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NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

C O R R E C T E D C O P Y

ISSUED: March 20, 1985

Forwarded to:
Mr. L. S. Crane
Chairman and Chief Executive Officer
Consolidated Rail Corporation
6 Penn Center Plaza
Philadelphia, Pennsylvania 19104

SAFETY RECOMMENDATION(S)
R-85-19 and -20

About 3:35 p.m. on February 26, 1984, westbound Consolidated Rail Corporation (Conrail) Train ENPI-6X, moving about 27 mph, struck the rear of standing Conrail Train OIPI-6 at Control Point (CP) Salts on the No. 2 track near Saltsburg, Pennsylvania. Derailed cars from train OIPI-6 were struck by eastbound Conrail train TV-12M while it was moving about 38 mph on the No. 1 track. When the collision occurred, the derailment of a car in train TV-12M caused its brakes to apply in emergency. Two cars and a caboose derailed in train OIPI-6, one locomotive unit derailed in train ENPI-6X, and one car derailed in train TV-12M. A fire which ensued severely damaged or destroyed 19 "piggy-back" truck semi-trailers carried by train TV-12M. Two crewmen on train ENPI-6X and one crewman on OIPI-6 were injured. Conrail estimated the damage at \$784,719. 1/

The Safety Board has reservations concerning the operation of trains by rule No. 299. It believes that the provision of rule No. 299 that allows a train with inoperative cab signals or a train that is not equipped with cab signals to move past a CP home signal when the "C" light cannot be displayed because a train is in the block ahead does not provide an adequate margin of safety. Under these circumstances a following train receives no indication of the location of a train until it is in sight. The Safety Board also takes exception to displaying a signal for a higher speed through the interlocking than is permissible beyond the interlocking and between CP locations. The engineer said that he understood the indication of the medium clear signal displayed for his train at CP Blair allowed him to move at medium speed (30 mph) through the interlocking, but he also believed it was the authorized speed between the CP locations. This belief is consistent with the speed at which the train was operated between CP Blair and the point of impact.

1/ For more detailed information, read Railroad Accident Report--"Rear End Collision Conrail Train OIPI-6 and ENPI-6X, near Saltsburg, Pennsylvania, February 26, 1984" (NTSB/RAR-85/02).

The Safety Board is aware that since the accident at CP Salts, Conrail has changed its operating procedures for moving a train with an inoperative cab signal past a CP when the "C" light cannot be given so as to eliminate a proceed signal and to require positive action by the engine crew in order to proceed. At the time of the accident, the medium clear signal aspect that was displayed for train ENPI-6X at CP Blair was intended to be good only through the interlocking. However, it allowed the train to proceed at medium speed (not exceeding 30 mph through the interlocking) beyond the interlocking because it did not indicate that the speed had to be reduced to restricted speed (not exceeding 15 mph) once the train was through the interlocking. The procedure previously in effect was confusing, as discussed earlier, because it could be interpreted by the crew that they could operate at medium speed to the next CP, as, in fact, was done in this instance according to the engineer.

With the recent change in operating procedures, the signal is not changed to proceed when the "C" light cannot be displayed. The signal is maintained at stop and Conrail Form CT-401 must be issued to the traincrew to give the engineer permission to pass a signal displaying a stop aspect. Accordingly, the train must be brought to a stop before it can move past the stop signal. The CT 401 also informs the engineer that he must operate at restricted speed. Further, the restricted speed rule has been changed so that now the train must be operated at a speed so as to enable the engineer to stop within one-half the range of vision but not exceeding 15 mph. The Safety Board is pleased to learn of these changes in rule No. 299 and the restricted speed rule.

The Safety Board believes that the operation of trains over the Conemaugh Line is somewhat unique because there are no wayside signals and that more emphasis should be placed on rules Nos. 559 and 299 in training and rules classes. Operating personnel who do not operate over the Conemaugh Line frequently need to be more familiar with these pertinent rules and their application in operating procedures on the Conemaugh Line. There is a need for management to have more positive assurance that employees are familiar with the territories over which they operate and any operating procedures peculiar to that territory. This becomes especially important with operating personnel transferring onto new seniority districts because of realignments resulting from railroad company mergers or reorganization within a company. These employees need to be familiar with the rules and their application on their new districts. A special qualifying class should be given to transferred people before they are considered as qualified over the Conemaugh Line. During its investigation of other railroad accidents, ^{2/} the Safety Board has found that railroad employees, who can pass an operating rules examination with a good grade, still may not know the meaning of the rules in their application. Railroad management needs to check on the aspect of training and rules examinations to evaluate whether or not operating personnel know how to apply the rules to operating requirements.

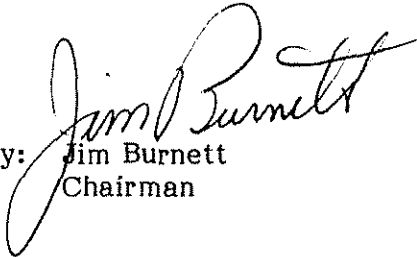
Therefore, as a result of its investigation, the National Transportation Safety Board recommends that the Consolidated Rail Corporation:

^{2/} Railroad Accident Report--"Head-on Collision of Amtrak Trains Extra 769 East and No. 195, Bristol, Pennsylvania, March 29, 1982" (NTSB-RAR-82-5).

Where rule No. 299 is applicable and the "C" light cannot be displayed, hold trains that are not equipped with cab signals or that have inoperative cab signals at a control point until the intervening block to the next control point is clear, instead of allowing trains to close up. (Class II, Priority Action) (R-85-19)

In locations where rule No. 299 is in effect, inform the crew of the lead train when a following train is not equipped with cab signals or has an inoperative cab signal. (Class II, Priority Action) (R-85-20)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in these recommendations.

By: 
Jim Burnett
Chairman