## 8830.1550 GATE OPERATION AND CONTROL.

Subpart 1. **Functional requirements.** The gate arms must uniformly and smoothly complete movements, and be securely held when in the raised position. Gate-arm lights must operate in conjunction with the active warning device at all times. The light nearest the tip of the arm must burn steadily and two lights must flash alternately in unison with the lights on the active warning device. The gate controls must be so designed that if the arms strike an object while being lowered, they will readily stop, and on removal of the obstruction will assume the proper position. The gate arm must start its downward motion not less than three seconds after the lights on the active warning device start to operate. The commissioner may require a longer time than three seconds if an engineering study based on vehicle operations so concludes. The gate arm must reach the horizontal position before arrival of a train and remain in that position as long as part of the train occupies the grade crossing.

The gate controls must be designed to ensure proper operation during unfavorable weather conditions.

Subp. 2. **Operational failure.** If out of order, the gate arm must assume the horizontal position across the roadway. Circuits must be so arranged that a failure of the gate mechanism to operate as intended will not prevent the lights on the gate arm and the active warning device from operating when a train approaches.

Subp. 3. **Operating gate arm during malfunction.** Where gates are installed, means must be provided to enable personnel designated by the rail carrier to raise the gates when a malfunction in the control system causes the gates to obstruct traffic under conditions other than the approach and movement of a train over the grade crossing.

**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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