

Chillers, Cooling Towers, Air Handling VAVs



Your Touchstone Energy®
Partner 

2012 Rebate Application

Dakota Electric Association
4300 220th Street West
Farmington, Minnesota 55024

Business Member Information

Company name _____ Date submitted _____
 Billing address _____ City _____ State _____ ZIP _____
 Installation address (if different) _____ City _____ State _____ ZIP _____
 Account number _____
 Contact name (print) _____ Phone _____
 E-mail _____

Vendor Information

Vendor name _____ Vendor contact name _____
 Vendor address _____ City _____ State _____ ZIP _____
 Phone _____ Fax _____
 E-mail _____

The undersigned does hereby certify that 1) The undersigned, and not Dakota Electric Association, is solely responsible for the accuracy of the information contained in this application, 2) all rules of the Chiller, Cooling Towers, Air Handling VAVs Rebate program have been followed, and 3) the installation is complete. Further, the undersigned acknowledges that nothing contained in the application shall impose any liability on Dakota Electric Association for the work performed and information presented by the member's engineer, contractor or vendor.

Member signature _____ Date _____

How to Apply for This Rebate

1. Rebate funds are limited. Contact rebates@dakotaelectric.com or 651-463-6243 to reserve funds. This is not a guarantee of project approval.
2. Fill out this rebate application. All information needs to be supplied before a rebate check can be issued. Please note any warranty, rules or qualifications on page two of this form.
3. Complete and sign rebate forms. Mail or fax pages 1 and 4 to:
 Rebates, Dakota Electric Association, 4300 220th Street West, Farmington, MN 55024
 Fax number: 651-460-7524

Application # _____



Specific Rules and Qualifications

1. Documents establishing proof-of-purchase (invoice) must be furnished when the original rebate application is completed.
2. On the documents establishing proof-of-purchase, circle the energy-saving products for which a rebate is requested and attach to the original application. If not indicated on the invoice, please add the number of units installed, manufacturer, model number and capacity (in tons).
3. Submit the manufacturer's data sheets with the rebate application. The sheets must show efficiency ratings in accordance with the most recent ARI Standards (design conditions for chillers) and must contain efficiency information for the following:
 - Chillers - kW/Ton
4. Only new and complete central air conditioning units, water chillers, and remote condensing unit retrofits qualify. Rebuilds do not qualify.
5. The new equipment must use a minimum ozone depleting refrigerant.
6. Rebates for air-cooled equipment are limited to 150 tons per account. Larger total capacities must use Dakota Electric Association's Custom EnergyGrant® Rebate program. Air-cooled chillers are not eligible for rebates.
7. If the efficiency rating is stated in SEER where the application asks for EER, multiply the SEER by 0.855 to calculate EER rating.

Chiller Rules

1. No rebates will be provided for back-up systems. Back-up systems are defined as a separate chiller that is required only when a primary chiller fails.
2. The basis for the rebate efficiency level will be design conditions and chiller efficiency data as contained in the vendor's data.
3. Members can use either the standard rebate (i.e. based on full-load efficiency) or part-load rebate formula for centrifugal chillers ≥ 150 tons.

Heat Rejection Rules (oversized cooling towers)

1. Rebate is paid per nominal tower ton.
2. Only new towers for electric chillers are eligible.
3. For purposes of determining rebate eligibility, design condensing water flow rate must be 3.0 gallons per minute per ton.
4. Design condensing water temperature to chiller must be 84 °F or less.
5. Cooling tower size must be larger than that which would be used to achieve a design condensing water temperature to the chiller of 85 °F at a wet bulb temperature of 78 °F.
6. The brake horsepower per cell of tower fans must not increase as compared to the tower which would deliver 85 °F design condensing water temperature.
7. The motors used in the cooling tower fans must meet Dakota Electric Association's NEMA Premium Efficient Motor program standards. See Premium Efficient Motor Rebate application.

Air Handling Rules (variable air volume (VAV) conversion)

1. Rebate is paid per VAV box. One box serves each air handling unit zone.
2. The installation must be in an existing air-handling zone which is being converted from constant volume.
3. The zone must be air conditioned by electric cooling equipment.
4. Only new VAV boxes (without fans) for retrofit applications may qualify.
5. Supply and return fans (if return fans are used) serving the VAV zones must be equipped with Variable Frequency Drives (VFD).
6. Appropriate controls to reduce fan energy usage must be included.
7. The motors and/or VFDs for air handling fans must meet Dakota Electric Association's NEMA Premium Efficient Motor and VFD program standards. See Premium Efficient Motor Rebate and VFD Rebate applications.

Warranty Information

Rebate qualifications do not imply any representation or warranty of such equipment, design or installation by Dakota Electric Association. Dakota Electric Association shall not be responsible or liable for any personal injury or property damage caused by this equipment. Dakota Electric Association does not guarantee that a specific level of energy or cost savings will result from the implementation of energy conservation measures or the use of products funded under this program. In no event shall Dakota Electric Association be liable for any incidental or consequential damages.

Other Important Program Rules

1. Installation must be complete before rebate funds will be issued.
2. Members and vendors must submit itemized equipment invoices, along with rebate application and worksheet, to Dakota Electric Association. To ensure that the equipment installed meets Dakota Electric Association's performance standards, these invoices must itemize labor charges.
3. Dakota Electric Association reserves the right to conduct random inspections of installations.
4. The member is responsible for checking with Dakota Electric Association to determine whether funding is available and to verify program parameters.
5. Project must comply with all program specific rules and qualifications on page two.
6. Dakota Electric Association retains the right to make adjustments to correct incentive calculations if necessary. Energy savings calculations are estimates and may vary from actual results.
7. Qualifying members must apply for 2012 rebates no later than November 15, 2012.

Chiller, Cooling Towers, Air Handling VAVs 2012 Rebate Application

| Minimum Qualifying Criteria | | | | | |
|---|--------------------|--------------------|--|--|--|
| Equipment Type Unit Tons | Minimum Efficiency | | Base Rebate \$/ton | Incremental rebate \$/ton per 0.01 kW/ton SEER/EER | Specific Rules |
| Air Cooled Chillers | FLV-EER 9.70 | IPLV-SEER 12.00 | \$10.00 | \$2.00 | Chiller rebates are based on design conditions |
| Water Cooled Chillers < 150 Tons (centrifugal) ≥ 150 Tons (centrifugal) < 150 Tons (screw/scroll) ≥ 150 Tons (screw/scroll) | Efficiency | Efficiency | \$20.00 \$20.00 \$18.00 \$18.00 | \$2.00 \$2.00 \$2.00 \$2.00 | Chiller rebates are based on design conditions Must improve on ASHRAE 90.1 2004 baseline by 0.016 kW/ton 0.74 FLV kW/ton, 0.63 IPLV kW/ton 0.67 FLV kW/ton, 0.58 IPLV kW/ton |
| Cooling Towers | Over-sized only | | \$3/nominal tower ton | | |
| Air Handling Systems (VAV) | | | \$170/VAV Box | | Must be controlled and operated with VFD and premium motor |

FLV – Base Full Load Value (kW/ton) IPLV – Integrated Part Load Value (kW/ton)

| Air Cooled Chillers | | | | | | | | |
|--|-----------|------------|-----------|-------------------------------|------------|-------------|-------------------------|--------|
| Manufacturer | Model No. | # of Units | Tons/Unit | Minimum Qualifying Efficiency | EER / SEER | Base Rebate | Incremental Eff. Rebate | Rebate |
| | | | | | | \$ | \$ | \$ |
| | | | | | | \$ | \$ | \$ |
| Example of Total Rebate = [Base Rebate \$10 x Tons/Unit] + [Incremental Efficiency Rebate \$2 X (Min. Qualifying kW/Ton from table – equip kW/Ton from vendor)/.01 x Tons] X Number of Units | | | | | | | Project Cost | |
| | | | | | | | Rebate | \$ |

Rebate must comply with all program specific rules and qualifications.

| Chillers < 150 tons (Centrifugal) | | | | | | | | |
|--|-----------|------------|-----------|-------------------------------|--------|-------------|-------------------------|--------|
| Manufacturer | Model No. | # of Units | Tons/Unit | Minimum Qualifying Efficiency | kW/Ton | Base Rebate | Incremental Eff. Rebate | Rebate |
| | | | | | | \$ | \$ | \$ |
| | | | | | | \$ | \$ | \$ |
| Example of Total Rebate = [Base Rebate \$20 x Tons/Unit] + [Incremental Efficiency Rebate \$2 X (Min. Qualifying kW/Ton from table – equip kW/Ton from vendor)/.01 x Tons] X Number of Units | | | | | | | Project Cost | |
| | | | | | | | Rebate | \$ |

Rebate must comply with all program specific rules and qualifications.

| Chillers ≥ 150 tons (Centrifugal) | | | | | | | | |
|--|-----------|------------|-----------|-------------------------------|--------|-------------|-------------------------|--------|
| Manufacturer | Model No. | # of Units | Tons/Unit | Minimum Qualifying Efficiency | kW/Ton | Base Rebate | Incremental Eff. Rebate | Rebate |
| | | | | | | \$ | \$ | \$ |
| | | | | | | \$ | \$ | \$ |
| Example of Total Rebate = [Base Rebate \$20 x Tons/Unit] + [Incremental Efficiency Rebate \$2 X (Min. Qualifying kW/Ton from table – equip kW/Ton from vendor)/.01 x Tons] X Number of Units | | | | | | | Project Cost | |
| | | | | | | | Rebate | \$ |

Rebate must comply with all program specific rules and qualifications.

| Chillers < 150 tons (screw/scroll) | | | | | | | | |
|--|-----------|------------|-----------|-------------------------------|--------|-------------|-------------------------|--------|
| Manufacturer | Model No. | # of Units | Tons/Unit | Minimum Qualifying Efficiency | kW/Ton | Base Rebate | Incremental Eff. Rebate | Rebate |
| | | | | | | \$ | \$ | \$ |
| | | | | | | \$ | \$ | \$ |
| Example of Total Rebate = [Base Rebate \$18 x Tons/Unit] + [Incremental Efficiency Rebate \$2 X (Min. Qualifying kW/Ton from table – equip kW/Ton from vendor)/.01 x Tons] X Number of Units | | | | | | | Project Cost | |
| | | | | | | | Rebate | \$ |

Rebate must comply with all program specific rules and qualifications.

| Chillers ≥ 150 tons (screw/scroll) | | | | | | | | |
|--|-----------|------------|-----------|-------------------------------|--------|-------------|-------------------------|--------|
| Manufacturer | Model No. | # of Units | Tons/Unit | Minimum Qualifying Efficiency | kW/Ton | Base Rebate | Incremental Eff. Rebate | Rebate |
| | | | | | | \$ | \$ | \$ |
| | | | | | | \$ | \$ | \$ |
| Example of Total Rebate = [Base Rebate \$18 x Tons/Unit] + [Incremental Efficiency Rebate \$2 X (Min. Qualifying kW/Ton from table – equip kW/Ton from vendor)/.01 x Tons] X Number of Units | | | | | | | Project Cost | |
| | | | | | | | Rebate | \$ |

Rebate must comply with all program specific rules and qualifications.

| Cooling Towers | | | |
|--|-----------------|----------------|------------------------------------|
| Manufacturer | Number of Units | Number of Tons | Rebate = \$3 X # Tons X # Units |
| | | | \$ |
| | | | \$ |
| Rebate must comply with all program specific rules and qualifications. | | | Project Cost |
| | | | Rebate |
| | | | \$ |

| Air Handling Systems (VAVs) | | | |
|--|-----------------|-----|--------------------------|
| Manufacturer | Number of Units | CFM | Rebate = \$200 X # Units |
| | | | \$ |
| | | | \$ |
| Rebate must comply with all program specific rules and qualifications. | | | Project Cost |
| | | | Rebate |
| | | | \$ |

See page 1 for chiller rebate rules and specific guidelines.

Important: A copy of this completed application form and an invoice(s) is required before Dakota Electric Association issues incentives.