

1 **STRAY CURRENT OR VOLTAGE REMEDIATION ACT**

2 2018 GENERAL SESSION

3 STATE OF UTAH

4 **Chief Sponsor: Stephen G. Handy**

5 Senate Sponsor: Todd Weiler

7 **LONG TITLE**

8 **General Description:**

9 This bill addresses stray current and voltage.

10 **Highlighted Provisions:**

11 This bill:

12 ▶ enacts the Stray Current or Voltage Remediation Act, including:

- 13 • providing legislative findings;
- 14 • defining terms;
- 15 • establishing the scope of the act;
- 16 • addressing filing of a notice, testing, and reporting related to stray current and
- 17 voltage;
- 18 • providing for remediation of stray current and voltage under certain
- 19 circumstances;
- 20 • addressing liability;
- 21 • requiring review by an interim committee; and
- 22 • addressing resolution of disputes.

23 **Money Appropriated in this Bill:**

24 None

25 **Other Special Clauses:**

26 None

27 **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

37

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, equine, or poultry.

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

86 (6) "Livestock operator" means a person who through an agreement with the owner of
87 livestock has authority and is responsible to oversee the care and well being of the livestock.

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

89 (8) "Qualified testing professional" means an electrical engineer who has:

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

91 (b) completed no fewer than 40 hours of relevant stray current or voltage training, with
92 electric utility experience; and

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

95 (9) "Root mean square" means:

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

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

99 (10) "Steady-state" means:

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

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

104 (11) "Transient" means a current or voltage impulse:

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

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

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

108 **54-21-103. Scope of chapter.**

109 This chapter does not expand or affect the jurisdiction of the commission. An electric
110 entity is not subject to the jurisdiction of the commission unless made subject to the

111 jurisdiction of the commission under a statute other than this chapter.

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

113 **Part 2. Notice and Remedies**

114 **54-21-201. Notice -- Testing -- Reporting -- Access to property.**

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

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

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

123 (b) a description of the claimed impacts of the potential stray current or voltage.

124 (3) Within 30 days of receipt of notice under Subsection (1), the electric entity shall
125 provide for testing for stray current or voltage at the location that is the subject of the notice
126 required by Subsection (2) by a qualified testing professional.

127 (4) (a) Within 60 days after completion of the tests required to be performed under this
128 chapter, a qualified testing professional shall prepare a written report. The written report shall
129 include:

130 (i) a summary of the tests performed; and

131 (ii) the data and results from the tests.

132 (b) The electric entity shall provide a copy of the written report to the livestock owner
133 or livestock operator who provided notice under Subsection (2).

134 (5) A livestock owner or livestock operator who provides written notice under
135 Subsection (2) shall provide reasonable access to the property where alleged stray current or
136 voltage has occurred to allow testing to be conducted as directed under this section.

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

138 **54-21-202. Plan to reduce or eliminate stray current or voltage.**

139 (1) The procedure described in Subsection (2) shall be followed if, through testing by a
140 qualified testing professional as described in Section [54-21-201](#), it is determined that the
141 electric entity's contribution to any stray current or voltage is 50% or more of the actionable

142 level.

143 (2) If the conditions of Subsection (1) are met, the electric entity shall diligently pursue
144 remediation to the electric entity's contribution to any stray current or voltage to less than 50%
145 of the actionable level within 90 days.

146 (3) The livestock owner or livestock operator who provides written notice under
147 Subsection 54-21-201(2) shall provide reasonable access for remediation.

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

149 **54-21-203. Liability limitations.**

150 (1) An electric entity may not be held liable for damages or other relief if the claim for
151 damages or other relief is based on livestock contact with any kind of stray current or voltage
152 contributed by the electric entity below the actionable level.

153 (2) There is no presumption of liability if the stray current or voltage is equal to or
154 greater than the actionable level.

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

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

160 **54-21-204. Committee review requirements.**

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

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

165 **54-21-205. Disputes.**

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

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