INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE SOUTHERN RAILWAY AT DAISY, TENN., ON AUGUST 7, 1929.

November 22, 1929

To the Commission:

On August 7, 1929, there was a derailment of a work train on the Southern Railway at Daisy, Tenn., which resulted in the death of one person.

Location and method of operation

This accident occurred on the Third District of the Queen & Crescent District, extending between Chattanooga and Oakdale, Tenn., a distance of 83.6 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and an automatic block-signal and train-control system. At a point 1,156 feet south of the station at Daisy there is a switch leading off the main track to the west to a spur track 1,766 feet in length, the point of accident being at the end of this spur. Beginning at a point on this track 725 feet from its southern end, the track is tangent for a distance of 211 feet, followed by an 11° curve to the left 135 feet in length and then a 12° curve to the right 122 feet in length, from which point the track is tangent to its northern end, a distance of 573 feet. The grade at the point of accident is 0.38 per cent ascending for northbound movements. There is a store building located 38 feet north of the end of the spur track, on the east side of which is directly in line with the west rail of the track. There was nothing but a cross tie to prevent cars from leaving the end of the track. There are two other tracks which lead off from this spur track, one of them being of much greater length.

The weather was clear at the time of the accident, which occurred at about 3.25 p. m.

Description

Northbound work train extra 6271 consisted of 47 cars and a caboose, hauled by engine 6271, and was in charge of Conductor Jackson and Engineman Lenman. This train departed from Chattanooga, 18 9 miles south of Daisy, at 10 46 a. m , and after setting cars off at several points en route, it arrived at Daisy at 2.01 p m , where it became engaged in switching. At the time of the accident, from north to south, the movement consisted of 2 cars, the caboose, 17 cars and the engine, which was headed north and was shoving the cars in on the spur track.

Two cars were shoved off the end of the track, the leading car striking and partly demolishing the store building, this car sustained slight damage The person killed was in the store building.

Summary of evidence

Conductor Jackson stated that during the course of switching at Daisy, 17 cars and the caboose were left standing on the main track, and when it became necessary to clear the time of train No. 3 the engine was coupled to these cars and they were shoved in on the spur track, on which track 2 cars were then standing Before this movement was started he instructed Brakeman Culvahouse to remain at the switch and informed Brakeman Stringfield that they would couple to the 2 cars and shove them to the north end of the track, where 1 of them was to be placed. Conductor Jackson rode on the caboose, which was on the north end of the cut, until they coupled to the two cars, and he then went to the north end of the leading car and climbed up on the ladder on the east side of it for the purpose of passing signals to Brakeman Stringfield, who was located on the ground opposite the station and who was in plain view at all times. When the leading car reached a point about four car-lengths from the end of the track he gave the brakeman a "steady" signal and the brakeman in turn passed it to the engineman, but after the cars moved an additional car-length Conductor Jackson realized that no action was being taken, jumped off, ran to a highway which parallels the spur track on the east, and gave the engineman a stop signal. This signal was immediately acted upon, out before the cars could be stopped the leading two cars were shoved off the end of the track and into the store building. Conductor Jackson said that the air was not coupled up, as it was entirely a switching movement, while at no time was the speed greater than 3 or 4 miles per hour. He also said that this

was the first day that Brakeman Stringfield had worked with him, but he considered him an experienced man and said he was aware of the contemplated movement Conductor Jackson did not notify the engineman as to just what movement was to be made, as it was a switching movement and he did not deem it necessary He was satisfied that Brakeman Stringfield was in proper position to transmit his signals when the movement was started, and supposed the brakeman would keep in sight of the engineman

Brakeman Stringfield stated that he was familiar with the various tracks at Daisy but that this was his first trip on this particular run for some time. The conductor notified him that in order to clear the main track for train No. 3, the cars would be shoved in on the spur track and at the same time one of the two cars then standing on that track would be placed at the northern end Brakeman Stringfield took a position in the roadway between the station and the spur track, so that he could pass signals, and after coupling to the two cars the conductor went ahead and boarded the side ladder of the leading car at its northern end, and constantly remained within view. The conductor then gave a proceed signal, which he repeated to the engineman, and when the cars neared the north end of the track the conductor gave a stop signal which he also transmitted, but at this time he discovered that the engineman had disappeared from view due to the engine then being on a curve. He immediately boarded the cars about 10 car-lengths ahead of the engine and started back towards the engine giving stop signals, he did not know whether the engineman observed these signals, although he could see the engine from his position on top of the cars, nor did he know how long the conductor remained on the side of the leading car.

Engineman Lehman stated that when the movement was started he did not know on which track the cars were to be placed Upon reaching a point about six or seven car-lengths from the main-track switch, Brakeman Stringfield, who was standing near the station, gave a signal to come ahead, shortly after which the brakeman disappeared from view, and the engineman did not see him again prior to the accident. He continued moving the cars ahead at a speed of 3 or 4 miles per hour until he saw the conductor move out in the roadway and give a stop signal, he immediately applied the engine brakes in emergency and brought the cars

to a stop He estimated the distance that the cars moved after the brakeman became lost to view, until the conductor gave a stop signal, at three or four car-lengths. Engineman Lehman was familiar with the requirements of rule 1313 that if, in switching, the train or yard man giving signals is lost to view the engineman is required to stop, but said the reason he did not do so was because he was under the impression that when the brakeman disappeared he had boarded the train, and that the cars were being shoved into the other track which is of greater length, which is the regular practice in making a movement of this kind.

Fireman Freeman stated that he was riding on his seatbox when the cars were shoved into clear but he did not know on which track they were moving on account of the curve, as well as some box cars standing on a spur track which obstructed his view. He did not see any signals after the cars cleared the main track until he noticed Brakeman Stringfield appear on top of the cars, giving a stop signal, and about the same time the engineman moved the brake-valve handle into the emergency position Fireman Freeman said that it is customary in switching at Daisy for signals to be given from the east side of the spur track, except when cars are shoved in on one of the other tracks, in which event signals are passed from the tops of the cars.

The statements of Brakeman Culvahouse added nothing more of importance, as he remained at the main-track switch and had no connection with the handling of the cars after they entered the spur track.

The statements of Sam Morgan and Fred Nelson, employees of an industry at Daisy, were to the effect that they were working about 120 feet south of the north end of the spur track and watched the cut of cars as it was being shoved northward. They said there was no one riding on either of the two cars ahead of the caboose, the conductor being located on the north platform of the caboose. They both noticed the conductor giving stop signals when the leading car was some distance from the end of the track, and Mr. Nelson said the conductor afterwards ran out into the road and continued giving stop signals.

Track Supervisor Kidd stated that there was a tie across the north end of the spur track, with some dirt behind it which caused the cars to mount the tie. Some time ago there was a standard mound at the end of this track, but on account of wagons working around this track, keeping the mound cut away, it was practically impossible to keep a standard mound at this point.

On August 12, a test was conducted at this point by using the same engine with a like number of cars and the same crew as was involved in the accident. The brakeman stationed himself as nearly as possible to the location at which he was standing at the time he transmitted signals, and it was found that the conductor riding on the east side of the leading car could be seen by the brakeman at all times. From the engineman's side of the cab, the brakeman was lost to view when about 12 car-lengths away

Conclusions

This accident was caused by the failure of Engineman Lehman to stop the cut of cars when the brakeman, who was transmitting signals, disappeared from view, and also by the failure of Brakeman Stringfield to keep himself where he could be seen by the engineman.

It appears that Engineman Lehman observed the brakeman give a signal to come ahead after the cars entered the spur track and a short time later the brakeman was lost to view, but the engineman did not bring the cars to a stop although he knew the rules required him to do so under such circumstances. His only reason for failing to do so was that when he did not see the brakeman he assumed the brakeman had boarded the cars and that they were being shoved into another track which branches off from the spur track and extends farther northward.

Brakeman Stringfield knew what movement was intended and stationed himself in the vicinity of the station for the purpose of transmitting signals to the engineman. When the conductor gave a stop signal from the head end of the cars he attempted to repeat it to the engineman but at that time the engineman was not in view and the brakeman then boarded the train and again gave stop signals, but it was too late to avert the accident. It was possible for him

to have moved a few feet away from the track to a roadway where he could have been seen in either direction at all times; it was his duty to keep in sight of the enginemen, and if in doing so he lost sight of the conductor, then he could have given the engineman a signal to stop.

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