INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BURLAU OF SAFETY IN RE IN-VESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LOUIS-VILLE & NASHVILLE RAILROAD AT ELSIECOAL, KY, ON NOV-EMBER 16, 1923.

January 21, 1924.

To the Commission.

On November 16, 1923, there was a nead-end collision between two freight trains on the Louisville & Nashville Railroad at Elsiecoal, Ky., which resulted in the death of two employees and the injury of seven employees

Location and Method of Operation.

This accident occurred on the Eastern Kentucky Division between Hazard and McRoberts, Ky., a distance of 57 miles, Neon, 2.8 miles north of McRoberts, being a terminal for freight trains At the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-siznal system being in use, southbound trains are superior by direction. This accident occurred approximately 400 feet south of the station at Elsiecoal, approaching this point from the south there is an 8° curve to the left 1,227.9 feet in length, followed by a tangent 452.5 feet long, then followed by a 7° curve to the right 1,089.9 feet in length, the accident occurring on this curve 446 feet from its northern end. Approaching from the north there are several short curves and tangents, followed by a tangent 817.5 feet in length and the curve on which the accident occurred. The grade is practically level or slightly descending northward at the point of accident. The view is restricted to about 300 feet on account of the bank of a cut on the right side of the track. The weatner was cloudy at the time of the accident, which occurred at about 4.14 p.m

Description.

Northbound freight train No. 30 consisted of 13 cars and a caboose, hauled by engine 1136, and was in charge of Conductor Harris and Engineman Sheegog. This train left Neon, 31 7 miles south of Elsiecoal, at 10.30 a.m., after receiving a copy of train order No. 70, on Form 31, reading in part as follows:

"No 30 Eng 1135 meet 3rd 43 eng 1179 at Kona No 45 Fng 1054 at Mayking 5rd 43 Eng 2408 at Whitesburg No 29 Eng 1055 at Roxana No 59 Eng 1098 at Viper Nos 31 and 35 Engs 1 and 2 at Double track north of B.G. Tower"

This train passed Whitesourg, 8.6 miles from Elsiecoal and the last open office, at 3.43 p.m., and collided with train No. 29 at Elsiecoal while running at a speed estimated to have been about 20 miles an hour.

Southbound freight train No. 29 consisted of 3 cars and a caboose, hauled by engine 1055, and was in charge of Conductor Moore and Engineman Bundschu. This train departed from Blackey, 8 miles from Elsiecoal, at 3.51 p.m., at which point two train orders not involved in this accident were received, no copy of train order No. 70, previously quoted, having been received; passed Roxana, 2.1 miles from Elsiecoal and the last open office, the point at which it should have met train No. 30, and collided with train No. 30 at Elsiecoal while traveling at a speed estimated to have been between 25 and 30 miles an hour.

The locomotives were considerably damaged but remained upright. The first car of train No. 29 was demolished and the second car derailed. Several cars of train No. 30 were derailed and more or less badly damaged, one car being destroyed. The employees killed were the engineman of train No. 29 and the head brakeman of train No. 30.

Summary of evidence

Dispatcher McClanahan said he issued train order No. 70 at 10.30 a.m., copying it in his train-order book while transmitting, and underscoring the order as repeated by the various operators. He said he transmitted the order to Operator May at Blackev, at the same time it was given to the other operators and he did not think that he would have entered the operator's personal signature unless the operator had repeated the order back and acknowledged his "OK" to it, and that while he annulled the order at several points, no annullment order was placed involving the meet oetween trains Nos. 39 and 30. Dispatcher McClanahan said he was familiar with the voice of Operator May and that the operator answered him for train order No. ?0 and also when he subsequently issued train orders Nos. 84 and 89. He further said that when he went off duty at 3 p.m., he made a written transfer of all train orders outstanding to the relieving dispatcher which showed train order No. 70 as being outstanding for train No. 29 at Blackey and unsigned by the conflictor of that train.

Dispatcher Farmar relieved Dispatcher McClanahan and received from him the book containing the transfer of outstand-

ing and unsigned train orders, which showed train orders Nos. 70, 84 and 99, all on Form 31, were outstanding at Blackey for train No. 29 and had not been signed. He failed, however, to refer to the order book and to read the train order when reading the transfer. He said Operator Disney, who relieved Operator May at 3 p.m., gave him the signatures to the last two orders at 3.32 p.m., and he gave the operator "complete" overlooking train order No. 70, being of the impression that it had been signed before he went on duty. Dispatcher Farmer also said that in conversation with the operator at the time the orders were signed, he remarked to the operator, as a reminder to the crew, that train No. 29 met train No. 30 at Roxana and train first No 36 at Blackey instead of UZ and that the operator made no comment other than to acknowledge the "complete" to the order, but while checking the meeting points of train No. 29 with Operator Disney, the latter remarked that he did not have the meet order for that train at Roxana with train No. 30, and Dispatcher Farmer said he told the operator he understood that train No. 29 received the order at Ulvah which is a station 5.8 miles north of Blackey,

Operator May, at Blackey, said that on the morning in question ne was working on his ticket report at a lesk in the center of the office and had not had occasion to leave the office between 10 and 11 a.m., nor did he fail to answer the dispatcher's call between those hours. He said that no one out himself worked on the wire and that at no time hid he receive train order No. 70 he received train orders Nos. 84 and 99 and transferred them to the relieving operator, Disney, before going off duty.

Operator Disney said he received from Operator May the transfer showing train orders No. 84 and 99 outstanding and unsigned by train No 29, no other orders being turned over to him, nor did he receive any additional orders for that train. He said when the signatures of the conductor and engineman of train No. 28 were obtained, he transmitted them to the dispatcher and received "complete" to them. Operator Disney further said that he had not conversed with the dispatcher with reference to train No. 29 meeting train No. 30 et Roxana as stated by the dispatcher, nor did the dispatcher instruct him to say anything to the crew of train No. 29. After he learned of the accident he made a search of the office out was unable to locate train order No. 70. Agent Gregory, at Blackey, said he had no knowledge of the handling of the train orders in question and made unsuccessful search about the office for the train order involved.

Operator Bowen, at Whitesburg, said he copied and repeated train order No. 70 and it was his recollection that he heard the operator at Blackey repeat the order by reason of the fact that there were so many trains meeting on the order and he noted that all of the offices addressed repeated the order correctly. He though the operator at Blackey acknowledged the

dispatcher's O.K. giving his private signal. Operator Whisman, at North Hazard, said that he thought he heard the operator at Blackey repeat the order by reason of the fact that prior to a time-table change which he had temporarily forgotten, it had been customary for a meet order to be placed at Jeff for train No. 29 and he was impressed with the fact that the order was placed at Blackey, ordinarily when train orders were placed jointly at Jeff and his station, he followed the operator at Jeff in repeating and on this occasion he vatched for the operator at Jeff and noticed that the operator at Blackey repeated the order. He too thought the operator acknowledged the dispatcher's O.K. Operators Vance at Kona, and Colsert, at Neon, said they copied and repeated the train order in question and heard the other stations aidressed repeat the order but were not positive that they neard the operator at Blackey repeat it. Operator Cundiff, at Whitesburg who had relieved Operator Bowen at 3.p.m., said that at about 3.55 p.m., he overheard a conversation on the telephone between an operator whose voice he did not recognize and the dispatcher to the effect that the operatosaid that he did not have an order for train No. 29 to meet train No. 30 at Roxana, and the dispatcher remarked, "I understand that he got it at Ulvah", Operator Rowell, at Jeff, said no overheard the Lame conversation.

Engineman Sheegog, of train No. 30, said he received a copy of train order No. 70 at Neon. Approaching Elsiecoal he made a light air-brake application and about 30 seconds later, when on the curve just south of Elsiecoal, say train No. 29 appraching about 3 car lengths away, applied the air brakes in emergency and jumped, at which time he estimated the speed to have been about 20 miles an hour.

Conductor Moore, of train No. 29, said he received copies of train orders No. 84 and 99 at Blackey but that he did not receive an order providing for a meet between train No. 30 and his own train at Roxama He said ne was riding in the cupola of the caboose with the three brakemen and saw train No. 30 approaching when it was about two car lengths away and estimated the speed of his train to have been about 25 miles an hour at the time of the collision. Brakemen Wells and Davis and Flagman Lanier correspondted the statement of Conductor Moore relative to the train orders received Fireman Minnich said he read train orders No. 84 and 99, received at Blackey, but that they did not hold an order for their train to meet train No. 30 at Royana. He said the engines were about 100 feet apart when he first sav train No. 30 approaching at which time his train was running at a speed of between 25 and 30 miles an hour.

Conclusions

This accident was caused by the failure to deliver train order No. 70 to the crew of train No. 29 at Blackey.

There is a direct conflict in the testimony of Dispatcher McClanahan, who asserts that he placed the train order at Blackey, and Operator May, who denies that the order was received at his station. Other evidence on this point is also conflicting, and in attempting to place the responsibility as between these two employees the issues resolves itself solely into one of a question of veracity, which in the absence of evidence of a more satisfactory nature cannot be determined.

Dispatcher Farmer is at fault for his failure to take the necessary steps to have the train order issued to the crew of train No. 29 before that train left Blackey. The order was shown on the transfer made by Dispatcher McClanahan, and Dispatcher Farrer admitted that he overlooked it.

This accident again calls attention to the inherent weakness of the train-order method of train operation. Therever trains are operated under this system the opportunities for failures such as this are ever present and such accidents may be expected. There are 16 scheduled trains operated daily or daily except Sundays over this portion of the division. Traffic of such iensity over a single-track line fully varrants the installation of a black-signal system. Had an adequate block-signal or automatic train-control system over in use on this line this accident unlouptedly would have been averted.

Dispatcher McClanahan was employed as an operator in 1913 and was promoted to dispatcher in 1917. Dispatcher farmer was employed as an operator in April, 1922, previous to which he had had six years' experience as an operator on another railrost and was promoted to dispatcher in March, 1923. The records of these dispatchers since their service with this railroad, particularly that of Dispatcher McClanahan, were not good. Operator May was employed as an operator in May, 1918.

The craw of train No. 39 had been on duty less than 12 hours and the crew of train No. 30 less than 7 hours, after off-duty periods ranging from 8 to 12 hours. None of the other employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully,

W. P. Borlani,

Birector.