

SEWARD COUNTY PUBLIC POWER DISTRICT CONSUMER SERVICES POLICY #16 ELECTRIC HEAT & HOT WATER INCENTIVE

I. OBJECTIVE:

- A. To provide the District's consumers with a cash incentive to offset installation charges for electric installations that will encourage off peak system electric load building.
- B. To increase the market share of electric space heat and electric water heater installations in both the residential and commercial markets.
- C. To better utilize SCPPD's power costs. When new loads are added the fixed capacity costs for the total generating capacity are shared by more customers. New loads are therefore beneficial to the existing rate payers.
- D. To encourage wise use of energy and to conserve finite fuels.

II. CONDITIONS AND DEFINITIONS:

(All heat pump rebates will only be paid after the District receives a completed performance certification form (High Efficiency Heat Pump Verification) signed by the customer and HVAC vendor.)

Residential Electric Heat Incentive Program Guidelines

- A. All space heating and water heating equipment must be permanently installed. A mobile home must be on a permanent foundation.
- B. Duplexes and condominiums will be considered residential.
- C. Rebates are paid to the owner of a residence after the equipment is installed, operating, verified by SCPPD, and after certification is returned and completed by the vendor.

Rebates are available for new construction.

Rebates are eligible for conversion from fossil fuel existing heating installations to electric.

Rebates are eligible for upgrades from air source heat pumps and resistance heating (as long as the upgrade is to a minimum of 14 SEER and 8.2 HSPF) to air source replacement units. Upgrades also include the change out from an air source heat pump to a geothermal heat pump. Upgrades do not include the change out of an old geothermal unit to a new geothermal unit.

- D. In those cases where combinations of two heat pumps or resistance furnace systems are

installed in the same house, the secondary payment must be submitted at the same time that the primary payment is submitted. Payment rate for a secondary unit is 50%. Secondary payment combinations are not applicable in the case of baseboard or cove heating applications.

- E. To be eligible for a space heating incentive, a cottage/cabin must be heated during the winter months of October through May.
- F. A house with fossil fuel furnace and an air conditioner is not eligible for an incentive payment.
- G. If electricity is the primary source of heat for a residence, the use of solar panels, wood stove or fireplace will not affect the eligibility for a space heating incentive payment.
- H. A resistance water heater must be a minimum of 40 gallons in size to be eligible. If a water heating system involving a heat pump also includes a resistance water heater tank, the resistance water heater tank is not eligible for a separate payment.
- I. Additions and supplemental are not eligible for incentive payments unless they are large enough for their own dedicated heating and cooling system.
- J. Rebates will not be made available for tankless water heaters due to the high energy demand such units are known to create.

Multi-Family Electric Heat Incentive Program Guides

- A. All space heating and water heating equipment must be permanently installed.
- B. An incentive payment will be paid to the owner of a building after the equipment is installed, operating and verified by SCPPD.
- C. Apartments are considered multi-family if they are separately metered. An apartment building is considered to be commercial if it is master metered. Duplexes and condominiums will be considered residential.
- D. "New" refers to new construction with new equipment. "Conversion" means that the primary source of heat had been a fossil fuel system, which must be removed except in the case of an add-on heat pump. "Upgrades" do not qualify. Incentives only apply for new construction or conversion installations. There are no rebates available for customers who replace their old electric heating system with new equipment of the same type (i.e. air source or add-on heat pump to a new air source heat pump, etc.) However, replacement of an air source or add-on heat pump to a water source heat pump will qualify for a rebate just as replacing an electric furnace and air conditioner with an air source or add-on pump will also qualify.
- E. To be eligible for s SEER payment, the building must be totally electrically heated or heated with an air source heat pump with fossil fuel backup.
- F. The SEER value for an air source heat pump or an air conditioner will be taken from the ARI Unitary Directory for the Manufacturer and the specific equipment Model Designation. The

Model Designation consists of an Outdoor Unit model number and an Indoor Unit model number. The Indoor Unit model number identifies the air handler and the coil. The specific equipment must be ARI listed to qualify for a new or conversion payment (heat pump only).

- G. The Cooling EER value may be used instead of an SEER value for a ground source heat pump or an air source heat pump larger than 5.5 tons. The Cooling EER will be taken from the ARI Applied Products Directory for the Manufacturer and the specific equipment Designation. For a ground water-source (open loop) heat pump, the Low Temperature Cooling EER (at 50° F inlet fluid temperature) may be used. For a closed loop ground source heat pump, only one rating condition is available (at 77° F inlet fluid temperature).
- H. Primary and secondary payment combinations are not applicable for multi-family space heating.
- I. A resistance water heater must be a minimum of 40 gallons in size to be eligible. If a water heating system involving a heat pump also includes a resistance water heater tank, the resistance water heater tank is not eligible for a separate payment.
- J. Additions and supplemental are not eligible for incentive payments.

Commercial Electric Heat Incentive Program Guidelines

- A. All space heating and water heating equipment must be permanently installed.
- B. An incentive payment will be paid to the owner of a building after the equipment is installed, operating and verified by SCPPD.
- C. An apartment building is considered to be commercial if it is master metered. If the apartments are separately metered, they will be considered to be multi-family. Duplexes and condominiums will be considered residential.
- D. "New" refers to new construction with new equipment. An addition to a commercial building is eligible for a "new payment" if a new heating system is being install in a new addition. "Conversion" means that the primary source of heat had been a fossil fuel system, which must be removed except with an add-on heat pump. Incentives only apply for new construction or conversion installations. There are no rebates available for customers who replace their old electric heating system with new equipment of the same type (i.e. air source heat pump to a new air source heat pump, etc.) However, replacement of an air source or add-on heat pump to a water source heat pump will qualify for a rebate just as replacing an electric furnace and air conditioner with an air source or add-on heat pump will also qualify.
- E. A commercial heating payment is determined by multiplying the respective matrix value times the design heating load in kW. The design heating load may be calculated by a SCPPD Representative, or may be estimated using a value of 6 watts per square foot (0.006

kW/sq. ft.) times the square foot floor area (excluding basement). The installed capacity (in output kW) may be used instead of the design heating load if it is a reasonable value. For a heat pump, the installed kW may be calculated by dividing the heat pump Btuh cooling capacity by 3413. Backup heat is not included as part of heat pump capacity. No payment is made for heat pump backup heat. SCPPD reserves the right to determine the appropriateness or to limit the value of a design heating load, determined by any of the above methods.

- F. To be eligible for a SEER payment, a whole building must be totally electrically heated or heated with air source heat pumps with fossil fuel backup.
- G. The SEER value for an air source heat pump or an air conditioner will be taken from the ARI Unitary Directory for the Manufacturer and the specific equipment Model Designation. The Model Designation consists of an Outdoor Unit model number and an Indoor Unit model number. The Indoor Unit model number identifies the air handler and the coil. The specific equipment must be ARI listed to qualify for a new or conversion payment (heat pump only). The cooling capacity in tons is calculated by dividing the cooling capacity in MBtuh by 12 (or dividing Btuh by 12,000).
- H. The Cooling EER value may be used instead of an SEER value for a ground source heat pump or an air source heat pump greater than 5.5 tons. The Cooling EER value will be taken from the ARI Applied Products Directory for the Manufacturer and the specific equipment Designation. For a ground water-source (open loop) heat pump, the Low Temperature Cooling EER (at 50° F inlet fluid temperature) may be used. For a closed loop ground source heat pump, only one rating condition is available (at 77° F inlet fluid temperature). The cooling capacity in tons is calculated by dividing the cooling capacity in Btuh by 12,000.
- I. For a two speed heat pump, the average of the high speed and the low speed Cooling Capacity and SEER or EER values may be used in the SEER payment calculation.
- J. Primary and secondary payment combinations are not applicable for commercial space heating.
- K. A limit of \$4,000 applies for commercial water heating. If a water heating system involving a heat pump also includes a resistance water heater tank, the resistance water heater tank is not eligible for a separate payment.
- L. Supplemental heat is not eligible for an incentive payment.

- M. For a commercial GSHP system larger than 25 tons, the following will apply:
 - 1. The average of all the equipment installed must be 13.0 EER or above (at ARI 330 conditions).

2. All circulating pumping equipment must be variable speed to be eligible for the full cooling EER payment rate of \$9 x tons x (EER-10). If the circulating pumping equipment is not variable speed, the cooling EER payment will be reduced to a lower rate of \$5 x tons x (EER-10).
3. The capacity of heat recovery equipment will be calculated as part of the overall heating system incentive payment.
4. The participating utilities have the option of conducting periodic inspections of the installation and to require an on-site factory start up performance and design verification.

III. POLICY:

In accordance with the proceeding objectives effective at the date noted below it shall be the policy of the District that the following payment schedule will apply as outlined on Exhibit 1, 2 and 3.

EXHIBIT 1 - Residential Heating

	Resistance *	Air Source Heat Pump **	Ground Source Heat Pump
Total Heating Incentive	\$150	\$400	\$700

* payments for new replacement air source heat pumps under 14 SEER are same as for resistance heating

** can include Add on Heat Pump as long as SEER is 14 and above

Water Heating

	Resistance	Integrated Equipment, Stand Alone Heat Pump or Desuperheater
Total Heating Incentive	\$50	\$50

Note: Upgrades do not apply. Incentives are only for new construction or conversion installations.

EXHIBIT 2 - Multi-Family
Space Heating & Cooling

	Resistance	Air Source Heat Pump *	Ground Source Heat Pump
Heating	\$150	\$300	\$500
Cooling	\$50	\$100	\$100
Possible Total	\$200	\$400	\$600

- Includes Add-On Heat Pump

Water Heating

Resistance	Integrated Equipment, Stand Alone Heat Pump Water Heater or Desuperheater
\$50	\$100

- Cooling Payment: Minimum SEER (Air Conditioning) = 11.0
Minimum SEER (Heat Pumps) = 10.0

Note: Upgrades do not apply. Incentives are only for new construction or conversion installations.

EXHIBIT 3 - Commercial
Space Heating & Cooling

	Resistance	Air Source Heat Pump *	Ground Source Heat Pump
Heating	\$15 / kW	\$25 / kW	\$50 / kW
Cooling *	\$9 x Tons x (SEER-11)	\$9 x Tons x (SEER-10)	\$12 x Tons x (EER-10)

- Includes Add-On Heat Pumps (fossil fuel backup)

Water Heating

All commercial water heating equipment: includes Resistance, Integrated Equipment, Stand Alone Heat Pump Water Heater or Desuperheater
\$1 / gallon

- Cooling ratings will be from ARI Directories. Refer to guidelines for cooling incentive payments for ground source heat pump systems over 25 tons.

Note: Upgrades do not apply. Incentives are only for new construction or conversion installations.

CONDITIONS FOR PAYMENT:

1. Eligible equipment must be installed permanently.
2. An allowance will be paid to the owner of the structure after the equipment is installed, operating and verified by SPPD.
3. Fifty percent of the incentives shown will be paid for one additional furnace, heat pump unit or water heater in new or conversion installations.
4. Cooling efficiency upgrades are limited to meeting SEER minimums.

IV. RESPONSIBILITY:

- A. It shall be the responsibility of the Board of Directors for any change or revisions of this policy.
- B. It shall be the responsibility of the General Manager for the administration of this policy and for making recommendations on necessary or required changes.

Date Adopted: December 19, 1988
Date Revised: April 17, 1989
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Secretary