INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3561

THE WESTERN PACIFIC RAILROAD COMPANY

IN RE ACCIDENT

NEAR SANO, NEV., ON

MARCH 26, 1954

SUMMARY

Date	March 26, 1954	
Railroad:	Western Pacific	
Location	Sano, Nev.	
Kind of accident:	Head-end collision	
Equipment involved:	Track motor-car 2197	Freight train
Train number:		Extra 708 East
Engine number:		Diesel-electric units 708 and 709
Consist.		Caboose, 16 cars, caboose
Estimated speeds.	Undetermined	8 m. p. h
Operation:	Signal indications	
Track:	Single, 1° curve, 0.36 percent ascending grade westward	
Weather	Clear	
Time:	11:35 a. m.	
Casualties.	1 killed	
Cause:	Failure to provide adequate protection for movement of track motor-car	
Recommendation:	That the Western Pacific Railroad Company provide adequate protection for movement of track motor-cars on its line	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3561

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE WESTERN PACIFIC RAILROAD COMPANY

April 21, 1954

Accident near Sano, Nev., on March 26, 1954, caused by failure to provide adequate protection for the movement of a track motor-car.

REPORT OF THE COMMISSION[1]

CLARKE, Commissioner.

On March 26, 1954, there was a head-end collision between a track motor-car and a freight train on the Western Pacific Railroad near Sano, Nev., which resulted in the death of one maintenance-of-way employee. This accident was investigated in conjunction with a representative of the Public Service Commission of Nevada.

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[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.

Report No. 3561
Western Pacific Railroad
Sano, Nev.
March 26, 1954

Location of Accident and Method of Operation

This accident occurred on that part of the Eastern Division extending between Winnemucca, Nev., and Portola, Calif., 211.0 miles, a single-track line, over which trains are operated by signal indications. At Sano, 127.6 miles west of Winnemucca, a siding 1.29 miles in length parallels the main track on the south. The accident occurred on the main track at a point 1,716 feet east of the east siding-switch at Sano. From the east there are, in succession, a tangent 2.75 miles in length and a 1° curve to the left 1,676 feet to the point of accident and 1,613 feet westward. From the west there are, in succession, a tangent 3,777 feet in length and the curve on which the accident occurred. The grade is 0.36 percent ascending westward at the point of accident.

Immediately west of the point of accident the track is laid in a cut. The south wall of the cut rises to a maximum height of approximately 10 feet above the level of the tops of the rails.

Semi-automatic signal 56RB, governing east-bound movements from the siding to the main track at Sano, is located approximately 1,900 feet west of the point of accident. Automatic signal 4077, governing east-bound movements on the main track, is located 2 miles east of the point of accident. These signals form part of a traffic-control system which extends between Winnemucca and Portola. The control machine is located at Elko, Nev., 133.1 miles east of Winnemucca.

This carrier's rules for the operation of track motor-cars read in part as follows:

> 4. Motor cars must be run with caution at all times
> * * *
>
> 10. Employes operating cars on main tracks shall, when practicable, obtain information regarding trains but such information will not relieve them from the responsibility for protecting their cars as required by the Book of Rules. They will see that their cars are clear of the main track for all trains.

15. When two or more men are with a motor car they must flag at curves where the view is obstructed * * *. Where one-man cars are operated under the above conditions, this man must proceed with extreme care (walking if necessary) keeping sharp lookout for trains and motor cars in both directions.

The maximum authorized speeds are 55 miles per hour for freight trains, 20 miles per hour for track motor-cars on tangent track, and 10 miles per hour for track motor-cars on curves.

Description of Accident

Track motor-car 2197, operated by a roadmaster, departed west-bound from Gerlach, 33.2 miles east of Sano, at some time after 9:30 a. m. While it was moving westward at an undetermined rate of speed, it collided with Extra 708 East at a point 1,716 feet east of the east siding-switch at Sano.

Extra 708 East, an east-bound freight train, consisted of Diesel-electric units 708 and 709, coupled in multiple-unit control, a caboose, 16 cars, and a caboose, in the order named. This train passed signal 56RE, which indicated Approach, entered the main track at the east siding-switch at Sano at 11:33 a. m., and while moving at an estimated speed of 8 miles per hour it collided with track motor-car 2197.

The track motor-car, which was not derailed, was moved eastward a distance of 136 feet to the point at which the front end of Extra 708 East stopped. It was badly damaged The front end of the first Diesel-electric unit of Extra 708 East was slightly damaged.

The roadmaster, who was on the track motor-car, was killed.

The weather was clear at the time of the accident, which occurred about 11:35 a. m.

Track motor-car 2197 was of the belt-drive type and was powered by a five to eight horsepower engine. It weighed 750 pounds and had seating capacity for four persons. It was equipped with a windshield.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 9.53 trains.

Discussion

At 9:32 a. m. on the day of the accident the roadmaster called the train dispatcher from Gerlach and requested a line-up of train movements between Gerlach and Portola. The dispatcher issued a line-up reading as follows:

> Extra 708 East Gerlach Local between Red Rock and Doyle.
> Extra 914-A East between Portola and Hawley.
> Nothing else called at Portola.
> No westbounds on road or called at Winnemucca.

Hawley, Red Rock, and Doyle are located, respectively, 77.2 miles, 52.2 miles, and 42.1 miles west of Sano. The dispatcher said that the roadmaster again called about 10:45 a. m. and inquired as to the location of the two east-bound trains. The roadmaster did not mention his location at this time, and the train dispatcher was not aware of the location of the track motor-car between the time the roadmaster obtained the line-up at Gerlach and the time the accident occurred.

When Extra 708 East arrived at Sano, it was routed into the siding to set off a car and to permit Extra 914-A East, an east-bound freight train, to pass. According to the traingraph of the traffic-control machine, Extra 914-A East passed the east siding-switch at 11:28 a. m. The rear end of Extra 914-A East passed signal 4077 and the indication of signal 56RB changed from Stop to Approach between 11:32 a. m and 11:33 a. m., and Extra 708 East entered the main track at 11.33 a. m

As Extra 708 East was approaching the point where the accident occurred the enginemen were in the control compartment of the first Diesel-electric unit. The conductor, the front brakeman, and the swing brakeman were in the caboose next to the locomotive. The flagman was in the caboose at the rear of the train. The brakes of this train had been tested and had functioned properly when used en route. The engineer said that when the locomotive reached a point about 1,200 feet east of the east siding-switch at Sano he saw the track motor-car approaching at a distance of about 1,600 feet. He immediately made an emergency application of the brakes and sounded a warning signal on the pneumatic

horn. The fireman said that he saw the track motor-car at approximately the same time that the engineer sounded the warning signal. Both of these employees thought that the speed of their train was about 20 miles per hour when they observed the track motor-car. The fireman thought the speed had been reduced to approximately 8 miles per hour when the collision occurred. These employees said that the track motor-car was moving at a high rate of speed. They said that there was no apparent reduction in the speed of the car and that the occupant made no attempt to alight until immediately before the collision occurred. None of the members of the train crew saw the track motor-car before the train stopped.

In tests made after the accident occurred it was found that in the immediate vicinity of the point of accident an east-bound Diesel-electric unit was visible a distance of 1,778 feet from a west-bound track motor-car. The track motor-car was visible a distance of 1,584 feet from the control compartment of the Diesel-electric unit. The signal circuits in this vicinity are so arranged that after Extra 914-A East passed signal 4077 that signal would remain lighted if the route was lined for a following train to leave Sano. However, considering the short period of time which elapsed between the time Extra 914-A East passed signal 4077 and the time the accident occurred, it appears that the track motor-car met Extra 914-A East a considerable distance west of the signal and that the roadmaster did not see the signal after Extra 914-A East passed it. Members of the crew of Extra 914-A East were not certain of the location at which they met the track motor-car.

In specified districts on this line positive block protection is provided for the movement of track motor-cars. After the operator of a track motor-car receives block authority from the train dispatcher, no train is permitted to enter the district in which the track motor-car is moving until after the operator of the car reports that the movement has been completed. However, track motor-cars are not operated by this method in the territory where this accident occurred. In this territory the operators of track motor-cars are required to obtain line-ups of train movements, when practicable, but these line-ups are issued as information only and confer no authority over trains or other track motor-cars. The rules do not prescribe any method for protection, except protection by flagman, and the operators of track motor-cars are required to depend upon their

ability to see or hear an approaching train in time to avert a collision. This method of operation is inadequate for providing protection for the movement of track motor-cars.

Since January 1, 1944, the Commission has investigated 47 collisions, including the present case, which were caused by failure to provide adequate protection for the movement of track motor-cars. These accidents resulted in the death of 83 persons and the injury of 144 persons. In the reports covering the investigations of these accidents, the Commission repeatedly has recommended that the carriers take measures to provide adequate protection for the movement of track motor-cars on their lines.

Cause

This accident was caused by failure to provide adequate protection for the movement of a track motor-car.

Recommendation

It is recommended that the Western Pacific Railroad Company provide adequate protection for the movement of track motor-cars on those portions of its line on which such protection is not now provided.

Dated at Washington, D. C., this twenty-first day of April, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.