

**ITEMIZED MEASURE TERMS AND CONDITIONS**

Effective January 1, 2009

**DETERMINING ELIGIBILITY**

For any measure detailed below, answer the questions following the measure category title to see if a project qualifies for an Express Efficiency incentive.

The answer should be “Yes” to every applicable question in a measure category in order for a project to qualify for that measure.

If your answer is “No” or you don’t know the answer to the question please contact your account representative. If you don’t know who your account representative is please call (800)736-4777.

**Lighting**

**L-A. Screw-In Compact Fluorescent lamps**

Yes No

- Are Compact Fluorescent Lamps (CFL’s) replacing incandescent lamps? Replacing CFL’s with CFL’s is not allowed.
- Is this the first time this location is participating in the Screw-In Compact Fluorescent lamp measure? Answering “No” to this question does not indicate that a project is ineligible for an incentive. If the answer is “No”, the measure is subject to pre-inspection. Rebates will not be paid for a customer location that has previously received a rebate for a CFL without a pre-installation inspection.
- Can documentation be provided showing the price of the new lamps was not reduced through a utility buy-down program? Lamps purchased at retail outlets do not qualify for a rebate if the price has been reduced through a utility buy-down program.
- If the CFL is self-ballasted (one-piece screw-in), is the lamp ENERGY STAR® qualified? Visit [www.energystar.gov](http://www.energystar.gov) for a list of qualifying lamps.
- If the CFL is modular (two-piece lamp and ballast adapter) and  $\geq 15$  watts, does it meet the minimum efficacy requirements in Table 1 and meet the minimum lumen output requirements in Table 2?

Table1: Minimum Efficacy Requirements

Lamp Power & Configuration		Minimum Efficacy
Minimum Efficacy		(Lumens Per Watt, Based on Initial Lumen Data)
<i>Bare Lamp</i>	Power < 15	45.0
	Power $\geq 15$	60.0
<i>Covered Lamp (no reflector)</i>	Lamp Power < 15	40.0
	Lamp Power $\geq 15$ and < 19	48.0
	Lamp Power $\geq 19$ and < 25	50.0
	Lamp Power $\geq 25$	50.0
	Lamp Power $\geq 25$	50.0
<i>Covered Lamp (with reflector)</i>	Lamp Power < 20	33.0
	Lamp Power $\geq 20$	40.0

Table 2: Minimum Lumen Output Requirements

Wattage of A-Shaped Incandescent Bulb	CFL Minimum Lumen Output (based on 100 hr. initial values)
40	Minimum of 450
60	Minimum of 800
75	Minimum of 1,100
100	Minimum of 1,600
150	Minimum of 2,600

Product Code	Description	Rebate/Unit Measure
L-A1	Screw-in Compact Fluorescent Lamp: 5-13 watts	\$1.50
L-A2	Screw-in Compact Fluorescent Lamp: 14-26 watts	\$2.50
L-A3	Screw-in Compact Fluorescent Lamp: $\geq$ 27 watts	\$3.50

### L-C. Compact Fluorescent Fixtures

Yes No

- Are complete new Compact Fluorescent fixtures being installed?
- Do the new fixtures have a lower Wattage than the fixtures being replaced without exceeding the maximum Wattage listed in the rebate table below for each range of lamp Wattage being replaced?
- Are fixtures equipped with Compact Fluorescent Lamps (CFLs) and electronic ballasts?
- Are CFL ballasts Programmed-start or Programmed Rapid-start with a Power Factor (PF) of  $\geq$  0.90 and Total Harmonic Distortion (THD) of  $<$  20%?
- Are new fixtures replacing, one for one, existing Incandescent, Mercury Vapor, T12/High Output Fluorescent, T12/Very High Output Fluorescent, Standard Metal Halide, or High Pressure Sodium Fixtures in interior installations? Existing Pulse Start Metal Halide installations do not qualify.
- If retrofitting an exterior fixture, is the existing lamp  $\leq$ 100 watts?
- Will all replacement fixtures be hardwired?
- Will fixtures be installed at a height over 12' above the finished floor to qualify for the greater than 400 watt category?
- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? Fixtures are not eligible for additional rebates under the Linear Fluorescent Fixtures and T8 or T5 Linear Fluorescent Lamps with Electronic Ballasts categories, but may qualify for an occupancy sensor rebate under the Occupancy Sensor category, provided all requirements are met.

**\*Please Note:** In all cases, the wattage of the replacement fixture must be less than the wattage of the existing lamp. The maximum replacement wattage listed in the table below is typically associated with the highest wattage in the basecase range.

Product Code	Description	Rebate/Unit Measure
L-C1	Exterior $\leq$ 100 Watt lamp basecase, up to 70 Watt replacement fixture	\$17.00
L-C2	Interior $\leq$ 100 Watt lamp basecase, up to 70 Watt replacement fixture	\$17.00
L-C3	Interior 101-175 Watt lamp basecase, up to 160 Watt replacement fixture	\$20.00
L-C4	Interior 176-399 Watt lamp basecase, up to 275 Watt replacement fixture	\$20.00
L-C5	Interior $\geq$ 400 Watt lamp basecase, up to 390 Watt replacement fixture	\$45.00

### L-B. Display and Accent Lighting

Yes No

- Does the retrofit involve the replacement of existing reflector-type incandescent, PAR halogen, or PAR halogen IR lamps? Accent lighting, flood lighting, or down lighting in interior installations all qualify.

### Cold Cathode Fluorescent Lamps: 2 to 8 Watts

Yes No

- Is the cold cathode lamp replacing an incandescent lamp of at least 10 watts?
- Does the cold cathode lamp range from 2 watts to 8 watts?
- Is the cold cathode lamp a medium (Edison) or candelabra base?
- Is the cold cathode lamp rated for at least 18,000 average life hours?

**Integrated Ballast Ceramic Metal Halide PAR Lamps**

Yes No

- Is the integrated ballast ceramic metal halide PAR lamp 25 watts?
- Does the integrated ballast ceramic metal halide PAR lamp have a rated lamp life of 10,500 hours or greater?
- Is the integrated ballast ceramic metal halide PAR lamp compatible with the existing equipment and controls? Customers are responsible for determining if the lamp will fit in their existing equipment and for verifying compatibility with existing lighting controls.

**Ceramic Metal Halide Directional Lighting Fixtures**

Yes No

- Does the ceramic metal halide directional lighting fixture have a nominal lamp wattage of 39 watts or lower?
- Is the ceramic metal halide directional lighting fixture compatible with the existing controls? Customers are responsible for verifying compatibility with existing lighting controls.

**Screw-in Compact Fluorescent Reflector Lamps**

Yes No

- Are the screw-in compact fluorescent reflector lamps with integrated ballasts listed as ENERGY STAR® qualified? Visit [www.energystar.gov](http://www.energystar.gov) for a list of qualifying lamps.
- Is the screw-in compact fluorescent reflector lamp wattage between 14 and 28 watts?
- If the retrofit involves screw-in induction reflector lamps, can it be demonstrated that the lamp performance is equivalent to ENERGY STAR®?

**Cold Cathode Fluorescent Lamp: 16 Watts with Electronic Ballast**

Yes No

- Is the Units a Refrigerated Case?
- Is the 16 Watt Cold Cathode Fluorescent Lamp with Electronic Ballast replacing a 4ft or 5ft T8/T12 fluorescent lamp?
- Is the Cold Cathode Lamp rated for at least 80,000 average life hours?

**Cold Cathode Fluorescent Lamp: 32 Watts with Electronic Ballast**

Yes No

- Is the Units a Refrigerated Case?
- Is the 16 Watt Cold Cathode Fluorescent Lamp with Electronic Ballast replacing a 4ft or 5ft T8/T12 fluorescent lamp?
- Is the Cold Cathode Lamp rated for at least 80,000 average life hours?

Product Code	Description	Rebate/Unit Measure
L-B1	Cold Cathode Fluorescent Lamp: 2-8 watts	\$2.00
L-B2	Integrated Ballast CMH PAR Lamps	\$12.50
L-B3	CMH Adjustable Accent Lighting	\$45.00
L-B4	Screw-in Compact Fluorescent Reflector Lamps, 14 - 28 Watts	\$5.00
L-B5	Cold Cathode Fluorescent Lamp: 16 watts	\$30.00
L-B6	Cold Cathode Fluorescent Lamp: 32 watts	\$30.00

## L-D. Interior Induction Fixtures

Yes No

- Are complete new Induction fixtures being installed?
- Do the new fixtures have a lower Wattage than the fixtures being replaced without exceeding the maximum Wattage listed in the rebate table below for each range of lamp Wattage being replaced?
- Are new fixtures equipped with Induction lamps and drivers?
- Are new fixtures replacing, one for one, existing Incandescent, Mercury Vapor, T12/High Output Fluorescent, T12/Very High Output Fluorescent, Standard Metal Halide, or High Pressure Sodium fixtures in interior installations? Existing Pulse Start Metal Halide installations do not qualify. Exterior installations do not qualify.
- Will all replacement fixtures be hardwired?
- Will fixtures be installed at a height over 12' above the finished floor to qualify for the 400 watt category?
- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? Fixtures are not eligible for additional rebates under the other measure categories, but may qualify for an occupancy sensor rebate under the Occupancy Sensor category, provided all requirements are met.

**\*Please Note: In all cases, the wattage of the replacement fixture must be less than the wattage of the existing lamp. The maximum replacement wattage listed in the table below is typically associated with the highest wattage in the basecase range.**

Product Code	Description	Rebate/Unit Measure
L-D1	100 Watt lamp basecase, up to 95 Watt replacement fixture	\$35.00
L-D2	101-175 Watt lamp basecase, up to 160 Watt replacement fixture	\$35.00
L-D3	176-399 Watt lamp basecase, up to 180 Watt replacement fixture	\$75.00
L-D4	400 Watt lamp basecase, up to 360 Watt replacement fixture	\$100.00

## L-E. T8 or T5 Linear Fluorescent Lamps with Electronic Ballasts

Yes No

- Are T12 lamps and magnetic ballasts being replaced with T8 or T5 lamps with electronic, high frequency ( $\geq 20$  kHz) ballasts?
- Are proposed ballasts Underwriters Laboratory (UL) listed ballasts that are warranted against mechanical or electrical defects for five years?
- Do the proposed ballasts have a power factor of  $\geq 0.90$ ?
- At full light output, do ballasts for 4-foot and 8-foot lamps have total harmonic distortion of  $\leq 20\%$ ?
- At full light output, do ballasts for 2-foot and 3-foot lamps have total harmonic distortion of  $\leq 32\%$ ?
- Will Programmed Start/Programmed Rapid-start ballasts be used for T5 lamp installations?
- Will T5 lamps being replaced in low bay installations (under 15') provide indirect lighting only? Customers installing T5 lamps for direct lighting in low ceilings should consult a lighting professional to address the possibility of excessive glare.
- Do T8 and T5 replacement lamps meet the color rendering index (CRI) and rated lamp life standards listed in Table 3 below?
- Can Manufacturer's specification sheets that document the color rendering index (CRI) and rated lamp life be provided for each ballast type?
- Will Instant Start ballasts be used for T8 lamp installations for general illumination purposes?
- Will Programmed Start/Programmed Rapid-start ballasts be used when occupancy sensors are installed to control circuits in lamp/ballast retrofits in order to maximize lamp life? (This is recommended; however, it is not required)
- Will occupancy sensors, which are being installed with linear fluorescent lighting retrofits, meet the requirements of Measure L-J?
- Is this the only Itemized Measure Category under which the replacement lamps and ballasts are receiving incentives? Replacement lamps and ballasts rebated in Measure L-E are not eligible for

rebates under Measures L-C and L-H.

Table 3: Lamp and Ballast Requirements

Lamp Type & Size	Ballast Type	CRI	Minimum Rated Lamp Life (3 hrs/start)
T8 – 2-ft, 3-ft, 4-ft	Programmed Start/ Programmed Rapid-start	≥80	24,000 hours
T8 – All sizes	Instant Start	≥80	18,000 hours
T5 – All sizes	Programmed Start or Programmed Rapid-start	≥82	20,000 hours

### De-Lamping

Yes No

- Are existing T12 lamps/ballasts and unused lamp holders (tomb stones) permanently being removed from existing fixtures?
- Are less than or equal to half of the existing lamps and ballasts (along with lamp holders) being removed from each fixture?
- Is the total number of lamps being claimed for de-lamping less than the number of replacement T8 or T5 lamps being installed?
- Will de-lamping maintain adequate light levels? Customers are responsible for deciding whether de-lamping will maintain adequate light levels.
- Is de-lamping being claimed in conjunction with T8 or T5 replacements? De-lamping alone is not eligible.

### L-H. Interior Linear Fluorescent Fixtures

Yes No

- Are complete new T8 or T5 or High Output (HO) T5 fixtures being installed?
- Will the new fixtures have a wattage equal to or less than the maximum wattage listed in the rebate table below for each range of lamp wattage being replaced and have a lower wattage than the fixture being replaced?\*
- Will fixtures be equipped with linear fluorescent lamps and ballasts that meet the specifications defined in the T8 or T5 Linear Fluorescent Lamps with Electronic Ballasts category?
- Are new fixtures replacing, existing Incandescent, Mercury Vapor, T12 Fluorescent, Standard Metal Halide, or High Pressure Sodium Fixtures in interior installations? Existing Pulse Start Metal Halide and exterior installations do not qualify.
- Will all replacement fixtures be hardwired?
- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? Fixtures are not eligible for additional rebates under the Compact Fluorescent Fixtures and T8 or T5 Linear Fluorescent Lamps with Electronic Ballasts categories, but may qualify for an occupancy sensor rebate under the Occupancy Sensor category, provided all requirements are met.
- Will fixtures be installed at a height over 12' above the finished floor to qualify for 400 watt and greater than 400 watt categories?

**\*Please Note:** In all cases, the wattage of the replacement fixture must be less than the wattage of the existing lamp. The maximum replacement wattage listed in the table below is typically associated with the highest wattage in the basecase range.

Product Code	Description	Rebate/Unit Measure
L-H1	≤100 Watt lamp basecase, up to 64 Watt replacement fixture	\$35.00
L-H2	101-175 Watts lamp basecase, up to 128 Watt replacement fixture	\$50.00
L-H3	176-399 lamp basecase, up to 192 Watt replacement fixture	\$75.00
L-H4	400 Watt lamp basecase, 245 to 360 Watt replacement fixture (Tier 2)	\$75.00
L-H5	400 Watt lamp basecase, up to 244 Watt replacement fixture (Tier 1)	\$100.00
L-H6	>400 Watt lamp basecase, up to 600 Watt replacement fixture	\$125.00

## L-F. Exterior Pulse-Start Metal Halide Fixtures

Yes No

- Are complete new Pulse Start Metal Halide Fixtures or Retrofit Kits being installed?
- Is the proposed installation for an exterior application? All installations for this measure are for exterior applications only - interior installations do not qualify.
- Are new fixtures replacing, one-for-one, existing Incandescent, Mercury Vapor, T12/High Output Fluorescent, T12/Very High Output Fluorescent, Standard Metal Halide, or High Pressure Sodium Fixtures?  
Retrofit kits may be used on existing Mercury Vapor, Standard Metal Halide, or High Pressure Sodium Fixtures only.
- If installing retrofit kits, will retrofit kits be used on existing Mercury Vapor, Standard Metal Halide, or High Pressure Sodium Fixtures only?
- Will the new fixtures or retrofit kits have a wattage equal to or less than the maximum wattage listed in the rebate table below for each range of lamp wattage being replaced and have a lower wattage than the fixture being replaced?\*
- Will fixtures be equipped with Pulse Start Metal Halide lamps and either magnetic or electronic ballasts?
- Are lamp wattages greater than 175 watts? Lamp wattages below 175 watts lamps do not qualify under this category.
- Will all replacement fixtures be hardwired?
- Will fixtures be installed at a height over 12' above the finished floor to qualify for 400 watt and greater than 400 watt categories?

**\*Please Note:** In all cases, the wattage of the replacement fixture must be less than the wattage of the existing lamp. The maximum replacement wattage listed in the table below is typically associated with the highest wattage in the basecase range.

Product Code	Description	Rebate/Unit Measure
L-F1	175 Watt lamp basecase, up to 190 Watt replacement fixture	\$10.00
L-F2	176-399 Watt lamp basecase, up to 275 Watt replacement fixture	\$40.00
L-F3	400 Watt lamp basecase, up to 400 Watt replacement fixture	\$45.00
L-F4	>400 Watt lamp basecase, 821 to 950 Watt replacement fixture (Tier 2)	\$50.00
L-F5	>400 Watt lamp basecase, up to 820 Watt replacement fixture (Tier 1)	\$100.00

## L-G. Interior Pulse Start Metal Halide Fixtures

Yes No

- Are complete new Pulse Start Metal Halide Fixtures or Retrofit Kits being installed?
- Are new fixtures replacing, one-for-one, existing Incandescent, Mercury Vapor, T12/High Output Fluorescent, T12/Very High Output Fluorescent, Standard Metal Halide, or High Pressure Sodium Fixtures in interior installations? Exterior installations do not qualify.
- If installing retrofit kits, will retrofit kits be used on existing Mercury Vapor, Standard Metal Halide, or High Pressure Sodium Fixtures only?
- Will the new fixtures or retrofit kits have a wattage equal to or less than the maximum wattage listed in the rebate table below for each range of lamp wattage being replaced and have a lower wattage than the fixture being replaced?\*
- Will fixtures be equipped with Pulse Start Metal Halide lamps and either magnetic or electronic ballasts?
- Are lamp wattages greater than or equal to 175 watts? Lamp wattages below 175 watts lamps do not qualify under this category.
- Will all replacement fixtures be hardwired?
- Will fixtures be installed at a height over 12' above the finished floor to qualify for 400 watt and greater than 400 watt categories?

- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? Fixtures are not eligible for additional rebates under the other measure categories, but may qualify for an occupancy sensor rebate under the Occupancy Sensor category, provided all requirements are met.

**\*Please Note:** In all cases, the wattage of the replacement fixture must be less than the wattage of the existing lamp. The maximum replacement wattage listed in the table below is typically associated with the highest wattage in the basecase range.

Product Code	Description	Rebate/Unit Measure
L-G1	175 Watt lamp basecase, up to 190 Watt replacement fixture	\$10.00
L-G2	176-399 Watt lamp basecase, up to 275 Watt replacement fixture	\$40.00
L-G3	400 Watt lamp basecase, up to 400 Watt replacement fixture	\$45.00
L-G4	>400 Watt lamp basecase, 821 to 950 Watt replacement fixture (Tier 2)	\$50.00
L-G5	>400 Watt lamp basecase, up to 820 Watt replacement fixture (Tier 1)	\$100.00

### L-J. Controls and Sensors

Yes No

- Are hardwired passive infrared and/or ultrasonic detectors being installed to control interior lighting fixtures?
- If planning to install self-contained wall-box lighting sensors, are the units without an exterior switch pack or relay and designed to replace a standard wall switch?
- If planning to install fixture-integrated sensors, are the units factory-installed in a lighting fixture, used in interior installations, and control all lamps in the fixture?
- If applicable, do sensors meet the wattage controlled requirements listed in the table below?
- Will Programmed Rapid-start ballasts be used when occupancy sensors are installed to control fluorescent lamps? (This is generally recommended; however, it is not required)
- Will the proper ballast be used for the retrofit? Customers shall ensure that the appropriate ballast is in use for the installation.

### Photocells

Yes No

- Does the retrofit involve built-in or stand-alone photoelectric cells that switch outdoor lighting loads on at dusk and off at dawn?

### Time Clocks

Yes No

- Will time clocks control lighting equipment?
- Do units feature a minimum 3-hour battery back-up to avoid time loss during power outages?
- For outdoor lighting without a photocell, will astronomical time clocks (where on-off time follows sunset and sunrise) be used?

Product Code	Description	Rebate/Unit Measure
L-J1	Wall-box	\$16.50
L-J2	Wall- or Ceiling-Mounted <500 Watts	\$20.00
L-J3	Wall- or Ceiling-Mounted ≥500 Watts	\$44.00
L-J4	Fixture-Integrated in Installations Over 12'	\$20.00
L-J5	Fixture-Integrated in Installations 12' or Under	\$7.00
L-J6	Photocell	\$7.00
L-J7	Timeclock	\$36.00

## L-K. Exit Signs

Yes No

- Are new Light Emitting Diode (LED), Electroluminescent, or Photoluminescent exit signs replacing incandescent or compact fluorescent lamps (CFL)? Retrofit kits are not eligible.
- Do all new exit signs meet UL-924 requirements?
- Will exit signs have a usage level  $\leq 5$  watts and a minimum product life of 10 years or be listed as ENERGY STAR<sup>®</sup> qualified?
- Can manufacturer's information be provided stating the model number and ENERGY STAR<sup>®</sup> qualification? If not, other qualifying specification sheet must be submitted with each rebate form.
- Do new exit signs meet local fire codes?

Product Code	Description	Rebate/Unit Measure
L-K1	Exit Sign, Incandescent basecase	\$27.00
L-K2	Exit Sign, CFL basecase	\$15.00

## L-M. Channel Signs (LED)

Yes No

- Are incandescent-lighted or neon-lighted channel letter signs being replaced? Retrofit kits or complete replacement LED signs are eligible.
- Will the replacement sign use less than or equal to 20% of the actual input power of the sign that it is replacing?
- Has the length of the sign been measured properly? Measure the length of the sign as follows:
- Measure the length of each individual letter at the centerline. Do not measure the distance between letters.
  - Add up the measurements of each individual letter to get the length of the entire sign being replaced.

Product Code	Description	Rebate/Unit Measure
L-M1	LED Channel Signage, Indoor $\leq 2$ ft	\$4.00
L-M2	LED Channel Signage, Outdoor $\leq 2$ ft	\$2.00
L-M3	LED Channel Signage, Indoor $> 2$ ft	\$6.00
L-M4	LED Channel Signage, Outdoor $> 2$ ft	\$3.00

### DEFINITIONS

#### Basecase

Refers to the existing lighting equipment, prior to retrofitting, based on lamp (bulb) wattage

#### Electroluminescent Exit Sign

Exit sign using materials containing phosphors that light up when voltage is applied.

#### Replacement Fixture

Refers to new equipment being installed based on system (lamp and ballast) wattage.

#### Photoluminescent Exit Sign

Non-electrified exit sign containing materials that absorb and reradiate light.

## Refrigeration

- Low temperature refers to temperatures below 0°F.
- Medium temperature refers to refrigerated space temperatures between 1°F and 35°F.

### R-A. Night Covers for Open Vertical and Horizontal Display Cases

Yes No

- Is a cover being installed on an otherwise open display case to decrease cooling load of the refrigerated case during off hours?
- Has the linear footage of the installed night cover been properly measured? The rebate is based on the linear footage of the installed night cover.
- Does the film type cover have small, perforated holes to decrease moisture buildup? (This is recommended; however, it is not required)
- Will the cover be applied for a period of at least six hours in a 24-hour period?
- Has the following been considered?
- Using proper compressor capacity modulation mechanisms (such as variable speed drive (VSD) or cylinder un-loader)
  - Using evaporator pressure regulator (EPR) and possibly resetting to higher suction temperatures when shields are applied
  - Resizing TVX and resetting suction pressure to a higher value
- Will installing night covers impact system performance? Consult with the case manufacturer or an authorized representative to determine if installing night covers will impact system performance.

### R-B. Strip Curtains for Walk-in Boxes

Yes No

- Are new strip curtains or plastic swinging doors being installed on doorways of walk-in boxes and refrigerated warehouses?
- Does the retrofit involve the replacement of existing strip curtains that have no useful life left?
- Has the square footage of the doorway been properly measured? The rebate is based on the linear footage of the installed night cover. Rebate is based on the square footage of the doorway.

### R-C. & R-D. New Refrigeration Display Case with Doors (Low and Medium Temperatures)

Yes No

- Does the retrofit involve the replacement of an existing open multi-deck display case with a new high efficiency reach-in unit with standard glass doors with electronically commutated motor (ECM) fan, T-8 lamps and electronic ballast? This measure can be applied to self-contained or remote cases.
- Have the display cases been properly measured? New display cases are rebated based on their length.
- Is the new case length equal to or shorter than the original case?

### R-E. New High Efficiency Refrigeration Display Case with Special Doors (Low Temp)

Yes No

- Is a new high efficiency reach-in display case replacing an existing low temperature self-contained or remote reach-in as shown in the table below?
- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? This measure cannot be used in conjunction with measure R-G.

Existing	Replacement
T-12 lamps, magnetic ballast	T-8 lamps, electronic ballast
Shaded pole fan motor	ECM fan
Standard glass doors	Low/no anti-sweat glass double pane doors meeting the requirements of measure F

## R-F. Special Doors with Low/No Anti-Sweat Heat on Low Temperature Display Cases

Yes No

- Is an existing standard glass door of a low temperature reach-in display case being replaced with a special glass door that requires minimum to no anti-sweat heat (ASH)?
- Will new doors prevent condensation from occurring within the frame assembly?
- Is the total amperage (at 120 volts) from the door rail, glass, and frame heater equal to or less than 0.39 amps per foot (length) of display case?
- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? This measure cannot be used in conjunction with measure R-G.

## R-G. Anti-Sweat Heat (ASH) Controls

Yes No

- Can the proposed device sense the relative humidity in the air outside of the display case and reduce or turn off the glass door (if applicable) and frame anti-sweat heaters at low humidity conditions? Equivalent technologies that can reduce or turn off anti-sweat heater based on the amount of condensation formed on the inner glass pane may also qualify.
- Is this the only Itemized Measure Category under which the fixtures are receiving incentives? This measure cannot be used in conjunction with measures R-E & R-F.
- Has the linear footage of the case been properly measured? Rebate is based on the total linear footage of the case.

## R-H. Insulation for Bare Suction Lines

Yes No

- Does the retrofit involve insulating bare refrigeration suction lines of 1 5/8 inches or less on existing equipment only?
- If insulating Medium temperature lines, will 3/4-inch of flexible closed-cell nitrite rubber or equivalent insulation be used?
- If insulating Low temperature lines, will 1-inch of flexible closed-cell nitrite rubber or equivalent insulation be used?
- Has the length of the insulated material been properly measured? Rebate is based on the length, in linear feet, of the insulation installed.

## R-I. Door Gaskets on Solid Doors

Yes No

- Is a worn gasket on the insulated opaque door of a walk-in or reach-in cooler or freezer being replaced?
- Do replacement gaskets meet the manufacturer's installation specifications, specifically regarding dimensions, materials, attachment method, style, compression, and magnetism?
- Has the perimeter of the door been properly measured? Rebate is based on total door perimeter in linear feet.

## R-J. Door Gaskets on Glass Doors

Yes No

- Is a worn gasket on the on a reach-in glass door(s) of a cooler or freezer being replaced?
- Do replacement gaskets meet the manufacturer's installation specifications, specifically regarding dimensions, materials, attachment method, style, compression, and magnetism?
- Has the perimeter of the door been properly measured? Rebate is based on total door perimeter in linear feet.

### R-K. & R-L. Auto-Closers for Main Cooler or Main Freezer Doors

Yes No

- Will the auto-closer be applied to the main insulated opaque door(s) of a walk-in cooler or freezer?
- Will the auto-closer be able to firmly close that door when it is within one inch of full closure?

### R-M. Evaporator Fan Controller for Walk-in Coolers

Yes No

- Will airflow of evaporator fans in medium-temperature walk-in coolers be reduced when compressor(s) cycle off and there is no refrigerant flow through the evaporator?
- Will a minimum fan load of 1/20 horsepower be controlled where the fan(s) operate continuously at full speed?
- Will fan motor power be reduced by at least 75% during the compressor off-cycle?

**Not eligible** if any of the following conditions apply:

- 1) the compressor runs all the time with high duty cycle;
- 2) the evaporator fan does not run at full speed all the time;
- 3) the evaporator fan motor runs on poly-phase power;
- 4) the evaporator fan motor is not shaded-pole; or
- 5) evaporator does not use off-cycle or time-off defrost.

### R-N. Vending Machine Controller

Yes No

- Do the refrigerated vending machines contain only non-perishable bottled and canned beverages?
- Will the controller include a passive infrared occupancy sensor to turn off fluorescent lights and compressor when surrounding area is unoccupied for 15 minutes or longer?
- Will control logic periodically power up the machine at two-hour intervals to maintain product temperature and provide compressor protection? Refurbished vending machines that include this option are eligible.

### R-O. & R-P. Efficient Evaporator Fan Motor

Yes No

- Is the existing equipment a standard efficiency shaded pole evaporator fan motor of refrigerated display cases or fan coil systems in walk-ins?
- Are shaded pole motors being replaced by either electronically commutated motors (ECM) or permanent-split-capacitor (PSC) motors?
- Is this the only Itemized Measure Category under which the fans are receiving incentives? This measure cannot be used in conjunction with Evaporator Fan Controller Measure R-M.

## Food Service

Electric equipment can only be replaced with qualifying electric equipment, and gas equipment can only be replaced with qualifying gas equipment. Fuel switching is not permitted.

**For a list of qualifying food service equipment visit <http://www.fishnick.com/saveenergy/rebates>.**

### FS-A1. Electric Commercial Pressureless Steamers (Connectionless/Boilerless)

Yes No

- Do pressureless or boilerless steamers meet ENERGY STAR® specifications or have cooking energy efficiency rating of 50% or greater? Cooking energy efficiency is based on full load efficiency testing (potato cooking test) in accordance with the American Society for Testing and Materials (ASTM) Standard F1484.
- Has the manufacturer or manufacturer's representative been consulted to determine if a specific model qualifies?

## FS-B. Commercial Insulated Hot Food Holding Cabinets

Yes No

- Is equipment an electric hot food holding cabinet that is fully insulated on all sides and has solid insulated doors, in full, three-quarter and half sizes respectively as listed in the table below? This measure does not include cook and hold equipment.
- Is the cabinet equal to or less than the maximum idle energy rate of 20 watts/ft<sup>3</sup> in accordance with the ASTM Standard F2140 test method?
- Has the manufacturer or manufacturer's representative been consulted to determine if a specific model qualifies?

Cabinet Size	Qualifying Energy Rate (ER)
Full Size	Insulated with ER $\leq$ 0.4 kW
$\frac{3}{4}$ Size	Insulated with ER $\leq$ 0.3 kW
$\frac{1}{2}$ Size	Insulated with ER $\leq$ 0.2 kW

## FS-C1. Commercial Electric Fryers

Yes No

- Are the commercial electric fryers ENERGY STAR® qualified or do they have a demonstrated cooking energy efficiency rating of  $\geq$  80% utilizing ASTM Standard F1361? ENERGY STAR® maintains an updated list of qualifying products and specifications at [www.energystar.gov](http://www.energystar.gov).
- Has the manufacturer or manufacturer's representative been consulted to determine if a non-ENERGY STAR® qualified model meets the ASTM Standard?

## FS-E1. Commercial Electric Griddles

Yes No

- Do the commercial electric griddles have a cooking energy efficiency of  $\geq$  70%, as tested in accordance with ASTM F1275?

## FS-E2. Commercial Gas Griddles (not applicable for SCE Customers)

Yes No

- Do the commercial gas griddles have a cooking energy efficiency of  $\geq$  38%, as tested in accordance with ASTM F1275?

## FS-F1. Commercial Electric Combination Ovens

Yes No

- Do the commercial electric combination ovens have a cooking energy efficiency  $\geq$  60%, as tested in accordance with ASTM F1639-05?

## FS-F2. Commercial Gas Combination Ovens (not applicable for SCE Customers)

Yes No

- Do the commercial gas combination ovens have a cooking energy efficiency  $\geq$  40%, as tested in accordance with ASTM F1639-05?

## FS-G1. Commercial Electric Convection Ovens

Yes No

- Do the commercial electric convection ovens have a cooking energy efficiency  $\geq$  70%, based on heavy load (potato) cooking as tested in accordance with ASTM F1496?

## FS-G2. Commercial Gas Convection Ovens (not applicable for SCE Customers)

Yes No

- Do the commercial gas convection ovens have a cooking energy efficiency  $\geq 40\%$ , based on heavy load (potato) cooking as tested in accordance with ASTM F1496?

### FS-H. Commercial Reach-In Refrigerators and Freezers

Yes No

- Does the retrofit involve new or replacement energy efficient commercial reach-in solid door refrigerators and freezers, and glass door reach-in refrigerators? Used or rebuilt equipment is not eligible.
- Is the refrigeration system built-in (packaged)? Cases with remote refrigeration systems do not qualify.
- Can documentation (manufacturer's specification sheet) be provided proving that the appliance meets the Consortium for Energy Efficiency (CEE) Tier II energy efficiency specifications using ASHRAE Standard 117-1992 (38°F +/- 2°F)?

Commercial Solid Door Reach-In Refrigerators and Freezers, and Glass Door Reach-In Refrigerators

Product Description	CEE Maximum Daily Energy Usage
Solid Door Reach-In Refrigerators Tier II CEE	$\leq 0.06 V + 1.22 \text{ kWh/day}$
Solid Door Reach-In Freezers Tier II CEE	$\leq 0.28 V + 0.97 \text{ kWh/day}$
Glass Door Reach-In Refrigerator Tier II CEE	$\leq 0.086 V + 2.39 \text{ kWh/day}$

### FS-I. Commercial Ice Machines

**New Specifications and Rebate Levels are Effective for all Purchases and Installations Effective 1/1/2008**

Yes No

- Do machines generate 60 grams (2 oz.) or lighter ice cubes, as well as flaked, crushed and fragmented ice makers? Performance data is based on ARI Standard 810.
- Is the machine air-cooled (self contained or remote)?
- Are efficiency specifications equivalent to CEE Tier II or CEE Tier III as listed below? Visit [www.ari.org](http://www.ari.org) for product information and testing procedures.
- Will the entire ARI tested Ice Making system be purchased?
- If proposed equipment is a remote machine, will the qualifying compressor unit be purchased with the remote machine?

Product Type	Ice Harvest Rate (lbs per 24 hrs.)*	Incentive Level kWh/100 lbs ice CEE Tier II	Incentive Level kWh/100 lbs ice CEE Tier III
Air-Cooled	101-200	8.5	8.0
Air-Cooled	201-300	7.7	7.3
Air-Cooled	301-400	6.5	6.1
Air-Cooled	401-500	5.5	5.2
Air-Cooled	501-1000	5.2	5.0
Air-Cooled	1001-1500	4.9	4.7
Air-Cooled	> 1500	4.6	4.4

\* Ice harvest rate (capacity in lbs) is the amount of ice produced in 24 hours.

### FS-J1. Commercial Kitchen Ventilation Control- Retrofit (Electric)

Yes No

- Was the purchase or installation made after 10/1/2007?
- Is a new commercial kitchen exhaust hood control system being installed in an existing dedicated commercial kitchen exhaust hood and make-up air system? **Indicate make-up air unit (MAU) hp on invoice.**

- Will the control system be used in conjunction with variable speed fan motor controls?
- Has the control system been pre-approved? Only pre-approved control systems will qualify for an incentive.

Product Code	Description	Rebate/Exhaust Fan HP
FS-J1	Ventilation Control Retrofit (Electric)	\$350.00

### FS-J2. Commercial Kitchen Ventilation Control- New Hood (Electric)

Yes No

- Was the purchase or installation made after 10/1/2007?
- Is a new commercial kitchen exhaust hood control system being installed in a new dedicated commercial kitchen exhaust hood and make-up air system? **Indicate make-up air unit (MAU) hp on invoice.**
- Will the control system be used in conjunction with variable speed fan motor controls?
- Has the control system been pre-approved? Only pre-approved control systems will qualify for an incentive.

Product Code	Description	Rebate/Exhaust Fan HP
FS-J2	Ventilation Control New Hood (Electric)	\$300.00

## Air Conditioning

### AC-A. Reflective Window Film

Yes No

- Does the film have a minimum five-year manufacturer's warranty?
- Do windows have a southern, eastern, or western exposure? Rebates are not available for windows with northern exposure.
- Is the space cooled by vapor-compression air conditioner? Evaporative-cooled space is not eligible.
- Does the film have either a solar heat gain coefficient (SHGC)  $\leq 0.39$  and will be applied to clear, single-pane glass, or have an SHGC  $\leq 0.47$  and visible transmittance/solar heat gain coefficient (VT/SHGC) ratio  $> 1.3$ ? Specification must be documented on the invoice, as well as square footage installed. To convert shading coefficient (SC) to SHGC, use the following equation:
  - $SHGC = SC \times .87$

### AC-B. Variable Frequency Drives (VFDs)

Yes No

- Does the retrofit involve VFD installations for fan applications on HVAC distribution systems?
- Is the fan equal to or less than 100 hp?
- Will throttling devices, such as inlet vanes, bypass dampers, and throttling valves be removed or permanently disabled?
- Will there be a 3% impedance choke (This is recommended; however, it is not required)

### AC-C. Package Terminal Air Conditioners and Package Heat Pumps

Yes No

- Are Package terminal air conditioners (PTAC) and Package terminal heat pumps (PTHP) through-the-wall, self-contained units and are 2 tons (24,000 Btu/hr) or less?
- Do units have an EER that is 20% higher than the minimum are eligible? Minimum EER is

calculated from the following equations:

- PTAC Min EER =  $10.9 - (0.213 \times \frac{\text{capacity}}{1,000})$  (capacity in Btu/hr\*)
- PTHP Min EER =  $10.8 - (0.213 \times \frac{\text{capacity}}{1,000})$  (capacity in Btu/hr\*)

\*If the capacity is less than 7,000 Btu/hr, use 7,000. If the capacity is > 15,000 Btu/hr, use 15,000.

## AC-D. Advanced Evaporative Coolers

Yes No

- Is an existing, vapor-compression air conditioning system being replaced? If not, will the existing compressor be made inoperative?
- Will retrofitted system not have "constant bleed" option?
- Is project site in a CEC climate zone other than 1 or 3? No rebate is available for CEC climate zones 1 and 3.
- Is tonnage on rebate form based on the capacity of the package unit that is being replaced? For evaporative coolers, one equivalent ton of cooling is defined as 1300 cfm of 0.1" Static Pressure. The invoice should contain information describing what is being replaced.
- Does the advanced evaporative cooler (AEC) have a rigid, manufactured evaporative media with a rated saturation effectiveness of 0.85 or better (a natural fiber pad is not allowed – the rigid media is generally 12" thick), and is equipped with water quality management system that provides positive removal of sump water on a regular interval (a bleed system is not allowed)?

## Agriculture

### A-A. Sprinkler to Drip Irrigation

Yes No

- Is a micro-irrigation system replacing a high-pressure, impact-type, sprinkler irrigation system (50 psi operating pressure or more at the sprinkler head) Existing drip tape systems are not eligible.
- If planting a new vineyard or orchard, was there a previous vineyard or orchard crop on the field? Not applicable to new plantings of vineyards or orchards unless respectively a vineyard or orchard was the previous crop on the field.
- Can documentation be provided to verify acreage? **Include an Assessor's Parcel Map or other documentation to verify acreage.**

### A-B. Low Pressure Sprinkler Nozzles

Yes No

- Is a high-pressure, sprinkler system nozzle (50 psi operating pressure or more at the sprinkler head) being replaced? Portable hand move or solid set systems may apply.
- Will the retrofit be accompanied by a pumping plant analysis to ensure reasonable pumping efficiency (55% overall pumping efficiency or above) after the conversion?

## Motors

### M. Premium Efficiency Motor

Yes No

- Are motors being replaced for commercial, industrial, and/or agricultural applications?
- Do the motors meet the minimum efficiency requirements for an itemized incentive as listed in the table below? Itemized motor requirements are based on NEMA premium efficiency standards for nominal full load efficiencies, published by the Consortium for Energy Efficiency (CEE).
- Are the motors classified as either three phase induction motors of open drip proof (ODP) or totally enclosed fan cooled (TEFC)? . These motors are also known as "open" and "closed" motors respectively.
- Are the motors general purpose, NEMA Design A and B qualifying motors (TEFC & ODP) ranging in size from 1 hp to 200 hp?
- Does the Nominal Full Load Efficiency of the new motor meet or exceed the qualifying efficiency level for that class enclosure type of motor? NEMA Design C and D are polyphase induction motors that are considered to be special-purpose motors and not eligible for incentives.
- Are the motors listed in the latest version of Motor Master Tables? Motors not listed in the latest version of Motor Master Tables are not eligible for incentives.

- Can the manufacturer's specification sheet be provided for the motor? Please submit a copy of the manufacturer's specification sheet with the application.

Consortium for Energy Efficiency (CEE) Minimum Nominal Efficiency Standards

Motor Size hp	Open Drip Proof			Totally Enclosed Fan Cooled		
	3600 rpm	1800 rpm	1200 rpm	3600 rpm	1800 rpm	1200 rpm
1	0.77	0.855	0.825	0.77	0.855	0.825
1.5	0.84	0.865	0.865	0.84	0.865	0.875
2	0.855	0.865	0.875	0.855	0.865	0.885
3	0.855	0.895	0.885	0.865	0.895	0.895
5	0.865	0.895	0.895	0.885	0.895	0.895
7.5	0.885	0.91	0.902	0.895	0.917	0.91
10	0.895	0.917	0.917	0.902	0.917	0.91
15	0.902	0.93	0.917	0.91	0.924	0.917
20	0.91	0.93	0.924	0.91	0.93	0.917
25	0.917	0.936	0.93	0.917	0.936	0.93
30	0.917	0.941	0.936	0.917	0.936	0.93
40	0.924	0.941	0.941	0.924	0.941	0.941
50	0.93	0.945	0.941	0.93	0.945	0.941
60	0.936	0.95	0.945	0.936	0.95	0.945
75	0.936	0.95	0.945	0.936	0.954	0.945
100	0.936	0.954	0.95	0.941	0.954	0.95
125	0.941	0.954	0.95	0.95	0.954	0.95
150	0.941	0.958	0.954	0.95	0.958	0.958
200	0.95	0.958	0.954	0.954	0.962	0.958

## Office

### O-A. Plug Load Occupancy Sensor

Yes No

- Does the retrofit involve the installation of passive infrared and/or ultrasonic detectors?
- Will plug load occupancy sensors control electric equipment in offices or cubicles, or control shared copy machines and/or printers?
- Will plug load sensors control a minimum of 50 watts?

### O-B. PC Network Software

Yes No

- Will software be installed that automatically controls the power settings of networked personal computers (PC) at the server level? Laptops are not eligible for rebate.
- Will the software be capable of measuring and managing power consumption for each individual PC, and reporting energy savings results?
- Is this measure to be used as part of a system-wide best practices strategy for energy efficiency? (This is recommended; however, it is not required)
- Can the following be provided? Customers must provide the following information in order to qualify.
- A report from the software that verifies number of PCs being controlled by the system and
  - A list of the license numbers serving the system

### O-C. High Efficiency Copier

Yes No

- Will new copy machine be ENERGY STAR® qualified and replace a copier without an idle/off control capability? A list of qualifying models can be found at the ENERGY STAR® website, <http://www.energystar.gov/products>. Desktop copiers are not eligible for a rebate.

- Is this the only Itemized Measure Category under which the copier is receiving an incentive? This measure cannot be used in conjunction with measure O-A above.
  
- If equipment is being leased, can a lease agreement be provided with the following information?
  1. Lease start date
  2. Length of lease (must be for 3+ years)
  3. Payment terms (i.e. Net 30, Net 60, Payment due date)
  4. Itemized list for each equipment type
    - a) Make or brand name & model information
    - b) Cost per unit
    - c) Quantity installed