# RAILROAD ACCIDENT INVESTIGATION

Report No 3893

## CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY

## PRATT, KANS

JUNE 26, 1960

## INTERSTATE COMMERCE COMMISSION

Washington

### SUMMARY

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DATE	June 26, 1960
RAILROAD	Chicago, Rock Island and Pacific
LOCATION	Pratt, Kans
KIND OF ACCIDENT	Derallment
TRAIN INVOLVED	Freight
TRAIN NUMBER	94
LOCOMOTIVE NUMBER	Diesel-electric units 123, 1358, 1068, and 1323
CONSIST	116 cars, 2 diesel-electric units in tow, caboose
ESTIMATED SPEED	48 m p h
OPERATION	Timetable, train orders, automatic block signal system yard limits
TRACK	Single, 0°45' curve, 0 7 percent ascending grade eastward
WEATHER	Clear
TIME	300 pm
CAUSE	Train moving out of control and entering turnout at meeting point at an excessive rate of speed, as a result of failure to make re- quired air prake tests
RECOMMENDATION	That the Chicago, Rock Island and Pacific Railroad Company Im- mediately make the necessary revisions to bring its rules and instructions governing employees in the operation of train air brakes into conformity with rules, standards and instructions prescribed by the Power Brake Law of 1958, and the orders of this Commission relating thereto, and further that this carrier promptly take necessary steps to obtain compliance with these regulations

### INTERSTATE COMMERCE COMMISSION

REPORT NO 3893

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

### CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY

December 5, 1960

Accident at Pratt, Kans, on June 26, 1960, caused by a train moving out of control and entering a turnout at a meeting point at an excessive rate of speed, as a result of failure to make required air brake tests

# REPORT OF THE COMMISSION

### HUTCHINSON, Commissioner

On June 26, 1960, at Pratt, Kans , there was a derailment of a freight train on the Chicago Rock Island and Pacific Railroad which resulted in property damage of approximately \$440,000 00

<sup>1</sup>Under authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Hutchinson for consideration and disposition



### Location of Accident and Method of Operation

This accident occurred on that part of the Missouri-Kansas Division extending between Liperal and Pratt, Kars , 32.6 miles, a single track furle, over which trains are operated by timetable, train orders and an automatic block signal system. At Prattia siding parallels the main track on the north. The west switch of this siding is 1,337 feet viest of the station and the east siding-switch is located a considerable distance east of that point. An auxiliary track designated as the house track parallels the siding on the north and converges with it at a switch located 727 feet west of the station. The west yard-limit-approach sign and the yard-limit sign are located, respectively, 2.11 miles and 1.34 miles west of the west siding-switch. The west the inain track is tangent throughout a considerable distance and then there is a  $0^{\circ}15'$  curve to the left 1.05 miles to the west switch of the siding and the yord-limit accurred. The siding is tangent a considerable distance immediately east of the aerailment occurred. The siding is tangent a considerable distance immediately east of the point of accident. The grade for eastbound trains in this territory is generally descending eastward and petween Smalley, 4.6 miles west of Pratt, and the point of accident it varies between 0.7 percent descending and 0.7 percent ascending and is 0.7 percent ascending at that point.

In the vicinity of the point of accident the main track is constructed of 115-pound rail. The turnout at the west end of the siding is provided with a No-10 frog

Rules and instructions of the carrier governing employees in the operation of train air brakes read in part as follows

Rule 21 - Preparation of Locomotive for Service

1 Where maintenance or inspection forces employed, foreman in charge must know before dispatching locomotives for service the following

A Brakes on locomotives are in proper condition for service

\* \* \*

2 Enginemen will be responsible to perform the following

A Enginemen when taking charge of locomotive at terminals must know by visual inspection that all brakes are in operative condition and that brake values function properly in all positions

\* \* \*

Rule 30 - Road Train Air Brake Tests

1 Passenger Trains

\* \* \*

2 Freight Train

A Before motive power is detached or angle cocks are closed on a freight train, brakes must be applied with not less than a 20 lb brake pipe reduction

B After recoupling and angle cocks are opened, it must be known that brake pipe air pressure is being properly restored as indicated by the caboose gauge and that brakes on rear car are released

Applicable provisions of the Power Brake Law of 1958 read in part as follows

132 10 General rules, locomotives

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(b) It must be known that air brake equipment on locomotives is in a safe and suitable condition for service

\* \* \*

(1) Enginemen when taking charge of locomotives must know that the brakes are in operative condition

\* \* \*

132 11 Train air brake system tests

(a) Supervisors are jointly responsible with inspectors, enginemen and trainmen for condition of air brake \* \* equipment on motive power and cars to the extent that it is possible to detect defective equipment by required air tests

\* \* \*

132-12 Initial terminal road train air brake tests

All trains must be given inspection and test as specified by paragraphs (a) to (h) of this section at points (1) Where a train is originally made up (Initial Terminal)

\* \* \*

132-13 Road train and intermediate terminal train air brake tests

\* \* \*

(d) (1) At a point other than a terminal where one or more cars are added to a train, and after the train brake system is charged to not less than 60 pounds as indicated by a gauge at the rear of freight train \* \* \*, tests of air brakes must be made to determine that brake pipe leakage does not exceed five (5) pounds per minute as indicated in the brake pipe gauge after a 15 pound brake pipe reduction. After the leakage test is completed, brake pipe reduction must be increased to full service, and it must be known that the brakes on each of these cars and on the rear car of train apply and release \* \* \*

(2) (1) At a terminal \* \* \*

(11) When cars which have not been previously charged and tested as prescribed by 132–12 (a) to (h) are added to a train such cars may either be given inspection and tests in accordance with 132–12 (a) to (h), or tested as prescribed by subparagraph (1) of this paragraph prior to departure \* \* \*

\* \* \*

The maximum authorized speed for freight trains in this territory is 60 miles per hour but it is restricted to 15 miles per hour through turnouts of the type here involved

#### **Description of Accident**

No 94, an eastbound second-class freight train, consisted of diesel-electric units 123, 135B, 106B and 1323, coupled in multiple-unit control, 116 cars, 2 diesel-electric units in tow, and a caboose Diesel-electric unit 1323, a road-switcher type unit, was added at Liberal as the fourth unit at the rear of the three-unit locomotive which had arrived on the inbound train. The 2 diesel-electric units in tow were positioned in the outbound train as the 6th and the 21st units to the rear of the locomotive. At Liberal members of the crew of No 94 received, among others, copies of train order No 238, reading as follows

### NO 94 ENG 123 HAS RIGHT OVER NO 39 ENG 650 LIBERAL TO PRATT

No 39, a westbound first-class bassenger train, is due to leave Pratt at 2.39 p.m., but was running somewhat late on the day of the accident. No 94 departed from Liberal at 12.05 p.m., 5 hours 55 minutes late, without a proper brake test having been made prior to departure. This train proceeded eastward, met en route two westbound extra freight trains, each of which had taken siding and cleared the main track, and while moving at a speed of about 48 miles per hour it was diverted to the siding at Pratt and the rear truck of the 6th and all trucks of the 7th to the 53rd units, inclusive, were detailed in the vicinity of the turnout of the west siding-switch. A separation occurred at the rear of the diesel-electric unit in tow, which was the sixth unit in the train, and the forward portion of the train stopped with the front end of the locomotive about 1,700 feet east of the point of accident. Other separations occurred at both ends of many of the detailed cars and detailed equipment stopped at right angles to the track and in various other positions on or near the track structure of the main track and the siding

Of the derailed equipment, 42 cars were heavily damaged, and 3 cars and 1 of the dieselelectric units in tow were somewhat damaged. Between points about 30 feet west and 510 feet east of the west siding-switch the main track was demolished. The west end of the siding was destroyed throughout a distance of 878 feet, and the adjacent auxiliary track was badly damaged throughout a distance of 80 feet in the vicinity of switch location where it converges with the siding. The estimated cost of the damages resulting from this accident was in excess of \$440,000

The weather was clear at the time of the accident, which occurred about 3 00 p m

Diesel-electric units 123, 135B and 106B are provided with 24-RL type brake equipment Diesel-electric unit 1323, the rear unit of the four-unit locomotive involved, is provided with 26-L type brake equipment with a 26-C brake valve and 26-F control valve A MU-2A valve is provided, the function of which is to condition 26-L brake equipment to be used in multiple-unit operation with other 26-L. No 6 and 24-RL equipped locomotive units. When arranged in trailing position in a locomotive controlled from a 24-RL equipped unit, the pointer type handle of the MU-2A valve is required to be positioned in "Trail 24" position with the brake pipe cut-off valve in cut out position and the brake valve handle placed in "handle off" position. When so arranged, the automatic brake valve of this unit will be inoperative unless the brake valve handle is moved to emergency position, and the control of supplying or reducing brake pipe pressure is the function of the brake control apparatus of the lead locomotive units of this carrier are nominally adjusted to maintain main reservoir pressure of 130 to 140 pounds and brake pipe pressure of 80 pounds. The handle of the angle cock provided at each end of this unit is of the spring loaded type

The locomotive and the caboose of No 94, the yard locomotive at Liberal, the train dispatcher's office at Liberal and the yard office at Pratt, are provided with radio telephone equipment

#### Discussion

No 94 originates at Tucumcari, New Mexico, 204.3 miles west of Liberal. This is the initial station on the line for this train and the point at which it is required to receive an initial terminal air brake test. Liberal is an intermediate terminal and crew change point for No 94. On the day of the accident No 94 arrived at Liberal at 11.25 a.m., 5 hours 45 minutes late, and was stopped with the caboose at a point near the train dispatcher's office. At that time the train consisted of diesel-electric units 123, 135B and 106B, coupled in multiple-unit control, 113 cars, 1 diesel-electric unit in tow, and a caboose. Immediately after arrival the locomotive was detached and proceeded to the fuel station where the three units were serviced. Diesel-electric unit 1323 was moved to the fuel station by a yard locomotive and was coupled to the third unit to form a four-unit locomotive for the outbound movement of No. 94. While the locomotive of No. 94 was detached from the train, the yard locomotive removed the first 9 cars and afterward added a block consisting of 13 cars and a diesel-electric unit in tow to the head end of the train.

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An employee of the mechanical department serviced the locomotive units which arrived on No 94 He coupled the hose between diesel-electric unit 106B and diesel-electric unit 1323 while he was refueling the former. He said that he was sure that all hose were properly connected between these units and that he had properly positioned the angle cocks on both units. The enginemen boarded the locomotive at the fuel station. The shop employee said that he had not entered the control compartment of diesel-electric unit 1323 but that the fireman had positioned the valves of the brake equipment in the control compartment of ' at unit

The engineer of No 94 said that he inspected the first three diesel-electric units and then boarded the locomotive at the fuel station He said that he did not inspect diesel-electric unit 1323 but proceeded to the control compartment of the first unit to assist in making a brake test after the fourth unit was added to the locomotive At that time the independent brake of the locomotive was applied - He said that in response to signals for a brake test he released the independent brake and applied the automatic brake and repeated the test, applying and releasing both the automatic and independent brake several times before receiving a signal that the test was completed. He said that v hile the brake tests were being made the fireman was inspecting the locomotive units and the front brakeman was in the vicinity of the rear of the locomotive. After the tests were completed, the locomotive departed from the fuel station and was delayed a short time while the yard locomotive completed work at the head end of the train of No 94 The engineer said that when the locomotive was coupled to the train he reduced the brake pipe pressure to avoid the possibility that the locomotive brakes might become applied in emergency. He said that later while he was waiting for a signal to make a brake test that he read the train orders. In response to instructions received by radio telephone he made a brake application. He said that he did not notice any irregularity in the brake value exhaust when making this application and subsequently received instructions on the radio for No 94 to release the brakes and proceed He said that he did not want to proceed on these instructions and in response to his inquiry directed to the caboose of No 94, the previous caller identified himself as being on the yard locomotive, and informed the engineer that the carman inspecting No 94 was standing near the yard locomotive at that time and was giving signals to release the brakes The engineer said that he then communicated by radio telephone with the conductor and inquired if the train was ready to proceed. He said that the conductor informed him that additional train order authority would be issued to their train en route and instructed him to proceed No 94 then departed The front brakeman said that he was in the control compartment with the engineer at the time the brake test was made. He said that he heard the instructions on the radio telephone for No 94 to apply the brakes and to release the brakes, during which a caller identified himself as being on the yard locomotive and relaying information as to the signals being given by the car inspector

The fireman boarded the locomotive at the fuel station. He said that he assisted the shopman who was servicing the locomotive by checking the units and he then alighted in the vicinity of or the rear unit. The brakes of diesel-electric unit 1323 did not function properly when first tested and he again boarded the locomotive and entered the control compartment of this unit. He said that at this time he positioned the MU-2A valve in "Trail 24" position but did not change the position of the cut-off valve and overlooked the position of the automatic brake valve handle and the independent brake valve handle, which he assumed were properly positioned. He said that the brakes of the locomotive were tested before departing from the fuel station. When the locomotive was recounsed to the train he alighted to make a visual inspection of the units and to assist in the brake test if necessary. He said that he did not inspect the couplings between the units at this time and did not observe if the brakes were applied before he heard the signal sounded on the locomotive horn which indicated that the air brakes had been released. He then proceeded to the first unit to ascertain if the train was ready to depart

The carr an on duty at Liberal said that he coupled the air hose of equipment which the yard locomotive added to the head end of No 94 at that point He then boarded the yard locomotive which proceeded westward on an adjacent track and aliahted when it was stopped at a point approximately 200 to 300 feet east of the caboose In the meanwhile the road locomotive had been coupled to the The carman said that he observed the brakes on cars releasing as he proceeded toward the train rear end of the train and that the release valve of the caboose was stuck in open position. He manipulated the release rod to close the valve before he boarded the caboose He said that the caboose air brake gauge indicated 75 pounds brake pipe pressure. He then communicated by radio with the engineer of No 94 and instructed him to apply the brakes. The carrian then alighted from the caboose He said that because the release valve had been open he did not expect the brakes of the caboose to apply, but he observed that the brakes of two cars immediately in front of the caboose also were not applied. He continued to walk eastward on the south side of the train but was unable to determine if the brakes were applied on the next nine cars in the train, all of which were of the piggyback type, because the brake cylinders were not visible from the south side of this equipment He said that he became concerned and he gave signals to apply the brakes but the train began to move before hereached the cars which were positioned ahead of the piggyback equipment in the train He said that he continued to give signals to apply the brakes until the caboose had passed him and that he then advised a lead carman and an assistant master mechanic who were nearby that No 94 had departed without a proper brake test. According to the carman, the road locomotive was coupled to the train at 11 53 and No 94 departed 12 minutes later

The engineer said that after the train departed from Liberal the train dispatcher communicated with him by radio telephone on two occasions relative to the location of No 94 and the point where additional train order authority would be issued on route. The engineer said that when members of the crew of a train which No 94 met en route reported to him by radio that brakes were sticking in the train the fireman left the control compartment to inspect the diesel-electric units and he initiated a 12 to 15 pound service brake pipe reduction and then returned the brake valve to running position to effect their release. He said that the brake valve exhaust was not very long but he thought that the brake application was effective. According to the engineer's statement this brake application was made when the train was at a point between Bloom and Kingsdown, which are located, respectively, 54.8 miles and 57.0 miles west of Pratt. The engineer estimated the train was within 8 miles of Pratt when instructions were received via the radio telephone that to expedite the movement of No. 94 the west siding-switch at Pratt would be lined for entry to the siding.

No 94, the inferior train, was required under the provision of train order No 238, to take siding at Pratt to meet No 39 Train order authority also had been issued for No 94 to run ahead of No 40, an eastbound first-class passenger train, Liberal to Pratt It was intended that after No 94 entered the siding at Pratt and moved toward the east end of the yard that No 39 would take siding at that point to meet No 40 To minimize delay to the trains involved, the operator at Pratt communicated by radio telephone with members of the crew on the locomotive of No 94 and informed them that the agent at Pratt would operate the west siding-switch for their train to enter the siding The agent said that he lined the west siding-switch for entry to the siding about 2.55 p m when the adjacent westward absolute signal indicated that No 94 was closely approaching. He said that at this time the aspect of an eastward signal which was visible to him indicated that No 39 was occupying the main track, and waiting in accordance with instructions previously issued, to take siding after No 94 had moved eastward on the siding. He estimated that No 94 was moving at a speed of 50 miles per hour when it came into view. He said that at this time he was standing on the south side of the track opposite the switch. When the speed of the train was not reduced as it approached he became concerned and crossed to the north side of the track when the locomotive was approximately 800 to 1,000 feet west of the siding-switch He then realized that if the speed of No 94 was not reduced before the locomotive entered the siding, that equipment entering the turnout at

a speed of 50 miles per hour probably would become derailed. He said that the speed of the train was not reduced and he did not restore the switch to normal position because he did not think No 94 could be stopped before colliding with No 39, which was occupying the main track at a point east of the station. He ran northward away from the track immediately before the derailment occurred

As No 94 was approaching the point where the accident occurred the fireman, a qualified engineer, was operating the locomotive and the engineer and the front brakeman were seated on the left-hand side of the control compartment The conductor and the flagman were in the caboose The fireman said that when the locomotive was at a point several hundred feet west of the approach-yardlimit sign at Pratt he made an initial service brake pipe reduction of about 9 pounds and observed that the service exhaust was of short duration. The eastward automatic signal in this vicinity indicated Approach and the indication was called. The fireman said that the locomotive passed this signal at a speed of about 55 miles per hour. He said that when the initial brake pipe reduction failed to reduce the speed of the train he became concerned and made a further brake pipe reduction of 8 to 10 pounds and then moved the brake valve to emergency position. The engineer and the front brakeman said that they then operated the emergency brake valve located adjacent to their positions in the control compartment. The fireir an said that the indicated speed was 48 miles per hour when he last looked at the speed indicator and that it was not materially reduced before the accident occurred The engineer said that as the train was moving on the curve west of the siding he observed the lighted headlight of the locomotive of No 39 at a point east of the station at Pratt and he attempted to call a warning over the radio telephone that No 94 was moving out of control Immediately after the locomotive entered the siding, there was a marked reduction in speed as following equipment became derailed on the turnout and separations occurred in the train resulting in an effective brake application The forward portion of the train consisting of the locomotive, five cars and a diesel-electric unit in tow, the rear truck of which was derailed, stopped on the siding a considerable distance east of the point where the derailment occurred

The conductor said that before he boarded the caboose at Liberal he observed that the brakes were applied Later, after the carman had instructed the engineer by radio to apply the brakes, the conductor alighted from the caboose He said that he then engaged in a conversation with the chief dispatcher and when he returned to the caboose the brakes were released and the flagman informed him that instructions to release the brakes and proceed had been issued over the radio but the flagman had not recognized the voice of the person issuing the instructions According to the conductor's statement he did not notice if the brakes were applied or released while he was conversing with the chief dispatcher and he did not see the carman giving signals to apply the brakes as No 94 departed from Liberal As the train passed the station at Kismet, copies of a train order were delivered to the conductor and members of the crew on the locomotive which contained instructions that No 94 was to hold the main track and meet an opposing extra train which was superior by right at Missler Kismet and Missler are, respectively, 115.5 miles and 98.5 miles west of Pratt This train order permitted No 94 to proceed and the two opposing trains which were met en route were clear of the main track at the meeting points. No 94 was not stopped at any point between Liberal and Pratt Neither the conductor nor the flagman used the radio communication equipment en route. The conductor said that approaching Prati we heard noises on this equipment but could not distinguish any conversation. He estimated that there was a reduction of 5 to 10 miles in the speed when the locomotive was in the vicinity of the approach-yard-limit sign and that the speed of the train was 45 to 50 niles per hour when the caboose passed the west yardlimit sign at Pratt He said that he then became concerned and left his seat at the desk and proceeded toward the conductor's valve but the brakes becare applied in emergency as a result of the derailment before he could take action to stop the train

Examination of the locon of two of No 94 after the accident occurred disclosed that the angle cock at the east, or fo and end in the direction of movement, of dissel-electric unit 1323, the rear unit of the locomotive, was in closed position. All hose between the units were properly connected and all other angle cocks were properly positioned. Examination of the control compartment of the rear locomotive unit disclosed that the automatic brake valve was in release position, as was the independent brake valve. The brake valve handle had not been removed from either of these brake valves. The cut-off valve was in freight position and the MU-2A valve was in "Trail 24" position.

The angle cock at the forward end of diesel-electric unit 1323 was in closed position when this unit was rioved by the yara locomotive and coupled to the preceding units in the locomotive of No 94, at the fuel station at Liberal Although connecting hose between this unit and the preceding unit of the locomotive were then coupled by an employee at the fuel station it is evident that the angle cock which was on the north side of the coupler at the east end of the unit was not properly positioned at this time and it remained closed In the control compartment of diesel-electric unit 1323 the brake pipe cut-off valve was not moved to cut out position as required when this unit is to be operated in trailing position in a multiple-unit locomotive consist, as in this case, but instead, this valve was left in freight position. According to the road foreman of equipment, the handles should be removed from the automatic and the independent brake valves when this type unit is operated in trailing position. As arranged in this instance, the brakes of the rear diesel-electric unit of the locomotive of No 94 could not be applied or released by manipulation of the automatic brake valve in the control compartment of the first diesel-electric unit However, the brakes on all units would function properly when applied or released by manipulation of the independent brake valve of the first unit. It is apparent, under these conditions, that when this locomotive was then coupled to the train the train brake system was charged to the setting of the pressure regulating device of the brake apparatus of the rear diesel-electric unit of the locomotive Because of the closed angle cock at the forward end of that unit, brake pipe pressure of the rear unit and following equipment could not then be reduced or otherwise controlled by manipulation of the automatic brake valve in the control compartment of the first unit of the locomotive As a result, the brakes in that portion of the train were not under control of the engineer and could be applied manually only by means of the automatic brake valve, the emergency brake valve of the rear locomotive unit, or by operation of the conductor's valve in the caboose. It is evident that if a proper and adequate inspection and test of the locomotive brake equipment had been made at the fuel station, these conditions would have been round and corrected before the locomotive was re-coupled to the train. It is further evident, that because of these conditions on the locomotive the brakes of the train could not be properly tested and No 94 departed from Liberal on the day of the accident without the brake test, which is required by the Power Brake Law, having been made

The investigation disclosed that this carrier's rules and instructions governing employees in the operation of train air brakes do not fully conform to the requirements of the Power Brake Law of 1958 and the orders of this Commission relating thereto. The initial terminal air brake test requirements vary from those prescribed by law. The Road Train Air Brake Tests for freight trains under Rule 30 II A, of these instructions requires only that before rotive power is detached or angle cocks closed on a freight train, brakes must be applied with not less than a 20 pound brake pipe reduction. Paragraph B of this section of the rules provides that after re-coupling and angle cocks are opened, it must be known that brake pipe pressure is being restored as indicated by the caboose gauge and that brakes on the rear car are released. The brakes of the cars added to the train at Liberal were not tested or inspected by the carman or any member of the crew. These rules and instructions at the present time do not require or prescribe the type tests which are to be made on brake equipment of cars added to a train at a point other than initial terminal. According to mechanical forei en at points in this territory, only verbal instructions are in effect relative to the

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manner in which brake tests are to be made at intermediate points. Employees involved were not familiar with the provisions of the Power Brake Law relating to brake tests. It is evident that verbal instructions relative to such tests are not adequate and that the so-called rear end test in which only the brakes of the rear car are observed has limited application under the law, and was not applicable under the circumstances existing in the instant case. Members of the crew on the yard locomotive said that they did not use the radio equipment on that locomotive to transmit information or instructions relative to the brake test on No. 94. However, it is apparent that there was improper use of radio telephone communication equipment in the unauthorized issuance of instructions to employees to release the brakes and proceed before the car inspector had completed the air brake test of No. 94 at Liberal. If the air brake test had been made in a proper manner at this point this accident would have been avoided. The Commission has initiated appropriate action in the violation of the Power Brake Law of 1958 in this case.

#### Cause

This accident was caused by a train moving out of control and entering a turnout at a meeting point at an excessive rate of speed, as a result of failure to make required air brake tests

### Recommendation

It is recommended that the Chicago, Rock Island and Pacific Railroad Company immediately make the necessary revisions to bring its rules and instructions governing employees in the operation of train air brakes into conformity with rules, standards and instructions prescribed by the Power Brake Law of 1958, and the orders of this Commission relating thereto, and further that this carrier promptly take necessary steps to obtain compliance with these regulations

Dated at Washington, D  $\,$  C , this fifth day of December, 1960

By the Commission, Commissioner Hutchinson

HAROLD D McCOY,

Secretary

(SEAL)