## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN ACCIDENT WHICH COURRED ON THE CHICAGO, ROCK ISLAND & PACIFIC RAILWAY NEAR FREEBURG, MO., ON MARCH 7, 1929

June 27, 1929.

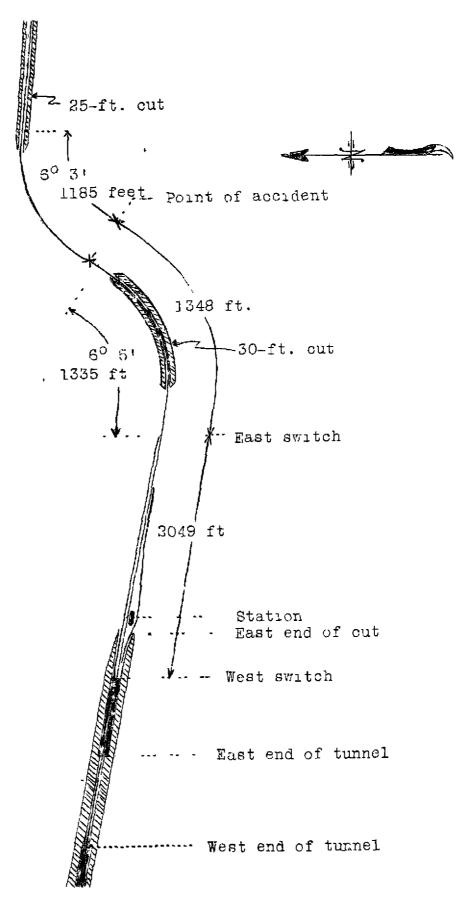
To the Commission:

On March 7, 1929, there was a head-end collision between two freight trains on the Chicago, Rock Island & Pacific Railway near Freeburg, Mo., which resulted in the injury of four employees.

Location and method of operation.

This accident occurred on Sub-Division 34 of the St. Louis-Kansas City Division extending between St. Louis and Eldon, Mo., a distance of 159.9 miles, which is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. The accident occurred at a point 1,348.3 feet east of the east passing-track switch at Freeburg; approaching this point from the west the track is tangent for a distance of 4,185.9 feet, followed by a 60 05! curve to the left 1,335 feet in length, including spirals, and then about 42 feet of tangent extending to the point of accident. Approaching from the east the track is tangent for a distance of 3,936.9 feet and then there is a 60 03' curve to the left 1,185 feet in length, ending at the point of accident. The grade at the point of accident is 0.76 per cent descending for east-bound trains. The track passes through a cut on the curve west of the point of accident which materially restricts the view from opposing trains. The passing track at Freeburg is 2,050 feet in length and parallels the main track on the north. Extra trains are required to clear opposing regular trains by five minutes.

The weather was clear at the time of the accident, which occurred at about 12.31 a.m.



Accident at Freeburg, Mo. March 7, 1929

## Description.

Eastbound second-class freight train No. 96 consisted of 40 cars and a caboose, hauled by engine 2527, and was in charge of Conductor Hiller and Engineman Harvin. This train departed from Eldon, 41.7 miles west of Freeburg, at 10.40 p.m. Harch 6, 5 hours and 55 minutes late, and upon arrival at Argyle, 34.8 miles beyond, and the last open office, the crew received two Form 19 train orders, one of which was order No. 98 requiring their train to wait at Freeburg until 12.40 a.m. for extra 2530. Train No. 96 left argyle at 12.12 a.m., 6 hours and 17 minutes late, passed Freeburg without stopping, and collided with extra 2530 while traveling at a speed estimated at 10 or 12 miles per hour.

Westbound freight train extra 2530 consisted of 21 cars and a caboose, hauled by engine 2530, and was in charge of Conductor Carr and Engineman Silsby. At Belle, 13 miles east of Freeburg, the crew received a copy of train order No. 98, Form 19, previously mentioned. This train departed from that point at 11.57 p.m., Harch 6, and was approaching Freeburg when it collided with train No.96 while traveling at a speed variously estimated to have been between 8 and 20 miles per hour.

Both engines remained on the track except the first three sets of drivers of engine 2530, which were laised a ove the rails about 6 inches; the engines were badly damaged. The rear tender truck of engine 2527 was also derailed. The first two cars of train No. 96 were derailed and came to rest down the enbankment, one on each side of the track, and the third and fourth cars were damaged but were not derailed. The forward truck of the first car in extra 2530 was derailed but the car was not damaged; the second and third cars overturned to the south, the second car being demolished, while the third car was damaged, as was also the case with the fourth car, although the latter car was not derailed.

## Summary of evidence.

Engineman Marvin, of train No. 96, stated that at Argyle he was oiling around his engine when the operator handed him two Form 19 train orders which he read after boarding the engine and then handed to the head brakeman, the brakeman and fireman both reading them aloud, and it was understood that their train was to wait at Freeburg until 12.40 a.m. for extra 2530. He kept these orders in mind and after sounding the station whistle signal approaching Freeburg he sounded a restrictive signal as required by rule to indicate to the train crew that an order was to be executed at that station. After coming out of a tunnel located just west of the passing track he looked at his watch and observed that it was 12.30 a.m., which time

he checked with the head brakeman. As he had closed the throttle before entering the tunnel he opened the drifting valve and then remarked that if the opposing train was coming they had better be providing flag protection. His own train continued past the siding and had reached a point near the east end of the curve west of the point of accident when the brakeman shouted "headlight". He immediately applied the brakes in emergency and then got off when the trains were about one car-length apart. Engineman Marvin said that the only reason he could offer for his failure to comply with order No. 98 was the fact that one of the requirements of the other order received at Argyle was to wait at Summerfield, a point beyond Freeburg, until 12.30 a.m. and the fact that his train did not leave Argyle until 12.10 a.m., which gave him 30 minutes in which to reach Freeburg and comply with the wait order at that point, together with the engine number of the opposing train being 2530, and having the figure "30" in mind in so many different ways it apparently caused him to become confused with his time at Freeburg. He further stated that neither the fireman nor the brakeman called his attention to the fact that he was leaving Freeburg ahead of the time specified in the wait order, and he was positive that the brakes were not applied from the rear end of the train prior to the time he applied them in emergency. estimated the speed of his train at the time the brakes were applied at 15 to 20 miles per hour and said they were effective, although he did not know to what extent speed had been reduced at the time of the accident.

Fireman Brockman, of train No. 96, stated that he read the orders received at Argyle, but that neither of these orders was read aloud either by the brakeman or by himself. He understood the orders at the time but a few seconds later he confused them, being of the impression they were to wait at Freeburg until 12.30 a.m. and at Summerfield until 12.40 a.m., instead of 12.40 a.m. and 12.30 a.m., respectively. His other statements practically corroborated those of the engineman.

The statements of Head Brakeman Morrow, of train No. 96, substantiated those of Engineman Marvin and Fireman Brockman, except that he did not agree with the engineman that the orders received at Argyle were read aloud by any person on the engine. The thought occurred to him at the time he read the orders that they had 30 minutes in which to reach Freeburg but he later fixed in his mind that the wait order for that point read 12.30 a.m., particularly in view of the engineman calling the time as 12.30 a.m. upon arrival at that point; he thought at the time that the engineman was referring to the requirements of the wait order, and for this reason he did not mention the order to the engineman. He was riding on the left side of the engine looking ahead while his train was passing through the cut east of Freeburg and when he observed the reflection of a headlight he immediately called it to the

attention of the engineerin; his train moved only about two or three car-lengths before the headlight came into view, about 9 or 10 car-lengths distant. In his opinion the speed of his train had been reduced to some extent before this occurred but he did not know whether this was the result of the brakes having been applied from the rear end of the train.

Conductor Hiller, of train No. 96, stated that after stopping for water at Argyle the train then departed, and when the caboose passed the station the operator handed the train orders to the flagman who in turn handed them to him. He read them and then returned a set of copies to the flagman, the flagman reading them but not aloud. He then told the flagman that none of the waits would delay their train except probably the one at Freeburg. While his train was passing through the tunnel he was standing in the rear door of the caboose and the flagman was stanking on the rear steps on the left side. As soon as the caboose emerged from the tunnel he asked the flagman if he could see the extra on the passing track and the flagman replied that he could not, but as smoke usually does not clear away until the caboose reaches a point in the vicinity of the west switch, and also on account of the length of the siding at that point, he was not convinced that the opposing train, which the dispatcher had said had only 22 cars, had not arrived. When the caboose reached a point not more than one car-length east of the station, which is located 618 feet east of the west switch, he again asked the flagman if he could see the train on the siding, and as the flagman replied in the negative he immediately went inside the caboose and opened the conductor's valve, which seemed to give a good exhaust.

The statements of Flagman Nichols, of train No. 96, coincided with those of Conductor Miller regarding the discussion of the wait at Freeburg, their positions on the caboose as the train approached that point, and as to what transpired just before the occurrence of the accident, except that he said he heard the whistle signals sounded by the engineman before reaching the tunnel. After leaving the tunnel he informed the conductor that there was no train on the passing track just as soon as the smoke cleared away sufficiently for him to see to the opposite end of the siding. He also stated that he closed the conductor's valve in the capoose at the time the rear end of the train was pulled back about three hours after the accident.

None of the members of the crew of extra 2530 was aware of anything unusual until just before the occurrence of the accident. Engineman Silsby stated that his train was traveling at a speed of approximately 30 miles per hour approaching Freeburg when the fireman notified him there was a headlight coming through the cut which was then about 25 or 30 car-lengths distant, he applied the brakes and jumped off just before the collision occurred. He thought the speed of his train had been reduced to about 15 miles per

hour at the time of the accident. Fireman Smith stated that he observed the reflection of a headlight as soon as his train came out of a cut, the western end of which is located approximately 1,000 feet east of the point of accident. At that time it appeared unusual to him but he thought it was train No. 96 standing at Freeburg, and did not realize that it was approaching until the headlight came into view as that train was leaving the cut west of the point of accident. Head Brakeman Catron also observed the reflection of a headlight when his train left the cut east of the point of accident but was of the opinion that it was train No. 96 standing at the east switch.

## Conclusions

This accident was caused by failure to obey a wait order, for which Engineman Marvin, Fireman Brockman and Head Brakeman Morrow, of train No. 96, are responsible.

According to the evidence these employees read train order No. 98 when it was received at Argyle, requiring their train to wait at Freeburg until 12.40 a.m. for extre 2530, and they understood it at the time they left Argyle, only 6.9 wiles from Freeburg, but before reaching Freeburg they confused this order with another order requiring their train to wait at Summerfield, which is beyond Freeburg until 12.30 a.m. In addition the engineman said that the figure "30" was on his mind since that figure appeared in the orders a number of times and they also had "30" minutes in which to reach Freeburg, a run which ordinarily requires from 22 to 25 minutes, and would likely be delayed unless extra 2530 had arrived at that point. There was no abnormal condition to detract the minds of any of these men from the proper performance of their duties.

Conductor Miller and Flagman Nichols were also familiar with train order No. 98 and apparently they were on the alert as their train approached Freeburg. On account of the characteristics in that locality, however, it is not believed they can be held responsible for the accident, even though the members of the crew on the engine maintained that the brakes were not applied from the rear of the train. Considering the location of the engine and the caboose at the time the brakes were said to have been applied by the engineman and conductor, respectively, as well as the length of the train, it is possible that the two men applied the brakes simultaneously.

The employees involved were experienced men and at the time of the accident they had not been on duty in violation of any of the provisions of the hours of scrvice law.

Respectfully submitted,

W. P. BORLAND, Director.