

2019 Agricultural Programs



Rebate Application

Federated Rural Electric, ATTN: Jon, P.O. Box 69, Jackson, MN 56143
847-3520, 728-8366 or 1-800-321-3520 • beckman@federatedrea.coop

Business Member Information

Business Name _____
Installation Address _____
City, State, Zip _____
Contact Name _____
Email _____
Phone Number _____
Account Number _____

Rebate Recipient

To release the rebate incentive check to an alternate party other than the cooperative business member, the member must specify an alternative mailing address and authorize with a signature below.

Please Send Rebate to (check one):

- Business Member Alternative Recipient

Recipient Name _____
Mailing Address _____
City, State, Zip _____
Contact Name _____

Application Check List

- Rebate application with
 Itemized project invoices (labor &
 Equipment specifications

The undersigned does hereby certify that the undersigned is solely responsible for the accuracy of the information contained in this application. All rules of the program have been followed and the installation is complete. The undersigned acknowledges that nothing contained in the application imposes any liability on the cooperative for the work performed and information presented by the member, member's engineer, contractor, or vendor. The undersigned also authorized payment of incentive directly to the specified rebate recipient.

Rebate applications due no later than November 15, 2019.

Member Signature

Date

Received _____



Reviewed _____

Agricultural Program

Rules & Information

Warranty Information

Rebate qualifications do not imply any representation or warranty of such equipment, design or installation by the cooperative. The cooperative shall not be responsible or liable for any personal injury or property damage caused by this equipment. The cooperative 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 the cooperative be liable for any incidental or consequential damages.

Additional Program Rules

1. Evaluation must be complete before funds will be issued for the rebate.
2. Members and vendors must submit itemized equipment invoices, along with rebate application and worksheet, to the cooperative. To ensure that the equipment installed meets the cooperative's performance standards, these invoices must itemize labor charges, quantity and price of the equipment installed, as well as information regarding the manufacturer and model numbers for all equipment included in the rebate.
3. Rebates must be applied for within 12 months of invoice date.
4. The cooperative reserves the right to conduct random inspections of installations.
5. Project must comply with all program specific rules and qualifications.
6. The member is responsible for checking with the cooperative to determine funding availability and to verify program parameters.

Agricultural Ventilation

Equipment & Rebate Info

Exhaust Fans \$15/each

Fan Size (in.)	min CFM/watt req.	Actual CFM/watt	quantity	Rebate
				0
				0
				0

*Actual CFM/watt > minimum CFM/watt (found on "Rules & Information" tab)

Circulation Fans \$25/ea

Fan Size (in.)	min CFM/watt req.	Actual CFM/watt	quantity	Rebate
				0
				0
				0

High Volume, Low Speed (HVLS) Fans \$400/each

Old fan size (in)	old quantity	HVLS fan size	new quantity	Rebate
				0
				0
				0

Rebate Information

Project Cost

Rebate

\$0.00

Minimum Efficiencies

Circulation Fans - generally used to regulate airflow and temperature. As the diameter of fan increases, so should the efficiency. These fans work best in free stall barns with two, four, or six rows and are generally located in 30-40 foot intervals over the feed alley and free stall area.

Exhaust Fans - generally used for ventilation. To achieve *cross ventilation*, fans are installed on one wall to pull air from one side of the barn to the other. Exhaust fans also can be designed for *tunnel ventilation* where fans are installed on one end of the barn and move air across to the rest of the barn. generally thermostatically controlled to turn on banks of fans when the temperature hits the set point. Exhaust fans should be installed away from prevailing winds. Similar with circulation fans, when exhaust fan diameter increases, efficiency should also increase.

High-Volume, Low-Speed (HVLS) - these fans move large volumes of air over a large area. They are available in a range of sizes, typically from starting around four feet and ranging up to 24 feet in diameter. Energy savings is achieved through use of fewer fans to move the same CFM with a more efficient design.

Exhaust	CFM/watt
16-23 in.	10.5
24-35 in.	11.5
36-47 in.	15.5
48-51 in.	20.3
52-59 in.	20.8
60-72 in.	21.1

Through the wall & tunnel ventilation

static pressure 0.10

Circulation	CFM/watt
24-35 in.	11.9
36-47 in.	15.5
48-64 in.	17.7

panel, box, and cage fans

static pressure 0.10

HVLS

HVLS fans should be fewer in quantity than the old fans

Dairy Rebates

Dairy Plate Cooler - \$2 / cow

Dairy plate coolers, also referred to as milk pre-cool, reduce milk temperature before sending the milk to the bulk tank. This saves energy by reducing the cooling load in the bulk tank. The milk is run through one side of the heat exchanger while cool (well) water passes through the other side of the heat exchanger and absorbs the heat from the fresh milk.

# Cows milked/day	<input type="text"/>
Lbs. milked/cow/day	<input type="text"/>
Project Cost	<input type="text"/>
Total Rebate	\$0.00

Robotic Milking - \$5,000 / stall

The Robotic Milking Program provides a rebate for dairies that install automated single stall milking unit(s). The milking process at the dairy site will use fully automated robotic milking station(s) in place of conventional systems.

# stalls	<input type="text"/>
Project Cost	<input type="text"/>
Total Rebate	\$0.00

Free Heater - \$10 / cow

Dairy free heaters, also referred to as refrigeration heat recovery, can be one of the fastest paybacks on a dairy farm. The free heater recovers waste heat from the cooling compressors and uses it to preheat water generally used for sanitation.

# cows / day	<input type="text"/>
Project Cost	<input type="text"/>
Total Rebate	\$0.00

Vacuum Pump VSD - \$20 / horse power

This rebate is for the installation of a variable speed driven on a vacuum pump motor.

HP	<input type="text"/>
Project Cost	<input type="text"/>
Total Rebate	\$0.00

Milk Pump VSD - \$20 / horse power

This rebate is for the installation of a variable speed driven on a milk transfer pump.

# of cows	<input type="text"/>
Project Cost	<input type="text"/>
Total Rebate	\$0.00

Hog Farrowing Mats

Equipment & Rebate Information

For the new construction barn using electric hog farrowing heated mats or replacement of heat lamps with heated mats with automated climate controls in an existing barn. Using heat mats significantly reduces heat lost to ambient air by providing direct heat transfer to the piglets. Replacement of heat mat to heat map does not qualify for this rebate.

Equipment Information

Existing barn retrofit

New Construction barn

Rebate:

\$50/crate

\$30/crate

Existing lamp information (if retrofitting existing barn)

	lamp watts	quantity
Type 1		
Type 2		
Type 3		
Example	175	60

Mat information (required for both retrofit and new construction)

	mat watts	quantity
Type 1		
Type 2		
Type 3		

total number of crates

Rebate Information

Project Cost

Rebate

Engine Block Timer

Equipment & Rebate Information

This rebate is for the installation of a plug-in timer that controls the operation of an engine block heater timer to modulate operation.

Equipment Information

Quantity of timers

Rebate Information - \$5/timer

Project Cost

\$10 per Horse Power

Livestock Waterer

Equipment & Rebate Information

This rebate is for the installation of insulated or energy free livestock waterers in place of standard electric waterers.

Equipment Information

- New Construction
- Electric Heat Replacement

Quantity of waterers

*quantity based on insulated or energy free waterers

Rebate Information - \$75/waterer

Project Cost

\$75 / Waterer

Irrigator VFD

Equipment & Rebate Information

Installing a Variable Frequency Drive (VFD) allows the pump to speed up or slow down to provide uniform application of water and maintain correct pressures throughout the irrigation system. Typically a VFD will be most beneficial for a system that has end guns or swing arms, precision application packages, or one pump supplying water to multiple irrigation systems.

Irrigator Information

Motor HP

Annual Hours of Operation*

*typically 600-900 hrs/year

Rebate Information - \$10 / HP

Project Cost

\$10 per Horse Power

\$0