# Air Conditioning

**Direct expansion** air conditioning units

| Size in MBtu | Size (tons) | Minimum Qualifying Efficiency | Retrofit Incentive* | New Construction Incentive* |
|---|---|---|---|---|
| <65 split system | <5.42 split system | 10.8 SEER | **$45.00** | **$60.00** |
| <65 single package | <5.42 single package | 11.1 SEER | **$45.00** | **$60.00** |
| 65 to 135 | 5.42 to 11.25 | 9.9 EER | **$45.00** | **$60.00** |
| >135 | >11.25 | 9.5 EER | **$45.00** | **$60.00** |

Incentive listed **plus $3.00 per ton** for each 0.1 efficiency point above the qualifying efficiency. SEER is Seasonal Energy Efficiency Ratio as defined by the American Refrigeration Institute (ARI).

**Water evaporative cooled** &
Heat Pump Units in cooling mode

| Size in MBtu | Size (tons) | Minimum Qualifying Efficiency | Retrofit Incentive* | New Construction Incentive* |
|---|---|---|---|---|
| <65 | <5.42 | 10.4 EER | **$45.00** | **$60.00** |
| 65 to 135 | 5.42 to 11.25 | 11.7 EER | **$45.00** | **$60.00** |
| >135 | >11.25 | 10.7 EER | **$45.00** | **$60.00** |

Incentive listed **plus $3.00 per ton** for each 0.1 efficiency point above the qualifying efficiency.

*Per ton.

# General Guidelines for Incentives

Incentives only apply to HELCO customers with electrical accounts under schedules G, J, H, K, and P. Incentives are subject to funds available and may be reduced. Specific requirements exist for each application and it is up to the customer to verify that these requirements are met. Analysis and tests may be required prior to payment of incentives. Incentives may be paid in payments by check or as a credit on the electric bill.

# Chillers

**Rotary, Scroll or Screw** chillers

| Size in tons | Minimum Qualifying Efficiency in kW/ton | Retrofit Incentive* | New Construction Incentive* |
|---|---|---|---|
| <150 | 0.75 | **$25.00** | **$35.00** |
| 150 to 250 | 0.70 | **$25.00** | **$35.00** |
| >250 | 0.65 | **$25.00** | **$35.00** |

Incentive listed **plus $3.00 per ton** for each 0.01 kW/ton lower than the qualifying efficiency.

**Centrifugal** chillers

| Size in tons | Minimum Qualifying Efficiency in kW/ton | Retrofit Incentive* | New Construction Incentive* |
|---|---|---|---|
| <150 | 0.69 | **$35.00** | **$45.00** |
| 150 to 250 | 0.65 | **$30.00** | **$40.00** |
| >250 | 0.62 | **$25.00** | **$35.00** |

Incentive listed **plus $3.00 per ton** for each 0.01 kW/ton lower than the qualifying efficiency.

*Per ton.

# Customized Incentive

An analysis may be submitted for approval of an energy efficient measure. The incentive is based upon **$125.00** per demand kilowatt (kW) saved during HELCO's peak period **plus $0.05** on retrofit and **$0.06** on new application first year kilowatt hours (kWh) of savings. The simple payback must be greater than two years on retrofits. Retrofit measures require pre-inspect of existing equipment prior to replacement. The incentive may not exceed 50% of the incremental cost of a retrofit and 100% of the incremental cost of a new application.

- **CFLs for Hotel guest rooms, Military Housing, and Commercially Metered Condominium Guest Rooms** --- The incentive ranges from **$1.25** to **$5.00** per lamp installed in guest rooms depending on the application and lamp type.
- **Solar Hot Water Systems** --- The incentive is **$80.00** per 5,000 Btu/day of solar panel output.
- **Heat Pump Water Heaters** --- The incentive is **$80.00** per 1,000 Btuh of output.
- **Window Film** --- **$0.35** per square foot of window film installed on outside windows. The window film shading coefficient must be 0.40 or less.

# HELCO

Demand Side Management
Commercial & Industrial

To apply or get more information call:

## (808) 969-0118

## *Energy Services Department*

*Other services include:*

Energy Audits, Energy Savings Analyses, and Energy Saving Answers.

Hawaii Electric Light Company, Inc.
1200 Kilauea Avenue
Hilo, Hawaii 96720
Tel: (808) 969-0118 Fax: (808) 969-0135

# T-8 Fluorescent Lighting with Electronic Ballast

**Retrofit** from T-12 to T-8 fluorescent lighting

| T-8 lamp length | Incentive per lamp |
|---|---|
| 2 feet | **$2.40** |
| 3 feet | **$2.60** |
| 4 feet | **$2.80** |
| 5 feet | **$3.00** |
| 8 feet | **$3.60** |

**Specular Optical Reflectors** on retrofit only

| Length | Incentive per lamp removed |
|---|---|
| 2 feet | **$5.00** |
| 4 feet | **$10.00** |
| 8 feet | **$15.00** |

**New Construction** with T-8 fluorescent lighting

| T-8 lamp length | Incentive per lamp |
|---|---|
| 2 feet | **$1.30** |
| 3 feet | **$1.45** |
| 4 feet | **$1.60** |
| 5 feet | **$1.75** |
| 8 feet | **$2.20** |

# Occupancy Sensors

Existing and new construction lighting

| Load | Incentive per sensor |
|---|---|
| < 500 watts | **$20.00** |
| => 500 watts | **$20.00** |

***Incentive Levels are Subject to Change***

*REVISED:* 03/01/2008

# ODP Motors

Incentive is for retrofit or new construction.

ODP – Open Drip Proof 3 phase motors

Minimum qualifying full load efficiencies (eff)

| Size in hp | Incentive | 2 pole 3600 RPM | 4 pole 1800 RPM | 6 pole 1200 RPM |
|---|---|---|---|---|
| 1 | **$15.00** | 77.0 | 85.5 | 82.5 |
| 1.5 | **$22.50** | 84.0 | 86.5 | 86.5 |
| 2 | **$30.00** | 85.5 | 86.5 | 87.5 |
| 3 | **$45.00** | 85.5 | 89.5 | 88.5 |
| 5 | **$50.00** | 86.5 | 89.5 | 89.5 |
| 7.5 | **$75.00** | 88.5 | 91.0 | 90.2 |
| 10 | **$100.00** | 89.5 | 91.7 | 91.7 |
| 15 | **$120.00** | 90.2 | 93.0 | 91.7 |
| 20 | **$160.00** | 91.0 | 93.0 | 92.4 |
| 25 | **$200.00** | 91.7 | 93.6 | 93.0 |
| 30 | **$210.00** | 91.7 | 94.1 | 93.6 |
| 40 | **$240.00** | 92.4 | 94.1 | 94.1 |
| 50 | **$300.00** | 93.0 | 94.5 | 94.1 |
| 60 | **$360.00** | 93.6 | 95.0 | 94.5 |
| 75 | **$450.00** | 93.6 | 95.0 | 94.5 |
| 100 | **$600.00** | 93.6 | 95.4 | 95.0 |
| 125 | **$750.00** | 94.1 | 95.4 | 95.0 |
| 150 | **$900.00** | 94.1 | 95.8 | 95.4 |
| 200 | **$1,200.00** | 95.0 | 95.8 | 95.4 |
| 250 | **$1,500.00** | 95.0 | 95.8 | 95.4 |
| 300 | **$1,800.00** | 95.4 | 95.8 | 95.4 |
| 350 | **$2,100.00** | 95.4 | 95.8 | 95.4 |
| 400 | **$2,400.00** | 95.8 | 95.8 | 95.8 |
| 450 | **$2,700.00** | 95.8 | 96.2 | 96.2 |
| 500 | **$3,000.00** | 95.8 | 96.2 | 96.2 |

# TEFC Motors

Incentive is for retrofit or new construction.

TEFC – Totally Enclosed Fan Cooled 3 Phase motors

Minimum qualifying full load efficiencies (eff)

| Size in hp | Incentive | 2 pole 3600 RPM | 4 pole 1800 RPM | 6 pole 1200 RPM |
|---|---|---|---|---|
| 1 | **$15.00** | 77.0 | 85.5 | 82.5 |
| 1.5 | **$22.50** | 84.0 | 86.5 | 87.5 |
| 2 | **$30.00** | 85.5 | 86.5 | 88.5 |
| 3 | **$45.00** | 86.5 | 89.5 | 89.5 |
| 5 | **$50.00** | 88.5 | 89.5 | 89.5 |
| 7.5 | **$75.00** | 89.5 | 91.7 | 91.0 |
| 10 | **$100.00** | 90.2 | 91.7 | 91.0 |
| 15 | **$120.00** | 91.0 | 92.4 | 91.7 |
| 20 | **$160.00** | 91.0 | 93.0 | 91.7 |
| 25 | **$200.00** | 91.7 | 93.6 | 93.0 |
| 30 | **$210.00** | 91.7 | 93.6 | 93.0 |
| 40 | **$240.00** | 92.4 | 94.1 | 94.1 |
| 50 | **$300.00** | 93.0 | 94.5 | 94.1 |
| 60 | **$360.00** | 93.6 | 95.0 | 94.5 |
| 75 | **$450.00** | 93.6 | 95.4 | 94.5 |
| 100 | **$600.00** | 94.1 | 95.4 | 95.0 |
| 125 | **$750.00** | 95.0 | 95.4 | 95.0 |
| 150 | **$900.00** | 95.0 | 95.8 | 95.8 |
| 200 | **$1,200.00** | 95.4 | 96.2 | 95.8 |
| 250 | **$1,500.00** | 95.8 | 96.2 | 95.8 |
| 300 | **$1,800.00** | 95.8 | 96.2 | 95.8 |
| 350 | **$2,100.00** | 95.8 | 96.2 | 95.8 |
| 400 | **$2,400.00** | 95.8 | 96.2 | 95.8 |
| 450 | **$2,700.00** | 95.8 | 96.2 | 95.8 |
| 500 | **$3,000.00** | 95.8 | 96.2 | 95.8 |

HELCO standards for energy efficiency motors are in consensus based on NEMA (National Electrical Manufacturers Association's) Premium™ specifications for induction motors. Motors that are not covered by the NEMA program may be considered on a case-by-case basis using NEPA as the standard. NEPA is the National Energy Policy Act of 1992 which requires motor manufacturers to comply with the threshold nominal full load efficiency standards for motors by October 1997.