

## Energy Enhancement Activity –ENR02- Solar Powered Electric Fence Charging Systems



### Enhancement Description

The replacement of an electric fence charging systems with solar powered systems.

### Land Use Applicability

Pasture land, rangeland and forest land.

### Benefits

Using solar power for electric fence charging systems reduces the need for fossil-fuel based electricity in agricultural operations, which in turn reduces emissions of air pollutants associated with fossil fuel combustion, and increases energy independence.

### Criteria for Solar Powered Electric Fence Chargers

- Implementation of this enhancement requires that the participant replace of existing electric fence charging systems used in the operation with solar powered charging systems.
- To comply with the enhancement, any new electric fencing installed during the life of the contract will also be powered with solar charging systems.

### Documentation Requirements

- A map identifying each field equipped with electric fencing, and the number of electric charging systems replaced with solar powered charging systems.
- Photographic documentation of the installed solar charging systems.



**Energy Enhancement Activity – ENR02 – Solar Powered Electric Fence Charging Systems**

Energizers shall be Underwriters Laboratory (UL) listed. Installation shall be in accordance with manufacturer recommendations. The length of electrified wire shall not exceed capacity of the energizers. A portable voltmeter is desirable to monitor voltage on the line.

Electric energizers or electric fence controllers are to meet the following minimum specifications:

- A minimum output of one joule and be high power, low impedance with 5,000-volt peak output, 2.3 millicoulombs charge, a pulse that is finished within 300-millionths of a second or less, and 54 to 60 pulse per minute.
- High impact weather resistant case.
- Snap-in circuit panels.
- Full power in, with reduced power on output.
- Safety pace fuse.
- Lightning arrester.
- 6-volt and 9-volt solar powered chargers

**Participant Acknowledgement Statement:**

I agree to apply this enhancement under the terms and conditions of my CSP contract and understand the requirements of the activity.

1	2	3	4	5	6
Tract	Field(s)	Planned No. of electric charging systems to be replaced	Type of existing electric charging systems	Applied No of solar powered electric fence charging systems	Manufacturer of the solar powered electric fence charging system and volts

Ex. = example. NRCS completes column 1, 2 & 3 (Tract, Field and Acres Planned). Operator completes remaining columns.

**I certify that the solar electric powered fence charging systems meets these specifications including the following documentation as applicable:**

1. A map identifying each field equipped with electric fencing, and the number of electric charging systems replaced with solar powered charging systems.
2. Photographic documentation of the installed solar charging systems.

**Certified by:** \_\_\_\_\_ **Date:** \_\_\_\_\_