INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CLEVELAND, CINCINNATI, CHICAGO & ST LOUIS RAILWAY AT DIX, IND , ON NOVEMBER 30, 1929.

February 25, 1930.

To the Commission:

On November 30, 1929, there was a head-end collision between a passenger train and a light engine on the Cleveland, Cincinnati, Chicago & St. Louis Railway, at Dix, Ind., which resulted in the death of 1 employee and the injury of 4 employees and 31 passengers

Location and method of operation

This accident occurred on that part of the Chicago Division, which extends between Cincinnati, Ohio, and Indianapolis, Ind , a distance of 109.6 miles It is a double-track line between Indianapolis and Dix, a distance of 14 miles, on which an automatic block signal system is in use, while on the single-track east of Dix a manual block system is in service The accident occurred on single track within the limits of Dix interlocking plant at the junction of double and single track line, at a point about 15 feet west of the tower There is an eastbound passing track 4,076 feet in length located east of Dix Tower and south of the main track Approaching the point of accident from either direction the track is tangent for several miles and the view is unrestricted The grade for westbound trains is 0 33 per cent descending at the point of accident

Dix is an interlocking plant from which the movements of trains are controlled from single to double track, and to and from sidings. The home signal governing westbound movements is located 215 feet east of Dix Tower. It is a three-arm, three-position signal of the upper quadrant type. The normal position of the home signal is at red for stop A "take-siding" signal and a distant signal are located 4,089 feet and 10,168 feet, respectively, east of Dix Tower. When the home signals are set at stop both of these outlying signals display caution indications for westbound trains.

The weather was clear at the time of the accident, which occurred at about 4 34 p.m.

Description

Westbound passenger train No 5 consisted of one combination mail and baggage car, one combination baggage car and coach, one coach, and two Pullman parlor cars, in the order named, hauled by engine 6410, and was in charge of Conductor Smith and Engineman Kern This train departed from Cincinnati at 3 05 p m , on time, passed Fairland, the last open office, 6 3 miles east of Dix at 4 28 p.m., 6 minutes late, passed the westbound home signal in the stop position and collided with light engine 167 while traveling at a speed estimated to have been between 30 and 35 miles per hour

Light engine 167 was in charge of Engineman Thompson and Fireman Lynch This engine was just out of the shops at Beech Grove, 3.1 miles west of Dix, and was being broken in between the shops and Dix It departed from Beech Grove at 4 30 p m and on arriving at Dix the route was set for a movement to the eastbound siding which diverges from single track at the tower, this engine had just reached the single track at the tower and had come practically to a stop when it was struck by train No 5

The force of the impact drove engine 167 back a distance of about 175 feet where it came to rest across the eastbound and westbound main tracks The boiler of engine 6410 was torn from its frame, both engines were considerably damaged None of the equipment of train No. 5 was derailed The employee killed was the engineman of train No 5.

Summary of evidence

Fireman Smith, of train No 5, stated that as their train was approaching the "take-siding" signal east of Dix Tower Engineman Kern reduced the speed of the train to about 30 or 35 miles per hour, and he did not know whether or not the brakes were released after this application as he was endeavoring to get the aspect of the home signal Fireman Smith asked Engineman Kern if he could see the home signal and the engineman replied that he could not. The view was obstructed by smoke and steam blowing over the track from engine 6169 which was standing on the eastbound passing track When the home signal did become visible Fireman Smith called "all red" to the engineman and told him that he was going right into engine 167 Fireman Smith jumped off the engine immediately and as he did so he saw the engineman place the brake valve in emergency position. Both outlying signals approaching this tower showed caution indications and their indications were called.

Conductor Smith, of train No 5, stated that the air brakes had been tested at Cincinnati, and no trouble was experienced with the air brakes en route. The speed had been reduced to about 30 miles per hour on approaching Dix Conductor Smith said he next felt the air brakes applied in emergency, the accident occurring almost immediately He afterward observed smoke and steam from engine 6169 on the eastbound siding drifting over the track rising to about the height of the signals. The statements of Brakeman Arnold and Baggageman Teagarden corroborated those of the conductor as to the operation of the air brakes and as to the speed of the train at the time of the accident

Engineman Thompson, of light engine 167, stated that when he first saw train No. 5 it was between the take-siding signal and the home signal, and he had just brought his train to a stop when struck by that train He saw that the signals governing the westbound movements were red, but he did not observe any smoke or steam blowing from engine 6169 on the eastbound siding that would obscure the view had by the crew of a westbound train.

Fireman Lynch, of light engine 167, stated that he first observed train No 5 when it was in the vicinity of the east end of the eastbound siding, approximately 4,500 feet east of the tower He noticed steam blowing from the engine on the siding but could not say whether it would obscure the view of engine crew of train No. 5. Fireman Lynch said that he thought their engine had come practically to a stop when the collision occurred.

Engineman Leppert, of engine 6169, stated that his engine had been standing at a point about 150 feet east of the home signal for about 10 or 15 minutes when train No 5 passed He stated his engine had not been fired for 30 minutes prior to that time and that the stack was free from black smoke, the blower was on, slightly open. The statements of Fireman Wehrel, of engine 6169, corroborated those of Engineman Leppert.

Operator Clements who was on duty at Dix Tower at the time of the accident stated that light engine 167 was reported in the block between Beech Grove and Dix at 4 20 p.m. He then lined the route for engine 167 to enter the eastbound siding and at that time engine 167 was in the circuit about 2 miles west of Acton At 4.28 p m he received a report from Fairland that train No. 5 had entered the block and he judged that the light engine was then near Acton, 1 mile west of Dix Tower.

He did not deem it advisable under the circumstances to change the route as such a move might introduce complications. He stated that he could see the approaching train a distance of about 2 miles Engine 6169, also being broken in, was standing east of the home signal on the eastbound siding and it was emitting smoke and steam which he thought obscured the home signal indications to westbound trains. He noted that train No. 5 was approaching rapidly and as it neared it became obscured by smoke and steam, he then raised his window and looked out and saw the train emerge as from behind a smoke screen.

Road Foreman of Engines Davis stated that after the occurrence of the accident he examined the interior of the cab and its appurtenances and found the independent brake valve in quick-action position, the automatic in emergency, the reverse lever in the running notch and the throttle and sanders closed An inspection of the locomotive wheels developed spots on the tires ranging from the size of a nickel to a quarter and from 4 to 6 inches apart, these were burned blue, indicating a heavy brake application.

Conclusions

This accident was caused by the failure of Engineman Kern, of train No. 5, to properly control the speed of his train approaching a signal in the stop position and to stop before passing that signal.

The evidence indicates that the home signal could not be seen by either the engineman or the fireman, due to smoke and steam blowing across the track from an engine standing on the eastbound siding a short distance east of the signal. In view of this fact, however, Engineman Kern made no attempt to further reduce the speed of his train and when his train emerged from the smoke and steam and the signal was seen in the stop position he was unable to stop in time to avert the accident. Both the distant signal and the "take-siding" signal were in the caution position, and it was incumbent upon Engineman Kern to operate his train under control, especially when his view of the home signal was obstructed.

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 hours of service laws.

Respectfully submitted,

W. P. BORLAND,

Director.