Commercial & Industrial Energy Efficiency Retrofits - Food Service Equipment Worksheet (Idaho)

IDAHO POWER
An IDACORP Company

Steps to Submit Project

1. Fill out this worksheet to reflect the proposed equipment to be installed
2. Fill out the Non-Lighting Application - Idaho
3. Obtain manufacturer specifications for the proposed new equipment
4. Submit the above to Retrofit@IdahoPower.com

Notes

- Projects must meet the applicable specifications stated on the pages of this worksheet
- Projects with estimated incentive $2,000 or greater should receive pre-approval from Idaho Power prior to project start

Project Name: _____

	Replacing	Installing	Quantity (Units)	Incentive (Per Unit)	Total Incentive
Refrigeration					
F2	No or damaged auto closer, low-temp	Auto-closer—walk-in	_____ door	$400.00	$_____
F3	No or damaged auto closer, low-temp	Auto-closer—reach-in	_____door	$75.00	$_____
F4	No or damaged auto closer, med-temp	Auto-closer—walk-in	_____door	$135.00	$_____
F5	No or damaged auto closer, med-temp	Auto-closer—reach-in	_____door	$55.00	$_____
F6a	Low temp case w/out controls	Anti-sweat heat controls (ASH)	_____ linear foot	$50.00	$_____
F6b	Med temp case w/ out controls	Anti-sweat heat controls (ASH)	_____ linear foot	$50.00	$_____
F41	No existing door or protective barrier	Refrigerated case doors- med temp	_____ linear foot	$130.00	$_____
F30	Existing PSC or SP motor on compressor head	ECM motor on compressor head	_____motor	$100.00	$_____
F10	Standard head pressure control	Floating head pressure controller	_____hp	$160.00	$_____
F11	Standard suction pressure control	Floating suction pressure controller	_____ hp	$40.00	$_____
F25	Manual or electric warehouse door	Freezer to dock automatic high speed door	_____ ft2 door opening	$100.00	$_____
F26	Manual or electric warehouse door	Freezer to refrigerator automatic high speed door	_____ ft2 door opening	$50.00	$_____
F31	Manual or electric warehouse door	Refrigerator to dock automatic high speed door	_____ ft^2 door opening	$25.00	$_____
F27	No protective barrier	Walk-in freezer strip curtain	_____ ft^2 door opening	$5.00	$_____
F28	No protective barrier	Walk-in refrigerator strip curtain	_____ ft^2 door opening	$5.00	$_____
F32	Standard Commercial Glass Door	No-heat glass door	_____ door	$200.00	$_____
F33	No existing pre-cooler on refrigeration system	Evaporative pre-cooler added to air-cooled condenser	_____ ton	$30.00	$_____
F34	No existing defrost coil control	Defrost Coil Control	_____ unit	$50.00	$_____
Kitchen Equipment					
F15	Standard electric oven	ENERGY STAR electric combination oven (5–40 pans) *List # of pans* _____	_____ unit	$800.00	$_____
F16	Standard electric oven	ENERGY STAR electric combination oven (3-4 pans)	_____ unit	$300.00	$_____
F17	Standard electric oven	ENERGY STAR electric convection oven *Check one:* ☐ *half size* ☐ *full size*	_____ unit	$180.00	$_____
F18	Standard electric fryer	ENERGY STAR electric fryer	_____ unit	$150.00	$_____
F19	Standard electric steamer, 3 pan or larger	ENERGY STAR electric steamer, 3 pan or larger	_____ pan	$30.00	$_____
F24	Kitchen hood with constant speed ventilation motor	VSD/VFD installed on kitchen exhaust and/or makeup air fan	_____ hp	$250.00	$_____

Kitchen Equipment continued...

F35	Standard commercial ice machine < 200 lbs	ENERGY STAR v3.0 commercial ice machine 1-199 lbs/day	_____	unit	$100.00	$_____
F36	Standard commercial ice machine >= 200 lbs	ENERGY STAR v3.0 commercial ice machine >= 200 lbs/day	_____	unit	$300.00	$_____
F37	Standard hot food holding cabinet	ENERGY STAR hot food holding cabinet - Half Size: < 13 cu. ft.	_____	unit	$200.00	$_____
F38	Standard hot food holding cabinet	ENERGY STAR hot food holding cabinet - Full Size: >= 13 and < 28 cu. ft.	_____	unit	$400.00	$_____
F39	Standard hot food holding cabinet	ENERGY STAR hot food holding cabinet -Double Size: >= 28 cu. ft.	_____	unit	$800.00	$_____
F40	Standard overwrapper	On-Demand overwrapper	_____	unit	$100.00	$_____

Food Service Total **$**

Checklists for Submission

Pre-Approval Checklist

- ☐ Signed/Dated Non-Lighting Pre-Approval Application (Idaho)
- ☐ Food Service Equipment Worksheet (Idaho)
- ☐ Manufacturer Specification Sheets

Payment Checklist

- ☐ Signed/Dated Non-Lighting Application (Idaho)
- ☐ Food Service Equipment Worksheet (Idaho)
- ☐ Invoices for Material & Labor

Clear Form Print

Specifications for Food Service Equipment

Auto-Closers

Auto-closers are eligible when installed on medium or low temp walk-in or reach-in freezer/cooler doors not previously equipped with functioning auto-closers. The auto-closer must firmly close the door when it is within one inch of full closure.

Anti-Sweat Control

Anti-sweat heat controls installed on a commercial glass door cooler or refrigerator utilizing humidity or conductivity control. This incentive does not apply to special doors with low/no anti-sweat heat. Control must use "on demand" defrost controls that sense space humidity or glass moisture. Controls must cycle or turn off heat when no condensate is present.

Refrigerated Case Doors

This measure is available for the installation of new solid, reach-in doors on medium-temp (ie dairy, deli, beverage) refrigerated cases where no door or protective barrier exits. The existing cases must be open-vertical display cases to qualify.

ECM Motor on Compressor Head

Installation of an electronically commutated motor (ECM) to replace a functioning shaded pole (SP) or permanent split capacitor (PSC) motor on a refrigeration system compressor head fan motor.

Head/Suction Pressures

Refrigeration systems having compressors with motors rated 1 horsepower or larger are eligible. A head pressure control valve (flood-back control valve) must be installed to lower minimum condensing head pressure from fixed position (180 psig for R-22; 210 psig for R-404a) to a saturated pressure equivalent to 70°F or less. Either a balanced-port or electronic expansion valve that is sized to meet the load requirement at a 70 degree condensing temperature must be installed. Alternatively, a device may be installed to supplement refrigeration feed to each evaporator attached to condenser that is reducing head pressure.

Incentive for both pressure controls are based on system compressor hp.

Automatic High-Speed Door

Eligible equipment will replace a manual or electric door that requires personnel input to open and close the door with an automatic door that will open and close. New door controls should decrease the amount of time the door remains open throughout the day. Savings will not be realized if doors are rarely opened or personnel are already diligent about ensuring door is only open when needed. Qualifying automatic door closers will be able to fully open or fully close within 7.5 seconds and will remain open for less than 3 minutes.

Strip Curtain

Strip curtains on walk-in freezers and refrigerators help keep the conditioned air inside of the space, while allowing for easy travel through the door. Strip curtains added to a doorway on walk-in freezers and refrigerators without any protective barrier qualifies foran incentive.

No-Heat Glass Door

The eligible equipment is a no-heat/low-heat clear glass on an upright display case. It is limited to door heights of 57 inches or more. Doors must have either heat reflective treated glass, be gas filled, or both. This measure applies to low temperature cases only—those with a case temperature below 0° F. Doors must have 3 or more panes. Total door rail, glass, and frame heater wattage cannot exceed 54 Watts per door for low temperature display cases. The baseline condition is assumed to be a commercial glass door that consists of two-pane glass, aluminum doorframes and door rails, and door and frame heaters.

Evaporative Pre-Cooler

A separate evaporative pre-cooler added to an air-cooled condenser coil in a properly working and maintained condition and utilizing R410A as the refrigerant type. The pre-cooler evaporatively cools the ambient air temperature before reaching the condenser coils. Eligible system types include saturated media, water nozzles (associated water piping) and rigid frame. Eligible systems must have a minimum performance efficiency of 75% and must have enthalpy controls to pre-cooler operation. Water supply must have chemical or mechanical water treatment. Magnetic water treatment does not qualify. Eligible systems must be purchased and installed by a qualified contractor. This measure is not a replacement of an air-cooled condenser with an evaporative condenser. Self-contained evaporative condensing coils are not eligible.

Defrost Coil Control

New electric defrost control installed on small commercial walk-in freezer and reach-in cooler systems with no evaporator coil defrost control. A refrigeration system with electric defrost is set to run the defrost cycle periodically throughout the day. A defrost control uses temperature and pressure sensors to monitor system processes and statistical modeling to learn the operations and requirements of the system. When the system calls for a defrost cycle, the controller determines if it is necessary and starts the cycle.

Kitchen Equipment

Electric Combination Oven

New electric combination ovens may replace existing standard electric combination ovens. New oven must be ENERGY STAR qualified and replace an oven of same or greater pan size.

Electric Convection Oven

New electric convection ovens may replace existing standard electric convection ovens. New oven must be ENERGY STAR qualified.

Electric Fryer

New electric fryer may replace existing standard electric fryer. New fryer must be ENERGY STAR qualified.

Electric Steamer

New electric steamer may replace existing standard electric steamer. New steamer must be ENERGY STAR qualified and replace a steamer of same or greater pan size

Kitchen Hood Variable Speed Drive

This incentive is available for variable speed/frequency drives (VSD/VFD) installed on commercial kitchen hood ventilation fans that is controlled by a temperature and optic sensor. The pre-existing condition is a single speed ventilation fan with only on and off cycle ability. The VFD should be able to reduce the fan speed down to a preset minimum value based on system demands. Kitchen HVAC system must be able to accommodate the variable exhaust airflow caused by the hood VFD. The VSD/VFD must operate a minimum 2,000 hours per year and variably loaded. The VFD must be installed in accordance with the Institute for Electrical and Electronics Engineers (IEEE) Standard 519 and Idaho Power's Rule K, Customer's Load and Operations Tariff.

Commercial Ice Machine

New air-cooled, cube-type commercial ice machines meeting ENERGY STAR 3.0 efficiency standards are eligible.

On-Demand Overwrapper

Incentives are available for the installation of new on-demand commercial electric overwrappers that replace traditional units typically left on all day. On-demand overwrappers must use a mechanical or optical control system.