INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED AT THE INTERSECTION OF THE TRACKS OF THE CHICAGO, INDIANAPOLIS AND LOUISVILLE RAILWAY AND THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD AT FRANKFORT, IND., ON DECEMBER 26, 1926

January 20, 1927

To the Commission

On December 26, 1926, there was a side collision between a freight train of the Chicago, Indianapolis and Louisville Railway and a light engine of the New York, Chicago and St. Louis Railroad at the intersection of the tracks of the two railroads at Frankfort, Ind., this accident resulting in the death of one employee.

Location and method of operation

Subdivision 2 of the Clover Leaf District of the New York, Chicago and St Louis Railroad, hereinafter called the Nickel Plate, extends between Delphos Yard, Ohio, and Frankfort Yard, Ind , a distance of 134 miles, and is a single-track line over which trains are operated by time-table, train orders and a manual block-signal system. The Second District of the Northern Division of the Chicago, Indianapolis and Louisville Railway, hereinafter called the Monon, extends between Monon and Indianapolis, Ind , a distance of 95.1 miles, and is a single-track line over which trains are operated by time-table, train orders and an automatic block-signal system.

Beginning at the Monon station in Frankfort and proceeding northward, the Monon's single-track line first crosses the tracks of the Pennsylvania Railroad at a point just north of the station while at a point 760 feet north of the station it passes over a five-track crossing, the first two tracks belonging to the Nickel Plate and the last three tracks to the Lake Erie and Western Railroad. The accident occurred at the point where the Monon track crosses the first of the two Nickel Plate tracks, this latter track being a yard-lead track. Between the station and the Nickel Plate crossing the track is tangent for a short distance leaving the station, followed by a 3° curve to the right which extends to the crossing. The grade is slightly

descending. Approaching from the east on the Nickel Plate tracks the line is practically tangent. Adjacent buildings prevent the engine crews of trains on the Monon and Nickel Plate from seeing each other until they are within approximately 100 feet of the crossing.

The movement of trains over this crossing is governed by manually-operated semaphore signals, which are mounted on a pole 33 feet in height located between the Nickel Plate and Lake Erie tracks, on the fireman's side of a northbound Monon train. Signal 1 located on the north side of the Pole governs Lake Erie and Western trains, signal 3 located on the south side of the pole governs Nickel Plate trains, and signal 2 located on the east side of the pole adjacent to the Monon tracks governs Monon trains. These signals operate in two positions, and the night indications are red and green for stop and proceed, respectively, the normal position is stop. Signals 1 and 3 can display a proceed indication at the same time, thus allowing trains of the Nickel Plate and Lake Erie and Western to proceed over the crossing simultaneously, when they are displaying proceed indications, signal 2 is locked in the stop position. When signal 2 displays a proceed indication, signals 1 and 3 are locked in the stop position. There is nothing, however, to prevent the targetman from changing the positions of the signals at any time, and the time interval required for this operation is a matter of but a few seconds Under the rules, however, when a signal is displayed to allow a train to pass in one direction it is not to be changed so as to allow an opposing movement until it is known th t the train for which the proceed signal was first displayed has been brought to a stop.

The superintendents of the two railroads involved in this accident stated that they recognized the stop made by a northbound Monon train at the Monon station, 760 feet from the crossing, and by a westbound Nickel Plate train at the Nickel Plate station, 781 feet east of the crossing, as complying with the law requiring all trains to stop not less than 40 feet or more than 500 feet from a crossing at grade where interlocking signals are not in use.

The weather was clear at the ti e of the accident, which occurred at 12.10 a.m

Description

Nickel Plate westbound light engine 745, in charge of Engineman Raabe, had hauled westbound

passenger train No 5 from Delphos to Frankfort, arriving at Frankfort at 12.08 a m Engines were changed at this point and engine 745 after being cut off from the train proceeded westward, entered on the yard-lead track en route to the roundhouse, and was moving over the Monon crossing at a speed of about 6 miles per hour when it was struck on the fireman's side by the engine of Monon train second No. 90.

Monon northbound freight train second No 90 consisted of 28 cars and a caboose, hauled by engine 283, and was in charge of Conductor McConahay and Engineman Wilson On arriving at Frankfort at 12 o'clock midnight the engine and two cars were cut off and after the engine had taken water it started northward, passed over the Pennsylvania crossing and when about 400 feet from the Nickel Plate crossing, according to the statements of the crew, a proceed signal was displayed and the engine moved ahead at a speed of about 10 miles an hour, colliding with the side of Nickel Plate engine 745 which was then passing over the crossing.

Nickel Plate engine 745 was turned over on its right side, while Monon engine 283 was derailed but remained upright, neither of the engines was badly damaged. The employee killed was the fireman of the Nickel Plate engine

Summary of evidence

Engineman Raabe, of Nickel Plate engine 745, said signals 1 and 3 were displaying proceed indications when his engine started ahead after having been cut off from train No. 5 at the station. He entered the lead track and when about 100 feet from the crossing his engine passed Nickel Plate engine 150, which was to back into the station to handle train No. 5 westward from that point. At about this time the fireman said everything was all right and he answered the proceed indication displayed at the crossing by two short blasts on the whistle. Engineman Raabe did not again look at the signal indication and said that his first knowledge of anything wrong was when the fireman suddenly called to him at about the time his engine started over the crossing. At first he thought the fireman had seen a switch improperly lined and he shut off steam and was about to apply the air brakes when the accident occurred. On getting out of his engine after it had overturned Engineman Raabe looked up at the signals and saw that signals 1 and 3 were in the stop position while signal 2 was displaying a proceed indication, indicating that the Monon crew had the right of way.

Engineman Ayers, in charge of engine 150, said a proceed indication was being displayed for Nickel Plate movements at the time engine 745 started for the crossing. As the two engines passed each other the engineman of engine 745 answered the proceed signal displayed at the crossing with two short blasts on the whistle and on looking back at the crossing a few seconds afterwards Engineman Ayers saw that the signal had been changed to the stop position. The statements of Fireman Henry and Section Foreman Brimberry, of the Nickel Plate road, did not bring out any additional facts of importance except that the section foreman also saw a proceed signal displayed for the movement of engine 745.

Targetman Weddle, on duty at the point where the Pennsylvania tracks cross those of the Nickel Plate between the Nickel Plate station and the Monon crossing, said that the signal displayed a proceed indication for engine 745 until it passed the engine which was waiting to go out on train No. 5. He then heard two short blasts on a whistle and saw the signal change from the proceed position to the stop position, this was followed by the sound of some one calling out and then the accident occurred. He thought engine 745 was not more than two car-lengths from the crossing when the position of the signal was changed.

Engineman Wilson, of Monon engine 283, said that after taking on water he started ahead towards the crossing and that when in the vicinity of a switch located 430 feet from the crossing he called for the signal, which was then in the stop position. After he had called for the signal it was changed to the proceed position, which he acknowledged by two short blasts on the whistle, and he then increased the speed to about 8 or 10 miles an hour. Suddenly he saw the Nickel Plate engine approaching from the east running at a speed he estimated to have been about twice as fast as that of his own engine, and although he immediately applied the air brakes in emergency he was unable to stop in time to avert the accident, he estimated that his own engine was about 10 feet from the crossing when he first saw the Nickel Plate engine. Engineman Wilson also stated that he had not heard any whistle signals sounded by the engineman of the Nickel Plate engine, while in addition to his own whistle signals the bell on his engine was ringing. Fireman Brubage, who was sitting on his seat box on the left side of engine 283, did not know there was anything wrong until the accident occurred, and his statements did not bring out any additional facts except that he said his engine was traveling at about 10 miles per hour when it struck the Nickel Plate engine

Conductor McConahay was riding on the Monon engine when it approached the crossing, standing on the deck of the engine directly back of the boiler head. He did not pay any attention to the signals displayed, but heard Engineman Wilson call for the signal and then answer it. He stated, however, that he saw the headlight of the Nickel Plate engine when his own engine was about two car-lengths from the crossing and that he immediately jumped to the ground, he did not hear Engineman Wilson apply the air brakes. Conductor McConahay's estimates as to speed were conflicting; he said his engine approached the crossing at a speed of about 10 miles per hour and although he did not hear the brakes applied yet he said the speed was about 3 or 4 miles per hour, when he jumped off. Brakeman Kreos and Lindsey were riding on the rear of the two cars being handled by the Monon engine Brakeman Krebs was unable to say whether the brakes were applied before the accident occurred and said he did not see the Nickel Plate engine until it was practically on the crossing. Brakeman Lindsey said he saw the Nickel Plate engine before it reached the crossing but his estimates as to distance were so far from correct as to render them useless. He stated, however, that the brakes on his own engine were applied and had reduced the speed to some extent before the accident occurred.

Targetman Baker, an employee of the Monon, said he had cleared the signal for the movement of Nickel Plate engine 150 when it backed over the crossing toward the station preparatory to going out on train No. 5 and that after it had cleared the crossing he restored the signals to the normal stop position, where they remained until the Monon engine whistled for the crossing. At this time Nickel Plate engine 745 was starting from the station and he cleared the signal for the Monon engine. He did not hear the engineman of the Nickel Plate engine call for the signal at any time and supposed that he would stop short of the crossing in accordance with the signal indications displayed. Targetman Baker's statements, however, were conflicting to some extent and he said he could not remember definitely whether the signals were in the stop position when Nickel Plate train No. 5 first arrived at Frankfort.

Conclusions

This accident was caused by the action of Targetman Baker in displaying a proceed indication for Monon engine 283 without waiting until Nickel Plate engine 745 had been brought to a stop.

The evidence indicated that instead of keeping the signals in the stop position Targetman Baker had allowed the signal governing Nickel Plate train movements to remain in the clear position for a period of several minutes after Nickel Plate engine 150 backed over the crossing, possibly with the intention of leaving it in that position until the inbound Nickel Plate engine had cut off from its train and had passed over the crossing en route to the roundhouse, and it seems probable that when the Monon engineman whistled for the signal the targetman overlooked the fact that the Nickel Plate engine was closely approaching the crossing, restored that signal to the stop position and then cleared the signal for the movement of the Monon engine.

All of the employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. Borland,

Director.