Requirements	Customer Incentive "up to"
	Air-Cooled – Split Systems Only	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton
Unitary Commercial Air Conditioners	Water Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton
	Evaporatively Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton
	$\leq$ 8,000 Btu/hr	12.2 EER	
Packaged Terminal	> 8,000 Btu/hr and < 10,500 Btu/hr	11.9 EER	\$25/top
(PTAC)	$\geq$ 10,500 Btu/hr and $\leq$ 13,500 Btu/hr	10.7 EER	\$23/1011
	> 13,500 Btu/hr	9.9 EER	
De also and Tamain al	≤ 8,000 Btu/hr	12.2 EER and 3.4 COP	
Heat Pumps (PTHP)	> 8,000 Btu/hr and < 10,500 Btu/hr	11.5 EER and 3.3 COP	<b>\$</b> 50 //
(Heating & Cooling	≥ 10,500 Btu/hr and ≤ 13,500 Btu/hr 10.7 EER and 3.1 COP		\$30/1011
Mode)	> 13,500 Btu/hr	9.8 EER and 3.0 COP	
Unitary Commercial	Air-Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton
	Water Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton
(See Note 3)	Ground Source	As defined in ENERGY STAR Program Requirements for Geothermal Heat Pumps	\$50/ton
	Groundwater Source	As defined in ENERGY STAR Program Requirements for Geothermal Heat Pumps	\$50/ton
Heat Pump Loop	Ground Source, Closed Loop		\$25/ton
(See Note 7)	Groundwater Source, Open Loop		\$25/ton
VDE Hoot Dumps	Air Cooled	As defined in CEE Commercial	\$75/ton
VRF Heat Pumps	Water Cooled	Pumps Specification	\$75/ton

### Table 3a – HVAC Incentives

(Continued)



### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 3a – HVAC Incentives (Continued)

#### Notes for table 3a - HVAC equipment incentive table

1. Equipment that meets or exceeds the efficiency requirements listed for the size category in the above table may qualify for the listed incentive. Equipment must meet all listed efficiency requirements to qualify for the listed incentives.

2. PTHPs can replace electric resistive heating, which must be removed.

3. Incentives for heat pumps are available per ton of cooling capacity ONLY. No incentives are paid per ton of heating capacity. Heat Pumps must meet both the cooling mode and heating mode efficiency requirements to qualify for per ton cooling efficiency incentives.

4. Equipment size categories and capacities are specified in terms of net cooling capacity at AHRI standard conditions as determined by AHRI Standard 210/240 for units <65,000 Btu/hr, AHRI Standard 340/360 for units ≥65,000 Btu/hr, AHRI Standard 310/380 for PTAC and PTHP units, and AHRI Standard 1230 for VRF systems.

5. Ground and Water Source Heat Pumps must meet or exceed listed efficiency requirements when rated in accordance with ISO-13256-1 to qualify for the listed incentive.

6. Efficiency requirements align with the Unitary Air-Conditioning and Heat Pump Specification maintained by the Consortium for Energy Efficiency for equipment with heating sections other than electric resistance. CEE minimum efficiency requirements are listed on the Company website.

7. Evaporative pre-cooler incentives are subject to the project cost cap and the one-year payback cap.

<b>AHRI</b> = Air-Conditioning, Heating, and Refrigeration Institute	<b>IEER</b> = Integrated Energy Efficiency Ratio
<b>CEE</b> = Consortium for Energy Efficiency	<b>IPLV</b> = Integrated Part Load Value
<b>COP</b> = Coefficient of Performance	<b>PTAC</b> = Packaged Terminal Air Conditioner
<b>EER</b> = Energy Efficiency Ratio	<b>PTHP</b> = Packaged Terminal Heat Pump
<b>HSPF</b> = Heating Seasonal Performance Factor	<b>SEER</b> = Seasonal Energy Efficiency Ratio
<b>HVAC</b> = Heating, Ventilation and Air-Conditioning	<b>VFR</b> = Variable Refrigerant Flow

(Continued)



# Third Revision of Sheet No. 140.10 Canceling Second Revision of Sheet No. 140.10

#### ELECTRIC SERVICE SCHEDULE NO. 140 - Continued Table 3b –Other HVAC Incentives

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Incentive "up to"
Evaporative Cooling	All sizes	Direct or Indirect	Requirement	\$0.06/CFM
Indirect-Direct Evaporative Cooling (IDEC)	All sizes		Applicable system components must exceed minimum efficiencies required by energy code	\$0.15/kWh annual energy savings See Note 2
Chillers	All except chillers intended for backup service only	Serving primarily occupant comfort cooling loads (no more than 20% for process cooling loads)	Must exceed minimum efficiencies required by energy code	\$0.15/kWh annual energy savings See Note 3
365/366 day Programmable or Occupancy-based Thermostat	All sizes in portable classrooms with mechanical cooling	Must be installed in portable classroom unoccupied during summer months	365/366 day thermostatic or occupancy based setback capability	\$150/thermostat
Occupancy Based PTHP/PTAC control	All sizes with no prior occupancy based control		See Note 5	\$50/controller
Evaporative Pre-cooler (Retrofit Only)		For single air- cooled packaged rooftop or matched split system condensers only	Minimum performance efficiency of 75%. Must have enthalpy controls to control pre-cooler operation. Water supply must have chemical or mechanical water treatment.	\$75/ton of attached cooling capacity (See Note 5)
	$\geq$ 5 tons and $\leq$ 10 tons	Must be installed on existing unitary packaged rooftop units (no split- systems), $\geq 5$ tons nominal cooling capacity with constant speed supply fans.	Controls must include: - Either a supply fan VFD or multi-speed supply fan motor with controller that meets ventilation and space conditioning needs Dirith birts and birts	\$2,000
Advanced Rooftop Unit Control	$> 10$ tons and $\le 15$ tons			\$2,800
	$> 15$ tons and $\le 20$ tons			\$4,000
	> 20 tons		economizer control	\$4,500

#### Notes for Table 3b

- 1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 2. Incentives paid at \$0.15/kWh annual energy savings. IDEC energy savings subject to approval by the Company.
- 3. Incentives paid at \$0.15/kWh annual energy savings. Chiller energy savings subject to approval by the Company.
- 4. Controller units must include an occupancy based control and include the capability to set back the zone temperature during extended unoccupied periods and set up the temperature once the zone is occupied.
- 5. Incentives for Evaporative Pre-coolers are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year.
- 6. Energy Efficiency Project Costs are subject to Rocky Mountain Power approval.

**CFM** = Cubic Feet per Minute

**HVAC** = Heating, Ventilating and Air Conditioning

- **IDEC** = Indirect Direct Evaporative Cooling
- **PTAC** = Packaged Terminal Air Conditioner

**PTHP** = Packaged Terminal Heat Pump

(Continued)



### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Category	Minimum Efficiency Requirement	Incentive "up to"
Cool Roof		ENERGY STAR Qualified	\$0.10/square foot
Roof/Attic Insulation		Minimum increment of R-10 insulation added	\$0.05/square foot
Wall Insulation		Minimum increment of R-10 insulation added	\$0.07/square foot
Windows (See Note 3, 4)	Site-Built	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Glazing Only Rating)	\$0.35/square foot
	Assembly	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Entire Window Assembly Rating)	\$0.35/square foot
Window Film	Existing Windows	See Note 5	\$0.15/kWh annual energy savings (See Note 5)

### Table 4a – Building Envelope Incentives (Retrofit)

Notes for Table 4a:

- 1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 2. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.
- 3. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-Built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive the incentives in the above table.

4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.

- 5. Incentives for window film are calculated based on film specifications and window orientation at \$0.15/kWh annual energy savings. Energy savings are subject to approval by the Company.
- NFRC = National Fenestration Rating Council

SHGC = Solar Heat Gain Coefficient

Equipment Type	Category	Minimum Efficiency Requirement	Incentive "up to"
Cool Roof		ENERGY STAR Qualified	\$0.10/square foot
Roof/Attic Insulation		Minimum increment of R-5 insulation above code (See Note 5)	\$0.05/square foot
Wall Insulation		Minimum increment of R-3.7 continuous insulation above code (See Note 5)	\$0.07/square foot
Windows	Site-Built	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Glazing Only Rating)	\$0.35/square foot
(See Note 3, 4)	Assembly	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Entire Window Assembly Rating)	\$0.35/square foot

(continued)



# Second Revision of Sheet No. 140.12 Canceling First Revision of Sheet No. 140.12

### P.S.C.U. No. 50

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 4b – Building Envelope Incentives (New Construction/Major Renovation) (Continued)

Notes for Table 4b:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

2. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.

3. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-Built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive the incentives in the above table.

4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.

5. Compliance with the minimum efficiency requirements of Roof/Attic and Wall Insulation measures may be demonstrated with equivalent U-factors and is subject to approval by the Company.

NFRC = National Fenestration Rating Council SHGC = Solar Heat Gain Coefficient

(continued)



# First Revision of Sheet No. 140.13 Canceling Original Sheet No. 140.13

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Incentive/Unit "up to"
Residential Dishwasher	Used in a Business	See Home Energy Savings Program	See Note 2
	Undercounter		\$100
Commercial Dishwasher (High Temperature models w/	Stationary Rack, Single Tank, Door Type	ENERGY STAR Qualified	\$400
electric boosters only)	Single Tank Conveyor		\$1,000
	Multiple Tank Conveyor		\$500
	$V \ge 28$		\$400
Cabinet	$13 \le V \le 28$	ENERGY STAR Qualified	\$300
	V < 13		\$200
Electric Steern Coolern	3-, 4-, 5- and 6-pan or larger sizes - Tier 1	ENERGY STAR Qualified	\$130
Electric Steam Cooker	3-, 4-, 5- and 6-pan or larger sizes - Tier 2	ENERGY STAR Qualified w/ Heavy Load Efficiency ≥ 68%	\$300
Electric Convection Oven		ENERGY STAR Qualified	\$350
Electric Griddle		ENERGY STAR Tier 2 Qualified	\$150
	6-14 pans	ENERGY STAR Qualified	\$1,000
Electric Comonation Oven	15-20 pans	ENERGY STAR Qualified	\$275
	Tier 1	ENERGY STAR Qualified	\$200
Electric Commercial Fryer	Tier 2	ENERGY STAR Qualified w/Cooking Efficiency ≥ 85%, Idle Energy Rate ≤ 860 Watts	\$300
	Tier 1: Harvest Rate < 500 lbs/day	ENERCY STAR Outlined	\$125
Ice Machines (Air-Cooled Only)	Tier 1: Harvest Rate ≥ 500 lbs/day	ENERGY STAR Quanned	\$150
	Tier 2: Harvest Rate < 500 lbs/day	CEE Tion 2 Ourlife d	\$250
	Tier 2: Harvest Rate ≥ 500 lbs/day	CEE Her 2 Qualified	\$400
Residential Refrigerator	Used in a Business	See Home Energy Savings Program	See Note 2

#### **Table 5 – Food Service Equipment Incentives**

(continued)



# Second Revision of Sheet No. 140.14 Canceling First Revision of Sheet No. 140.14

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 5 – Food Service Equipment Incentives (Continued)

	0 < V < 15		\$25
Commercial Transparent	$15 \le V < 30$		\$50
Door Refrigerator	$30 \le V \le 50$	ENERGY STAR Qualified	\$75
	$50 \le V$		\$125
	Chest Configuration		\$50
	0 < V < 15		\$25
Commercial Transparent	$15 \le V < 30$		\$50
Door Freezer	$30 \le V < 50$	ENERGY STAR Qualified	\$75
	$50 \le V$		\$100
	Chest Configuration		\$100
Demand Controlled Kitchen Ventilation Exhaust Hood (Retrofit Only)	Must be installed on commercial kitchen exhaust system.	Variable speed motors must be controlled to vary fan speed depending upon kitchen demand, as indicated by connected sensors.	\$0.15/kWh annual energy savings (See note 3)
Anti-Sweat Heater Controls (Retrofit Only)	Low-Temp (Freezing) Cases Med-Temp (Refrigerated) Cases	Controls that reduce energy consumption of anti-sweat heaters based on sensing humidity.	\$20/linear foot (case length) \$16/linear foot (case length)

### Notes for Table 5:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

2. Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.

3. Incentives are paid at \$0.15/kWh annual energy savings. Demand controlled kitchen ventilation exhaust hood energy savings subject to approval by Company.

CEE = Consortium for Energy Efficiency

ASTM = American Society for Testing and Materials

MDEC = Maximum Daily Energy Consumption

V = Association of Home Appliance Manufacturers (AHAM) Volume (cubic feet)

(Continued)



# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### **Table 6 – Office Equipment Incentives**

Equipment Type	Equipment Type Minimum Efficiency Requirements			
Smart Plug Strip	<ol> <li>Incentive applies to any plug strip that eliminates idle or stand-by power consumption of connected plug-load appliance through the use of an occupancy sensor, electric load sensor, or timer.</li> <li>Applies only to electric plug-load applications (e.g. computer monitors, desk lamps, etc.)</li> </ol>	\$15/qualifying unit		

### Notes for Table 6:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

(continued)



### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Incentive "up to"
High-Efficiency Clothes Washer	Residential (used in a business)	See Home Energy Savings Program	See Note 3
	Commercial (must have electric water heating)	ENERGY STAR Qualified	\$100
Heat Pump Water Heater	Residential (used in a business)	See Home Energy Savings Prog	gram

#### **Table 7 – Appliance Incentives**

### Notes for Table 7:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

2. Equipment must meet the efficiency rating standard that is in effect on the date of purchase.

3. Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.

(continued)



# Second Revision of Sheet No. 140.17 Canceling First Revision of Sheet No. 140.17

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 8a - Irrigation Incentives - Measures for Wheel Line, Hand Line, or Other Portable Systems (Retrofit Only)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
New rotating sprinkler replacing worn or leaking impact or rotating sprinkler	Leaking or malfunctioning impact or rotating sprinkler	Rotating sprinkler	<ol> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two sprinklers per irrigated acre.</li> </ol>	\$2.50 each
New or rebuilt impact sprinkler replacing worn or leaking impact sprinkler	Leaking or malfunctioning impact sprinkler	New or rebuilt impact sprinkler	<ol> <li>New nozzle shall be included in new or rebuilt sprinkler.</li> <li>Rebuilt sprinkler shall meet or exceed manufacturer's specifications.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two sprinklers per irrigated acre.</li> </ol>	\$2.25 each
New nozzle replacing worn nozzle of same design flow or less on existing sprinkler	Worn nozzle	New nozzle of same design flow or less	<ol> <li>Flow rate shall not be increased.</li> <li>All nozzles on the wheel line or hand line shall be replaced.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two nozzles per irrigated acre.</li> </ol>	\$0.50 each
New flow-control nozzle for impact sprinkler replacing existing nozzle or worn flow-control nozzle of same design flow or less	Worn nozzle	New flow control nozzle	<ol> <li>Nozzle to be replaced may be fixed orifice or flow control type.</li> <li>New flow control nozzle shall have a flow rating equal to or less than the flow rating of the existing nozzles at 40 psi.</li> <li>All nozzles on the wheel line or hand line shall be replaced.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two nozzles per irrigated acre.</li> </ol>	\$2.75 each
New gasket replacing leaking gasket, including mainline valve or section gasket, seal, or riser cap (dome disc)	Leaking gasket	New gasket, including mainline valve or section gasket, seal, or riser cap (dome disc)	<ol> <li>New gasket must replace leaking gasket.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two gaskets per irrigated acre.</li> </ol>	\$2 each
New drain replacing leaking drain	Leaking drain	New drain, including drains on pivots and linears	<ol> <li>New drain must replace leaking drain.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two drains per irrigated acre.</li> </ol>	\$3 each
Cut and press or weld repair of leaking wheel line, hand line, or portable main line	Leak in wheel line, hand line, or portable main line	Cut and pipe press or weld repair	1. For rebuilds, invoice must show number of rebuild kits purchased and installed.	\$10/repair
New or rebuilt wheel line leveler replacing leaking or malfunctioning leveler	Leaking or malfunctioning leveler	New or rebuilt leveler	<ol> <li>Applies to leaking or malfunctioning levelers only.</li> <li>For rebuilds, invoice must show number of rebuild kits purchased and installed.</li> </ol>	\$3 each

(continued)



# Second Revision of Sheet No. 140.18 Canceling First Revision of Sheet No. 140.18

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

# Table 8a - Irrigation Incentives – Measures for Wheel Line, hand Line, or Other Portable Systems (Retrofit Only) (Continued)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
New or rebuilt wheel line feed hose replacing leaking wheel line feed hose	Leaking wheel line feed hose	New or rebuilt wheel line feed hose	<ol> <li>Applies to leaking wheel line feed hose only.</li> <li>For rebuilds, invoice must show number of rebuild kits purchased and installed.</li> </ol>	\$12 each
New Thunderbird wheel line hub replacing leaking wheel line hub	Leaking Thunderbird wheel line hub	New Thunderbird wheel line hub	New hub must replace leaking hub	\$10 each

### Table 8b - Irrigation Incentives – Measures for Pivots and Linear Systems (Retrofit Only)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
Pressure regulator	Worn pressure regulator	New pressure regulator of same design pressure or less	1. New regulator must be of same design pressure or less	\$3 each
Low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray) replacing impact sprinkler	Impact sprinkler	New low pressure sprinkler (on-board nozzle is considered part of sprinkler, not a separate item with additional incentive)	1. New sprinkler is of same design flow or less	\$3 each
Low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray) replacing worn low pressure sprinkler	Worn low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray)	New low pressure sprinkler (on-board nozzle is considered part of sprinkler, not a separate item with additional incentive)	1. New sprinkler is of same design flow or less	\$1.50 each
Gooseneck as part of conversion to low pressure system		New gooseneck as part of conversion to low pressure system	Gooseneck shall be used to convert existing center pivot with sprinkler equipment mounted on top of the pivot to low pressure sprinklers with regulators on new drop tubes.	\$0.50 per outlet

(continued)



# Second Revision of Sheet No. 140.19 Canceling First Revision of Sheet No. 140.19

# P.S.C.U. No. 50

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

# Table 8b - Irrigation Incentives – Measures for Pivots and Linear Systems (Retrofit Only) (continued)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
Drop tube (3 ft minimum length)	Leaking drop tube	New drop tube (3 ft minimum length) OR add drop tube as part of conversion to low pressure system	Drop tube or hose extension shall extend below the pivot lower brace or shall be a minimum of 3 ft in length, whichever is greater.	\$2 per drop tube
New center pivot base boot gasket replacing leaking base boot gasket	Leaking center pivot base boot gasket	New center pivot base boot gasket	<ol> <li>Gasket shall replace leaking gasket at the pivot point of the center pivot.</li> <li>No more than one gasket shall be claimed per pivot.</li> </ol>	\$125 each
New tower gasket replacing leaking tower gasket	Leaking tower gasket	New tower gasket	New gasket shall replace leaking tower gasket.	\$4 each

### Table 8c - Irrigation Incentives – Measures for Any Type of System (Retrofit or New Construction, Including Non-Agricultural Irrigation Applications)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
Irrigation pump VFD		Add variable frequency drive to existing or new irrigation pump	<ol> <li>Pumps serving any type of irrigation water transport or distribution system are eligible – wheel lines, hand lines, pivots, linears, fixed-in-place (solid set).</li> <li>Both retrofit and new construction projects are eligible.</li> </ol>	\$0.15/kWh annual savings

#### Notes for Irrigation Incentive Tables:

1. Equipment that meets or exceeds the requirements listed above may qualify for the listed incentive.

2. Except for the pump VFD measure, incentives listed here are available only for retrofit projects where new equipment replaces existing equipment (i.e. new construction is not eligible).

3. Except for the pump VFD measure, equipment installed in fixed-in-place (solid set) systems is not eligible. Incentive is limited to two units per irrigated acre.

4. Incentives are capped at 70 percent of Energy Efficiency Costs, and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

VFD = Variable Frequency Drive

(continued)



# Second Revision of Sheet No. 140.20 Canceling First Revision of Sheet No. 140.20

### ELECTRIC SERVICE SCHEDULE NO. 140 - Continued Table 9 – Farm and Dairy Equipment Incentives

Equipment Type	Equipment Category	Minimum Efficiency Requirements	Incentive "up to"
Automatic Milker Takeoff (Retrofit Only)		Equipment must be able to sense milk flow and remove milker when flow reaches a pre-set level. The vacuum pump serving the affected milking units must be equipped with a VFD. Incentive is available for adding automatic milker takeoffs to existing milking systems, not for takeoffs on a brand new system where there were none before. Replacement of existing automatic milker takeoffs is not eligible for this listed incentive, but may qualify for a Custom Energy Efficiency incentive.	\$235 each
Agricultural Engine Block Heater Timer		Timer must be a UL-listed device and rated for a minimum of 15 amps continuous duty.	\$10 each
High-efficiency Circulating fan (See Note 2)	12-23" Diameter	Fan must achieve an efficiency level of 11 cfm/w	\$25/fan
	24-35" Diameter	Fan must achieve an efficiency level of 18 cfm/w	\$35/fan
	36-47" Diameter	Fans must achieve an efficiency level of 18 cfm/w	\$50/fan
	≥48" Diameter	Fans must achieve an efficiency level of 25 cfm/w	\$75/fan
Heat Recovery		Heat recovery unit must use heat rejected from milk cooling refrigeration system to heat water. Customer must use electricity for water heating.	\$0.15/kWh annual energy savings
	12-23" Diameter	Fan must achieve an efficiency level of 11 cfm/w	\$45/fan
High-efficiency Ventilation	24-35" Diameter	Fan must achieve an efficiency level of 13 cfm/w	\$75/fan
(See Note 2)	36-47" Diameter	Fan must achieve an efficiency level of 17 cfm/w	\$125/fan
	≥48" Diameter	Fan must achieve an efficiency level of 19.5 cfm/w	\$150/fan
Milk Pre-cooler (Retrofit Only)		The equipment must cool milk with well- water before it reaches the bulk cooling tank. New construction not eligible.	\$0.15/kWh annual energy savings

(continued)



# Second Revision of Sheet No. 140.21 Canceling First Revision of Sheet No. 140.21

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 9 – Farm and Dairy Equipment Incentives (continued)

Equipment Type	Equipment Category	Minimum Efficiency Requirements	Incentive "up to"
Programmable Ventilation Controllers		The controller must control ventilation fans based on temperature or other applicable factors such as humidity, odor concentration, etc.	\$20/fan controlled
Variable Frequency Drives for Dairy Vacuum Pumps (Retrofit Only)		VFD must vary motor speed based on target vacuum level. Incentive available for retrofit only. New construction and replacement of existing VFD not eligible.	\$165/hp

#### Notes for Table 9:

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.

2. Fan performance must be rated by an independent testing body in accordance with the appropriate ANSI/AMCA standards.

3. Incentives are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

4. Except where noted, all equipment listed in the table is eligible for incentives in both new construction and retrofit projects.

AMCA = Air Movement and Control Association International, Inc. ANSI = American National Standards Institute cfm = cubic feet per minute VFD = Variable Frequency Drive w = watt

Equipment Category	Replace	With	Limitations	Unit	Incentive "up to"
Low Pressure Drop Filter	Standard coalescing filter	Low Pressure drop filter where: 1.Pressure loss at rated flow is $\leq 1$ psi when new and $\leq 3$ psi at element change. 2. Particulate filtration is 100% at $\geq 3.0$ microns and 99.98% at 0.1 to 3.0 microns, with $\leq 5$ ppm liquid carryover. 3. Filter is of deep-bed "mist eliminator" style, with element life $\geq 5$ years. 4. Rated capacity of filter is $\leq 500$ scfm.	<ol> <li>Compressor system must be ≥</li> <li>25 hp and ≤ 75 hp.</li> <li>Compressor discharge pressure setpoint must be reduced by 2 psi or more after installation of low pressure drop filter.</li> </ol>	scfm	\$2/scfm

**Table 10 – Compressed Air Incentives** 

(continued)



# Second Revision of Sheet No. 140.22 Canceling First Revision of Sheet No. 140.22

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Category	Replace	With	Limitations	Unit	Incentive "up to"
Receiver Capacity Addition	Limited or no receiver capacity (≤ 2 gallons per scfm of trim compressor capacity)	Total receiver capacity after addition must be > 2 gallons per scfm of trim compressor capacity	<ol> <li>Compressor system size ≤ 75 horsepower, not counting backup compressor(s).</li> <li>Trim compressor must use load/unload control, not inlet modulation or on/off control.</li> <li>Systems with VFD compressor or using variable displacement compressor as trim compressor are not eligible.</li> </ol>	gal	\$3/gal above 2 gallons per scfm
Cycling Refrigerated Dryer	Non-cycling refrigerated dryer	Cycling refrigerated dryer	<ol> <li>Rated dryer capacity must be ≤ 500 scfm.</li> <li>Dryer must operate exclusively in cycling mode and cannot be equipped with the ability to select between cycling and non-cycling mode.</li> <li>Refrigeration compressor must cycle off during periods of reduced demand.</li> </ol>	scfm	\$2/scfm
VFD Controlled Compressor	Fixed speed compressor	≤75 hp VFD controlled oil-injected screw compressor operating in system with total compressor capacity ≤75 hp, not counting backup compressor capacity	<ol> <li>Total compressor capacity in upgraded system is ≤75 hp, not counting backup compressor.</li> <li>Compressor must adjust speed as primary means of capacity control.</li> </ol>		\$0.15/kWh annual energy savings
Zero Loss Condensate Drain	Fixed timer drain	Zero loss condensate drain (See Note 4)	Drain is designed to function without release of compressed air into the atmosphere. Any size system is eligible there is no restriction on compressor size.	each	\$100 each
Outside Air Intake	Compressor drawing intake air from compressor room	Permanent ductwork between compressor air intake and outdoors.	1. Compressor system size $\leq 75$ HP. 2. Ductwork must meet manufacturer's specifications, which may include: (a) $\leq 0.25$ " W.C. pressure loss at rated flow, and (b) allow use of compressor room air during extremely cold outside air conditions	hp	\$6/hp
Compressed air end use reduction	Inappropriate or inefficient compressed air end uses	Functionally equivalent alternatives or isolation valves	Any size system is eligible – there is no restriction on compressor size.		\$0.15/kWh annual energy savings

#### Table 10 – Compressed Air Incentives (Continued)

(continued)



# Second Revision of Sheet No. 140.23 Canceling First Revision of Sheet No. 140.23

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Notes for Table 10:

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.

2. Except for the zero loss condensate drain and compressed air end use reduction measures, eligibility for incentives is limited to compressed air systems with total compressor capacity of 75 hp or less, not including backup compressor capacity that does not normally run.

3. Incentives are capped at 70 percent of Energy Efficiency Project Costs, and incentives will not be available to reduce Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

4. Zero loss condensate drains purchased as an integral part of another measure are eligible for the incentive shown above.

hp = horsepower ppm = parts per million psi = pounds per square inch scfm = cubic feet of air per minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity) VFD = variable frequency drive

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

Equipment Type	Replace	With	Incentive "up to"
Adaptive refrigeration control	Conventional controls (defrost timeclock, space thermostat, evaporator fan control, if any, thermal expansion valve in some instances)	Adaptive refrigeration controller and, in some instances, electric expansion valve	\$0.15/kWh annual energy savings
Fast acting door	Manually operated door, automatic door with long cycle time, strip curtain, or entryway with no door in refrigerated/conditioned space	Fast acting door	\$0.15/kWh annual energy savings
Oil and gas pump off controller		Add pump off controller to existing oil or gas well	\$1,500 per controller
Wastewater – low power mixer	Excess aeration capacity	Extended range circulator	\$0.15/kWh annual energy savings

#### Notes for Table 11:

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.

2. Incentives are capped at 70 percent of Energy Efficiency Project Costs, and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

(continued)



### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### **Small Business Direct Install (Retrofit only)**

Incentives and participation for small business direct installations 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 25% of the qualifying equipment costs.

Eligible Customer	Eligibility Requirements	Incentive	Customer Co-pay "up to"	
Kate Schedules		"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%	25%
6a	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	25%
6b	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	25%
23		\$5,000 per facility	10%	25%

### Table 12 – Incentives for Small Business Direct Installation (Retrofit only)

### Table 13a – Mid-Market Incentives -Lighting

Measure	Category	Eligibility Requirements	Incentive "up to"
	A-Lamp, Medium Base	LED must be listed on qualified equipment list	\$7/Lamp
	PAR Reflector Lamp	LED must be listed on qualified equipment list	\$15/Lamp
	BR Reflector Lamp	LED must be listed on qualified equipment list	\$13/Lamp
	MR16 Reflector Lamp	LED must be listed on qualified equipment list	\$10/Lamp
LED	Candelabra/Globe Lamp	LED must be listed on qualified equipment list	\$10/Lamp
	Recessed Downlight Kit	LED must be listed on qualified equipment list	\$15/Fixture
	Tubular LED "TLED"	LED must be listed on qualified equipment list	\$10/Lamp
	HID Replacement Lamp <50 W	LED must be listed on qualified equipment list	\$60/Lamp
	HID Replacement Lamp ≥50 and < 150 W	LED must be listed on qualified equipment list	\$65/Lamp
	Wall Pack Fixture	LED must be listed on qualified equipment list	\$30/Fixture

(Continued)



# Fifth Revision of Sheet No. 140.25 Canceling Fourth Revision of Sheet No. 140.25

# **ELECTRIC SERVICE SCHEDULE NO. 140 – Continued**

#### 13a – Mid-Market Incentives -Lighting (Continued)

Measure	Category	Eligibility Requirements	Incentive "up to"
LED	Wall Pack Fixture with Occupancy Sensor	LED must be listed on qualified equipment list	\$75/Fixture
Eluorogoont	Reduced Wattage T8 Lamp	≤28 W CEE Replacement Lamp	\$0.75/Lamp
Fluorescent	Reduced Wattage T5 HO Lamp	≤51 W T5HO Lamp	\$1/Lamp

### Table 13b – Mid-Market Incentives –HVAC

Measure	Category	Eligibility Requirements	Incentive "up to"
Unitary Commercial Air Conditioners	Air-Cooled – Packaged Systems Only	As defined in CEE Commercial Unitary Air- conditioning and Heat Pumps Specification	\$50/Ton

#### Notes for mid-market incentive tables:

- 1. Incentives are capped at 70 percent of qualifying equipment cost. Qualifying equipment costs are subject to Company approval.
- 2. Qualified equipment lists referenced in the above table are posted on the Utah energy efficiency program section of the Company's website.
- 3. Incentives included in the mid-market incentive tables are available through Company-approved retailers/distributors or a customer application process.

Measure	Category	Eligibility Requirements	Incentive "up to"
Maintenance Agreement	3 year maintenance agreement	Maintenance agreements must include a minimum of two system checks per year (heating and cooling seasons), one condenser coil cleaning per year, and a thermostat reprogramming and calibration.	\$75/ RTU
Thermostats	Programmable Thermostat Smart Thermostat	Replace existing non-programmable thermostat with programmable thermostat with a minimum of 7-day occupied/unoccupied settings. Replace non-programmable thermostat with programmable smart thermostat with a minimum of 7-day occupied/unoccupied settings. Smart thermostats must be Wi-Fi enabled, online dashboard and/or mobile device ann with occupancy sensor enabled	\$50/Thermostat
Economizer	Economizer Repair		\$150/RTU
Refrigerant	Proper Refrigerant Charge		\$35/Ton RTU Capacity

#### Table 14 – HVAC Check-up Incentives

#### Notes for Table 14:

1. Incentives are capped at 70 percent of qualifying cost. Qualifying costs are subject to Company approval.



Seventh Eighth Revision of Sheet No. B.1 Canceling Sixth Seventh Revision of Sheet No. B.1

# ELECTRIC SERVICE SCHEDULES STATE OF UTAH

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196	Sustainable Transportation and Energy Plan (STEP) Cost Adjustment	196.1 - 196.2
	Pilot Program	
300	Regulation Charges	300.1 - 300.4

Schedule Numbers not listed are not currently used.

\*These Schedules are not available to new customers or premises.



# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 1a - Lighting System Retrofits Retrofit Lighting Energy Efficiency Measures

Measure	C	ategory	Eligibility Requirements	Incentive <u>"up to"</u>
	Lighti	ng Retrofits	See Notes below Eligibility requirements are posted on the Company's website	<del>\$0.15/kWh</del>
Interior Lighting	TLE	<del>D Relamp</del>	Lamp wattage reduction of $\geq 10$ Watts, No ballast or driver retrofit.	<del>\$10/lamp</del>
	Fluores	cent Relamp	Lamp wattage reduction of $\geq$ 3 Watts, No ballast retrofit.	<del>\$1/lamp</del>
Exterior Lighting	Lighti	ng Retrofits	See Notes below – Eligibility requirements are posted on the Company's website	<del>\$0.15/kWh</del>
Exterior Lighting	<del>Sti</del>	<del>eet/Pole</del>	See Notes below Eligibility requirements are posted on the Company's website	<del>\$0.15/kWh</del>
<u>Measure</u>	<u>Category</u>		Eligibility Requirements	<u>Maximum</u> <u>Incentive</u> <u>"up to"</u>
			Advanced Controls	
	<b>.</b>	<u>Full Fixture</u> Replacement	Basic Controls	"up to"         \$0.15/kWh         \$10/lamp         \$1/lamp         \$0.15/kWh         \$0.15/kWh         Maximum         Incentive         "up to"         \$0.20/kWh         \$0.15/kWh
	Interior Lighting	replacement	Without Controls	<u>\$0.20/kWh</u>
	Eighting	Fixture Retrofit	With Controls	
Lighting System		Kits	Without Controls	
Retrofits		Full Fixture	Advanced Dimming Controls	
		Replacement	Without Controls	
	Exterior	Fixture Retrofit	Advanced Dimming Controls	\$0.15/kW/b
	<u>Lighting</u>	<u>Kits</u>	Without Controls	<u>\$0.15/KWII</u>
		Street Lighting	Advanced Dimming Controls	
			Without Controls	

### Notes for Table 1a:

- 1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.
- 2. Incentives are capped at 70 percent of Energy Efficiency Project Costs and will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy Efficiency Project costs are subject to Company approval.
- 3. Incentives for TLED Fluorescent Relamps may not be combined with other lamp or fixture incentives and will only be paid once per facility.
- 4.3. Eligible retrofit lighting equipment is defined in qualified equipment lists posted on the Utah energy efficiency program section of the Company's website.

(continued)

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**First Second** Revision of Sheet No. 140.56 Canceling Original First Revision of Sheet No. 140.56

P.S.C.U. No. 50

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 1b -- Lighting Controls and Non-General Illuminance Incentives (Retrofit Only) (Continued)

Measure	Category	Eligibility Requirements	Incentive "up to"
	Exit Sign	LED or photoluminescent replacing incandescent or fluorescent	\$15/Sign
	LED Message Center Sign	LED replacing existing incandescent signage	\$5/Lamp
	LED Channel Letter Sign	LED replacing existing neon or fluorescent signage	\$5/Linear Foot
Non-General Illuminance	LED Marquee/Cabinet Sign	LED replacing existing fluorescent signage	\$5/Linear Foot
	LED Case Lighting – Reach-in Case	LED replacing fluorescent lamp in refrigerated cases. LED must be listed on qualified equipment list.	\$10/linear foot
	LED Case Lighting – Open Case		\$10/linear foot
	Refrigerated Case Occupancy Sensor	Installed in existing refrigerated case with LED lighting	\$1/linear foot
Custom	Custom	Not listed above	\$0.15/kWh annual energy savings

### Notes for Table 1b:

1. To be eligible for the incentives listed, the new lighting system must use less energy than the existing lighting system replaced or the baseline lighting system as determined by the Company.

2. Incentives are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy Efficiency Project Costs are subject to Company approval.

3. Incentives for Advanced Daylighting Controls may not be combined with Occupancy Control or Daylighting Control incentives.

4. Watt controlled refers to the total wattage of lighting fixtures down circuit from the control.

5. Qualified equipment lists for measures referenced in the above table are posted on the Utah energy efficiency program section of the Company's website.

PIR = Passive Infrared Dual Tech = Sensors combining ultrasonic and passive infrared LED - Light-emitting Diode

(continued)



**First Second** Revision of Sheet No. 140.<u>67</u> Canceling Original First Revision of Sheet No. 140.<u>67</u>

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 1c – New Construction/Major Renovation Lighting Incentives

	<i>a</i> .		Incentive
Measure	Category	Eligibility Requirements	"up to"
Interior Lighting*	Lighting and Lighting Control	<ol> <li>The total connected interior lighting power for New Construction/Major Renovation projects must be at least 10% lower than the interior lighting power allowance calculated under the applicable version of the state energy code. For New Construction/Major Renovation projects not included in the state energy code, the total connected lighting power must be at least 10% lower than common practice as determined by the Company.</li> <li>Energy savings is subject to approval by the Company</li> </ol>	\$0.08/kWh annual energy savings
	Induction Fixture	All Wattages, New Fixtures Only	\$75/Fixture
	LED Outdoor Pole/Roadway, decorative	<75W; LED must be listed on qualified equipment list	\$75/Fixture
	LED Outdoor Pole/Roadway	≤200W; LED must be listed on qualified equipment list	\$100/fixture
		>200W; LED must be listed on qualified equipment list	\$400/fixture
	LED Canopy/Soffit	LED must be listed on qualified equipment list	\$125/fixture
	LED Wall Dealer	<50 Watts; LED must be listed on qualified equipment list	\$50/fixture
	LED wan Facks	≥50 Watts; LED must be listed on qualified equipment list	\$75/fixture
Exterior Lighting		<100 Watts; LED must be listed on qualified equipment list	\$75/fixture
	LED Flood Lights	≥100 Watts; LED must be listed on qualified equipment list	\$150/fixture
	CFL Wall Pack	All Wattages, Hardwire Fixtures Only	\$30/Fixture
	Custom	Not listed above	\$0.08/kWh annual energy savings
	Exterior Dimming Control	Must control LED technology in an exterior lighting application. Control must be integral to LED fixture or fixture-mounted and reduce fixture power by 75% or more for a minimum of 6 hrs per night or when the space has been unoccupied for 15 minutes or less. e	\$0.34/Watt controlled**

\*Project Cost Caps of 70% and 1-Year Simple Payback Caps apply to New Construction and Major Renovation projects that are not subject to state energy code. 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.

\*\* Exterior lighting controls required by the applicable version of the state energy code are not eligible for incentives.

CFL - Compact Fluorescent Lamp

(continued)



**First Second** Revision of Sheet No. 140.<u>67</u> Canceling Original First Revision of Sheet No. 140.<u>67</u>

**ELECTRIC SERVICE SCHEDULE NO. 140 - Continued** 

LED - Light-Emitting Diode

(continued)

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Second Third Revision of Sheet No. 140.78 Canceling First Second Revision of Sheet No. 140.78

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 2 - Motor Incentives

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Incentive "up to"
Electronically	$\leq 1$ horsepower	Refrigeration application		\$0.50/watt
(ECM)		HVAC application		\$50/horsepower
Variable- Frequency Drives (HVAC fans and pumps)	≤ 100 horsepower	HVAC fans and pumps	See Note 2	\$65/horsepower
Green Motor Rewinds	$\geq$ 15 and $\leq$ 5,000 horsepower		Must meet GMPG Standards	\$1/horsepower Refer to Note 3

### Notes for Table 2:

- 1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 2. Throttling or bypass devices, such as inlet vanes, bypass dampers, three-way valves, or throttling valves must be removed or permanently disabled to qualify for HVAC fan or pump VFD incentives. VFDs required by or used to comply with the applicable version of the energy code are not eligible for incentives. Savings will only be realized for installations where a variable load is present.
- 3. For Green Motor Rewinds, the participating electric motor service center is paid \$2/horsepower for eligible Green Motor Rewinds. A minimum of \$1/horsepower is paid by the service center to the Customer as a credit on the motor rewind invoice. The balance is retained by the service center. Green Motor Rewind motors that are installed or placed in inventory may qualify for an incentive.

ECM = Electronically Commutated Motor GMPG = Green Motors Practices Group HVAC = Heating, Ventilation and Air Conditioning NEMA = National Electrical Manufacturer's Association VFD = Variable Frequency Drive

(continued)

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**First Second** Revision of Sheet No. 140.98 Canceling Original First Revision of Sheet No. 140.9-8

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Category	Minimum Efficiency Requirements	Customer Incentive "up to"	
	Air-Cooled – Split Systems Only	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton	
Unitary Commercial Air Conditioners	Water Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton	
	Evaporatively Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton	
	$\leq$ 8,000 Btu/hr	12.2 EER		
Packaged Terminal	> 8,000 Btu/hr and < 10,500 Btu/hr	11.9 EER	\$25/ker	
(PTAC)	$\geq$ 10,500 Btu/hr and $\leq$ 13,500 Btu/hr	10.7 EER	\$25/ton	
( - )	> 13,500 Btu/hr	9.9 EER		
Deales and Terminal	≤ 8,000 Btu/hr	12.2 EER and 3.4 COP		
Heat Pumps (PTHP)	> 8,000 Btu/hr and < 10,500 Btu/hr	11.5 EER and 3.3 COP	ф. <u>со</u> .//	
(Heating & Cooling	$\geq$ 10,500 Btu/hr and $\leq$ 13,500 Btu/hr	10.7 EER and 3.1 COP	- \$50/ton	
Mode)	> 13,500 Btu/hr	9.8 EER and 3.0 COP		
Unitary Commercial Heat Pumps (See Note 3)	Air-Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton	
	Water Cooled	As defined in CEE Commercial Unitary Air-conditioning and Heat Pumps Specification	\$75/ton	
	Ground Source	As defined in ENERGY STAR Program Requirements for Geothermal Heat Pumps	\$50/ton	
	Groundwater Source	As defined in ENERGY STAR Program Requirements for Geothermal Heat Pumps	\$50/ton	
Heat Pump Loop (See Note 7)	Ground Source, Closed Loop		\$25/ton	
	Groundwater Source, Open Loop		\$25/ton	
VRE Heat Dumps	Air Cooled	As defined in CEE Commercial	\$75/ton	
VRF Heat Pumps	Water Cooled	Pumps Specification	\$75/ton	

### Table 3a – HVAC Incentives

(Continued)

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### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 3a – HVAC Incentives (Continued)

#### Notes for table 3a - HVAC equipment incentive table

1. Equipment that meets or exceeds the efficiency requirements listed for the size category in the above table may qualify for the listed incentive. Equipment must meet all listed efficiency requirements to qualify for the listed incentives.

2. PTHPs can replace electric resistive heating, which must be removed.

3. Incentives for heat pumps are available per ton of cooling capacity ONLY. No incentives are paid per ton of heating capacity. Heat Pumps must meet both the cooling mode and heating mode efficiency requirements to qualify for per ton cooling efficiency incentives.

4. Equipment size categories and capacities are specified in terms of net cooling capacity at AHRI standard conditions as determined by AHRI Standard 210/240 for units <65,000 Btu/hr, AHRI Standard 340/360 for units ≥65,000 Btu/hr, AHRI Standard 310/380 for PTAC and PTHP units, and AHRI Standard 1230 for VRF systems.

5. Ground and Water Source Heat Pumps must meet or exceed listed efficiency requirements when rated in accordance with ISO-13256-1 to qualify for the listed incentive.

6. Efficiency requirements align with the Unitary Air-Conditioning and Heat Pump Specification maintained by the Consortium for Energy Efficiency for equipment with heating sections other than electric resistance. CEE minimum efficiency requirements are listed on the Company website.

7. Evaporative pre-cooler incentives are subject to the project cost cap and the one-year payback cap.

<b>AHRI</b> = Air-Conditioning, Heating, and Refrigeration Institute	<b>IEER</b> = Integrated Energy Efficiency Ratio
<b>CEE</b> = Consortium for Energy Efficiency	<b>IPLV</b> = Integrated Part Load Value
<b>COP</b> = Coefficient of Performance	<b>PTAC</b> = Packaged Terminal Air Conditioner
<b>EER</b> = Energy Efficiency Ratio	<b>PTHP</b> = Packaged Terminal Heat Pump
<b>HSPF</b> = Heating Seasonal Performance Factor	<b>SEER</b> = Seasonal Energy Efficiency Ratio
<b>HVAC</b> = Heating, Ventilation and Air-Conditioning	<b>VFR</b> = Variable Refrigerant Flow

(Continued)



# Second <u>Third</u> Revision of Sheet No. 140.1110 Canceling <u>First Second</u> Revision of Sheet No. 140.1110

#### ELECTRIC SERVICE SCHEDULE NO. 140 - Continued Table 3b –Other HVAC Incentives

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Incentive "up to"
Evaporative Cooling	All sizes	Direct or Indirect		\$0.06/ CFM
Indirect-Direct Evaporative Cooling (IDEC)	All sizes		Applicable system components must exceed minimum efficiencies required by energy code	\$0.15/kWh annual energy savings See Note 2
Chillers	All except chillers intended for backup service only	Serving primarily occupant comfort cooling loads (no more than 20% for process cooling loads)	Must exceed minimum efficiencies required by energy code	\$0.15/kWh annual energy savings See Note 3
365/366 day Programmable or Occupancy-based Thermostat	All sizes in portable classrooms with mechanical cooling	Must be installed in portable classroom unoccupied during summer months	365/366 day thermostatic or occupancy based setback capability	\$150/thermostat
Occupancy Based PTHP/PTAC control	All sizes with no prior occupancy based control		See Note 5	\$50/controller
Evaporative Pre-cooler (Retrofit Only)		For single air- cooled packaged rooftop or matched split system condensers only	Minimum performance efficiency of 75%. Must have enthalpy controls to control pre-cooler operation. Water supply must have chemical or mechanical water treatment.	\$75/ton of attached cooling capacity (See Note 5)
Advanced Rooftop Unit Control	$\geq$ 5 tons and $\leq$ 10 tons	Must be installed on existing unitary packaged rooftop units (no split- systems) > 5 tons	Controls must include: - Either a supply fan VFD or multi-speed supply fan motor with controller that meets ventilation and space conditioning needs	\$2,000
	$> 10$ tons and $\le 15$ tons			\$2,800
	$>$ 15 tons and $\leq$ 20 tons	nominal cooling capacity with		\$4,000
	> 20 tons	constant speed supply fans.	economizer control	\$4,500

#### Notes for Table 3b

- 1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 2. Incentives paid at \$0.15/kWh annual energy savings. IDEC energy savings subject to approval by the Company.
- 3. Incentives paid at \$0.15/kWh annual energy savings. Chiller energy savings subject to approval by the Company.
- 4. Controller units must include an occupancy based control and include the capability to set back the zone temperature during extended unoccupied periods and set up the temperature once the zone is occupied.
- 5. Incentives for Evaporative Pre-coolers are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year.
- 6. Energy Efficiency Project Costs are subject to Rocky Mountain Power approval.

**CFM** = Cubic Feet per Minute **HVAC** = Heating, Ventilating and Air Conditioning **IDEC** = Indirect Direct Evaporative Cooling **PTAC** = Packaged Terminal Air Conditioner

(Continued)

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**ELECTRIC SERVICE SCHEDULE NO. 140 - Continued** 

**PTHP** = Packaged Terminal Heat Pump

(Continued)

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Second Third Revision of Sheet No. 140.1211 Canceling First Second Revision of Sheet No. 140.12-11

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Category	Minimum Efficiency Requirement	Incentive "up to"
Cool Roof		ENERGY STAR Qualified	\$0.10/square foot
Roof/Attic Insulation		Minimum increment of R-10 insulation added	\$0.05/square foot
Wall Insulation		Minimum increment of R-10 insulation added	\$0.07/square foot
Windows (See Note 3, 4)	Site-Built	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Glazing Only Rating)	\$0.35/square foot
	Assembly	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Entire Window Assembly Rating)	\$0.35/square foot
Window Film	Existing Windows	See Note 5	\$0.15/kWh annual energy savings (See Note 5)

#### Table 4a – Building Envelope Incentives (Retrofit)

Notes for Table 4a:

- 1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.
- 2. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.
- 3. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-Built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive the incentives in the above table.

4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.

- 5. Incentives for window film are calculated based on film specifications and window orientation at \$0.15/kWh annual energy savings. Energy savings are subject to approval by the Company.
- NFRC = National Fenestration Rating Council

SHGC = Solar Heat Gain Coefficient

Equipment Type	Category	Minimum Efficiency Requirement	Incentive "up to"
Cool Roof		ENERGY STAR Qualified	\$0.10/square foot
Roof/Attic Insulation		Minimum increment of R-5 insulation above code (See Note 5)	\$0.05/square foot
Wall Insulation		Minimum increment of R-3.7 continuous insulation above code (See Note 5)	\$0.07/square foot
Windows	Site-Built	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Glazing Only Rating)	\$0.35/square foot
(See Note 3, 4)	Assembly	U-Factor $\leq$ 0.30 and SHGC $\leq$ 0.33 (Entire Window Assembly Rating)	\$0.35/square foot

Fable 4b – Buildin	g Envelop	be Incentives	(New	Construction/M	ajor Renovation)
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**First Second** Revision of Sheet 140.12 Canceling Original First Revision of Sheet No. 140.13-12

**ELECTRIC SERVICE SCHEDULE NO. 140 - Continued** 

### Table 4b – Building Envelope Incentives (New Construction/Major Renovation) (Continued)

Notes for Table 4b:

P.S.C.U. No. 50

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

2. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.

3. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-Built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive the incentives in the above table.

4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.

5. Compliance with the minimum efficiency requirements of Roof/Attic and Wall Insulation measures may be demonstrated with equivalent U-factors and is subject to approval by the Company.

NFRC = National Fenestration Rating Council SHGC = Solar Heat Gain Coefficient

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# First Revision of Sheet No. 140.13 Canceling Original Sheet No. 140.14-13

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Incentive/Unit "up to"
Residential Dishwasher	Used in a Business	See Home Energy Savings Program	See Note 2
	Undercounter		\$100
Commercial Dishwasher (High Temperature models w/	Stationary Rack, Single Tank, Door Type	ENERGY STAR Qualified	\$400
electric boosters only)	Single Tank Conveyor		\$1,000
	Multiple Tank Conveyor		\$500
	$V \ge 28$		\$400
Cabinet	$13 \le V \le 28$	ENERGY STAR Qualified	\$300
	V < 13		\$200
	3-, 4-, 5- and 6-pan or larger sizes - Tier 1	ENERGY STAR Qualified	\$130
Electric Steam Cooker	3-, 4-, 5- and 6-pan or larger sizes - Tier 2	ENERGY STAR Qualified w/ Heavy Load Efficiency ≥ 68%	\$300
Electric Convection Oven		ENERGY STAR Qualified	\$350
Electric Griddle		ENERGY STAR Tier 2 Qualified	\$150
	6-14 pans	ENERGY STAR Qualified	\$1,000
Electric Comonitation Oven	15-20 pans	ENERGY STAR Qualified	\$275
	Tier 1	ENERGY STAR Qualified	\$200
Electric Commercial Fryer	Tier 2	ENERGY STAR Qualified w/Cooking Efficiency ≥ 85%, Idle Energy Rate ≤ 860 Watts	\$300
	Tier 1: Harvest Rate < 500 lbs/day	ENERCY STAR Outlined	\$125
Ice Machines (Air-Cooled Only)	Tier 1: Harvest Rate ≥ 500 lbs/day	ENERGY STAR Quanned	\$150
	Tier 2: Harvest Rate < 500 lbs/day	CEE Tion 2 Qualified	\$250
	Tier 2: Harvest Rate $\geq$ 500 lbs/day	CEE Her 2 Quaimed	\$400
Residential Refrigerator	Used in a Business	See Home Energy Savings Program	See Note 2

#### **Table 5 – Food Service Equipment Incentives**

(continued)

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### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 5 – Food Service Equipment Incentives (Continued)

	0 < V < 15		\$25
Commercial Transparent	$15 \leq V \leq 30$		\$50
Door Refrigerator	$30 \le V \le 50$	ENERGY STAR Qualified	\$75
	$50 \le V$		\$125
	Chest Configuration		\$50
	0 < V < 15		\$25
Commercial Transparent	$15 \le V < 30$		\$50
Door Freezer	$30 \le V \le 50$	ENERGY STAR Qualified	\$75
	$50 \le V$		\$100
	Chest Configuration		\$100
Demand Controlled Kitchen Ventilation Exhaust Hood (Retrofit Only)	Must be installed on commercial kitchen exhaust system.	Variable speed motors must be controlled to vary fan speed depending upon kitchen demand, as indicated by connected sensors.	\$0.15/kWh annual energy savings (See note 3)
Anti-Sweat Heater Controls (Retrofit Only)	Low-Temp (Freezing) Cases Med-Temp (Refrigerated) Cases	Controls that reduce energy consumption of anti-sweat heaters based on sensing humidity.	\$20/linear foot (case length) \$16/linear foot (case length)

### Notes for Table 5:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

2. Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.

3. Incentives are paid at \$0.15/kWh annual energy savings. Demand controlled kitchen ventilation exhaust hood energy savings subject to approval by Company.

CEE = Consortium for Energy Efficiency

ASTM = American Society for Testing and Materials

MDEC = Maximum Daily Energy Consumption

V = Association of Home Appliance Manufacturers (AHAM) Volume (cubic feet)

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# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### **Table 6 – Office Equipment Incentives**

Equipment Type	Minimum Efficiency Requirements	Incentive "up to"
Smart Plug Strip	<ol> <li>Incentive applies to any plug strip that eliminates idle or stand-by power consumption of connected plug-load appliance through the use of an occupancy sensor, electric load sensor, or timer.</li> <li>Applies only to electric plug-load applications (e.g. computer monitors, desk lamps, etc.)</li> </ol>	\$15/qualifying unit

### Notes for Table 6:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

(continued)

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First Second Revision of Sheet No. 140.1716 Canceling Original First Revision of Sheet No. 140.17-16

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Type	Equipment Category	Minimum Efficiency Incen Requirement "up	
High-Efficiency Clothes Washer	Residential (used in a business)	See Home Energy Savings Program	See Note 3
	Commercial (must have electric water heating)	ENERGY STAR Qualified	\$100
Heat Pump Water Heater	Residential (used in a business)	See Home Energy Savings Prog	gram

#### Table 7 – Appliance Incentives

### Notes for Table 7:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for the listed incentive.

2. Equipment must meet the efficiency rating standard that is in effect on the date of purchase.

3. Refer to Company's Home Energy Savings program for efficiency requirements and incentives for listed residential appliances used in a business.

(continued)



# First Second Revision of Sheet No. 140.1817 Canceling Original First Revision of Sheet No. 140.1817

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Table 8a - Irrigation Incentives - Measures for Wheel Line, Hand Line, or Other Portable Systems (Retrofit Only)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
New rotating sprinkler replacing worn or leaking impact or rotating sprinkler	Leaking or malfunctioning impact or rotating sprinkler	Rotating sprinkler	<ol> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two sprinklers per irrigated acre.</li> </ol>	\$2.50 each
New or rebuilt impact sprinkler replacing worn or leaking impact sprinkler	Leaking or malfunctioning impact sprinkler	New or rebuilt impact sprinkler	<ol> <li>New nozzle shall be included in new or rebuilt sprinkler.</li> <li>Rebuilt sprinkler shall meet or exceed manufacturer's specifications.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two sprinklers per irrigated acre.</li> </ol>	\$2.25 each
New nozzle replacing worn nozzle of same design flow or less on existing sprinkler	Worn nozzle	New nozzle of same design flow or less	<ol> <li>Flow rate shall not be increased.</li> <li>All nozzles on the wheel line or hand line shall be replaced.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two nozzles per irrigated acre.</li> </ol>	\$0.50 each
New flow-control nozzle for impact sprinkler replacing existing nozzle or worn flow-control nozzle of same design flow or less	Worn nozzle	New flow control nozzle	<ol> <li>Nozzle to be replaced may be fixed orifice or flow control type.</li> <li>New flow control nozzle shall have a flow rating equal to or less than the flow rating of the existing nozzles at 40 psi.</li> <li>All nozzles on the wheel line or hand line shall be replaced.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two nozzles per irrigated acre.</li> </ol>	\$2.75 each
New gasket replacing leaking gasket, including mainline valve or section gasket, seal, or riser cap (dome disc)	Leaking gasket	New gasket, including mainline valve or section gasket, seal, or riser cap (dome disc)	<ol> <li>New gasket must replace leaking gasket.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two gaskets per irrigated acre.</li> </ol>	\$2 each
New drain replacing leaking drain	Leaking drain	New drain, including drains on pivots and linears	<ol> <li>New drain must replace leaking drain.</li> <li>Fixed-in-place (solid set) systems not eligible.</li> <li>Incentive limited to two drains per irrigated acre.</li> </ol>	\$3 each
Cut and press or weld repair of leaking wheel line, hand line, or portable main line	Leak in wheel line, hand line, or portable main line	Cut and pipe press or weld repair	1. For rebuilds, invoice must show number of rebuild kits purchased and installed.	\$10/repair

(continued)

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# **First Second** Revision of Sheet No. 140.1817 Canceling Original First Revision of Sheet No. 140.1817

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

New or rebuilt wheel line leveler replacing leaking or malfunctioning leveler	Leaking or malfunctioning leveler	New or rebuilt leveler	<ol> <li>Applies to leaking or malfunctioning levelers only.</li> <li>For rebuilds, invoice must show number of rebuild kits purchased and installed.</li> </ol>	\$3 each
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First Second Revision of Sheet No. 140.1918 Canceling Original First Revision of Sheet No. 140.1918

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

 Table 8a - Irrigation Incentives – Measures for Wheel Line, hand Line, or Other Portable Systems (Retrofit Only) (Continued)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
New or rebuilt wheel line feed hose replacing leaking wheel line feed hose	Leaking wheel line feed hose	New or rebuilt wheel line feed hose	<ol> <li>Applies to leaking wheel line feed hose only.</li> <li>For rebuilds, invoice must show number of rebuild kits purchased and installed.</li> </ol>	\$12 each
New Thunderbird wheel line hub replacing leaking wheel line hub	Leaking Thunderbird wheel line hub	New Thunderbird wheel line hub	New hub must replace leaking hub	\$10 each

### Table 8b - Irrigation Incentives – Measures for Pivots and Linear Systems (Retrofit Only)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
Pressure regulator	Worn pressure regulator	New pressure regulator of same design pressure or less	1. New regulator must be of same design pressure or less	\$3 each
Low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray) replacing impact sprinkler	Impact sprinkler	New low pressure sprinkler (on-board nozzle is considered part of sprinkler, not a separate item with additional incentive)	1. New sprinkler is of same design flow or less	\$3 each
Low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray) replacing worn low pressure sprinkler	Worn low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray)	New low pressure sprinkler (on-board nozzle is considered part of sprinkler, not a separate item with additional incentive)	1. New sprinkler is of same design flow or less	\$1.50 each
Gooseneck as part of conversion to low pressure system		New gooseneck as part of conversion to low pressure system	Gooseneck shall be used to convert existing center pivot with sprinkler equipment mounted on top of the pivot to low pressure sprinklers with regulators on new drop tubes.	\$0.50 per outlet

(continued)

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# First Second Revision of Sheet No. 140.2019 Canceling Original First Revision of Sheet No. 140.20-19

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

# Table 8b - Irrigation Incentives – Measures for Pivots and Linear Systems (Retrofit Only) (continued)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
Drop tube (3 ft minimum length)	Leaking drop tube	New drop tube (3 ft minimum length) OR add drop tube as part of conversion to low pressure system	Drop tube or hose extension shall extend below the pivot lower brace or shall be a minimum of 3 ft in length, whichever is greater.	\$2 per drop tube
New center pivot base boot gasket replacing leaking base boot gasket	Leaking center pivot base boot gasket	New center pivot base boot gasket	<ol> <li>Gasket shall replace leaking gasket at the pivot point of the center pivot.</li> <li>No more than one gasket shall be claimed per pivot.</li> </ol>	\$125 each
New tower gasket replacing leaking tower gasket	Leaking tower gasket	New tower gasket	New gasket shall replace leaking tower gasket.	\$4 each

### Table 8c - Irrigation Incentives – Measures for Any Type of System (Retrofit or New Construction, Including Non-Agricultural Irrigation Applications)

Irrigation Measure	Replace	With	Limitations	Incentive "up to"
Irrigation pump VFD		Add variable frequency drive to existing or new irrigation pump	<ol> <li>Pumps serving any type of irrigation water transport or distribution system are eligible – wheel lines, hand lines, pivots, linears, fixed-in-place (solid set).</li> <li>Both retrofit and new construction projects are eligible.</li> </ol>	\$0.15/kWh annual savings

#### Notes for Irrigation Incentive Tables:

1. Equipment that meets or exceeds the requirements listed above may qualify for the listed incentive.

2. Except for the pump VFD measure, incentives listed here are available only for retrofit projects where new equipment replaces existing equipment (i.e. new construction is not eligible).

3. Except for the pump VFD measure, equipment installed in fixed-in-place (solid set) systems is not eligible. Incentive is limited to two units per irrigated acre.

4. Incentives are capped at 70 percent of Energy Efficiency Costs, and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

VFD = Variable Frequency Drive

(continued)

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**First Second** Revision of Sheet No. 140.2120 Canceling Original First Revision of Sheet No. 140.21-20

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	Equipment		Incentive	
Equipment Type	Category	Minimum Efficiency Requirements	"up to"	
Automatic Milker Takeoff (Retrofit Only)		Equipment must be able to sense milk flow and remove milker when flow reaches a pre-set level. The vacuum pump serving the affected milking units must be equipped with a VFD. Incentive is available for adding automatic milker takeoffs to existing milking systems, not for takeoffs on a brand new system where there were none before. Replacement of existing automatic milker takeoffs is not eligible for this listed incentive, but may qualify for a Custom Energy Efficiency incentive.	\$235 each	
Agricultural Engine Block Heater Timer		Timer must be a UL-listed device and rated for a minimum of 15 amps continuous duty.	\$10 each	
High-efficiency Circulating fan (See Note 2)	12-23" Diameter	Fan must achieve an efficiency level of 11 cfm/w	\$25/fan	
	24-35" Diameter	Fan must achieve an efficiency level of 18 cfm/w	\$35/fan	
	36-47" Diameter	Fans must achieve an efficiency level of 18 cfm/w	\$50/fan	
	≥48" Diameter	Fans must achieve an efficiency level of 25 cfm/w	\$75/fan	
Heat Recovery		Heat recovery unit must use heat rejected from milk cooling refrigeration system to heat water. Customer must use electricity for water heating.	\$0.15/kWh annual energy savings	
	12-23" Diameter	Fan must achieve an efficiency level of 11 cfm/w	\$45/fan	
High-efficiency Ventilation	24-35" Diameter	Fan must achieve an efficiency level of 13 cfm/w	\$75/fan	
Fan (See Note 2)	36-47" Diameter	Fan must achieve an efficiency level of 17 cfm/w	\$125/fan	
	≥48" Diameter	Fan must achieve an efficiency level of 19.5 cfm/w	\$150/fan	
Milk Pre-cooler (Retrofit Only)		The equipment must cool milk with well- water before it reaches the bulk cooling tank. New construction not eligible.	\$0.15/kWh annual energy savings	

#### ELECTRIC SERVICE SCHEDULE NO. 140 - Continued Table 9 – Farm and Dairy Equipment Incentives

(continued)

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**First Second** Revision of Sheet No. 140.2221 Canceling Original First Revision of Sheet No. 140.22-21

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### Table 9 – Farm and Dairy Equipment Incentives (continued)

Equipment Type	Equipment Category	Minimum Efficiency Requirements	Incentive "up to"
Programmable Ventilation Controllers		The controller must control ventilation fans based on temperature or other applicable factors such as humidity, odor concentration, etc.	\$20/fan controlled
Variable Frequency Drives for Dairy Vacuum Pumps (Retrofit Only)		VFD must vary motor speed based on target vacuum level. Incentive available for retrofit only. New construction and replacement of existing VFD not eligible.	\$165/hp

#### Notes for Table 9:

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.

2. Fan performance must be rated by an independent testing body in accordance with the appropriate ANSI/AMCA standards.

3. Incentives are capped at 70 percent of Energy Efficiency Project Costs and incentives will not be available to reduce Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

4. Except where noted, all equipment listed in the table is eligible for incentives in both new construction and retrofit projects.

AMCA = Air Movement and Control Association International, Inc. ANSI = American National Standards Institute cfm = cubic feet per minute VFD = Variable Frequency Drive w = watt

Equipment Category	Replace	With	Limitations	Unit	Incentive "up to"
Low Pressure Drop Filter	Standard coalescing filter	Low Pressure drop filter where: 1.Pressure loss at rated flow is $\leq 1$ psi when new and $\leq 3$ psi at element change. 2. Particulate filtration is 100% at $\geq 3.0$ microns and 99.98% at 0.1 to 3.0 microns, with $\leq 5$ ppm liquid carryover. 3. Filter is of deep-bed "mist eliminator" style, with element life $\geq 5$ years. 4. Rated capacity of filter is $\leq 500$ scfm.	<ol> <li>Compressor system must be ≥</li> <li>25 hp and ≤ 75 hp.</li> <li>Compressor discharge pressure setpoint must be reduced by 2 psi or more after installation of low pressure drop filter.</li> </ol>	scfm	\$2/scfm

**Table 10 – Compressed Air Incentives** 

(continued)

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**First Second** Revision of Sheet No. 140.2322 Canceling Original First Revision of Sheet No. 140.2322

# **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

Equipment Category	Replace	With	Limitations	Unit	Incentive "up to"
Receiver Capacity Addition	Limited or no receiver capacity (≤ 2 gallons per scfm of trim compressor capacity)	Total receiver capacity after addition must be > 2 gallons per scfm of trim compressor capacity	<ol> <li>Compressor system size ≤ 75 horsepower, not counting backup compressor(s).</li> <li>Trim compressor must use load/unload control, not inlet modulation or on/off control.</li> <li>Systems with VFD compressor or using variable displacement compressor as trim compressor are not eligible.</li> </ol>	gal	\$3/gal above 2 gallons per scfm
Cycling Refrigerated Dryer	Non-cycling refrigerated dryer	Cycling refrigerated dryer	<ol> <li>Rated dryer capacity must be ≤ 500 scfm.</li> <li>Dryer must operate exclusively in cycling mode and cannot be equipped with the ability to select between cycling and non-cycling mode.</li> <li>Refrigeration compressor must cycle off during periods of reduced demand.</li> </ol>	scfm	\$2/scfm
VFD Controlled Compressor	Fixed speed compressor	≤75 hp VFD controlled oil-injected screw compressor operating in system with total compressor capacity ≤75 hp, not counting backup compressor capacity	<ol> <li>Total compressor capacity in upgraded system is ≤75 hp, not counting backup compressor.</li> <li>Compressor must adjust speed as primary means of capacity control.</li> </ol>		\$0.15/kWh annual energy savings
Zero Loss Condensate Drain	Fixed timer drain	Zero loss condensate drain (See Note 4)	Drain is designed to function without release of compressed air into the atmosphere. Any size system is eligible there is no restriction on compressor size.	each	\$100 each
Outside Air Intake	Compressor drawing intake air from compressor room	Permanent ductwork between compressor air intake and outdoors.	<ol> <li>Compressor system size ≤ 75 HP.</li> <li>Ductwork must meet manufacturer's specifications, which may include: (a) ≤ 0.25" W.C. pressure loss at rated flow, and (b) allow use of compressor room air during extremely cold outside air conditions</li> </ol>	hp	\$6/hp
Compressed air end use reduction	Inappropriate or inefficient compressed air end uses	Functionally equivalent alternatives or isolation valves	Any size system is eligible – there is no restriction on compressor size.		\$0.15/kWh annual energy savings

#### Table 10 – Compressed Air Incentives (Continued)

(continued)

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First Second Revision of Sheet No. 140.2423 Canceling Original First Revision of Sheet No. 140.2423

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

#### Notes for Table 10:

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.

2. Except for the zero loss condensate drain and compressed air end use reduction measures, eligibility for incentives is limited to compressed air systems with total compressor capacity of 75 hp or less, not including backup compressor capacity that does not normally run.

3. Incentives are capped at 70 percent of Energy Efficiency Project Costs, and incentives will not be available to reduce Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

4. Zero loss condensate drains purchased as an integral part of another measure are eligible for the incentive shown above.

hp = horsepower ppm = parts per million psi = pounds per square inch scfm = cubic feet of air per minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity) VFD = variable frequency drive

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

Equipment Type	Replace	With	Incentive "up to"
Adaptive refrigeration control	Conventional controls (defrost timeclock, space thermostat, evaporator fan control, if any, thermal expansion valve in some instances)	Adaptive refrigeration controller and, in some instances, electric expansion valve	\$0.15/kWh annual energy savings
Fast acting door	Manually operated door, automatic door with long cycle time, strip curtain, or entryway with no door in refrigerated/conditioned space	Fast acting door	\$0.15/kWh annual energy savings
Oil and gas pump off controller		Add pump off controller to existing oil or gas well	\$1,500 per controller
Wastewater – low power mixer	Excess aeration capacity	Extended range circulator	\$0.15/kWh annual energy savings

#### Notes for Table 11:

1. Equipment that meets or exceeds the efficiency requirements above may qualify for the listed incentive.

2. Incentives are capped at 70 percent of Energy Efficiency Project Costs, and incentives will not be available to reduce the Energy Efficiency Project simple payback below one year. Energy savings and Energy Efficiency Project Costs are subject to Company approval.

(continued)

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**First Second** Revision of Sheet No. 140.2524 Canceling Original First Revision of Sheet No. 140.2524

### **ELECTRIC SERVICE SCHEDULE NO. 140 - Continued**

### **Small Business Direct Install (Retrofit only)**

Incentives and participation for small business direct installations 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 25% of the qualifying equipment costs.

Eligible Customer	Eligibility Requirements	Incentive	Customer Co-pay "up to"	
Kate Schedules		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%	25%
6a	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	25%
6b	Non-residential facilities not in excess of 200 kW demand monthly in the last twelve months.	\$5,000 per facility	10%	25%
23		\$5,000 per facility	10%	25%

### Table 12 – Incentives for Small Business Direct Installation (Retrofit only)

### Table 13a – Mid-Market Incentives -Lighting

Measure	Category	Eligibility Requirements	Incentive "up to"
LED	A-Lamp, Medium Base	LED must be listed on qualified equipment list	\$7/Lamp
	PAR Reflector Lamp	LED must be listed on qualified equipment list	\$15/Lamp
	BR Reflector Lamp	LED must be listed on qualified equipment list	\$13/Lamp
	MR16 Reflector Lamp	LED must be listed on qualified equipment list	\$10/Lamp
	Candelabra/Globe Lamp	LED must be listed on qualified equipment list	\$10/Lamp
	Recessed Downlight Kit	LED must be listed on qualified equipment list	\$15/Fixture
	Tubular LED "TLED"	LED must be listed on qualified equipment list	\$10/Lamp
	HID Replacement Lamp <50 W	LED must be listed on qualified equipment list	\$60/Lamp
	HID Replacement Lamp ≥50 and < 150 W	LED must be listed on qualified equipment list	\$65/Lamp
	Wall Pack Fixture	LED must be listed on qualified equipment list	\$30/Fixture

(Continued)

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EFFECTIVE: April 1, 2017August



# **Fourth Fifth** Revision of Sheet No. 140.25 Canceling Third Fourth Revision of Sheet No. 140.2625

# **ELECTRIC SERVICE SCHEDULE NO. 140 – Continued**

#### **13a – Mid-Market Incentives -Lighting (Continued)**

Measure	Category	Eligibility Requirements	Incentive "up to"
LED	Wall Pack Fixture with Occupancy Sensor	LED must be listed on qualified equipment list	\$75/Fixture
Eluorogoont	Reduced Wattage T8 Lamp ≤28 W CEE Replacement Lamp	≤28 W CEE Replacement Lamp	\$0.75/Lamp
Fluorescent	Reduced Wattage T5 HO Lamp	≤51 W T5HO Lamp	\$1/Lamp

### Table 13b – Mid-Market Incentives –HVAC

Measure	Category	Eligibility Requirements	Incentive "up to"
Unitary Commercial Air Conditioners	Air-Cooled – Packaged Systems Only	As defined in CEE Commercial Unitary Air- conditioning and Heat Pumps Specification	\$50/Ton

#### Notes for mid-market incentive tables:

- 1. Incentives are capped at 70 percent of qualifying equipment cost. Qualifying equipment costs are subject to Company approval.
- 2. Qualified equipment lists referenced in the above table are posted on the Utah energy efficiency program section of the Company's website.
- 3. Incentives included in the mid-market incentive tables are available through Company-approved retailers/distributors or a customer application process.

Measure	Category	Eligibility Requirements	Incentive "up to"
Maintenance Agreement	3 year maintenance agreement	Maintenance agreements must include a minimum of two system checks per year (heating and cooling seasons), one condenser coil cleaning per year, and a thermostat reprogramming and calibration.	\$75/ RTU
Thermostats	Programmable Thermostat Smart Thermostat	Replace existing non-programmable thermostat with programmable thermostat with a minimum of 7-day occupied/unoccupied settings. Replace non-programmable thermostat with programmable smart thermostat with a minimum of 7-day occupied/unoccupied settings. Smart thermostats must be Wi-Fi enabled, online dashboard and/or mobile device ann with occupancy sensor enabled	\$50/Thermostat
Economizer	Economizer Repair		\$150/RTU
Refrigerant	Proper Refrigerant Charge		\$35/Ton RTU Capacity

### Table 14 – HVAC Check-up Incentives

#### Notes for Table 14:

1. Incentives are capped at 70 percent of qualifying cost. Qualifying costs are subject to Company approval.

Exhibit B

# Lighting System Retrofit Incentives Webpage Content DRAFT

- Lighting System Retrofit Description / Explanatory Introduction
  - Rocky Mountain Power has developed lighting system retrofit incentive offerings to encourage customers to upgrade existing lighting systems to operate more efficiently. Eligible business customers who upgrade their lighting will save energy and money.

The offer includes incentives for the most common interior and exterior lighting technologies and lighting controls, such as LEDs and occupancy controls. The offer allows for a wide variety lighting system upgrades, allowing customers to select the lighting upgrade that best fits their needs and their budget.

The table below lists the lighting system retrofits and the associated incentives available for the various upgrade options.

Measure	Category	Eligibility Requirements		Offered Incentive	Maximum Incentive "up to"
Lighting System Retrofits	Interior Lighting	Full Fixture Replacement	Advanced Controls	\$0.15/kWh	\$0.20/kWh
			Basic Controls	\$0.12/kWh	
			Without Controls	\$0.10/kWh	
		Einterne Detre fit Vite	With Controls	\$0.10/kWh	
		Fixture Retrolit Kits	Without Controls	\$0.08/kWh	
	Exterior Lighting	Eull Eisture Denlessment	Advanced Dimming Controls	\$0.08/kWh	
		Full Fixture Replacement	Without Controls	Without Controls \$0.05/kWh	
		Eintura Datrofit Vita	Advanced Dimming Controls	\$0.07/kWh	¢0 15/1-33/1-
		Fixture Report Kits	Without Controls \$0.04/kW		\$0.15/KWh
		Streat Lighting	Advanced Dimming Controls	\$0.07/kWh	
		Sueer Lignung	Without Controls	\$0.04/kWh	

- Why are typical lighting incentives being restructured?
  - The intent of this restructuring is to encourage customers to install controls with lighting retrofits. It is proposed to combine control measures from Table 1b with lighting retrofit measures in Table 1a within Schedule 140, to create a single offering structure for interior and exterior lighting retrofits that promotes controllability. While replacement lamps currently offered through Table 1a are a good option, replacement lamps typically provide lower savings, life, and costs than full fixture replacements. This new combined approach is intended to augment prudent spending on lighting incentives by paying for energy savings that adopt basic or advanced controls, while still allowing customers to select LED products that best fit their lighting needs and budgets.

As LEDs have entered the mainstream lighting market, LED lighting options have become more varied in application, efficiency, quality, and price. During this market transition, the following changes have occurred:

- o Improvements in LED efficiency/efficacy;
- Rapid price shifts;

- o Development of various LED types and applications;
- o Growing disparity between good/better/best products;
- Increasing controllability, enabling significant advances in lighting control systems;
- o An increasing focus on health impacts and non-energy benefits of lighting; and
- Widespread market acceptance of LED technology.

Customers now have access to a broad selection of lighting upgrade options ranging from basic lamp replacements to full system redesign with new fixtures and advanced controls. The proposed Table 1a below is designed to address the market's transition.

- What are some benefits of the Rocky Mountain Power Lighting Program?
  - Incentives to reduce customers' upfront costs of lighting upgrades;
  - Reduce customers' operating costs to increase profitability;
  - Increase customer comfort to improve sales;
  - Enhance employee productivity;
  - Improve workplace safety and reduce potential hazards; and
  - Raise the value of customers' businesses and appearance.
- Who can participate in the Rocky Mountain Power Lighting Program?
  - Customers eligible to participate in this offer are those currently defined as eligible customers in Schedule 140: Non-residential facilities on Utah rate schedules 6, 6A, 6B, 8, 9, 9A, 10, 12, 15, 21, 23, and Supplementary Service under Schedule 31.
- What type of projects are eligible for incentives?
  - Projects that save energy and install lighting products on the qualified equipment lists are eligible for incentives. The more energy you save the higher your potential incentive is.
- What are qualified equipment lists and how do they confirm products meet performance and safety standards?
  - Rocky Mountain Power looks to certain organizations to ensure that lighting equipment meets important performance standards. These organizations, such as, ENERGY STAR and Design Lights Consortium (DLC), review lighting product efficiency and safety testing to ensure products operate efficiently and safely.
- What are full fixture replacements?
  - Full fixture replacements are a lighting system upgrade where the entire existing fixture, including lamps, reflectors, ballasts/drivers, housing, etc., are removed and new fixtures are installed. Full fixture replacements, when properly designed and installed, deliver the highest savings and lighting performance potential. See the Lighting Catalog for more details.

- What are fixture retrofit kits?
  - Fixture retrofit kits are a lighting system upgrade that keeps existing fixture housing and modifies fixture components to incorporate new lighting equipment. Fixture retrofit kits, when properly selected and installed, present good savings and lighting performance potential. See the Lighting Catalog for more details.
- What are replacement lamps?
  - Replacement lamps are lighting system upgrades that keep existing fixtures in place and replace only the lamp and/or lamp operating components, such as ballasts or drivers. Examples of replacement lamps include Tubular LEDs, LED HID replacements, and screwin LEDs. Replacement lamps present significant savings potential. Replacement lamp incentives are only available at the point of purchase from qualified distributors. A list of qualified distributors can be found here.
- What are basic controls?
  - Basic lighting controls provide significant savings potential by using one or two control strategies to reduce lighting levels when possible. Basic controls are not networked and only communicate with a single group of lights. Some of the most common basic lighting controls are occupancy sensors that dim or turn off lights when an area becomes unoccupied, or daylighting controls that dim or turn off lights when sufficient daylight is available.
- What are advanced controls?
  - Advanced lighting controls provide the highest savings potential by networking with other fixtures and building operating systems, employ at least two control strategies, and enable each fixture to be programmed to achieve specific settings and control strategies. Rocky Mountain Power uses DLC's Networked Lighting Controls Qualified Products List to determine eligibility for advanced controls.
- What are lighting control strategies and how do they save energy?
  - Lighting controls work by using a few different methods to either turn lights off or dim lights to save energy. Popular control strategies include:
    - Occupancy sensing: The occupancy control strategy uses sensors to determine if a room or space is occupied. If the sensors do not detect an occupant for a set amount of time, the control will either turn off or dim the lights to the minimum light needed for safety. Occupancy controls are particularly effective at saving energy in spaces that are not used consistently, such as break rooms, closet/storage spaces, conference rooms, bathrooms and large warehouse spaces.
    - <u>Daylight harvesting</u>: The daylight harvesting control strategy uses sensors to determine the amount of daylight in an area. The control then adjusts the amount of light provided by the fixture to provide only the amount of light needed

accounting for the available daylight. If there is enough daylight, the fixture is dimmed significantly or turned off, while if no daylight is present, the fixture is not dimmed at all. Daylighting controls are effective in areas that receive an abundance of natural light, such as areas near windows or skylights.

- <u>Tuning</u>: The tuning control strategy uses fixture settings to dim lighting areas or individual fixtures to match the needs of the space or individual occupant's needs. Tuning controls can be effective in almost any scenario and are especially effective when each fixture can be tuned to account for the different lighting preferences of people in an area.
- Why are full fixture replacement incentives greater than fixture retrofit kit incentives?
  - While retrofit kits are a good option, full fixture replacements typically have higher savings, longer life, and higher costs than retrofit kits.
- How do I participate and receive incentives for upgrading my lighting?
  - To begin, obtain an assessment of your current lighting system. For help with the assessment you may contact an approved wattsmart Business vendor. A list of participating vendors can be found here. Approved vendors will perform an assessment of the existing lighting system, recommend improvements, and facilitate the pre-approval process. Incentives for qualifying full fixture replacements and retrofit kit lighting system upgrades require pre-approval. Qualified replacement lamps are eligible for incentives through qualified lighting distributors at the point of purchase. A list of qualified lighting distributors can be found here. For other participation options, please contact us.
- Why are replacement lamp incentives exclusively available through the mid-market channel?
  - Upgrading lighting systems with replacement lamps through the mid-market channel is the quickest way to save energy and receive lighting incentives. Customers can receive instant incentive discounts by purchasing qualifying replacement lamps directly from participating vendors or by applying through a simple post-purchase process.

#### **CERTIFICATE OF SERVICE**

Docket No. 17-035-T09 Advice 17-10

I hereby certify that on July 10, 2017, a true and correct copy of the foregoing was served by electronic mail to the following:

# **Utah Office of Consumer Services**

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