

## Utility Contribution to Animal Contact Current (5)

Farm \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Personnel \_\_\_\_\_

Shunt resistor value used for temporary load test.

$$R_{SHUNT} = \boxed{\phantom{00000}} \Omega$$

From 72 hour continuous recording of one-minute averaged voltage, the highest animal contact voltage (AcV) was:

Date and time highest animal contact voltage occurred:

Date =

Time =

Primary to reference voltage at that same time:  
(Primary NEV test voltage)

NpEvt =

Following voltages are taken from temporary load test:

Animal contact voltage with all farm load off:

AcVo =

Primary NEV with all farm load off:

NpEVo =

Animal contact voltage with temporary load on:

AcVtemp =

Primary NEV with temporary load on:

NpEVtemp =

Calculate utility contribution to animal contact voltage (AcVu). See MPSC Stray Voltage Rule 7(3)(g)(i). Note: Multiply AcVtemp and AcVo by the adjustment factor (AF) before inserting into equation.

$$A_c V_u = \frac{N_p EV_t - N_p EV_o}{N_p EV_{temp} - N_p EV_o} \times (A_c V_{temp} - A_c V_o) + A_c V_o \quad A_c V_u = \boxed{\phantom{00000}} \text{ V}$$

Calculate utility contribution to animal contact current (AcCu). See MPSC Stray Voltage Rule 7(3)(h).

$$A_c C_u = \frac{A_c V_u}{R_{shunt}}$$

AcCu =  A

AcCu x 1000 =  mA

Is the utility contribution to animal contact current (AcCu) equal or greater than 1.0 mA?

\_\_\_\_\_ Yes \_\_\_\_\_ No