

TITLE 61
PUBLIC UTILITY REGULATION

CHAPTER 8
STRAY CURRENT AND VOLTAGE REMEDIATION ACT

61-801. LEGISLATIVE FINDINGS AND PURPOSES. The legislature of the state of Idaho finds that the efficient and safe distribution of electricity is critical to the well-being of the citizens and the economy of the state, including the business of agriculture, and that this enactment is necessary for the protection of the public welfare and benefit. The legislature also finds that the potential impact of stray current or voltage on dairy cows is a matter of interest and concern to dairy producers with dairies situated near and served by a multi-grounded wye electrical distribution system, which is the type of distribution system used by utilities in this state. Scientific research has established a level of stray current or voltage, at or below which no effect on a dairy cow's behavior, health or milk production has been shown. To provide for the continued, safe and efficient availability of electricity while addressing complaints regarding stray current or voltage, it is necessary and appropriate to: establish a uniform preventive action level; establish uniform procedures and protocols for measurements of stray current or voltage; require, when necessary, that the sources of stray current or voltage be identified; require, when necessary, adequate remediation; and establish procedures for handling complaints.

[61-801, added 2005, ch. 189, sec. 1, p. 578.]

61-802. DEFINITIONS. As used in this chapter, unless the context otherwise requires:

(1) "Adequate remediation" means corrective action by a utility which results in, and is reasonably likely to sustain, a reduction of stray current or voltage attributable to the utility's distribution system of fifty percent (50%) or less of the preventive action level.

(2) "Commission" means the Idaho public utilities commission as established pursuant to section [61-201](#), Idaho Code.

(3) "Cow contact points" means any two (2) electrically conductive points which a dairy cow may, in its normal environment, unavoidably and simultaneously contact.

(4) "Preventive action level" is stray current or voltage that is either:

(a) A steady-state, root mean square (rms), alternating current (AC) of 2.0 milliamp (mA) or more through a 500 ohm resistor connected between cow contact points, as measured by a true rms meter; or

(b) A steady-state, rms, AC voltage of 1.0 volts or more, across (in parallel with) a 500 ohm resistor connected between cow contact points, as measured by a true rms meter.

(5) "Steady-state" is the value of a current or voltage after an amount of time where all transients have decayed to a negligible value.

(6) "Stray current or voltage" is:

(a) Any steady-state, 60 hertz (Hz) (including harmonics thereof), root mean square (rms), alternating current (AC) of less than 20 milliamp (mA) through a 500 ohm resistor connected between cow contact points, as measured by a true rms meter; or

(b) Any steady-state, 60 Hz (including harmonics thereof), rms, AC voltage of less than 10 volts, across (in parallel with) a 500 ohm resistor connected between cow contact points, as measured by a true rms meter. Stray current or voltage is a normal, inherent and unavoidable result of electricity traveling through grounded electrical systems, including a dairy producer's on-farm system and a utility's distribution system, which systems are required by the national electrical code and the national electrical safety code to be grounded to the earth to ensure continuous safety and reliability.

(7) "Utility" means a public utility as defined in section [61-332A](#), Idaho Code.

[61-802, added 2005, ch. 189, sec. 1, p. 578.]

61-803. RULES. Within six (6) months of the effective date of this chapter, the commission shall promulgate temporary rules and proposed rules, referred to collectively in this chapter as "commission rules," establishing uniform procedures and protocols for the measurement of stray current or voltage. The commission shall review the rules from time to time, or upon petition to the commission, to ensure that the uniform procedures and protocols continue to be the most scientifically and technologically accurate and reliable means of detecting stray current or voltage. If the commission determines that it is appropriate to revise the rules because of advances in science or technology, it is encouraged to do so by the adoption of temporary rules which would confer a benefit on utilities and dairy producers by making better science available for the measurement of stray current or voltage. Any measurements of stray current or voltage not made in compliance with commission rules shall be inadmissible before the commission or in any civil action. The commission rules shall be applicable to dairy producers, utilities, and all persons or entities involved in any way in the measurement or remediation of stray current or voltage in this state.

[61-803, added 2005, ch. 189, sec. 1, p. 579.]

61-804. CLAIM -- NOTICE -- RESPONSE OF UTILITY. Any dairy producer in this state who claims that its dairy cows are being affected by any form or type of electrical energy allegedly attributable to a utility including, without limitation, stray current or voltage, shall, as a condition precedent to commencing any civil action against the utility, provide written notice thereof to the utility. The notice shall specify why the dairy producer believes its dairy cows are being affected by electrical energy attributable to the utility. Within fourteen (14) days of receipt of such notice, the utility shall take measurements at cow contact points at the dairy producer's dairy to identify the existence and magnitude of stray current or voltage, if any. If the utility finds a level of stray current or voltage at cow contact points in excess of the preventive action level, the utility shall thereafter promptly identify that portion, if any, of the stray current or voltage that is attributable to the utility's distribution system. If that portion of the stray current or voltage at cow contact points attributable to the utility's distribution system exceeds fifty percent (50%) of the preventive action level, the utility shall, within five (5) business days, commence and diligently pursue to completion, remedial procedures which shall reduce, and are reasonably likely to sustain, that

portion of the stray current or voltage at cow contact points attributable to the utility's distribution system to fifty percent (50%) or less of the preventive action level.

[61-804, added 2005, ch. 189, sec. 1, p. 579.]

61-805. COMMISSION -- JURISDICTION -- ORDERS. The commission shall have exclusive, initial jurisdiction to determine whether a utility has complied with the commission rules regarding measurement of stray current or voltage; whether the utility's measurements demonstrated stray current or voltage at or above the preventive action level; whether the utility has properly identified that portion of the stray current or voltage at cow contact points attributable to the utility's distribution system; and whether the utility has complied with its remediation obligation under this chapter.

(1) If, after hearing, the commission determines that (a) the utility complied with the commission rules regarding measurement of stray current or voltage, and (b) the utility properly identified no stray current or voltage in excess of the preventive action level, then the commission shall issue an order that the utility has provided adequate service pursuant to section [61-302](#), Idaho Code. The commission's order thereon shall be binding on the parties, subject only to the provisions of section [61-807](#), Idaho Code.

(2) If, after hearing, the commission determines that (a) the utility complied with the commission rules regarding measurement of stray current or voltage, (b) the utility properly identified stray current or voltage in excess of the preventive action level, and (c) the utility properly identified that the portion of stray current or voltage attributable to the utility's distribution system was fifty percent (50%) or less of the preventive action level, then the commission shall issue an order that the utility provided adequate service pursuant to section [61-302](#), Idaho Code. The commission's order thereon shall be binding on the parties, subject only to the provisions of section [61-807](#), Idaho Code.

(3) If, after hearing, the commission determines that (a) the utility complied with the commission rules regarding measurement of stray current or voltage, (b) the utility properly identified stray current or voltage in excess of the preventive action level, and (c) the utility properly identified that the portion of stray current or voltage attributable to the utility's distribution system exceeded fifty percent (50%) of the preventive action level, then the commission shall thereafter determine the adequacy of the utility's remediation efforts. The commission's order thereon shall be binding on the parties, subject only to the provisions of section [61-807](#), Idaho Code. If the dairy producer has complied with the notice provisions set forth in section [61-804](#), Idaho Code, and the commission has made a determination that the conditions set forth in this subsection are met, then the dairy producer may, not later than one (1) year following completion of adequate remediation, or one (1) year following the issuance of the commission's final order thereon, whichever occurs later, commence a civil action seeking monetary damages against the utility. In any such civil action, damages shall be limited as set forth in section [61-808](#), Idaho Code.

(4) If, after hearing, the commission determines that (a) the utility failed to comply with the commission rules regarding measurement of stray current or voltage, (b) the utility failed to properly identify, when required pursuant to section [61-804](#), Idaho Code, to do so, that portion of stray current or voltage attributable to the utility's distribution system,

or (c) the utility failed to provide adequate remediation, then the commission shall order the utility to take measurements of stray current or voltage in conformance with commission rules, or identify that portion of the stray current or voltage attributable to the utility's distribution system and, if necessary, to provide adequate remediation. The commission's order thereon shall be binding on the parties, subject only to the provisions of section [61-807](#), Idaho Code. If the dairy producer complied with the notice provisions set forth in section [61-804](#), Idaho Code, and the commission made a determination that the portion of stray current or voltage attributable to the utility's distribution system exceeded fifty percent (50%) of the preventive action level, then the dairy producer may, not later than one (1) year following completion of adequate remediation, or one (1) year following the issuance of the commission's final order thereon, whichever occurs later, commence a civil action seeking monetary damages against the utility. In any such civil action, damages shall be limited as set forth in section [61-808](#), Idaho Code.

(5) If after hearing, the commission determines that a dairy producer made or pursued a claim in bad faith or for purposes of harassment of the utility, the commission shall require the dairy producer to pay the utility's actual costs of investigation and defense. If, after hearing, the commission determines that a utility acted in bad faith, or for purposes of harassment or delay, the commission shall require the utility to pay the dairy producer's actual costs of investigation, if any, and preparation and presentation of the claim before the commission. The commission's order thereon shall be binding on the parties, subject only to the provisions of section [61-807](#), Idaho Code.

[61-805, added 2005, ch. 189, sec. 1, p. 580.]

61-806. COMMISSION -- RULES OF PRACTICE AND PROCEDURE. In all matters arising under this chapter which are submitted to the commission for decision, order or review, procedure shall be governed by the commission rules of practice and procedure.

[61-806, added 2005, ch. 189, sec. 1, p. 581.]

61-807. CIVIL ACTIONS. No civil action may be commenced by a dairy producer against a utility seeking damages or other relief allegedly due to injury caused by stray current or voltage unless the dairy producer has complied with the provisions of section [61-804](#), Idaho Code, and the commission has issued an order pursuant to section [61-805](#), Idaho Code. In any civil action against a utility for damages or other relief, after the dairy producer has complied with the provisions of section [61-804](#), Idaho Code, and the commission has issued an order pursuant to section [61-805](#), Idaho Code, the commission's order shall be admissible in evidence in such civil action.

[61-807, added 2005, ch. 189, sec. 1, p. 581.]

61-808. DAMAGES. In any civil action against a utility for damages pursuant to this chapter, a dairy producer shall be limited to those damages which (a) were incurred by the dairy producer during that period of time commencing twelve (12) months prior to the dairy producer's provision of notice to the utility and ending on the date of completion of adequate remediation,

and (b) were caused by that portion of the stray current or voltage attributable to the utility's distribution system.

[61-808, added 2005, ch. 189, sec. 1, p. 581.]

61-809. LIMITATION OF CLAIMS. No claim for nuisance may be asserted against a utility for damages due to stray current or voltage. Claims against a utility for damages due to stray current or voltage shall be limited to claims of negligence, including in the case of a prior determination of the commission pursuant to subsections (3) or (4) of section [61-805](#), Idaho Code, negligence per se. In determining whether the utility was negligent, the utility's conduct shall be judged using a standard of ordinary care under the existing circumstances.

[61-809, added 2005, ch. 189, sec. 1, p. 581.]