

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

On the Commissioner's Own Motion for a Determination of the Adequacy of Warning Devices at the Grade Crossing of the Union Pacific Railroad Co. Tracks with STH 54 in the Town of Brockway, Jackson County

9040-RX-1213

FINDINGS OF FACT AND ORDER

On March 16, 2005, the Commissioner of Railroads directed the staff of the Office of the Commissioner of Railroads (OCR) to investigate the adequacy of warning devices under §195.28, Stats., at the grade crossing of the Union Pacific Railroad Co. (UP) tracks with STH 54 in the Town of Brockway, Jackson County (Crossing No. 184 041M).

An OCR investigator inspected the crossing. No hearing was held.

Findings of Fact

THE COMMISSIONER FINDS:

STH 54 is a divided roadway with two two-lane roadways divided by a 15'-wide raised median. The roadway cross-section consists of inside curbs and outside shoulders (10'-wide with 8' STH 54 and intersects the railroad tracks at an angle of 55°. STH 54 carried an average daily traffic (ADT) of 8200 according to 2003 DOT records at a legal speed limit of 55 mph.

The Union Pacific Railroad Co. operates 4 train movements per day over the crossing at a timetable speed of 40 mph. The crossing consists of one mainline track.

The exposure factor at this crossing is about 32,000. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

Five train-vehicle accidents have occurred at this crossing since 1973. The crashes all occurred prior to 1980 (two in 1979, 1977, 1976, and 1974).

Accidents that do occur here will likely be quite serious if a through train is involved due to their 40 mph speed. Train speed is strongly correlated with fatalities in train/vehicle accidents. More specifically, crossings with train speeds of 40 mph and over have a disproportionate number of fatalities.

The crossing is presently protected with cantilevered automatic flashing lights on the outside shoulders and mast-mounted signals in the median. Conditions warrant adding gates to the existing warning devices when safety funding is available. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety, the addition of gates, LED lamps, and constant warning time circuitry is needed.

Constant warning time circuitry adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

Light emitting diodes (LED) lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

Source of funding: The signal materials and installation shall be paid from OCR safety funds.

Conclusion on the Issue

THE COMMISSIONER CONCLUDES:

That in order to adequately protect and promote public safety, it is necessary to add LED lamps, gates and constant warning time circuitry to the existing warning devices at the crossing of the tracks of the Union Pacific Railroad Co. with STH 54 in the Town of Brockway, Jackson County.

Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §195.28, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

Order

THE COMMISSIONER ORDERS:

1. That the **Union Pacific Railroad Co.** shall add and maintain 12" LED lamps, gates and constant warning time circuitry to the existing warning with appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **STH 54** at-grade in the Town of Brockway, Jackson County by **December 31, 2009** (Crossing No. 184 041M).

2. That the **Union Pacific Railroad Co.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

3. That the signal installation work herein ordered shall not begin until the district office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

4. That to the extent feasible the **Union Pacific Railroad Co.** shall re-use the existing signal equipment.

5. That the **Union Pacific Railroad Co.** shall bear no part of the cost of the crossing signals installation, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

6. That if the petitioner, railroad or any interested party objects to this order and requests a hearing within 20 days of the date of this order in writing, the Office will hold a public hearing.

7. That jurisdiction is retained.

Dated at Madison, Wisconsin, (June 17, 2008).

By the Office of the Commissioner of Railroads.

Roger Breske
Commissioner of Railroads

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