

## § 234.1

- 234.233 Rail joints.
- 234.235 Insulated rail joints.
- 234.237 Reverse switch cut-out circuit.
- 234.239 Tagging of wires and interference of wires or tags with signal apparatus.
- 234.241 Protection of insulated wire; splice in underground wire.
- 234.243 Wire on pole line and aerial cable.
- 234.245 Signs.

### INSPECTIONS AND TESTS

- 234.247 Purpose of inspections and tests; removal from service of relay or device failing to meet test requirements.
- 234.249 Ground tests.
- 234.251 Standby power.
- 234.253 Flashing light units and lamp voltage.
- 234.255 Gate arm and gate mechanism.
- 234.257 Warning system operation.
- 234.259 Warning time.
- 234.261 Highway traffic signal pre-emption.
- 234.263 Relays.
- 234.265 Timing relays and timing devices.
- 234.267 Insulation resistance tests, wires in trunking and cables.
- 234.269 Cut-out circuits.
- 234.271 Insulated rail joints, bond wires, and track connections.
- 234.273 Results of inspections and tests.

### APPENDIX A TO PART 234—SCHEDULE OF CIVIL PENALTIES

### APPENDIX B TO PART 234—ALTERNATE METHODS OF PROTECTION UNDER 49 CFR 234.105(C), 234.106, AND 234.107(C).

AUTHORITY: 49 U.S.C. 20103, 20107, and 49 CFR 1.49.

AUTHORITY: 49 U.S.C. 20103, 20107; 28 U.S.C. 2461, note; and 49 CFR 1.49.

SOURCE: 61 FR 31806, June 20, 1996, unless otherwise noted.

## Subpart A—General

### § 234.1 Scope.

This part imposes minimum maintenance, inspection, and testing standards for highway-rail grade crossing warning systems. This part also prescribes standards for the reporting of failures of such systems and prescribes minimum actions railroads must take when such warning systems malfunction. This part does not restrict a railroad from adopting and enforcing additional or more stringent requirements not inconsistent with this part.

### § 234.3 Application.

This part applies to all railroads except:

## 49 CFR Ch. II (10–1–04 Edition)

(a) A railroad that exclusively operates freight trains only on track which is not part of the general railroad system of transportation;

(b) Rapid transit operations within an urban area that are not connected to the general railroad system of transportation; and

(c) A railroad that operates passenger trains only on track inside an installation that is insular; i.e., its operations are limited to a separate enclave in such a way that there is no reasonable expectation that the safety of the public—except a business guest, a licensee of the railroad or an affiliated entity, or a trespasser—would be affected by the operation. An operation will not be considered insular if one or more of the following exists on its line:

- (1) A public highway-rail crossing that is in use;
- (2) An at-grade rail crossing that is in use;
- (3) A bridge over a public road or waters used for commercial navigation; or
- (4) A common corridor with a railroad, i.e., its operations are within 30 feet of those of any railroad.

### § 234.4 Preemptive effect.

Under 49 U.S.C. 20106 (formerly § 205 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 434)), issuance of these regulations preempts any State law, rule, regulation, order, or standard covering the same subject matter, except a provision directed at an essentially local safety hazard that is consistent with this part and that does not impose an undue burden on interstate commerce.

### § 234.5 Definitions.

As used in this part:

*Activation failure* means the failure of an active highway-rail grade crossing warning system to indicate the approach of a train at least 20 seconds prior to the train's arrival at the crossing, or to indicate the presence of a train occupying the crossing, unless the crossing is provided with an alternative means of active warning to highway users of approaching trains. (This failure indicates to the motorist that it is safe to proceed across the railroad tracks when, in fact, it is not safe to do so.) A grade crossing signal

system does not indicate the approach of a train within the meaning of this paragraph if—more than 50% of the flashing lights (not gate arm lights) on any approach lane to the crossing are not functioning as intended, or in the case of an approach lane for which two or more pairs of flashing lights are provided, there is not at least one flashing light pair operating as intended. Back lights on the far side of the crossing are not considered in making these determinations.

*Appropriately equipped flagger* means a person other than a train crewmember who is equipped with a vest, shirt, or jacket of a color appropriate for daytime flagging such as orange, yellow, strong yellow green or fluorescent versions of these colors or other generally accepted high visibility colors. For nighttime flagging, similar outside garments shall be retro reflective. Acceptable hand signal devices for daytime flagging include “STOP/SLOW” paddles or red flags. For nighttime flagging, a flashlight, lantern, or other lighted signal shall be used. Inasmuch as Part VI of the Federal Highway Administration’s Manual on Uniform Traffic Control Devices addresses standards and guides for flaggers and flagging equipment for highway traffic control, FRA recommends that railroads be aware of the standards and follow them to the greatest extent possible. Copies of the latest MUTCD provisions regarding flagging will be available from FRA, as well as FMCSA, as changes are made in this area.

*Credible report of system malfunction* means specific information regarding a malfunction at an identified highway-rail crossing, supplied by a railroad employee, law enforcement officer, highway traffic official, or other employee of a public agency acting in an official capacity.

*False activation* means the activation of a highway-rail grade crossing warning system caused by a condition that requires correction or repair of the grade crossing warning system. (This failure indicates to the motorist that it is not safe to cross the railroad tracks when, in fact, it is safe to do so.)

*Highway-rail grade crossing* means a location where a public highway, road, street, or private roadway, including

associated sidewalks and pathways, crosses one or more railroad tracks at grade.

*Partial activation* means activation of a highway-rail grade crossing warning system indicating the approach of a train, however, the full intended warning is not provided due to one of the following conditions:

(1) At non-gated crossings equipped with one pair of lights designed to flash alternately, one of the two lights does not operate properly (and approaching motorists can not clearly see flashing back lights from the warning lights on the other side of the crossing);

(2) At gated crossings, the gate arm is not in a horizontal position; or

(3) At gated crossings, any portion of a gate arm is missing if that portion normally had a gate arm flashing light attached.

*Train* means one or more locomotives, with or without cars.

*Warning system malfunction* means an activation failure, a partial activation, or a false activation of a highway-rail grade crossing warning system.

#### § 234.6 Penalties.

(a) *Civil penalty.* Any person (an entity of any type covered under 1 U.S.C. 1, including but not limited to the following: a railroad; a manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; any independent contractor providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor) who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least \$550, but not more than \$11,000 per violation, except that: penalties may be assessed against individuals only for willful violations, and where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury, a penalty not to exceed \$27,000 per violation may be assessed. Each day a violation continues shall constitute a separate offense. Appendix A to this part contains a schedule of