## MEASURE CATALOG & SPECIFICATIONS

PNM Business Energy Efficiency Programs







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### RETROFIT SPECIFICATIONS

### **Lighting Retrofit Specifications**

All lighting projects are expected to comply with the Illuminating Engineering Society of North America (IESNA) recommended lighting levels or the local code.

#### **Permanent Lamp Removal, All Sections**

(Pre-Application Required)

Applicable to any section below, incentives are paid for the permanent removal of existing fixtures and lamps. Permanent lamp removal is the net reduction in the quantity of lamps after a project is completed. Customers are responsible for determining whether to use reflectors in combination with lamp removal in order to maintain adequate lighting levels. Lighting retrofits are expected to meet the Illuminating Engineering Society of North America (IESNA) recommended light levels. Unused lamps, lamp holders and ballasts must be permanently removed from the fixture and disposed of in accordance with local regulations.

A pre-notification application is required for this measure to allow PNM to conduct a pre-inspection.

### **IMPORTANT for all LED Lighting!**

The integral lamp or fixture you install MUST appear on one of the following lists. If not, your project may be ineligible to receive any incentives:

ENERGY STAR® Qualified Products List: www.energystar.gov/index.cfm?c=ssl.pr\_commercial

DesignLights Consortium Qualified Products List: designlights.org/search

#### **Interior Retrofits**

#### **LED Lamps Replacing Incandescent Lamps**

This measure addresses the replacement of 20-100 watt incandescent lamps with integral screw-in or pin-type replacement lamps. Eligible lamp types include A, R, Par, MR, G and Candle lamps. LED wattage may not exceed 20 watts. All LED lamps, strips or fixtures must be DesignLights Consortium or ENERGY STAR® qualified.

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

#### **LED Lamps Replacing CFL's**

This measure addresses the replacement of up to 42-watt CFLs with integral screw-in or pin-type replacement lamps. Eligible lamp types include A, R, Par, MR, G and Candle lamps. LED wattage may not exceed 20 watts. All LED lamps, strips or fixtures must be DesignLights Consortium or ENERGY STAR® qualified.

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

#### **Controls: Occupancy Sensors**

All lighting controls must be listed by UL- or other OSHA approved nationally recognized testing laboratory (NRTL) in accordance with applicable U.S. standards. Passive infrared, ultrasonic detectors and fixture-integrated sensors or sensors with a combination thereof are eligible. Sensors may be hardwired or wireless if they have a minimum 10-year battery life. All sensors must control interior lighting fixtures. The incentive is per watt controlled. Incentives are also available for new fixtures with integrated occupancy controls. These fixtures must meet specifications for both new and control measures.

To assist in rebate processing, an inventory of controlled fixtures MUST be submitted with the Final Application (see Watts Controlled Calculator under **Apply > Tools & Resources** at pnmenergyefficiency.com).

#### **Controls: Daylight Sensors**

This incentive is for daylight sensor controls in spaces with suitable available ambient light for at least part of the day. Light may be through skylights, clerestories, windows or "light tubes." The controls can be on/off, stepped, or continuous (dimming). The on/off controller should turn off artificial lighting when the interior illuminance meets the desired indoor lighting level. The stepped controller generally dims the artificial lighting 50% when the interior illuminance levels reach 50% of the desired lighting levels. Continuous or dimming controllers dim artificial lighting proportional to the available ambient light. All types of daylight sensor controls are required to be commissioned in order to ensure proper sensor calibration and energy savings. Incentives are per watt controlled.

To assist in rebate processing, an inventory of controlled fixtures MUST be submitted with the Final Application (see Watts Controlled Calculator under **Apply > Tools & Resources** at pnmenergyefficiency.com).

#### **LED Replacing HID**

(Lamps, Fixtures, & Retrofit Kits)

### LED Replacing HID (Lamps, Fixtures & Retrofit Kits)

This incentive is for replacing existing high intensity discharge (HID) fixtures such as Metal Halide (MH), High or Low Pressure Sodium (HPS or LPS), or Mercury Vapor (MV) with LED lamps, fixtures, and retrofit kits. LED fixtures, retrofit kits, and lamps must be DLC, or ENERGY STAR® approved. Enter the existing fixture type into "Existing equipment: HID fixtures and/or lamps being removed" and the retrofit measure into "Replacement equipment: New T8, T5, or LED lamps, fixtures, or fixture retrofit kit being installed".

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.



### LED Replacing T5, T8, or T12

(Lamps, Fixtures, & Retrofit Kits)

## LED Replacing T5, T8 or T12 (Lamps, Fixtures & Retrofit Kits)

This incentive is for replacing existing T12, T8 or T5 fluorescent fixtures with LED fixtures, retrofit kits or LED lamps. All LED fixtures, retrofit kits and lamps must be DLC or ENERGY STAR® approved. Enter the existing fixture type into "Existing equipment: T5, T8 or T12 fixtures and/or lamps being removed" and the retrofit measure into "Replacement equipment: New T8, T5, or LED lamps, fixtures, or fixture retrofit kit being installed".

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

#### **Controls for New LED Fixtures**

This incentive is for adding occupancy controls to new individual fixtures installed in Sections 2 or 3 above for Exterior / 12 Hours or 24 Hour / Garage / 3 Shift operations. Fixtures must be able to, on an individual basis based on occupancy, be able to reduce their wattage from 100% to a lower percentage or off. This applies to replaced LED fixtures and retrofit kits above. All LED fixtures and retrofit kits must be DLC or ENERGY STAR® approved. Provide the Hi-Low wattage manufacturer specification sheets with the application.

For lighting systems that use a master control, use the Custom portion of the application.

### **Indoor Agriculture Specifications**

## Indoor Agriculture Lighting: LED replacing HID or Fluorescent Fixtures

This measure is designed for interior agriculture applications that use artificial lighting stimulation in an indoor conditioned space. Incentives available on new construction and retrofit applications. Efficient LED fixtures must have a reduced wattage, be listed on the DesignLights Consortium (DLC) qualified products list (www.designlights.org/horticultural-lighting), be UL listed,

(www.designlights.org/horticultural-lighting), be UL listed, have a power factor (PF) ≥ 0.90, a PPE of no less than 1.9 micromoles per joule, a minimum rated lifetime of 50,000 hours, and a minimum warranty of 5 years. To calculate the wattage reduction of grow lighting, use the following formula:

Watts reduced= 
$$\left(\frac{PPF_{installed}}{PPE_{baseline}} - Watts_{installed}\right) \times Qty$$

#### Where:

PPFinstalled = Photosynthetically-active Photon Flux output of the installed fixture, in  $\mu$ mol/s

PPEbaseline = Photosynthetically-active Photon Efficiency of the assumed baseline fixture, in  $\mu$ mol/J

Wattsinstalled = Fixture wattage of the installed LED grow light

Qty = The installed quantity of efficient fixtures

#### **Dehumidification units**

This measure is available for new standalone or portable dehumidifiers with an energy factor of 2.0 L/kWh or better or ENERGY STAR® rated. Incentives available on new construction and retrofit applications. Dehumidifiers must be installed in an indoor grow facility that operates year-round. Green house installations are not approved. If replacing an existing unit, proposed size must be the same size.

### **HVAC Specifications**

## **Unitary and Split Air-Conditioning and Air Source Heat Pump Systems**

New unitary air conditioning units or air source heat pumps that meet or exceed the qualifying cooling efficiency shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water-cooled systems, evaporative coolers and water-source heat pumps do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). Minimum efficiencies for all HVAC equipment are based on ASHRAE 90.1-2019 for commercial air conditioning and heat pump **specifications (ashrae.org).** A manufacturer's specification sheet or an AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER2; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons, use the HSPF2; for units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit. Qualifying efficiencies for RTUs are summarized below:



	< 65,000 Btu/h (< 5.4 tons) Split System	14.0 SEER2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.4 SEER2
Unitary and Split Air Conditioning	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	16.1 IEER
Systems	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.6 IEER
	≥ 240,000 Btu/h and < 760,000 Btu/h (20-63 tons)	14.5 IEER
	≥ 760,000 Btu/h (≥ 63 tons)	13.8 IEER
Air Source Heat Pumps	< 65,000 Btu/h (< 5.4 tons) Split System	15.0 SEER2 and 7.7 HSPF2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.1 SEER2 and 6.9 HSPF2
	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.2 IEER and 3.5 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	14.6 IEER and 3.4 COP
	≥ 240,000 Btu/h and < 760,000 Btu/h (20-63 tons)	13.6 IEER and 3.3 COP

#### **Water-and Air-Cooled Chillers**

Chillers are eligible for an incentive if they have a rated kW/ ton for the integrated part load value (IPLV) that is less than or equal to the qualifying level efficiencies shown in the table below. The chiller-efficiency rating must be based on ARI Standard 550/590-2003 for IPLV conditions and not based on full-load conditions. The chillers must meet AHRI standards 550/590-2003 and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for commercial chiller specifications (ashrae.org). The AHRI net capacity value should be used to determine the chiller tons. A manufacturer's specification sheet with the rated kW/ton-IPLV or COP-IPLV must accompany the application. Qualifying efficiencies for chillers are summarized below:

	< 150 tons	0.495 kW/ton- IPLV
	≥ 150 tons and < 300 tons	0.495 kW/ton- IPLV
Chillers: Water-cooled; Centrifugal	≥ 300 tons and < 400 tons	0.468 kW/ton- IPLV
Continugui	≥ 400 tons and < 600 tons	0.450 kW/ton- IPLV
	≥ 600 tons	0.450 kW/ton- IPLV
Chillers: Water- cooled; Scroll, Helical-Rotary, or Reciprocating	< 75 tons	0.540 kW/ton- IPLV
	≥ 75 tons and < 150 tons	0.504 kW/ton- IPLV
	≥ 150 tons and < 300 tons	0.486 kW/ton- IPLV
	≥ 300 tons and < 600 tons	0.468 kW/ton- IPLV
	≥ 600 tons	0.450 kW/ton- IPLV
Chillers: Air- cooled	< 150 tons	0.788 kW/ton- IPLV
	≥ 150 tons	0.771 kW/ton- IPLV

#### **Packaged Terminal Systems (Replacements)**

Packaged terminal air conditioners and heat pumps are through-the-wall, self-contained units that are 2 tons (24,000 Btu/h) or less. All EER values must be rated at 95°F outdoor dry-bulb temperature. Qualifying efficiencies for PTACs and PTHPs are summarized below:

Packaged Terminal AC	ALL	14.5 - (0.300 x [Btu/h]/1000) EER
Packaged Terminal HP	ALL	14.5 - (0.300 x [Btu/h]/1000) EER

#### Variable Refrigerant Flow (VRF) Systems

New VRF air-conditioning and heating air source units that meet or exceed the qualifying cooling and heating efficiencies shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water and evaporatively cooled systems do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting



refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for VRF air-conditioning and heat pump specifications (ashrae. org). An AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons use the HSPF; units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit indicating if the indoor unit(s) are ducted or non-ducted units. Qualifying efficiencies for VRFs are summarized below:

Variable Refrigerant Flow Systems	< 65,000 Btu/h (< 5.4 tons)	13.7 SEER and 7.7 HSPF
	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.7 IEER and 3.4 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.1 IEER and 3.3 COP
	≥ 240,000 Btu/h (≥ 20 tons)	13.8 IEER and 3.3 COP

#### **Computer Room Air Conditioners**

New computer room air conditioner (CRAC) units must be electric and installed in network rooms or data centers to be eligible for incentive. CRAC units are rated for sensible coefficient of performance (SCOP), as seen in the below table.

	< 65,000 Btu/h (< 5.4 tons)	2.6 SCOP
Computer Room Air Conditioners	≥ 65,000 Btu/h and < 240,000 Btu/h (5.4-20 tons)	2.4 SCOP
	≥ 240,000 Btu/h (≥ 20 tons)	2.3 SCOP

### **Hotel Guest Room Occupancy Sensors**

Incentives are offered for occupancy-based controls that regulate cooling-only HVAC units for individual hotel rooms. Sensors must be controlled by automatic occupancy detectors or a key-card system, and the default setting for controlled units must differ by at least 5 degrees (or shut the unit fan and heating or cooling off completely) from the operating set point during unoccupied periods. The incentive is per room controlled, not per sensor. The control system also may be tied into other electric loads, such as lighting and plug loads, to shut them off when occupancy is not sensed. Replacement or upgrades of existing occupancy-based controls are not eligible as a prescriptive incentive. To determine unit size, use the following formula:

Unit size in tons = [Btu/h]/12,000

Example: 9,000 Btu/h unit / 12,000 = 0.75 ton unit.

## **Food Service Equipment Specifications NOTES:**

- Any equipment that does not meet ENERGY STAR® qualifications are NOT eligible for an incentive
- Food service equipment is only eligible for multi-family properties with commercial equipment (e.g., assisted living, retirement communities, etc.). Food service equipment for single- unit purposed are NOT eligible for incentive.

#### **ENERGY STAR® Combination ovens**

Half-size combination ovens are defined as capable of accommodating a single 12.7  $\times$  20.8  $\times$  2.5-inch steam table cook pan per rack position, loaded from front-to-back or lengthwise.

Full-size combination ovens are defined as capable of accommodating two  $12.7 \times 20.8 \times 2.5$ -inch steam table pans per rack position, loaded from front-to-back or lengthwise.

#### **ENERGY STAR® Convection ovens**

Convection oven sizes are defined to accommodate a standard pan size, as follows:

Convection Oven Size	Standard Pan Size
Half	18 × 13 × 1-inch
Full	18 × 26 × 1-inch

Convection ovens eligible for rebate do not include ovens that can heat the cooking cavity with saturated or superheated steam. However, eligible convection ovens may have moisture injection capabilities (e.g., baking ovens and moisture assist ovens). Ovens that include a "hold feature" are eligible under this specification if convection is the only method used to fully cook the food.

#### **Commercial Vat Fryers**

Standard Fryer is defined as a fryer with a van that measures > 12 inches and < 18 inches wide, and a shortening capacity 25 pounds and 65 pounds.

Large vat fryer is defined as a fryer with a vat that measures 18 and 24 inches wide, and a shortening capacity > 50 pounds.

Fryers with vets measure less than 12 inches wide, or greater than 24 inches wide are not eligible for incentive.

Eligible building types include independent restaurants, chain restaurants, elementary and secondary schools, colleges and universities, corporate food service operations, healthcare, hospitality, and supermarkets.



#### **ENERGY STAR® Steam Cookers**

High-efficiency ENERGY STAR® steam cookers have the characteristics, as shown below:

Pan Capacity	Heavy Load Cooking Energy Efficiency	Idle Rate, Watts
3-Pan	50%	400
4-Pan	50%	530
5-Pan	50%	670
6-Pan or Larger	50%	800

### **ENERGY STAR® Hot Food Holding Cabinet**

This measure is intended for commercial food-grade equipment only. Hot food holding cabinets qualifying under this specification must be third-party certified to:

- ANSI/NSF Standard 4 International Standard for Commercial Cooking, Rethermalization and Powered Hot Food Holding Transport Equipment
- ANSI/UL Standard 197 Commercial Electric Cooking Appliances

Hot food holding cabinets that do not qualify for incentive include:

- Dual function equipment (e.g., "cook-and-hold" and proofing units)
- · Heated transparent merchandising cabinets
- Drawer warmers

### **ENERGY STAR® High Efficiency Ice Makers**

This measure can be classified into two types of automatic commercial ice makers: batch-type (also called "cubetype") and continuous type.

Eligible commercial ice makers include:

- Air-cooled batch-type and continuous type ice makers.
   Designs include:
  - Ice-making head units (IMH)
  - Self-contained units (SCU)
  - Remote condensing units (RCU)
- Air-cooled RCU units designed for connection to remote rack compressors that are alternatively sold with a dedicated remote condensing unit

Ineligible commercial ice makers include:

- Water-cooled ice makers
- Ice and water dispensing systems
- Air-cooled RCU units that are designed only for connection to remote rack compressors

## **ENERGY STAR® Heat Pump Water Heater Specifications**

Pre-notification Application is required

This measure covers the installation for ENERGY STAR® rated Heat Pump Water Heaters (HPWH). HPWH incentives are calculated based on the size category (in gallons).

HPWHs must be ENERGY STAR® certified with a 3.30 Uniform Energy Factor (UEF) or greater and 55 gallons or less of storage capacity

### **Pool Pumps Specifications**

This measure involves replacing a single-speed pool pump with an ENERGY STAR® or CEE Tier 1 qualified multi-speed or variable speed pool pump between 0.5 and 3.0 horsepower (HP). Savings are achieved by using more efficient pumps and operating multi-speed or variable speeds at speeds lower than the maximum design speed for tasks which need water flow less than the maximum design flow.

### **Variable Speed Drives (VSDs) Specifications**

### Variable Speed Drives on Fan and Pump Applications

Variable speed drives (VSDs) installed on HVAC fans or pumps are eligible for this incentive. The installation of a VSD must accompany the permanent removal or disabling of any flow control devices such as inlet vanes, bypass dampers and throttling valves to be eligible.

Other requirements include:

- Rated motor horsepower must be less than 200 HP
- Does not apply to redundant or backup/standby motors that are expected to operate less than 1,200 hours per year.
- Does not apply to variable pitch fans and forward curve with inlet guide vanes unless applicant supplies proof of kWh savings from logged or measured data.
- Does not apply to replacement of a multispeed motor.
- Does not apply to VFDs on new chillers (existing chillers qualify under the custom program).
- Applies only to VSDs installed with an automatic control technology.
- Does not apply to non-HVAC applications such as an industrial process, water well pumping or other non-HVAC applications.

### **Air Compressor Specifications**

#### **Compressed Air Storage Receiver Tanks**

To qualify for this measure an existing load/no-load compressor with a 1 gal/cfm storage ratio or a modulating w/ blowdown compressor must be replaced with a load/no-load compressor with an improved storage capacity and ratio.

Eligible equipment is an oil-flooded load/no-load compressor with an improved storage capacity and ratio compared to the existing system. The cfm should reflect the rated capacity (in cfm) of all active compressors. If that value cannot be determined, compressor power can be converted to capacity using the rule of thumb of 4.5 cfm/hp.

#### **Compressed Air Nozzles**

This measure is for the replacement of a standard air nozzle with a high-efficiency used in a compressed air system.



Eligible nozzles must meet the following specifications:

- High-efficiency air nozzles must replace continuous open blow-offs
- High-efficiency air nozzles must meet SCFM rating at 80 psig less than or equal to ≥

Nozzle Diameter	1/8"	1/4"	5/16"	1/2"
Max SCFM Rating @ 80 psig	11	29	56	140

 Manufacturer's specification sheet of the highefficiency air nozzle must be provided along with the make and model

#### **VSD Air Compressors**

This measure is eligible for high-efficiency oil-flooded air compressors ≤ 200 hp with inlet modulating with blowdown or load/no-load controls.

#### **Efficient Desiccant Compressed Air Dryers**

Eligible equipment is heated or externally-heated by a blower purge desiccant dryer without dew point demand controls. Dryers installed on inlet modulation compressors do not qualify for incentive.

#### **Desiccant Dryer Dew Point Demand Controls**

Eligible equipment is a heatless, externally-heated, or blower purge regenerative desiccant dryer without dew point controls. The controls should be able to respond to changes in flow and moisture loading. Dryers installed on inlet modulation compressors do not qualify for incentive.

### **Efficient Refrigerated Compressed Air Dryers**

Eligible equipment includes a high-efficiency thermal mass dryers, variable speed dryers, or digital scroll dryers.

### **Refrigeration Specifications**

### **Night Covers for Displays**

This measure supports the installation of a cover on open vertical or horizontal refrigerated cases to decrease cooling load. Installing films with small, perforated holes to decrease moisture buildup is recommended. The use of proper compressor capacity modulation mechanisms (such as VSDs or unloaders) also is recommended. Incentive is based on the length of the case.

## **Electronically Commutated Evaporator Fan Motor** (Refrigerated Cases or Walk-Ins)

ECMs must be certified for operation in intended end-use environment and supplied the correct voltage and match the existing (replaced) fan motor with regard to horsepower, rotation and high-speed airflow. If changing fan blades with the evaporator ECM change out, the new blade/s shall provide air flow equal to the coil manufacturer's specifications. Matched high-performance blades with reduced horsepower ECMs may be exempt from motor horsepower and fan blade requirements. Program

administrators must review project prior to installation.

#### **Anti-Sweat Heater Controls (ASH)**

The ASH controller will maintain an adequate door frame temperature to prevent the accumulation of condensation on door frame or mullion. The ASH controller will monitor the humidity and temperature (dew point) outside of the refrigerated device. The controller will maintain the coldest temperature possible without causing the formation of condensation. No temperature sensors shall be mounted in or on any controlled door. If a single controller simultaneously controls heaters on a refrigerator and freezer, the controller must have the means to control each device separately.

Upon failure, the controller will default to full on. The heaters will become 100% active. The controller will indicate a failure by flashing light and/or sound, or send notice of failure via email, text, or similar notification. The controller must be rated to match and exceed the total amp load requirement and shall not operate at more than 90% of maximum amperage capacity.

The incentive is per linear foot of the door width, not the perimeter of the door. Most doors will be about 3 feet in width.

#### **Zero Energy Doors**

Rebate for Zero Energy Doors replacing continuously heated (electrically heated) cooler or freezer glass doors. This measure saves refrigeration energy by eliminating the need for electric resistive heaters on coolers and freezer doors to prevent condensation. Zero Energy Doors must prevent condensation with multiple panes of glass, inert gas, and low-e coatings instead of using electrically generated heat.

## **Building Envelope: Window Film Specifications Window Film**

Window film must have a shading coefficient (SC) 10% lower than the pre-existing Shading Coefficient values listed below. Must be refrigerated air-conditioned space to qualify for rebate; buildings with evaporated air do not qualify. New construction buildings are not eligible for this incentive. Preapplication notification is required.

Shading Type	Shading Coefficient
Single-Pane – None	0.93
Single-Pane – Roller Shade	0.60
Single-Pane – Louvered Interior Shades	0.56
Single-Pane – Draperies—Open Weave	0.67



Single-Pane – Draperies—Closed Weave	0.56
Double-Pane – None	0.80
Double-Pane – Roller Shade	0.62
Double-Pane – Louvered Interior Shades	0.58
Double-Pane – Draperies—Open Weave	0.64
Double-Pane – Draperies—Closed Weave	0.58
Full	18 × 26 × 1-inch

#### **Custom Specifications**

Pre-Notification Application is strongly encouraged.

The PNM New Construction and Retrofit Rebates program offers custom incentives for those eligible improvements not included under the program's prescriptive measures. Custom incentives are available under the New Construction and Retrofit Rebates program to non-residential customers within PNM service territory. The incentive will be calculated at \$0.08 per estimated kilowatt hour saved (first year only). Actual incentive payments will be based on either (1) documented electrical energy (kWh) reduction or (2) an electrical energy reduction estimate approved by PNM New Construction and Retrofit Rebates program staff.

The energy savings from installed measures must occur on a meter with an eligible rate schedule. Most non-residential rate schedules are eligible. See table of eligible rates in Terms & Conditions.

Custom projects must involve measures that result in a reduction in electric energy due to an improvement in system efficiency. Projects that result in a reduced energy consumption without an improvement in system efficiency are not eligible for a custom incentive. However, projects that involve an automated control technology such as energy management system programming are eligible for an incentive. All projects must meet the PNM cost-effectiveness requirements.

Projects involving measures covered by the prescriptive incentive portion of the program are not eligible for a custom incentive. However, if the applicant can justify significant interactive effects between prescriptive and custom measures, the applicant may apply for the entire project using a custom application. For example, a chiller system upgrade project that includes a chiller replacement and staging controls could go through custom, even though the chiller replacement would normally go through the prescriptive portion. PNM reserves the right to make the final determination of which application is appropriate.

Therefore, submitting a Pre-Notification Application for

combined prescriptive and custom measures is strongly encouraged.

Project requirements under the New Construction and Retrofit Rebates program include the following:

- Projects must involve a facility improvement that results in a permanent reduction in electrical usage (kWh).
- Project savings must be sustainable for a period of five years or the life of the product, whichever is less.
- PNM is required to conduct a cost-effectiveness test on each custom application. Generally, projects with a financial payback beyond 5-8 years are unlikely to pass this test and could be ineligible for incentives. While this test will be based upon the final installation, Pre-Notification Applications offer the opportunity to determine if projects are likely to pass this test prior to investing in a project.

Projects that are NOT eligible for an incentive include the following:

- Fuel switching (e.g., electric to gas or gas to electric)
- Changes in operational and/or maintenance practices or simple control modifications not involving capital costs
- On-site electricity generation
- Projects involving gas-driven equipment in place of electric equipment (such as a chiller)
- Projects that involve peak-shifting (and not kWh savings)
- Measures installed with funding from or under another incentive program
- Renewables

PNM reserves the right to inspect proposed projects prior to equipment installation and to inspect projects post-installation.

#### **Supporting Documentation**

Please attach the following documentation in addition to required documentation as described in the PNM New Construction and Retrofit Rebates program policies and procedures:

- Complete description of the proposed project, the products and technologies used, and how they will be employed. Include definitions of the base case and details of the proposed equipment (provide manufacturer's specification sheets for both base and proposed cases, if possible).
- All facilities, buildings or equipment that will be affected by the project; include all PNM account numbers
- · Detailed cost breakdown by measure

#### **Savings Calculations**

Include all relevant data that will allow an engineer to duplicate the savings estimate provided, such as:

 Concise description of the existing energy systems to be affected



- Facility physical description and occupancy (include activities in building and hours of operation)
- Location of affected equipment
- Condition and age of equipment if a degradation in nameplate efficiency is assumed
- Hours of operation of the affected equipment
- Number of existing units
- Ratings of equipment (wattage, nameplate, tonnage, voltage, etc.)
- Measure-by-measure summary of the calculated savings associated with the project
- Historical peak power (if demand metered) and/or energy consumption data
- Clearly indicate all assumptions and variables used in the analysis
- Describe the basis or rationale for each assumption and variable

It is the applicant's responsibility to present a convincing case for estimating energy savings. If it is unclear whether your preferred method is sufficient, contact us at (505) 938-9400.

### **Incentive Payment Limits**

The total incentive paid cannot exceed 100% of the incremental measure cost or 50% of total project cost, whichever is lowest. Contractor labor costs can be considered in project cost. Internal customer labor costs should not be included in project costs.

# NEW CONSTRUCTION SPECIFICATIONS



### **Lighting Power Density, Interior**

This measure is for the installation of interior energyefficient lighting with LPD in watts per square foot in accordance with the values listed in ASHRAE 90.1-2016 corresponding space type.

- Light levels should meet IES recommendations for each space type
- Documentation showing how LPD was calculated must accompany Final Application.
- Incentive = (LPD baseline LPD actual) x area x \$0.53 (interior) or \$0.63 (exterior)
- Area is gross lighted area of each space type (except parking garage)
- Incentive is for interior lighting only
- Installed interior lighting power includes all power used by the luminaries including lamps, ballasts, current regulators, and control devices.
- Incentive applies only to LED lighting (fluorescent and incandescent excluded)
- All lighting must be DLC and/or Energy Star approved.

The following lighting equipment and applications are excluded from the calculation of interior lighting power:

- Display or accent lighting for galleries, museums and monuments
- Lighting integral to equipment, instrumentation or applicants
- · Lighting in retail display windows
- Lighting integral to advertising or directional signage
- Exit signs
- Lighting for theatrical purposes including performance, stage, film and video production
- Lighting for television broadcasting in sporting-activity areas
- Casino gaming areas

Use the following procedure to calculate the actual lighting power density of the building or space:

- Determine the building type(s) and LPD baseline(s) using the table on the new construction lighting incentive worksheet.
- Determine the gross lighted area corresponding to the building type and enter in the new construction lighting incentive worksheet.
- 3. Determine the interior lighting power for corresponding building type and enter in the new construction lighting incentive worksheet.
- 4. Incentive = (LPD baseline LPD actual) x gross lighted area x \$0.53 (interior) or \$0.63 (exterior)

#### **IMPORTANT for all LED Lighting!**

The integral lamp or fixture you install MUST appear on one of the following lists. If not, your project may be ineligible to receive any incentives: ENERGY STAR® Qualified Products List: www.energystar.gov/index.cfm?c=ssl.pr\_commercial

DesignLights Consortium Qualified Products List: designlights.org/search

#### **Interior Daylighting Controls**

This measure supports the installation of a photo sensor that controls dimming fixtures.

- Dimming can be continuous or stepped at four or more levels (including on/off).
- Applicant must provide a room-by-room or fixture-byfixture spreadsheet indicating which fixtures and their associated wattages are controlled.
- Systems that allow on/off overrides are not eligible.
- Occupancy sensors, where required by code, are not eligible in the New Construction Application.
- A manufacturer's specification sheet must accompany the application

### **Lighting Power Density, Exterior**

This measure is for the installation of exterior energy efficient lighting with LPD in watts per square foot, watts per foot, or watts per unit in accordance with the values listed in ASHRAE 90.1-2016 corresponding to the surface type.

- Light levels should meet IES recommendations for each space type
- Documentation showing how LPD was calculated must accompany Final Application
- Incentive = (LPD baseline LPD actual) x area x \$0.53 (interior) or \$0.63 (exterior)
- Area is gross lighted area of each space type (except parking garage)
- Incentive applies only to LED lighting (fluorescent and incandescent excluded)
- All lighting must be DLC and/or Energy Star approved
- Exterior Lighting must be photocell controlled

Use the following procedure to calculate the actual lighting power density of the building or space:

- Determine the building type(s) and LPD baseline(s) using the table on the new construction lighting incentive worksheet.
- Determine the gross lighted area corresponding to the building type and enter in the new construction lighting incentive worksheet.
- Determine the interior lighting power for corresponding building type and enter in the new construction lighting incentive worksheet.
- Incentive = (LPD baseline LPD actual) x gross lighted area x \$0.53 (interior) or \$0.63 (exterior)

#### **Indoor Agriculture Specifications**

Indoor Agriculture Lighting: LED replacing HID or Fluorescent Fixtures

This measure is designed for interior agriculture



applications that use artificial lighting stimulation in an indoor conditioned space. Incentives available on new construction and retrofit applications. Efficient LED fixtures must have a reduced wattage, be listed on the DesignLights Consortium (DLC) qualified products list

(www.designlights.org/horticultural-lighting), be UL listed, have a power factor (PF)  $\geq$  0.90, a PPE of no less than 1.9 micromoles per joule, a minimum rated lifetime of 50,000 hours, and a minimum warranty of 5 years. To calculate the wattage reduction of grow lighting, use the following formula:

Watts reduced= 
$$\left(\frac{PPF_{installed}}{PPE_{baseline}} - Watts_{installed}\right) \times Qty$$

#### Where:

PPFinstalled = Photosynthetically-active Photon Flux output of the installed fixture, in  $\mu$ mol/s

PPEbaseline = Photosynthetically-active Photon Efficiency of the assumed baseline fixture, in  $\mu$ mol/J

Wattsinstalled = Fixture wattage of the installed LED grow light

Qty = The installed quantity of efficient fixtures

#### **Dehumidification units**

This measure is available for new standalone or portable dehumidifiers with an energy factor of 2.0 L/kWh or better or ENERGY STAR® rated. Incentives available on new construction and retrofit applications. Dehumidifiers must be installed in an indoor grow facility that operates year-round. Green house installations are not approved. If replacing an existing unit, proposed size must be the same size.

#### **HVAC Specifications**

## Unitary and Split Air-Conditioning and Air Source Heat Pump Systems

New unitary air conditioning units or air source heat pumps that meet or exceed the qualifying cooling efficiency shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water-cooled systems, evaporative coolers and water-source heat pumps do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). Minimum efficiencies for all HVAC equipment are based on ASHRAE 90.1-2019 for commercial air conditioning and heat pump **specifications (ashrae.org).** A manufacturer's specification sheet or an AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER2; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons, use the HSPF2; for units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit. Qualifying efficiencies for RTUs are summarized below:

	< 65,000 Btu/h (< 5.4 tons) Split System	14.0 SEER2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.4 SEER2
Unitary and Split Air Conditioning	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	16.1 IEER
Systems	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.6 IEER
	≥ 240,000 Btu/h and < 760,000 Btu/h (20-63 tons)	14.5 IEER
	≥ 760,000 Btu/h (≥ 63 tons)	13.8 IEER
Air Source Heat Pumps	< 65,000 Btu/h (< 5.4 tons) Split System	15.0 SEER2 and 7.7 HSPF2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.1 SEER2 and 6.9 HSPF2
	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.2 IEER and 3.5 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	14.6 IEER and 3.4 COP
	≥ 240,000 Btu/h and < 760,000 Btu/h (20-63 tons)	13.6 IEER and 3.3 COP

#### **Water- and Air-Cooled Chillers**

Chillers are eligible for an incentive if they have a rated kW/ ton for the integrated part load value (IPLV) that is less than or equal to the qualifying level efficiencies shown in the table below. The chiller-efficiency rating must be based on ARI Standard 550/590-2003 for IPLV conditions and not based on full-load conditions. The chillers must meet AHRI standards 550/590-2003 and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for commercial chiller specifications (ashrae.org). The AHRI net capacity value should be used to determine



the chiller tons. A manufacturer's specification sheet with the rated kW/ton-IPLV or COP-IPLV must accompany the application. Qualifying efficiencies for chillers are summarized below:

	< 150 tons	0.495 kW/ton- IPLV
	≥ 150 tons and < 300 tons	0.495 kW/ton- IPLV
Chillers: Water-cooled; Centrifugal	≥ 300 tons and < 400 tons	0.468 kW/ton- IPLV
o en a nagar	≥ 400 tons and < 600 tons	0.450 kW/ton- IPLV
	≥ 600 tons	0.450 kW/ton- IPLV
	< 75 tons	0.540 kW/ton- IPLV
Chillers: Water-	≥ 75 tons and < 150 tons	0.504 kW/ton- IPLV
cooled; Scroll, Helical-Rotary, or Reciprocating	≥ 150 tons and < 300 tons	0.486 kW/ton- IPLV
	≥ 300 tons and < 600 tons	0.468 kW/ton- IPLV
	≥ 600 tons	0.450 kW/ton- IPLV
Chillers: Air- cooled	< 150 tons	0.788 kW/ton- IPLV
	≥ 150 tons	0.771 kW/ton- IPLV

#### **Packaged Terminal Systems (Replacements)**

Packaged terminal air conditioners and heat pumps are through-the-wall, self-contained units that are 2 tons (24,000 Btu/h) or less. All EER values must be rated at 95°F outdoor dry-bulb temperature. Qualifying efficiencies for PTACs and PTHPs are summarized below:

Packaged Terminal AC	ALL	14.5 - (0.300 x [Btu/h]/1000) EER
Packaged Terminal HP	ALL	14.5 - (0.300 x [Btu/h]/1000) EER

### Variable Refrigerant Flow (VRF) Systems

New VRF air-conditioning and heating air source units that meet or exceed the qualifying cooling and heating efficiencies shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference

number. Water and evaporatively cooled systems do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for VRF air-conditioning and heat pump specifications (ashrae. org). An AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons use the HSPF; units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit indicating if the indoor unit(s) are ducted or non-ducted units. Qualifying efficiencies for VRFs are summarized below:

	< 65,000 Btu/h	13.7 SEER and
Variable Refrigerant Flow Systems	(< 5.4 tons)	7.7 HSPF
	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.7 IEER and 3.4 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.1 IEER and 3.3 COP
	≥ 240,000 Btu/h (≥ 20 tons)	13.8 IEER and 3.3 COP

#### **Computer Room Air Conditioners**

New computer room air conditioner (CRAC) units must be electric and installed in network rooms or data centers to be eligible for incentive. CRAC units are rated for sensible coefficient of performance (SCOP), or as seen in the below table.

	< 65,000 Btu/h (< 5.4 tons)	2.6 SCOP
Computer Room Air Conditioners	≥ 65,000 Btu/h and < 240,000 Btu/h (5.4-20 tons)	2.4 SCOP
	≥ 240,000 Btu/h (≥ 20 tons)	2.3 SCOP

#### **Hotel Guest Room Occupancy Sensors**

Incentives are offered for occupancy-based controls that regulate cooling-only HVAC units for individual hotel rooms. Sensors must be controlled by automatic occupancy detectors or a key-card system, and the default setting for controlled units must differ by at least 5 degrees (or shut the unit fan and heating or cooling off completely) from the operating set point during unoccupied periods. The incentive is per room controlled, not per sensor. The control



system also may be tied into other electric loads, such as lighting and plug loads, to shut them off when occupancy is not sensed. Replacement or upgrades of existing occupancy-based controls are not eligible as a prescriptive incentive. To determine unit size, use the following formula:

Unit size in tons = [Btu/h]/12,000

Example: 9,000 Btu/h unit / 12,000 = 0.75 ton unit.

## **Food Service Equipment Specifications NOTES:**

- Any equipment that does not meet ENERGY STAR® qualifications are NOT eligible for an incentive
- Food service equipment is only eligible for multi-family properties with commercial equipment (e.g., assisted living, retirement communities, etc.). Food service equipment for single- unit purposed are NOT eligible for incentive.

### **ENERGY STAR® Ovens & Fryers**

#### **Combination ovens**

Half-size combination ovens are defined as capable of accommodating a single 12.7  $\times$  20.8  $\times$  2.5-inch steam table cook pan per rack position, loaded from front-to-back or lengthwise.

Full-size combination ovens are defined as capable of accommodating two  $12.7 \times 20.8 \times 2.5$ -inch steam table pans per rack position, loaded from front-to-back or lengthwise.

#### **Convection ovens**

Convection oven sizes are defined to accommodate a standard pan size, as follows:

Convection Oven Size	Standard Pan Size
Half	18 × 13 × 1-inch
Full	18 × 26 × 1-inch

Convection ovens eligible for rebate do not include ovens that can heat the cooking cavity with saturated or superheated steam. However, eligible convection ovens may have moisture injection capabilities (e.g., baking ovens and moisture assist ovens). Ovens that include a "hold feature" are eligible under this specification if convection is the only method used to fully cook the food.

#### **Commercial Vat Fryers**

Standard Fryer is defined as a fryer with a van that measures > 12 inches and < 18 inches wide, and a shortening capacity 25 pounds and 65 pounds

Large vat fryer is defined as a fryer with a vat that measures 18 and 24 inches wide, and a shortening capacity > 50 pounds.

Fryers with vets measure less than 12 inches wide, or

greater than 24 inches wide are not eligible for incentive.

Eligible building types include independent restaurants, chain restaurants, elementary and secondary schools, colleges and universities, corporate food service operations, healthcare, hospitality, and supermarkets.

#### **ENERGY STAR® Steam Cookers**

High-efficiency ENERGY STAR® steam cookers have the characteristics, as shown below:

Pan Capacity	Heavy Load Cooking Energy Efficiency	Idle Rate, Watts	
3-Pan	50%	400	
4-Pan	50%	530	
5-Pan	50%	670	
6-Pan or Larger	50%	800	

### **ENERGY STAR® Hot Food Holding Cabinet**

This measure is intended for commercial food-grade equipment only. Hot food holding cabinets qualifying under this specification must be third-party certified to:

- ANSI/NSF Standard 4 International Standard for Commercial Cooking, Rethermalization and Powered Hot Food Holding Transport Equipment
- ANSI/UL Standard 197 Commercial Electric Cooking Appliances

Hot food holding cabinets that do not qualify for incentive include:

- Dual function equipment (e.g., "cook-and-hold" and proofing units)
- Heated transparent merchandising cabinets
- Drawer warmers

### **Pool Pumps Specifications**

This measure involves replacing a single-speed pool pump with an ENERGY STAR® or CEE Tier 1 qualified multi-speed or variable speed pool pump between 0.5 and 3.0 horsepower (HP). Savings are achieved by using more efficient pumps and operating multi-speed or variable speeds at speeds lower than the maximum design speed for tasks which need water flow less than the maximum design flow.

### **ENERGY STAR® High Efficiency Ice Makers**

This measure can be classified into two types of automatic commercial ice makers: batch-type (also called "cubetype") and continuous type.

Eligible commercial ice makers include:

- Air-cooled batch-type and continuous type ice makers.
   Designs include:
  - Ice-making head units (IMH)



- Self-contained units (SCU)
- Remote condensing units (RCU)
- Air-cooled RCU units designed for connection to remote rack compressors that are alternatively sold with a dedicated remote condensing unit

Ineligible commercial ice makers include:

- Water-cooled ice makers
- Ice and water dispensing systems
- Air-cooled RCU units that are designed only for connection to remote rack compressors

### **Pool Pumps Specifications**

This measure involves installing an ENERGY STAR® or CEE Tier 1 qualified multi-speed or variable speed pool pump between 0.5 and 3.0 horsepower (HP) in place of a new baseline pump meeting the federal standard. Savings are achieved by using more efficient pumps and operating multi-speed or variable speeds at speeds lower than the maximum design speed for tasks which need water flow less than the maximum design flow.

### **Air Compressor Specifications**

#### **Compressed Air Storage Receiver Tanks**

To qualify for this measure an existing load/no-load compressor with a 1 gal/cfm storage ratio or a modulating w/ blowdown compressor must be replaced with a load/no-load compressor with an improved storage capacity and ratio.

Eligible equipment is an oil-flooded load/no-load compressor with an improved storage capacity and ratio compared to the existing system. The cfm should reflect the rated capacity (in cfm) of all active compressors. If that value cannot be determined, compressor power can be converted to capacity using the rule of thumb of 4.5 cfm/hp.

#### **VSD Air Compressors**

This measure is eligible for high-efficiency oil-flooded air compressors ≤ 200 hp with inlet modulating with blowdown or load/no-load controls.

#### **Efficient Desiccant Compressed Air Dryers**

Eligible equipment is heated or externally-heated by a blower purge desiccant dryer without dew point demand controls. Dryers installed on inlet modulation compressors do not qualify for incentive.

#### **Efficient Refrigerated Compressed Air Dryers**

Eligible equipment includes a high-efficiency thermal mass dryers, variable speed dryers, or digital scroll dryers.

#### **Custom Specifications**

Pre-Notification Application is strongly encouraged

The PNM New Construction and Retrofit Rebates program offers custom incentives for those eligible improvements not included under the program's prescriptive

measures. Custom incentives are available under the New Construction and Retrofit Rebates program to non-residential customers within PNM service territory. The incentive will be calculated at \$0.08 per estimated kilowatt hour saved (first year only). Actual incentive payments will be based on either (1) documented electrical energy (kWh) reduction or (2) an electrical energy reduction estimate approved by PNM New Construction and Retrofit Rebates program staff.

The energy savings from installed measures must occur on a meter with an eligible rate schedule. Most non-residential rate schedules are eligible. See table of eligible rates in Terms & Conditions.

Custom projects must involve measures that result in a reduction in electric energy due to an improvement in system efficiency. Projects that result in a reduced energy consumption without an improvement in system efficiency are not eligible for a custom incentive. However, projects that involve an automated control technology such as energy management system programming are eligible for an incentive. All projects must meet the PNM cost-effectiveness requirements.

Projects involving measures covered by the prescriptive incentive portion of the program are not eligible for a custom incentive. However, if the applicant can justify significant interactive effects between prescriptive and custom measures, the applicant may apply for the entire project using a custom application. For example, a chiller system upgrade project that includes a chiller replacement and staging controls could go through custom, even though the chiller replacement would normally go through the prescriptive portion. PNM reserves the right to make the final determination of which application is appropriate.

Therefore, submitting a Pre-Notification Application for combined prescriptive and custom measures is strongly encouraged.

Project requirements under the New Construction and Retrofit Rebates program include the following:

- Projects must involve a facility improvement that results in a permanent reduction in electrical usage (kWh).
- Project savings must be sustainable for a period of five years or the life of the product, whichever is less.
- PNM is required to conduct a cost-effectiveness test on each custom application. Generally, projects with a financial payback beyond 5-8 years are unlikely to pass this test and could be ineligible for incentives. While this test will be based upon the final installation, Pre-Notification Applications offer the opportunity to determine if projects are likely to pass this test prior to investing in a project.

Projects that are NOT eligible for an incentive include the following:

• Fuel switching (e.g., electric to gas or gas to electric)



- Changes in operational and/or maintenance practices or simple control modifications not involving capital costs
- On-site electricity generation
- Projects involving gas-driven equipment in place of electric equipment (such as a chiller)
- Projects that involve peak-shifting (and not kWh savings)
- Measures installed with funding from or under another incentive program
- Renewables

PNM reserves the right to inspect proposed projects prior to equipment installation and to inspect projects post-installation.

#### **Supporting Documentation**

Please attach the following documentation in addition to required documentation as described in the PNM New Construction and Retrofit Rebates program policies and procedures:

- Complete description of the proposed project, the products and technologies used, and how they will be employed. Include definitions of the base case and details of the proposed equipment (provide manufacturer's specification sheets for both base and proposed cases, if possible).
- All facilities, buildings or equipment that will be affected by the project; include all PNM account numbers
- Detailed cost breakdown by measure

#### **Savings Calculations**

Include all relevant data that will allow an engineer to duplicate the savings estimate provided, such as:

- Concise description of the existing energy systems to be affected
- Facility physical description and occupancy (include activities in building and hours of operation)
- · Location of affected equipment
- Condition and age of equipment if a degradation in nameplate efficiency is assumed
- Hours of operation of the affected equipment
- Number of existing units
- Ratings of equipment (wattage, nameplate, tonnage, voltage, etc.)
- Measure-by-measure summary of the calculated savings associated with the project
- Historical peak power (if demand metered) and/or energy consumption data
- Clearly indicate all assumptions and variables used in the analysis
- Describe the basis or rationale for each assumption and variable

It is the applicant's responsibility to present a convincing case for estimating energy savings. If it is unclear whether your preferred method is sufficient, contact us at (505) 938-9400.

#### **Incentive Payment Limits**

The total incentive paid cannot exceed 100% of the incremental measure cost or 50% of total project cost, whichever is lowest. Contractor labor costs can be considered in project cost. Internal customer labor costs should not be included in project costs.

## New Construction Whole Building Performance Specifications

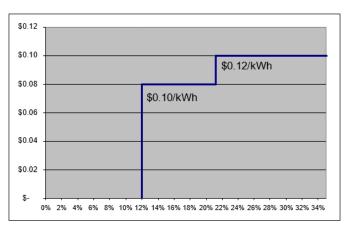
This measure is for designing and constructing a Multifamily residential building that is at least 10% more energy efficient than a baseline building constructed to ASHRAE 90.1-2016 Standards. Standards qualify under the following conditions:

The multifamily building must be 4 stories or greater.

The following incentives are paid to PNM customers according to the efficiency.

- 12% to 22% energy savings compared to ASHRAE 90.1-2016: \$0.10 per kWh saved.
- Greater than 22% energy savings compared to ASHRAE 90.1-2016: \$0.12 per kWh saved.

#### Whole Building - Owner Incentive



Incentives are limited by the following:

- Paid on estimated annualized kWh savings only
- Estimating savings following ASHRAE 90.1-2016
   Appendix G standards (including errata; excluding addenda; not including Exceptional Calculation methodology) as quantified in a final report indicating the annual energy savings of the baseline and the design case.
- Savings as demonstrated using energy simulation modeling tools capable of hourly calculations in multiple thermal zones (e.g., a program such as, but not limited to: Trane Trace, EnergyPlus and eQuest). The tool used must be approved by PNM New Construction and Retrofit Rebates program staff.
- Savings associated with interior buildings systems; exterior lighting is not included in calculations; renewable generation is not included; process loads



must be the same for both baseline and proposed design.

- Energy efficiency measures not eligible or receiving any other incentive by PNM.
- Maximum incentive per project may not exceed \$400,000 and is limited to 50% of project cost.
- The Whole Building Incentive approach follows a performance rating method that enables the design team to identify the interactive effects of energy efficiency measures across all building systems during the design process. For example: a change in proposed lighting power density affects both heating and cooling consumption, and in most cases will achieve savings greater than the lighting system alone.

#### **Supporting Documentation**

- Calculated values for the baseline building performance, the proposed design, and the percentage improvement.
- A list of energy efficiency measures included in the proposed design that differ from the baseline.
- Input and output reports from the approved energy simulation modeling tool, with breakdown of energy usage by component.
- An explanation of any error messages that appear in the simulation program output reports.

#### Eligible projects are limited to:

- PNM customers on an eligible rate.
- Construction projects that are in the design phase and will be substantially complete within 24 months of agreement acceptance by PNM.

# MULTIFAMILY RETROFIT SPECIFICATIONS



### **Lighting Retrofit Specifications**

All lighting projects are expected to comply with the Illuminating Engineering Society of North America (IESNA) recommended lighting levels or the local code.

#### **Permanent Lamp Removal, All Sections**

Pre-Application Required

Applicable to any section below, incentives are paid for the permanent removal of existing fixtures and lamps. Permanent lamp removal is the net reduction in the quantity of lamps after a project is completed. Customers are responsible for determining whether to use reflectors in combination with lamp removal in order to maintain adequate lighting levels. Lighting retrofits are expected to meet the Illuminating Engineering Society of North America (IESNA) recommended light levels. Unused lamps, lamp holders and ballasts must be permanently removed from the fixture and disposed of in accordance with local regulations.

A pre-notification application is required for this measure to allow PNM to conduct a pre-inspection.

### **IMPORTANT for all LED Lighting!**

The integral lamp or fixture you install MUST appear on one of the following lists. If not, your project may be ineligible to receive any incentives:

ENERGY STAR® Qualified Products List: www.energystar.gov/index.cfm?c=ssl.pr\_commercial

DesignLights Consortium Qualified Products List: designlights.org/search

#### **Interior Retrofits**

#### **LED Lamps Replacing Incandescent Lamps**

This measure addresses the replacement of 20-100 watt incandescent lamps with integral screw-in or pin-type replacement lamps. Eligible lamp types include A, R, Par, MR, G and Candle lamps. LED wattage may not exceed 20 watts. All LED lamps, strips or fixtures must be DesignLights Consortium or ENERGY STAR® qualified.

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

#### **LED Exit Signs**

This measure for the replacement of incandescent or CFL exit signs with LED exit signs.

#### **LED Open Signs**

This measure for the replacement of neon 'open' signs with LED 'open' signs

#### **LED Lamps Replacing CFL's**

This measure addresses the replacement of up to 42-watt CFLs with integral screw-in or pin-type replacement lamps.

Eligible lamp types include A, R, Par, MR, G and Candle lamps. LED wattage may not exceed 20 watts. All LED lamps, strips or fixtures must be DesignLights Consortium or ENERGY STAR® qualified.

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

#### **Controls: Occupancy Sensors**

All lighting controls must be listed by UL- or other OSHA approved nationally recognized testing laboratory (NRTL) in accordance with applicable U.S. standards. Passive infrared, ultrasonic detectors and fixture-integrated sensors or sensors with a combination thereof are eligible. Sensors may be hardwired or wireless if they have a minimum 10-year battery life. All sensors must control interior lighting fixtures. The incentive is per watt controlled. Incentives are also available for new fixtures with integrated occupancy controls. These fixtures must meet specifications for both new and control measures.

To assist in rebate processing, an inventory of controlled fixtures MUST be submitted with the Final Application (see Watts Controlled Calculator under **Apply > Tools & Resources** at pnmenergyefficiency.com).

### **Controls: Daylight Sensors**

This incentive is for daylight sensor controls in spaces with suitable available ambient light for at least part of the day. Light may be through skylights, clerestories, windows or "light tubes." The controls can be on/off, stepped, or continuous (dimming). The on/off controller should turn off artificial lighting when the interior illuminance meets the desired indoor lighting level. The stepped controller generally dims the artificial lighting 50% when the interior illuminance levels reach 50% of the desired lighting levels. Continuous or dimming controllers dim artificial lighting proportional to the available ambient light. All types of daylight sensor controls are required to be commissioned in order to ensure proper sensor calibration and energy savings. Incentives are per watt controlled.

To assist in rebate processing, an inventory of controlled fixtures MUST be submitted with the Final Application (see Watts Controlled Calculator under **Apply > Tools & Resources** at pnmenergyefficiency.com).

### **LED Replacing HID**

(Lamps, Fixtures, & Retrofit Kits)

#### LED Replacing HID (Lamps, Fixtures & Retrofit Kits)

This incentive is for replacing existing high intensity discharge (HID) fixtures such as Metal Halide (MH), High or Low Pressure Sodium (HPS or LPS), or Mercury Vapor (MV) with LED lamps, fixtures, and retrofit kits. LED fixtures, retrofit kits, and lamps must be DLC, or ENERGY STAR®



approved. Enter the existing fixture type into "Existing equipment: HID fixtures and/or lamps being removed" and the retrofit measure into "Replacement equipment: New T8, T5, or LED lamps, fixtures, or fixture retrofit kit being installed".

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

### LED Replacing T5, T8, or T12

(Lamps, Fixtures, & Retrofit Kits)

## LED Replacing T5, T8 or T12 (Lamps, Fixtures & Retrofit Kits)

This incentive is for replacing existing T12, T8 or T5 fluorescent fixtures with LED fixtures, retrofit kits or LED lamps. All LED fixtures, retrofit kits and lamps must be DLC or ENERGY STAR® approved. Enter the existing fixture type into "Existing equipment: T5, T8 or T12 fixtures and/or lamps being removed" and the retrofit measure into "Replacement equipment: New T8, T5, or LED lamps, fixtures, or fixture retrofit kit being installed".

**NOTE:** For lamp-only retrofits, any yellowed, cracked, otherwise damaged or missing lenses MUST also be replaced, or the project will not pass inspection.

#### **Controls for New LED Fixtures**

This incentive is for adding occupancy controls to new individual fixtures installed in Sections 2 or 3 above for Exterior / 12 Hours or 24 Hour / Garage / 3 Shift operations. Fixtures must be able to, on an individual basis based on occupancy, be able to reduce their wattage from 100% to a lower percentage or off. This applies to replaced LED fixtures and retrofit kits above. All LED fixtures and retrofit kits must be DLC or ENERGY STAR® approved. Provide the Hi-Low wattage manufacturer specification sheets with the application.

For lighting systems that use a master control, use the Custom portion of the application.

### **HVAC Specifications**

## **Unitary and Split Air-Conditioning and Air Source Heat Pump Systems**

New unitary air conditioning units or air source heat pumps that meet or exceed the qualifying cooling efficiency shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water-cooled systems, evaporative coolers and water-source heat pumps do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting

refrigerant (e.g., HCFC or HFC). Minimum efficiencies for all HVAC equipment are based on ASHRAE 90.1-2019 for commercial air conditioning and heat pump specifications (ashrae.org). A manufacturer's specification sheet or an AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER2; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons, use the HSPF2; for units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit. Qualifying efficiencies for RTUs are summarized below:

	< 65,000 Btu/h (< 5.4 tons) Split System	14.0 SEER2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.4 SEER2
Unitary and Split Air Conditioning	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	16.1 IEER
Systems	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.6 IEER
	≥ 240,000 Btu/h and < 760,000 Btu/h (20-63 tons)	14.5 IEER
	≥ 760,000 Btu/h (≥ 63 tons)	13.8 IEER
Air Source Heat Pumps	< 65,000 Btu/h (< 5.4 tons) Split System	15.0 SEER2 and 7.7 HSPF2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.1 SEER2 and 6.9 HSPF2
	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.2 IEER and 3.5 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	14.6 IEER and 3.4 COP
	≥ 240,000 Btu/h and < 760,000 Btu/h (20-63 tons)	13.6 IEER and 3.3 COP

#### **Water- and Air-Cooled Chillers**

Chillers are eligible for an incentive if they have a rated kW/ton for the integrated part load value (IPLV) that is less than or equal to the qualifying level efficiencies shown in the



table below. The chiller-efficiency rating must be based on ARI Standard 550/590-2003 for IPLV conditions and not based on full-load conditions. The chillers must meet AHRI standards 550/590-2003 and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for commercial chiller specifications (ashrae.org). The AHRI net capacity value should be used to determine the chiller tons. A manufacturer's specification sheet with the rated kW/ton-IPLV or COP-IPLV must accompany the application. Qualifying efficiencies for chillers are summarized below:

	< 150 tons	0.495 kW/ton- IPLV	
	≥ 150 tons and < 300 tons	0.495 kW/ton- IPLV	
Chillers: Water-cooled; Centrifugal	≥ 300 tons and < 400 tons	0.468 kW/ton- IPLV	
Ochunagai	≥ 400 tons and < 600 tons	0.450 kW/ton- IPLV	
	≥ 600 tons	0.450 kW/ton- IPLV	
	< 75 tons	0.540 kW/ton- IPLV	
Chillers: Water-	≥ 75 tons and < 150 tons	0.504 kW/ton- IPLV	
cooled; Scroll, Helical-Rotary, or Reciprocating	≥ 150 tons and < 300 tons	0.486 kW/ton- IPLV	
	≥ 300 tons and < 600 tons	0.468 kW/ton- IPLV	
	≥ 600 tons	0.450 kW/ton- IPLV	
Chillers: Air- cooled	< 150 tons	0.788 kW/ton- IPLV	
	≥ 150 tons	0.771 kW/ton- IPLV	

#### **Packaged Terminal Systems (Replacements)**

Packaged terminal air conditioners and heat pumps are through-the-wall, self-contained units that are 2 tons (24,000 Btu/h) or less. All EER values must be rated at 95°F outdoor dry-bulb temperature. Qualifying efficiencies for PTACs and PTHPs are summarized below:

Packaged Terminal AC	ALL	14.5 - (0.300 x [Btu/h]/1000) EER
Packaged Terminal HP	ALL	14.5 - (0.300 x [Btu/h]/1000) EER

#### Variable Refrigerant Flow (VRF) Systems

New VRF air-conditioning and heating air source units that meet or exceed the qualifying cooling and heating efficiencies shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water and evaporatively cooled systems do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for VRF air-conditioning and heat pump specifications (ashrae. org). An AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons use the HSPF; units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit indicating if the indoor unit(s) are ducted or non-ducted units. Qualifying efficiencies for VRFs are summarized below:

Variable Refrigerant Flow Systems	< 65,000 Btu/h (< 5.4 tons)	13.7 SEER and 7.7 HSPF
	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.7 IEER and 3.4 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.1 IEER and 3.3 COP
	≥ 240,000 Btu/h (≥ 20 tons)	13.8 IEER and 3.3 COP

#### **Smart/Programmable Thermostats**

This measure only applies to smart or programmable thermostats replacing manual thermostats (or programmable thermostats if installing smart thermostats). Incentives are offered for new smart or programmable thermostats that reduce heating and cooling consumption through a configurable schedule of temperature setpoints and automatic variations to that schedule to better HVAC system runtimes.

These schedules may be defaults, established through user interaction, and changed manually at the device or remotely through a web or mobile app. Automatic variations to that schedule could be driven by local sensors and software algorithms, and/or through connectivity to an internet software service. Data triggers to automatic schedule changes might include, for example, occupancy/



activity detection, arrival & departure of conditioned spaces, optimization based on historical or population specific trends, weather data and forecasts.

#### **Multi-family Guest Room Occupancy Sensors**

Incentives are offered for occupancy-based controls that regulate cooling-only HVAC units for individual senior living or hotel conversion-multi-family rooms. Sensors must be controlled by automatic occupancy detectors or a key-card system, and the default setting for controlled units must differ by at least 5 degrees (or shut the unit fan and heating or cooling off completely) from the operating set point during unoccupied periods. The incentive is per room controlled, not per sensor. The control system also may be tied into other electric loads, such as lighting and plug loads, to shut them off when occupancy is not sensed. Replacement or upgrades of existing occupancy-based controls are not eligible as a prescriptive incentive. To determine unit size, use the following formula:

Unit size in tons = [Btu/h]/12,000

#### **ENERGY STAR® Exhaust Fans**

This measure is for the installation of a new bathroom fan to be used in either a typical usage or continuous usage application. Bathroom fans must be ENERGY STAR® or ENERGY STAR® Most Efficient certified. Any fans that do not have the 'ENERGY STAR® Most Efficient' mark listed on their specification sheet does not qualify under the Most Efficient efficiency level.

Efficiency Level	Fan Capacity (CFM)	Minimum Efficacy Level (CFM/ Watts)	Maximum Allowable Sound Level (sones)
ENERGY	10 – 89	20	
STAR®	90 – 200	3.5	
ENERGY STAR® Most Efficient	All	10	2.0

#### **Appliances Equipment Specifications**

#### Low-flow showerheads

This measure applies to the replacement of showerheads rated at 2.0 gpm or greater with low-flow showerheads rated at 1.25, 1.5, 1.75, or 2.0 gpm in multifamily residences.

#### **Low-flow Faucet Aerators**

This measure applies to the replacement of faucet aerators rated at 2.2 gpm or greater with low-flow faucet aerators rated at 0.5 gpm, or 1.0 gpm for bathrooms, or 1.5 gpm for kitchens in multifamily residences.

### **ENERGY STAR® Refrigerators**

This measure applies to the replacement of non-ENERGY

STAR® refrigerators with ENERGY STAR® qualified refrigerators. Products with total refrigerated volume exceeding 39 cubic feet are not eligible for ENERGY STAR, thus are not eligible for a rebate.

#### **ENERGY STAR® Dishwashers**

This measure applies to the installation of standard or compact dishwashers meeting the ENERGY STAR® standards. A standard dishwasher is defined as capable of accommodating eight (8) place settings plus six (6) serving places or greater.

Dishwasher Type	Maximum kWh/year	Maximum gallons/ cycle
Standard (≥ 8 place settings + six serving pieces)	270	3.5
Compact (< 8 place settings + six serving pieces)	203	3.1

#### **ENERGY STAR® Washers & Dryers**

This measure applies to the installation of ENERGY STAR® qualified residential clothes washer and/or dryers for single-family in-unit OR common area applications (e.g., laundry rooms for an apartment complex, assisted living facilities, and retirement communities).

Clothes washers and dryers must meet the following ENERGY STAR® criteria, as shown below:

Clothes Washer Configuration	ENERGY STAR® Efficiency
Top Loading (≥ 2.5 cu. ft.)	IMEF > 2.06 WF < 4.3
Front Loading (≥.2.5 cu. ft.)	IMEF > 2.76 WF < 3.2
<2.5 cu. ft.	IMEF > 2.07 WF < 4.2

Dryer Product Class	Combined Energy Factor (ibs/kWh)
Vented Electric – Standard (≥ 4.4 cu. ft.)	3.93
Vented Electric – Compact (< 4.4 cu. ft.)	3.80
Ventless Electric, Combination Washer-Dryer	3.93

## **Food Service Equipment Specifications NOTES:**

Any equipment that does not meet ENERGY STAR®



- qualifications are NOT eligible for an incentive
- Food service equipment is only eligible for multi-family properties with commercial equipment (e.g., assisted living, retirement communities, etc.). Food service equipment for single- unit purposed are NOT eligible for incentive.

#### **ENERGY STAR® Combination ovens**

Half-size combination ovens are defined as capable of accommodating a single 12.7  $\times$  20.8  $\times$  2.5-inch steam table cook pan per rack position, loaded from front-to-back or lengthwise.

Full-size combination ovens are defined as capable of accommodating two 12.7  $\times$  20.8  $\times$  2.5-inch steam table pans per rack position, loaded from front-to-back or lengthwise.

#### **ENERGY STAR® Convection ovens**

Convection oven sizes are defined to accommodate a standard pan size, as follows:

Convection Oven Size	Standard Pan Size
Half	18 × 13 × 1-inch
Full	18 × 26 × 1-inch

Convection ovens eligible for rebate do not include ovens that can heat the cooking cavity with saturated or superheated steam. However, eligible convection ovens may have moisture injection capabilities (e.g., baking ovens and moisture assist ovens). Ovens that include a "hold feature" are eligible under this specification if convection is the only method used to fully cook the food.

#### **Commercial Vat Fryers**

Standard Fryer is defined as a fryer with a van that measures > 12 inches and < 18 inches wide, and a shortening capacity 25 pounds and 65 pounds.

Large vat fryer is defined as a fryer with a vat that measures 18 and 24 inches wide, and a shortening capacity > 50 pounds.

Fryers with vets measure less than 12 inches wide, or greater than 24 inches wide are not eligible for incentive.

Eligible building types include independent restaurants, chain restaurants, elementary and secondary schools, colleges and universities, corporate food service operations, healthcare, hospitality, and supermarkets.

#### **Steam Cookers**

High-efficiency ENERGY STAR® steam cookers have the characteristics, as shown below:

Pan Capacity	Heavy Load Cooking Energy Efficiency	Idle Rate, Watts
3-Pan	50%	400
4-Pan	50%	530
5-Pan	50%	670
6-Pan or Larger	50%	800

### **ENERGY STAR® Hot Food Holding Cabinet**

This measure is intended for commercial food-grade equipment only. Hot food holding cabinets qualifying under this specification must be third-party certified to:

- ANSI/NSF Standard 4 International Standard for Commercial Cooking, Rethermalization and Powered Hot Food Holding Transport Equipment
- ANSI/UL Standard 197 Commercial Electric Cooking Appliances

Hot food holding cabinets that do not qualify for incentive include:

- Dual function equipment (e.g., "cook-and-hold" and proofing units)
- Heated transparent merchandising cabinets
- Drawer warmers

#### **ENERGY STAR® High Efficiency Ice Makers**

This measure can be classified into two types of automatic commercial ice makers: batch-type (also called "cubetype") and continuous type.

Eligible commercial ice makers include:

- Air-cooled batch-type and continuous type ice makers.
   Designs include:
  - Ice-making head units (IMH)
  - Self-contained units (SCU)
  - Remote condensing units (RCU)
- Air-cooled RCU units designed for connection to remote rack compressors that are alternatively sold with a dedicated remote condensing unit

Ineligible commercial ice makers include:

- · Water-cooled ice makers
- · Ice and water dispensing systems
- Air-cooled RCU units that are designed only for connection to remote rack compressors

### **ENERGY STAR® Heat Pump Water Heater**

Pre-notification Application is required

This measure covers the installation for ENERGY STAR® rated Heat Pump Water Heaters (HPWH). HPWH incentives are calculated based on the size category (in gallons).

HPWHs must be ENERGY STAR® certified with a 3.30 Uniform Energy Factor (UEF) or greater and 55 gallons or less of storage capacity.



### **Pool Pumps Specifications**

This measure involves replacing a single-speed pool pump with an ENERGY STAR® or CEE Tier 1 qualified multi-speed or variable speed pool pump between 0.5 and 3.0 horsepower (HP). Savings are achieved by using more efficient pumps and operating multi-speed or variable speeds at speeds lower than the maximum design speed for tasks which need water flow less than the maximum design flow.

### **Variable Speed Drives (VSDs) Specifications**

#### Variable Speed Drives on Fan and Pump Applications

Variable speed drives (VSDs) installed on HVAC fans or pumps are eligible for this incentive. The installation of a VSD must accompany the permanent removal or disabling of any flow control devices such as inlet vanes, bypass dampers and throttling valves to be eligible.

Other requirements include:

- · Rated motor horsepower must be less than 200 HP
- Does not apply to redundant or backup/standby motors that are expected to operate less than 1,200 hours per year.
- Does not apply to variable pitch fans and forward curve with inlet guide vanes unless applicant supplies proof of kWh savings from logged or measured data.
- Does not apply to replacement of a multispeed motor.
- Does not apply to VFDs on new chillers (existing chillers qualify under the custom program).
- Applies only to VSDs installed with an automatic control technology.
- Does not apply to non-HVAC applications such as an industrial process, water well pumping or other non-HVAC applications.

### **ENERGY STAR® Window Specifications**

#### **Window Replacement**

This measure covers the installation of ENERGY STAR® rated windows replacing Single-Pane/Double-Pane windows. ENERGY STAR® window incentives are calculated on per square foot of window basis, inclusive of frame and sash.

Windows MUST satisfy ENERGY STAR® criteria below:

Climate Zone	U-Factor	Idle Rate, Watts
Albuquerque	≤ 0.30	≤ 0.40
	≤ 0.27	ANY
Ocarto Fo	≤ 0.28	≥ 0.32
Santa Fe	≤ 0.29	≥ 0.37
	≤ 0.30	≥ 0.42
Las Cruces	≤ 0.30	≤ 0.25

#### **Custom Specifications**

Pre-Notification Application is strongly encouraged

The PNM New Construction and Retrofit Rebates program offers custom incentives for those eligible improvements not included under the program's prescriptive measures. Custom incentives are available under the New Construction and Retrofit Rebates program to non-residential customers within PNM service territory. The incentive will be calculated at \$0.08 per estimated kilowatt hour saved (first year only). Actual incentive payments will be based on either (1) documented electrical energy (kWh) reduction or (2) an electrical energy reduction estimate approved by PNM New Construction and Retrofit Rebates program staff.

The energy savings from installed measures must occur on a meter with an eligible rate schedule. Most non-residential rate schedules are eligible. See table of eligible rates in Terms & Conditions.

Custom projects must involve measures that result in a reduction in electric energy due to an improvement in system efficiency. Projects that result in a reduced energy consumption without an improvement in system efficiency are not eligible for a custom incentive. However, projects that involve an automated control technology such as energy management system programming are eligible for an incentive. All projects must meet the PNM cost-effectiveness requirements.

Projects involving measures covered by the prescriptive incentive portion of the program are not eligible for a custom incentive. However, if the applicant can justify significant interactive effects between prescriptive and custom measures, the applicant may apply for the entire project using a custom application. For example, a chiller system upgrade project that includes a chiller replacement and staging controls could go through custom, even though the chiller replacement would normally go through the prescriptive portion. PNM reserves the right to make the final determination of which application is appropriate.

Therefore, submitting a Pre-Notification Application for combined prescriptive and custom measures is strongly encouraged.

Project requirements under the New Construction and Retrofit Rebates program include the following:

- Projects must involve a facility improvement that results in a permanent reduction in electrical usage (kWh).
- Project savings must be sustainable for a period of five years or the life of the product, whichever is less.
- PNM is required to conduct a cost-effectiveness test on each custom application. Generally, projects with a financial payback beyond 5-8 years are unlikely to pass this test and could be ineligible for incentives. While this test will be based upon the final installation, Pre-Notification Applications offer the opportunity to



determine if projects are likely to pass this test prior to investing in a project.

Projects that are NOT eligible for an incentive include the following:

- Fuel switching (e.g., electric to gas or gas to electric)
- Changes in operational and/or maintenance practices or simple control modifications not involving capital costs
- On-site electricity generation
- Projects involving gas-driven equipment in place of electric equipment (such as a chiller)
- Projects that involve peak-shifting (and not kWh savings)
- Measures installed with funding from or under another incentive program
- Renewables

PNM reserves the right to inspect proposed projects prior to equipment installation and to inspect projects post-installation.

#### **Supporting Documentation**

Please attach the following documentation in addition to required documentation as described in the PNM New Construction and Retrofit Rebates program policies and procedures:

- Complete description of the proposed project, the products and technologies used, and how they will be employed. Include definitions of the base case and details of the proposed equipment (provide manufacturer's specification sheets for both base and proposed cases, if possible).
- All facilities, buildings or equipment that will be affected by the project; include all PNM account numbers
- Detailed cost breakdown by measure

#### **Savings Calculations**

Include all relevant data that will allow an engineer to duplicate the savings estimate provided, such as:

- Concise description of the existing energy systems to be affected
- Facility physical description and occupancy (include activities in building and hours of operation)
- Location of affected equipment
- Condition and age of equipment if a degradation in nameplate efficiency is assumed
- Hours of operation of the affected equipment
- Number of existing units
- Ratings of equipment (wattage, nameplate, tonnage, voltage, etc.)
- Measure-by-measure summary of the calculated savings associated with the project
- Historical peak power (if demand metered) and/or energy consumption data
- Clearly indicate all assumptions and variables used in the analysis

Describe the basis or rationale for each assumption and variable

It is the applicant's responsibility to present a convincing case for estimating energy savings. If it is unclear whether your preferred method is sufficient, contact us at (505) 938-9400.

#### **Incentive Payment Limits**

The total incentive paid cannot exceed 100% of the incremental measure cost or 50% of total project cost, whichever is lowest. Contractor labor costs can be considered in project cost. Internal customer labor costs should not be included in project costs.

# MULTIFAMILY NEW CONSTRUCTION SPECIFICATIONS



## **New Construction Interior Lighting Specifications**

#### **Lighting Power Density, Interior**

This measure is for the installation of interior energyefficient lighting with LPD in watts per square foot in accordance with the values listed in ASHRAE 90.1-2016 corresponding space type.

- Light levels should meet IES recommendations for each space type
- Documentation showing how LPD was calculated must accompany Final Application.
- Incentive = (LPD baseline LPD actual) x area x \$0.53 (interior) or \$0.63 (exterior)
- Area is gross lighted area of each space type (except parking garage)
- Incentive is for interior lighting only
- Installed interior lighting power includes all power used by the luminaries including lamps, ballasts, current regulators, and control devices.
- Incentive applies only to LED lighting (fluorescent and incandescent excluded)
- All lighting must be DLC and/or Energy Star approved.

The following lighting equipment and applications are excluded from the calculation of interior lighting power:

- Display or accent lighting for galleries, museums and monuments
- Lighting integral to equipment, instrumentation or applicants
- Lighting in retail display windows
- · Lighting integral to advertising or directional signage
- Exit signs
- Lighting for theatrical purposes including performance, stage, film and video production
- Lighting for television broadcasting in sporting-activity areas
- Casino gaming areas

Use the following procedure to calculate the actual lighting power density of the building or space:

- Determine the building type(s) and LPD baseline(s) using the table on the new construction lighting incentive worksheet.
- Determine the gross lighted area corresponding to the building type and enter in the new construction lighting incentive worksheet.
- Determine the interior lighting power for corresponding building type and enter in the new construction lighting incentive worksheet.
- 4. Incentive = (LPD baseline LPD actual) x gross lighted area x \$0.53 (interior) or \$0.63 (exterior).

### **IMPORTANT for all LED Lighting!**

The integral lamp or fixture you install MUST appear on one of the following lists. If not, your project may be ineligible to receive any incentives:

ENERGY STAR® Qualified Products List: www.energystar.gov/index.cfm?c=ssl.pr\_commercial

DesignLights Consortium Qualified Products List: designlights.org/search

### **Interior Daylighting Controls**

This measure supports the installation of a photo sensor that controls dimming fixtures.

- Dimming can be continuous or stepped at four or more levels (including on/off).
- Applicant must provide a room-by-room or fixture-byfixture spreadsheet indicating which fixtures and their associated wattages are controlled.
- Systems that allow on/off overrides are not eligible.
- Occupancy sensors, where required by code, are not eligible in the New Construction Application.
- A manufacturer's specification sheet must accompany the application

## **New Construction Exterior Lighting Specifications**

This measure is for the installation of exterior energy efficient lighting with LPD in watts per square foot, watts per foot, or watts per unit in accordance with the values listed in ASHRAE 90.1-2016 corresponding to the surface type.

- Light levels should meet IES recommendations for each space type
- Documentation showing how LPD was calculated must accompany Final Application.
- Incentive = (LPD baseline LPD actual) x area x \$0.53 (interior) or \$0.63 (exterior)
- Area is gross lighted area of each space type (except parking garage)
- Incentive applies only to LED lighting (fluorescent and incandescent excluded)
- All lighting must be DLC and/or Energy Star approved.
- Exterior Lighting must be photocell controlled

Use the following procedure to calculate the actual lighting power density of the building or space:

- Determine the building type(s) and LPD baseline(s) using the table on the new construction lighting incentive worksheet.
- Determine the gross lighted area corresponding to the building type and enter in the new construction lighting incentive worksheet.
- Determine the interior lighting power for corresponding building type and enter in the new construction lighting incentive worksheet.



 Incentive = (LPD baseline - LPD actual) x gross lighted area x \$0.53 (interior) or \$0.63 (exterior)

### **HVAC Specifications**

## **Unitary and Split Air-Conditioning and Air Source Heat Pump Systems**

New unitary air conditioning units or air source heat pumps that meet or exceed the qualifying cooling efficiency shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water-cooled systems, evaporative coolers and water-source heat pumps do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240. 320 or 340/360), and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). Minimum efficiencies for all HVAC equipment are based on ASHRAE 90.1-2019 for commercial air conditioning and heat pump **specifications (ashrae.org).** A manufacturer's specification sheet or an AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER2; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons, use the HSPF2; for units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit. Qualifying efficiencies for RTUs are summarized below:

	< 65,000 Btu/h (< 5.4 tons) Split System	14.0 SEER2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.4 SEER2
Unitary and Split Air Conditioning	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4- 11.25 tons)	16.1 IEER
Systems	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.6 IEER
	≥ 240,000 Btu/h and < 760,000 Btu/h (20- 63 tons)	14.5 IEER
	≥ 760,000 Btu/h (≥ 63 tons)	13.8 IEER

	< 65,000 Btu/h (< 5.4 tons) Split System	15.0 SEER2 and 7.7 HSPF2
	< 65,000 Btu/h (< 5.4 tons) Single Package	14.1 SEER2 and 6.9 HSPF2
Air Source Heat Pumps	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4- 11.25 tons)	15.2 IEER and 3.5 COP
	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	14.6 IEER and 3.4 COP
	≥ 240,000 Btu/h and < 760,000 Btu/h (20- 63 tons)	13.6 IEER and 3.3 COP

#### Water- and Air-Cooled Chillers

Chillers are eligible for an incentive if they have a rated kW/ ton for the integrated part load value (IPLV) that is less than or equal to the qualifying level efficiencies shown in the table below. The chiller-efficiency rating must be based on ARI Standard 550/590-2003 for IPLV conditions and not based on full-load conditions. The chillers must meet AHRI standards 550/590-2003 and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for commercial chiller specifications (ashrae.org). The AHRI net capacity value should be used to determine the chiller tons. A manufacturer's specification sheet with the rated kW/ton-IPLV or COP-IPLV must accompany the application. Qualifying efficiencies for chillers are summarized below:

	< 150 tons	0.495 kW/ton- IPLV
	≥ 150 tons and < 300 tons	0.495 kW/ton- IPLV
Chillers: Water-cooled; Centrifugal	≥ 300 tons and < 400 tons	0.468 kW/ton- IPLV
Centinagai	≥ 400 tons and < 600 tons	0.450 kW/ton- IPLV
	≥ 600 tons	0.450 kW/ton- IPLV



	≤ 75 tons	0.540 kW/ton- IPLV
Chillers: Water-	≥ 75 tons and < 150 tons	0.504 kW/ton- IPLV
cooled; Scroll, Helical-Rotary, or	≥ 150 tons and < 300 tons	0.486 kW/ton- IPLV
Reciprocating	≥ 300 tons and < 600 tons	0.468 kW/ton- IPLV
	≥ 600 tons	0.450 kW/ton- IPLV
Chillers: Air-	< 150 tons	0.788 kW/ton- IPLV
cooled	≥ 150 tons	0.771 kW/ton- IPLV

### **Packaged Terminal Systems (Replacements)**

Packaged terminal air conditioners and heat pumps are through-the-wall, self-contained units that are 2 tons (24,000 Btu/h) or less. All EER values must be rated at 95°F outdoor dry-bulb temperature. Qualifying efficiencies for PTACs and PTHPs are summarized below:

Packaged Terminal AC	ALL	14.5 - (0.300 x [Btu/h]/1000) EER
Packaged Terminal HP	ALL	14.5 - (0.300 x [Btu/h]/1000) EER

### Variable Refrigerant Flow (VRF) Systems

New VRF air-conditioning and heating air source units that meet or exceed the qualifying cooling and heating efficiencies shown in the HVAC incentive worksheet table are eligible for an incentive. Units can be either split systems or single package units. The unit size and efficiency of systems are based on an AHRI (Air-Conditioning, Heating & Refrigeration Institute) reference number. Water and evaporatively cooled systems do not qualify under this program but may qualify under the custom incentive program. All packaged and split system cooling equipment must meet AHRI standards (210/240, 320 or 340/360), and use a minimum ozone-depleting refrigerant (e.g., HCFC or HFC). All required efficiencies are based on the ASHRAE 90.1 minimum efficiencies for VRF air-conditioning and heat pump specifications (ashrae. org). An AHRI sheet indicating the system efficiency must accompany the application. Disposal of the existing unit must comply with local codes and ordinances.

For cooling, units under 5.4 tons use the SEER; for units over 5.4 tons, use the IEER. For heating, units under 5.4 tons use the HSPF; units over 5.4 tons, use the COP. Provide the applicable AHRI Specification Sheet for each unit indicating if the indoor unit(s) are ducted or non-ducted units.

Qualifying efficiencies for VRFs are summarized below:

	< 65,000 Btu/h (< 5.4 tons)	13.7 SEER and 7.7 HSPF
Variable	≥ 65,000 Btu/h and < 135,000 Btu/h (5.4-11.25 tons)	15.7 IEER and 3.4 COP
Refrigerant Flow Systems	≥ 135,000 Btu/h and < 240,000 Btu/h (11.25-20 tons)	15.1 IEER and 3.3 COP
	≥ 240,000 Btu/h (≥ 20 tons)	13.8 IEER and 3.3 COP

#### **Hotel Guest Room Occupancy Sensors**

Incentives are offered for occupancy-based controls that regulate cooling-only HVAC units for individual hotel rooms. Sensors must be controlled by automatic occupancy detectors or a key-card system, and the default setting for controlled units must differ by at least 5 degrees (or shut the unit fan and heating or cooling off completely) from the operating set point during unoccupied periods. The incentive is per room controlled, not per sensor. The control system also may be tied into other electric loads, such as lighting and plug loads, to shut them off when occupancy is not sensed. Replacement or upgrades of existing occupancy-based controls are not eligible as a prescriptive incentive. To determine unit size, use the following formula:

Unit size in tons = [Btu/h]/12,000

Example: 9,000 Btu/h unit / 12,000 = 0.75 ton unit.

## **Food Service Equipment Specifications NOTES:**

- Any equipment that does not meet ENERGY STAR® qualifications are NOT eligible for an incentive
- Food service equipment is only eligible for multi-family properties with commercial equipment (e.g., assisted living, retirement communities, etc.). Food service equipment for single- unit purposed are NOT eligible for incentive.

### **ENERGY STAR® Combination ovens**

Half-size combination ovens are defined as capable of accommodating a single  $12.7 \times 20.8 \times 2.5$ -inch steam table cook pan per rack position, loaded from front-to-back or lengthwise.

Full-size combination ovens are defined as capable of accommodating two 12.7  $\times$  20.8  $\times$  2.5-inch steam table pans per rack position, loaded from front-to-back or lengthwise.

#### **ENERGY STAR® Convection ovens**

Convection oven sizes are defined to accommodate a standard pan size, as follows:



Convection Oven Size	Standard Pan Size
Half	18 × 13 × 1-inch
Full	18 × 26 × 1-inch

Convection ovens eligible for rebate do not include ovens that can heat the cooking cavity with saturated or superheated steam. However, eligible convection ovens may have moisture injection capabilities (e.g., baking ovens and moisture assist ovens). Ovens that include a "hold feature" are eligible under this specification if convection is the only method used to fully cook the food.

### **Commercial Vat Fryers**

Standard Fryer is defined as a fryer with a van that measures > 12 inches and < 18 inches wide, and a shortening capacity 25 pounds and 65 pounds

Large vat fryer is defined as a fryer with a vat that measures 18 and 24 inches wide, and a shortening capacity > 50 pounds.

Fryers with vets measure less than 12 inches wide, or greater than 24 inches wide are not eligible for incentive.

Eligible building types include independent restaurants, chain restaurants, elementary and secondary schools, colleges and universities, corporate food service operations, healthcare, hospitality, and supermarkets.

#### **ENERGY STAR® Steam Cookers**

High-efficiency ENERGY STAR® steam cookers have the characteristics, as shown below:

Pan Capacity	Heavy Load Cooking Energy Efficiency	Idle Rate, Watts
3-Pan	50%	400
4-Pan	50%	530
5-Pan	50%	670
6-Pan or Larger	50%	800

#### **ENERGY STAR® Hot Food Holding Cabinet**

This measure is intended for commercial food-grade equipment only. Hot food holding cabinets qualifying under this specification must be third-party certified to:

- ANSI/NSF Standard 4 International Standard for Commercial Cooking, Rethermalization and Powered Hot Food Holding Transport Equipment
- ANSI/UL Standard 197 Commercial Electric Cooking Appliances

Hot food holding cabinets that do not qualify for incentive include:

 Dual function equipment (e.g., "cook-and-hold" and proofing units)

- Heated transparent merchandising cabinets
- Drawer warmers

### **ENERGY STAR® High Efficiency Ice Makers**

This measure can be classified into two types of automatic commercial ice makers: batch-type (also called "cubetype") and continuous type.

Eligible commercial ice makers include:

- Air-cooled batch-type and continuous type ice makers.
   Designs include:
  - Ice-making head units (IMH)
  - Self-contained units (SCU)
  - Remote condensing units (RCU)
- Air-cooled RCU units designed for connection to remote rack compressors that are alternatively sold with a dedicated remote condensing unit

Ineligible commercial ice makers include:

- Water-cooled ice makers
- Ice and water dispensing systems
- Air-cooled RCU units that are designed only for connection to remote rack compressors

### **Appliances Equipment Specifications**

#### Low-flow showerheads

This measure applies to the installation of low-flow showerheads rated at 1.25, 1.5, 1.75, or 2.0 gpm in multifamily residences.

#### **Low-flow Faucet Aerators**

This measure applies to the installation of low-flow faucet aerators rated at 0.5 gpm, or 1.0 gpm for bathrooms, or 1.5 gpm for kitchens in multifamily residences.

#### **ENERGY STAR® Dishwashers**

This measure applies to the installation of standard or compact dishwashers meeting the ENERGY STAR® standards. A standard dishwasher is defined as capable of accommodating eight (8) place settings plus six (6) serving places or greater.

Dishwasher Type	Maximum kWh/ year	Maximum gallons/cycle
Standard (≥ 8 place settings + six serving pieces)	270	3.5
Compact (< 8 place settings + six serving pieces)	203	3.1

### **ENERGY STAR® Washers & Dryers**

This measure applies to the installation of ENERGY STAR® qualified residential clothes washer and/or dryers for single-family in-unit OR common area applications (e.g., laundry rooms for an apartment complex, assisted living facilities,



and retirement communities).

Clothes washers and dryers must meet the following ENERGY STAR® criteria, as shown below:

Clothes Washer Configuration	ENERGY STAR® Efficiency
Top Loading (≥ 2.5 cu. ft.)	IMEF > 2.06 WF < 4.3
Front Loading (≥.2.5 cu. ft.)	IMEF > 2.76 WF < 3.2
<2.5 cu. ft.	IMEF > 2.07 WF < 4.2

Dryer Product Class	Combined Energy Factor (ibs/kWh)
Vented Electric – Standard (≥ 4.4 cu. ft.)	3.93
Vented Electric – Compact (< 4.4 cu. ft.)	3.80
Ventless Electric, Combination Washer-Dryer	3.93

## **ENERGY STAR® Heat Pump Water Heater Specifications**

### **Heat Pump Water Heaters**

This measure covers the installation for ENERGY STAR® rated Heat Pump Water Heaters (HPWH). HPWH incentives are calculated based on the size category (in gallons).

HPWHs must be ENERGY STAR® certified with a 3.30 Uniform Energy Factor (UEF) or greater and 55 gallons or less of storage capacity.

#### **Pool Pumps Specifications**

This measure involves installing an ENERGY STAR® or CEE Tier 1 qualified multi-speed or variable speed pool pump between 0.5 and 3.0 horsepower (HP) in place of a new baseline pump meeting the federal standard. Savings are achieved by using more efficient pumps and operating multi-speed or variable speeds at speeds lower than the maximum design speed for tasks which need water flow less than the maximum design flow.

### **Custom Specifications**

Pre-Notification Application is strongly encouraged

The PNM New Construction and Retrofit Rebates program offers custom incentives for those eligible improvements not included under the program's prescriptive measures. Custom incentives are available under the New Construction and Retrofit Rebates program to non-residential customers within PNM service territory. The

incentive will be calculated at \$0.08 per estimated kilowatt hour saved (first year only). Actual incentive payments will be based on either (1) documented electrical energy (kWh) reduction or (2) an electrical energy reduction estimate approved by PNM New Construction and Retrofit Rebates program staff.

The energy savings from installed measures must occur on a meter with an eligible rate schedule. Most non-residential rate schedules are eligible. See table of eligible rates in Terms & Conditions.

Custom projects must involve measures that result in a reduction in electric energy due to an improvement in system efficiency. Projects that result in a reduced energy consumption without an improvement in system efficiency are not eligible for a custom incentive. However, projects that involve an automated control technology such as energy management system programming are eligible for an incentive. All projects must meet the PNM cost-effectiveness requirements.

Projects involving measures covered by the prescriptive incentive portion of the program are not eligible for a custom incentive. However, if the applicant can justify significant interactive effects between prescriptive and custom measures, the applicant may apply for the entire project using a custom application. For example, a chiller system upgrade project that includes a chiller replacement and staging controls could go through custom, even though the chiller replacement would normally go through the prescriptive portion. PNM reserves the right to make the final determination of which application is appropriate.

Therefore, submitting a Pre-Notification Application for combined prescriptive and custom measures is strongly encouraged.

Project requirements under the New Construction and Retrofit Rebates program include the following:

- Projects must involve a facility improvement that results in a permanent reduction in electrical usage (kWh).
- Project savings must be sustainable for a period of five years or the life of the product, whichever is less.
- PNM is required to conduct a cost-effectiveness test on each custom application. Generally, projects with a financial payback beyond 5-8 years are unlikely to pass this test and could be ineligible for incentives.
   While this test will be based upon the final installation, Pre-Notification Applications offer the opportunity to determine if projects are likely to pass this test prior to investing in a project.

Projects that are NOT eligible for an incentive include the following:

- Fuel switching (e.g., electric to gas or gas to electric)
- Changes in operational and/or maintenance practices or simple control modifications not involving capital costs
- On-site electricity generation



- Projects involving gas-driven equipment in place of electric equipment (such as a chiller)
- Projects that involve peak-shifting (and not kWh savings)
- Measures installed with funding from or under another incentive program
- Renewables

PNM reserves the right to inspect proposed projects prior to equipment installation and to inspect projects post-installation.

#### **Supporting Documentation:**

Please attach the following documentation in addition to required documentation as described in the PNM New Construction and Retrofit Rebates program policies and procedures:

- Complete description of the proposed project, the products and technologies used, and how they will be employed. Include definitions of the base case and details of the proposed equipment (provide manufacturer's specification sheets for both base and proposed cases, if possible).
- All facilities, buildings or equipment that will be affected by the project; include all PNM account numbers
- Detailed cost breakdown by measure

#### **Savings Calculations:**

Include all relevant data that will allow an engineer to duplicate the savings estimate provided, such as:

- Concise description of the existing energy systems to be affected
- Facility physical description and occupancy (include activities in building and hours of operation)
- Location of affected equipment
- Condition and age of equipment if a degradation in nameplate efficiency is assumed
- Hours of operation of the affected equipment
- Number of existing units
- Ratings of equipment (wattage, nameplate, tonnage, voltage, etc.)
- Measure-by-measure summary of the calculated savings associated with the project
- Historical peak power (if demand metered) and/or energy consumption data
- Clearly indicate all assumptions and variables used in the analysis
- Describe the basis or rationale for each assumption and variable

It is the applicant's responsibility to present a convincing case for estimating energy savings. If it is unclear whether your preferred method is sufficient, contact us at (505) 938-9400.

### **Incentive Payment Limits:**

The total incentive paid cannot exceed 100% of the

incremental measure cost or 50% of total project cost, whichever is lowest. Contractor labor costs can be considered in project cost. Internal customer labor costs should not be included in project costs.

## **New Construction Whole Building Performance Specifications**

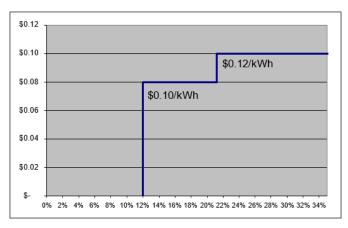
This measure is for designing and constructing a Multifamily residential building that is at least 10% more energy efficient than a baseline building constructed to ASHRAE 90.1-2016 Standards. Standards qualify under the following conditions:

· The multifamily building must be 4 stories or greater

The following incentives are paid to PNM customers according to the efficiency.

- 12% to 22% energy savings compared to ASHRAE 90.1-2016: \$0.10 per kWh saved.
- Greater than 22% energy savings compared to ASHRAE 90.1-2016: \$0.12 per kWh saved.

### Whole Building - Owner Incentive



Incentives are limited by the following:

- Paid on estimated annualized kWh savings only
- Estimating savings following ASHRAE 90.1-2016
   Appendix G standards (including errata; excluding addenda; not including Exceptional Calculation methodology) as quantified in a final report indicating the annual energy savings of the baseline and the design case.
- Savings as demonstrated using energy simulation modeling tools capable of hourly calculations in multiple thermal zones (e.g., a program such as, but not limited to: Trane Trace, EnergyPlus and eQuest). The tool used must be approved by PNM New Construction and Retrofit Rebates program staff.
- Savings associated with interior buildings systems; exterior lighting is not included in calculations; renewable generation is not included; process loads must be the same for both baseline and proposed design.



- Energy efficiency measures not eligible or receiving any other incentive by PNM.
- Maximum incentive per project may not exceed \$400,000 and is limited to 50% of project cost.
- The Whole Building Incentive approach follows a performance rating method that enables the design team to identify the interactive effects of energy efficiency measures across all building systems during the design process. For example: a change in proposed lighting power density affects both heating and cooling consumption, and in most cases will achieve savings greater than the lighting system alone.

### **Supporting Documentation**

- Calculated values for the baseline building performance, the proposed design, and the percentage improvement.
- A list of energy efficiency measures included in the proposed design that differ from the baseline.
- Input and output reports from the approved energy simulation modeling tool, with breakdown of energy usage by component.
- An explanation of any error messages that appear in the simulation program output reports.

#### Eligible projects are limited to:

- PNM customers on an eligible rate.
- Construction projects that are in the design phase and will be substantially complete within 24 months of agreement acceptance by PNM.



The PNM Business Energy Efficiency Programs are designed to help eligible commercial, industrial, multifamily, tribal, and government customers reduce their energy use. PNM offers incentives, training, and energy information services to its customers to improve energy efficiency.

The PNM Business Energy Efficiency Programs Trade Ally Network is comprised of industry professionals who receive Program training and who agree to follow the policies and procedures of the PNM Business Energy Efficiency Programs. Trade Allies include installation contractors, equipment vendors, engineers, consultants, architects and energy services providers.



Contact us with any questions.

### **PNM Business Energy Efficiency Programs**

c/o DNV Energy Services USA, Inc. 320 Gold Avenue SW, Suite 500 Albuquerque, NM 87102

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