# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3504

ERIE RAILROAD COMPANY

IN RE ACCIDENT

NEAR GRANTON JCT., N. J., ON

JANUARY 19, 1953

## SUMMARY

Date:

January 19, 1953

Railroad:

Erle

Location:

Granton Jct., N. J.

Kind of accident:

Rear-end collision

Trains involved:

Freight

: Passenmer

Train numbers:

Extra 1239 West

: 815

Engine numbers:

Diesel-electric

:

unit 1239

Consists:

39 cars, caboose

: 1 Diesel-powered

car

Estimated speeds:

Standing

: 7 m. b. h.

Operation:

Signal indications

Trac'c:

Double; tangent; 0.10 percent descending grade westward

Weather:

Dense fog

Time:

9:59 a. m.

Casualties:

22 injured

Cause:

Failure to operate following train in accordance with a signal indication

### INTERSTATE COMMERCE COMMISSION

## REPORT NO. 3504

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

## ERIE RAILROAD COMPANY

## April 6, 1953

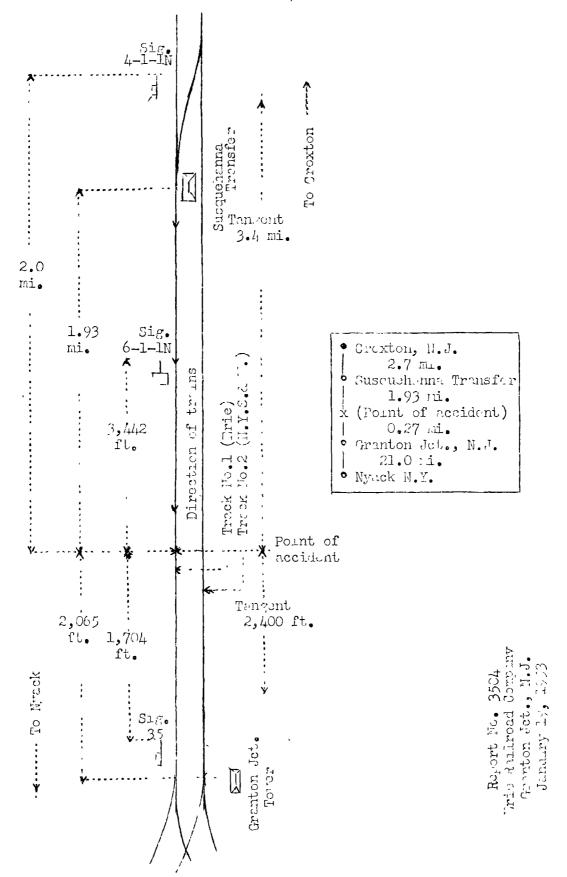
Accident near Granton Jct., N. J., on January 19; 1953, caused by failure to operate the following train in accordance with a signal indication.

## REPORT OF THE COMMISSION

## PATTERSON, Commissioner:

On January 19, 1953, there was a rear-end collision between a freight train and a passenger train on the Eric Railroad near Granton Jct., N. J., which resulted in the injury of 22 passengers. This accident was investigated in conjunction with a representative of the New Jersey Public Utility Commission.

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



## Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Croxton, N. J., and Nyack, N. Y., 25.9 miles. Between Croxton and Granton Jct., N. J., 4.9 miles west of Croxton, the main track of the New York, Susquehanna and Westorn Railroad, hereinafter referred to as the N.Y.S.& W., parallels the main track of the Erie on the south. From north to south these tracks are designated as No. 1 and No. 2. Between these points west-bound trains of both lines are operated over track No. 1 and east-bound trains of both lines are operated over track No. 2. Train movements on both tracks are under the jurisdiction of the Erie. Between Susquehanna Transfer, 2.7 miles west of Croxton, and Granton Jct., trains moving with the current of traffic on track No. 1 are operated by signal indications. The accident occurred on track Ic. 1 at a point 1.93 miles west of Susquehanna Transfer and 2,065 feet east of the interlocking station at Granton Jet. Track No, I is tangent throughout a distance of 3,4 miles immediately east of the point of accident and 2,400 feet westward. The grade is 0.10 percent descending westward at the point of accident.

Automatic signals 4-1-1N and 6-1-1N, governing west-bound movements on track No. 1, and semi-automatic signal 35, governing west-bound movements from track No. 1 through the routes of the interlocking at Granton Jet., are located, respectively, 2 miles east, 3,442 feet east and 1,704 feet west of the point of accident. These signals are of the upper-quadrant semaphore type. Signals 4-1-1N and 6-1-1N are approach lighted. Signal 35 is continuously lighted. Aspects applicable to this investigation and the corresponding indications and names are as follows:

<u>Signal</u>	Aspect	<u>Indication</u>	Name
4-l-1N	Vertical- over-verti- cal-over- number plate	* * * PROCEED REGARDLESS OF FOLLOWING SUPERIOR TRAINS. * * *	
6-1-1N	Diagonal- over-number plate	PREPARE TO STOP AT NEXT SIGNAL. TRAIN EXCEED-ING MEDIUM SPEED MUST AT ONCE REDUCE TO THAT SPEED.	APPROACH

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STOP: THEN PROCEED AT STOP AND Horizontal-RESTRICTED SPEED. PROCEED over-number plate CLEAR-PROCEED THROUGH CROSS-35 Horizontal-MEDIUM over-verti-OVER OR TURNOUT WITH ENTIRE TRAIN AT NOT cal-over-EXCEEDING MEDIUM horizontal SPEED, THEN RESUME NORMAL SPEED TO NEXT SIGNAL.

The controlling circuits are so arranged that when the route is lined for movement from track No. 1 to the westward main track of the Erie at Granton Jct. and the blocks of both signals are unoccupied, signal 6-1-1N indicates Approach and signal 35 indicates Clear-Medium. When the block of signal 6-1-1N is occupied, this signal indicates Stop and Proceed

This carrier's operating rules read in part as follows:

#### DEFINITIONS

Medium Speed--One-half maximum authorized speed at point involved, but not to exceed thirty miles per hour unless otherwise provided.

Restricted Speed---Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

55. The following signals will be used by flagmen:

Day signals -- A red flag,
Torpedoes and
Fusees.

\* \* \*

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must to back immediately with flagman's signals a sufficient distance to insure full protection, placing two torocdoes, and when necessary, in addition, displaying lighted fusces. \* \* \*

\* \* \*

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When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be dropped off at proper intervals.

The maximum authorized speeds are 60 miles per hour for passenger trains and 40 miles per hour for freight trains.

## Description of Accident

Extra 1239 West, a west-bound Erie freight train, consisted of Diesel-electric unit 1239, 40 cars, and a caboose. This train departed from Croxton, the last open office, at 9:33 a.m. and arrived at Susquehanna Transfer about 9:40 a.m. One car was set off at Susquehanna Transfer, and the train departed about 9:48 a.m. It passed signal 4-1-1N, which indicated Proceed-regardless-of-following-superior-trains, passed signal 6-1-1N, which indicated Approach, and stopped at signal 35, with the rear end of the train 3,442 feet west of signal 6-1-1N and 2,065 feet east of the interlocking station at Granton Jet. About 2 minutes later the rear end was struck by No. 815.

Mo. 815, a west-bound first-class N.Y.S.& W. passenger train, consisted of one Dicsel-powered passenger car. This train originated at Susquehanna Transfer. It entered track No. 1 a short distance west of signal 4-1-1N, departed from Susquehanna Transfer at 9:51 a.m., 21 minutes late, and stopped at signal 6-1-1N, which indicated Stop and Proceed. It then proceeded westward, and while moving at an estimated speed of 7 miles per hour it struck the rear end of Extra 1239 West.

Neither train was derailed. The equipment of No. 815 was slightly damaged.

There was a dense fog at the time of the accident, which occurred about 9:59 a. m.

## Discussion

After Extra 1239 West departed from Susquehanna Transfer the enginemen, the conductor, and the front brakeman were in the control compartment of the locomotive. The flagman was on the caboose. Signal 6-1-1N indicated Approach, and the train

passed it at a speed of between 20 and 25 miles per hour. engineer made a light application of the brokes after the train passed the signal, and the speed was reduced to about 5 miles per hour as the train approached signal 35. The range of vision of the employees on the locomotive was materially restricted by a dense fog. As the lacomotive was closely approaching signal 35, the engineer initiated a service brake-pipe reduction. This action resulted in an underired emergency application of the brakes, and the train stopped abruptly. After the brakes were released the train proceeded The emplayees on the locomotive were not aware that westward. a collision had occurred until they were so informed by the train dispatcher. The flagman said that he was on the rear platform of the caboose as the train passed signal 6-1.11. When the speed was reduced as the train approached Granton Jct. he entered the caboose to obtain a consist which was to be thrown off at that point. He had not thrown aff fusces after the train departed from Susquehanna Transfer. Muen the energency application of the brakes occurred he was thrown to the floor of the caboose. As soon as he regained his footing he alight'd from the rear of the caboose. After he alighted he heard o train approaching from the east. He said that he immediately ran eastward and gave stop signals with a lighted fusee. He thought that he had reached a point about 125 feet east of the caboose when No. 815 passed him and that the collision occurred not more than 2 minutes after his train stopped:

On the day of the accident the crew of No. 815, consisting of an engineer and a conductor, was assigned to operate No. 814, an east-bound passenger train which terminates at Suscuehanna Transfer, and to return westward from Susquehanna Transfer on No. 815. No. 814 arrived at Susquehanna Transfer at 9:48 a. m., 23 minutes late. Extra 1239 West was leaving the station as No. 814 arrived. No. 815 entered track No. I behind Extra 1239 West, and after passengers were picked up at the station it departed westward at 9:51 a. m. The brakes were applied and released before the train departed from Susquenama Transfer, and they functioned preperly when used after the train doparted from that station. The headlight was lighted brightly. The engineer said that fog restricted his range of vision to a distance of 500 to 1,000 feet in the vicinity of Susquehanna Transfer and to a distance of about 50 feet in the vicinity of signal C-1-1M, which indicated Stop and Proceed. After stopping at that signal the train proceeded westword. The aspect displayed by signal 6-1-1N required No. 815 to stop short of a preceding train. The engineer said that because the speed recording device was

defective he did not know the **exact** speed at which the train was movine, but the speed was low and he was expecting to find a train ahead. He said that he did not seem in html fused not the flagman of Extra 1239 West, and that he first became aware that Exara 1239 West had stopped when he saw the rear of the caboese. He thought that at this time his range of vision was restricted by fog to a distance of about 25 f et. When he saw the caboose he immediately made an emergency application of the brakes, but the collision occurred before the train could be stopped. As No. 815 was apportabling the relativement the accident occurred two employees not on duty when riding in the front vestibule. Each of these employees said that he was maintaining a locatout ahead, and each of them said that he did not see either a fusee on the flagman of Extra 1239 West before the collision occurred.

## Causs

It is found that this accident was caused by failure to operate the following train in accordance with a signal indication.

Dated at Washington, D. C., this sixth day of April, 1953.

By the Commission, Commissioner Patterson.

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GEORGE W. LAIRD,

Acting Secretary.