

State	Statute or Regulation	Preventive action level or designated level of concern	Established testing procedures	Entity assigned jurisdiction	Other information/comments
Connecticut	PUC Order following complaint (Docket 94-05-35, Order issued June 30, 1995)	0.5 volts/1.0 milliampere in cow contact areas. Also included a cap of 1.0 volts measured between the primary neutral and the earth.	Protocol recommended as part of PUC Order. PUC specifically rejected the idea of a separate entity or independent tester.	State PUC	Connecticut Stray Voltage Task Force was to be established; but there is no indication that it actually was ever created. Recommendation included an education program and training sessions for farmers, electrical contractors, dairy equipment installers, and other interested parties. Each utility was to designate a stray voltage team
Idaho	Statute (Stray Voltage and Current Remediation Act. Section 61-803 Idaho Code) and Rules (Rules for the Measurement of Stray Current or Voltage. IDAPA31.61.01)	1 volt (0.5 volts attributed to utility and 0.5 volts attributed to farmer) or 2 milliamperes.	Testing procedures established in PUC rules. 6 different tests described.	State PUC	Legislation also includes damage limitations; a limited period for filing claims; and other provisions.
Michigan	Rules (Rules and Regulations Governing Animal Contact Current Mitigation. Rules 460.2701 - 460.2707)	2 milliamperes (utility contribution must be reduced to less than 1 milliampere)	Testing described in the rules at 460.2707	State Public Service Commission	If a complaint is filed, the commission may appoint experts to investigate the complaint and report findings to the commission
Minnesota	Legislation proposed in 2011 that would have required the PUC to establish a Stray Voltage Advisory Task Force and develop legislation (HF 1157) - The 2011 legislation did not pass				Stray Voltage Work Group established in 1990 at the request of the Governor to assess the stray voltage problem in Minnesota and recommend an appropriate state response. Work group noted need for more uniform investigative procedures and better training for stray voltage investigators. The work group concluded that

					utilities should develop technical criteria/standards based on nationally recognized guidelines.
Vermont	Voluntary Program for the Control of Stray Voltage adopted in 1994	neutral isolation devices to be installed when neutral to earth voltages in excess of 0.5 volts are encountered	Each utility establishes its own testing procedures. Each utility's policy was submitted to the Department of Agriculture, Food, and Markets and it is presumed the basic testing procedures are contained in the Voluntary Program book; but the book has not been reviewed.	Department of Agriculture, Food, and Markets in cooperation with the Department of Public Service worked with the utilities to prepare the voluntary program	A Milk Quality Enhancement Program (MQEP) administered by the Department of Agriculture, Food, and Markets oversees a program to address on-farm stray voltage and provides training and education regarding farm wiring.
Wisconsin	Wisconsin Legislature has adopted a provision requiring the PSC to create a Stray Voltage Program and providing funding. (Wisc. Statute 196.857 and PSC 113.0506). The legislature has also directed the Dept. of Agriculture to participate in the Stray Voltage Program. Wisc. Statute 93.41). The PSC has issued Orders prescribing standardized testing procedures and establishing mitigation levels. The Orders were	A total stray voltage level of 2.0 milliamperes was found to be a conservative level of concern. Based on the concept of equal responsibility between the utility and the farmer, the utility is responsible to keep its contribution of stray voltage to 1.0 milliamperes or less.	The Orders issued by the PSC include standard testing procedures. These include tests designed to identify off-farm stray voltage and on-farm stray voltage. These are similar, if not identical, to the tests codified in the Idaho rules.	The Wisconsin PSC has the jurisdiction to investigate and hear complaints	The PSC and the Wisconsin Department of Agriculture created a Stray Voltage Analysis Team (SVAT), which is now called the Rural Electric Power Service (REPS). The PSC has also worked with the University of Wisconsin College of Agriculture to detail the proper actions involved in stray voltage testing and education.

	issued in Docket 05-EI-106 and 05-EI-115. These Orders have been supplemented by PSC staff reports and whitepapers.				
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* Note: Stray voltage for purpose of this document is a small voltage measured between two points that can be contacted by an animal. This is different from higher voltage shock that might occur as a result of incorrect wiring or equipment failures. New York adopted "stray voltage" testing requirements for all utility facilities in 2005 in response to an individual that was shocked while walking her dog when she stepped on a metal plate on the sidewalk. She unfortunately died in the incident that involved a shock of 57 volts of electricity coming from an underground service box to the metal plate. However, the testing of utility facilities in New York is intended to identify any improper voltages in excess of 8 volts and up to 600 volts. These tests are designed to protect the public from faulty utility facilities and are not designed to address the natural phenomenon of stray voltage that is present in the livestock context. The omission of the New York "stray voltage" testing requirements from the chart above is intended to provide consistency in the comparisons based on the harm intended to be addressed. Other states may similarly use the phrase "stray voltage" in a different context.

Other Pertinent Statutory provisions - not specifically dealing with stray voltage

South Dakota

S.D. 47-21-75. - Construction to comply with National Electrical Safety Code--Compliance establishes due care in negligence claim. Construction of electric lines by a cooperative shall comply with the standards of the National Electrical Safety Code in effect at the time of the construction. Proof of compliance with the requirements of the applicable National Electrical Safety Code establishes due care in the defense of a negligence claim alleging a violation of that standard.

21-10-2. - Acts under statutory authority not deemed nuisance. Nothing which is done or maintained under the express authority of a statute can be deemed a nuisance.

Iowa

657.1(2) NUISANCE -- WHAT CONSTITUTES -- ACTION TO ABATE -- ELECTRIC UTILITY DEFENSE.

2. Notwithstanding subsection 1, in an action to abate a nuisance against an electric utility, an electric utility may assert a defense of comparative fault as set out in section 668.3 if the electric utility demonstrates that in the course of providing electric services to its customers it has complied with engineering and safety standards as adopted by the utilities board of the department of commerce, and if the electric utility has secured all permits and approvals, as required by state law and local ordinances, necessary to perform activities alleged to constitute a nuisance.