

STRAY CURRENT OR VOLTAGE REMEDIATION ACT

2018 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Stephen G. Handy

Senate Sponsor: _____

LONG TITLE

General Description:

This bill addresses stray current and voltage.

Highlighted Provisions:

This bill:

- ▶ enacts the Stray Current or Voltage Remediation Act, including:
 - providing legislative findings;
 - defining terms;
 - establishing the scope of the act;
 - addressing filing of a notice, testing, and reporting related to stray current and voltage;
 - providing for remediation of stray current and voltage under certain circumstances;
 - addressing liability;
 - requiring review by an interim committee; and
 - addressing resolution of disputes.

Money Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:



28 ENACTS:

29 **54-21-101**, Utah Code Annotated 1953

30 **54-21-102**, Utah Code Annotated 1953

31 **54-21-103**, Utah Code Annotated 1953

32 **54-21-201**, Utah Code Annotated 1953

33 **54-21-202**, Utah Code Annotated 1953

34 **54-21-203**, Utah Code Annotated 1953

35 **54-21-204**, Utah Code Annotated 1953

36 **54-21-205**, Utah Code Annotated 1953



38 *Be it enacted by the Legislature of the state of Utah:*

39 Section 1. Section **54-21-101** is enacted to read:

40 **CHAPTER 21. STRAY CURRENT OR VOLTAGE REMEDIATION ACT**

41 **Part 1. General Provisions**

42 **54-21-101. Title -- Legislative findings.**

43 (1) This chapter is known as the "Stray Current or Voltage Remediation Act."

44 (2) The Legislature finds that:

45 (a) to protect livestock and livestock operations, it is necessary and appropriate to
46 establish an actionable level of stray current and voltage that is safely below any level that is
47 capable of harming livestock or adversely affecting the behavior, health, or productivity of
48 livestock;

49 (b) the efficient, effective, and safe generation, transmission, and distribution of
50 electrical energy by electric entities is critical to the well-being of the citizens and the economy
51 of the state;

52 (c) permitting an electric entity to face liability based on a level of stray current or
53 voltage that is incapable of adversely affecting livestock seriously threatens the efficient,
54 effective, and safe generation, transmission, and distribution of electrical energy in the state, as
55 well as the continuing viability of economic activity that depends on electrical energy;

56 (d) to guarantee the sufficient availability of efficient, effective, and safe electrical
57 energy in the state, which requires the continuing operation of electric entities, it is necessary
58 and appropriate for the Legislature to establish a uniform actionable level for an electric entity

59 with respect to stray current and voltage and livestock; and

60 (e) because the actionable level is set sufficiently below any level that is capable of
 61 adversely affecting the behavior, health, or productivity of livestock, any potential of harm to
 62 livestock from stray current or voltage below this level is highly remote and unexpected.

63 Section 2. Section **54-21-102** is enacted to read:

64 **54-21-102. Definitions.**

65 (1) "Actionable level" means stray current or voltage that is:

66 (a) a steady-state, root mean square, alternating current (AC) of 2.0 milliamps or more
 67 through a 500 ohm resistor connected between livestock contact points, as measured by a
 68 digital true root mean square meter;

69 (b) a steady-state, root mean square AC voltage of 1.0 volt or more across, in parallel
 70 with, a 500 ohm resistor connected between livestock contact points, as measured by a true root
 71 mean square meter;

72 (c) a steady-state direct current (DC) of 2.8 milliamps or more through a 500 ohm
 73 resistor connected between livestock contact points, as measured by a digital meter; or

74 (d) a steady-state DC voltage of 1.4 volts or more across a 500 ohm resistor connected
 75 between livestock contact points, as measured by a digital meter.

76 (2) "Electric entity" means:

77 (a) an electrical corporation, independent energy producer, qualifying power producer,
 78 interlocal entity, public agency, or person engaged in generating, furnishing, transmitting,
 79 distributing, or marketing electrical power for public or private use; and

80 (b) an agent, affiliate, employee, or independent contractor of a person described in
 81 Subsection (2)(a).

82 (3) "Interlocal entity" means the same as that term is defined in Section [11-13-103](#).

83 (4) "Livestock" means cattle, swine, sheep, ~~H~~→ **equine**, ←~~H~~ or poultry.

84 (5) "Livestock contact points" means two electrically conductive points that livestock
 85 may simultaneously contact.

86 (6) "Public agency" means the same as that term is defined in Section [11-13-103](#).

87 (7) "Qualified testing professional" means an electrical engineer who has:

88 (a) graduated with an engineering degree from an accredited university;

89 (b) completed no fewer than 40 hours of relevant stray current or voltage training, with

90 electric utility experience; and

91 (c) been involved in at least one prior investigation involving the measurement or
92 testing of stray current or voltage.

93 (8) "Root mean square" means:

94 (a) a measure of the effective energy value of a wave or cycle; and

95 (b) for regularly shaped alternating current sine waves, a value of 0.707 multiplied by
96 the peak value of the sine wave.

97 (9) "Steady-state" means:

98 (a) for alternating current and AC voltage, a one minute average of root mean square
99 amperage or voltage values, excluding transients; and

100 (b) for direct current and DC voltage, a one minute average of amperage or voltage
101 values excluding transients.

102 (10) "Transient" means a current or voltage impulse:

103 (a) lasting less than five thousandths of a second; and

104 (b) found on all types of electrical, data, and communications circuits.

105 Section 3. Section **54-21-103** is enacted to read:

106 **54-21-103. Scope of chapter.**

107 This chapter does not expand or affect the jurisdiction of the commission. An electric
108 entity is not subject to the jurisdiction of the commission unless made subject to the
109 jurisdiction of the commission under a statute other than this chapter.

110 Section 4. Section **54-21-201** is enacted to read:

111 **Part 2. Notice and Remedies**

112 **54-21-201. Notice -- Testing -- Reporting -- Access to property.**

113 (1) A livestock owner or livestock operator shall file a notice with an electric entity as
114 provided in Subsection (2) if the livestock owner or livestock operator believes that the
115 livestock owner's or livestock operator's livestock is affected by stray current or voltage that
116 may be attributable to an electric entity and is seeking a remedy from the electric entity.

117 (2) To file a notice, a livestock owner or livestock operator shall provide written notice
118 to the electric entity that documents:

119 (a) the address of the livestock owner or livestock operator and the location of the
120 potential stray current or voltage; and

- 121 (b) a description of the claimed impacts of the potential stray current or voltage.
- 122 (3) Within 30 days of receipt of notice under Subsection (1), the electric entity shall
- 123 provide for testing for stray current or voltage at the location that is the subject of the notice
- 124 required by Subsection (2) by a qualified testing professional.
- 125 (4) (a) Within 60 days after completion of the tests required to be performed under this
- 126 chapter, a qualified testing professional shall prepare a written report. The written report shall
- 127 include:
- 128 (i) a summary of the tests performed; and
- 129 (ii) the data and results from the tests.
- 130 (b) The electric entity shall provide a copy of the written report to the livestock owner
- 131 or livestock operator who provided notice under Subsection (2).
- 132 (5) A livestock owner or livestock operator who provides written notice under
- 133 Subsection (2) shall provide reasonable access to the property where alleged stray current or
- 134 voltage has occurred to allow testing to be conducted as directed under this section.

135 Section 5. Section **54-21-202** is enacted to read:

136 **54-21-202. Plan to reduce or eliminate stray current or voltage.**

- 137 (1) The procedure described in Subsection (2) shall be followed if, through testing by a
- 138 qualified testing professional as described in Section [54-21-201](#), it is determined that the
- 139 electric entity's contribution to any stray current or voltage is 50% or more of the actionable
- 140 level.
- 141 (2) If the conditions of Subsection (1) are met, the electric entity shall diligently pursue
- 142 remediation to the electric entity's contribution to any stray current or voltage to less than 50%
- 143 of the actionable level within 90 days.

- 144 (3) The livestock owner or livestock operator who provides written notice under
- 145 Subsection [54-21-201](#)(2) shall provide reasonable access for remediation.

146 Section 6. Section **54-21-203** is enacted to read:

147 **54-21-203. Liability limitations.**

- 148 (1) An electric entity may not be held liable for damages or other relief if the claim for
- 149 damages or other relief is based on livestock contact with any kind of stray current or voltage
- 150 contributed by the electric entity below the actionable level.
- 151 (2) There is no presumption of liability if the stray current or voltage is equal to or

152 greater than the actionable level.

153 (3) A claim for nuisance may not be asserted against an electric entity for damages due
154 to stray current or voltage. Claims for stray current or voltage shall be limited to claims of
155 negligence. The electric entity's conduct shall be evaluated using a standard of ordinary care
156 under the circumstances.

157 Section 7. Section **54-21-204** is enacted to read:

158 **54-21-204. Committee review requirements.**

159 By November 2020 and in three year intervals thereafter, the Public Utilities, Energy,
160 and Technology Interim Committee shall review industry standards and peer reviewed research
161 regarding levels of stray current and voltage and impacts to livestock.

162 Section 8. Section **54-21-205** is enacted to read:

163 **54-21-205. Disputes.**

164 A dispute under this chapter involving an electric entity shall be resolved as follows:

- 165 (1) if the electric entity is a public utility, in accordance with Section [54-7-9](#); and
166 (2) if the electric entity is not a public utility, by filing an action with the district court.

Legislative Review Note
Office of Legislative Research and General Counsel