

8830.1200 OPERATION OF ACTIVE WARNING DEVICE; CONTROLS.

Subpart 1. **Time requirements.** At signalized grade crossings, the active warning devices must operate for at least 20 seconds before a train's arrival at the crossing.

Where the distance from the active warning device to the point where a vehicle will clear the farthest track is more than 35 feet (10.7 meters), the 20-second time requirement must be increased. The distance should be measured parallel to the center line of the roadway. The rate of increase must be one second for each additional ten feet (three meters) of travel to allow slow-moving roadway vehicles to clear the farthest track.

Subp. 2. **Design compliance.** Warning device controls, including electric, electronic, and mechanical methods, must comply with the AREMA signal manual, insofar as it applies, and must be so designed that if a part fails, the device will provide the warning normally provided when a train approaches the grade crossing.

Subp. 3. **Suspending operation.** If means are provided to suspend operation of an active warning device during intervals when trains make regular operating stops or perform switching operations on approach circuits, the active warning device controls must be designed so that train movements on other tracks included in the warning device system activate the warning device before a train reaches the grade crossing. Automatic control of warning devices, activated by approaching trains on tracks other than the track on which the train has stopped or is performing switching operations, must take precedence over any feature provided to suspend operation.

Subp. 4. **Manual control.** If a manual supervisory control of active warning devices is provided in addition to automatic controls:

A. the automatic control, activated by approaching trains on tracks other than that for which manual control has been made effective, must take precedence over the manual control;

B. means must be provided to restore the controls to automatic operation; and

C. means must be provided to prevent manual operation by unauthorized persons.

Subp. 5. **Track circuits.** Tracks over grade crossings with active warning devices must be provided with track circuits, unless the commissioner specifically exempts the crossing in question based on train operation characteristics.

Where train speeds on a given track vary by more than 20 miles per hour (30 kilometers per hour) under normal operation and volume of railroad and roadway traffic warrants, special devices or circuits must be installed to provide consistent warning time for train movements. Special control features must be used to eliminate the effects of station stops and switching operations within approach-control circuits. Wraparound or equivalent circuits may be required with stand-alone, motion-sensitive control equipment.

Subp. 6. **Indication of power interruption.** A "power off" indicator, or equivalent device or method, must be installed for each active warning device system to show that a transfer from the primary power source to a secondary power source has taken place. This "power off" indicator must be visible from the outside of the control cabinet or visible through some other method so that notice is provided indicating that a transfer in power source has taken place and maintenance is required.

Statutory Authority: *MS s 218.071; 219.073; 219.165; 219.17; 219.384; 222.50; 222.58; 222.63*

History: *23 SR 524*

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