

Decision No. 79854

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation into the safety, maintenance, operation, use and protection or closing of the crossings at grade of Railroad Avenue with tracks of Southern Pacific Transportation Company, Crossing No. B-48.9, and The Atchison, Topeka and Santa Fe Railway Company, Crossing No. 2-1155.7, in the City of Pittsburg.

Case No. 9199  
(Filed March 9, 1971)

Neal W. McCrory and Richard L. Rosett, Attorneys at Law, for The Atchison, Topeka and Santa Fe Railway Company; Harold S. Lentz, Attorney at Law, for Southern Pacific Transportation Company; and Roger Golla and Alfred A. Affinito, City Attorneys, for City of Pittsburg; respondents.  
William David Figg-Hoblyn, Attorney at Law, for the Commission staff.

### O P I N I O N

The Order Instituting Investigation herein was issued primarily for the purpose of determining whether and in what manner the crossing protection at the crossings in question should be upgraded from the presently installed No. 8 flashing lights controlled by conventional track circuitry.

Since the issuance of Decision No. 78877 herein, evidentiary hearings have been held before Examiner Gilman on various dates in October and December of 1971 and in January 1972 in Pittsburg and San Francisco.

As indicated in Decision No. 78877, issued herein on June 29, 1971, there is a dispute between the City of Pittsburg (City) and Southern Pacific Transportation Company (Southern Pacific) over

the appropriate rules to govern time of crossing blocking and train speeds. Evidence on these matters as well as the allocation of costs of crossing protection is still being received under paragraph 5 of the Order Instituting Investigation.<sup>1/</sup>

Since all the evidence directly pertaining to the type of crossing protection is now in the record, it is appropriate to consider a final decision on that issue, without waiting completion of the proceedings on cost allocation, blocking and speed issues.

#### The Crossings

The two railroad grade crossings under investigation are centrally located in the City of Pittsburg. Each is a crossing of generally east-west main line tracks of the Southern Pacific and The Atchison, Topeka and Santa Fe Railway Company (Santa Fe) railroads, respectively, by Railroad Avenue, the main north-south thoroughfare in Pittsburg. Railroad Avenue provides the principal connection between the two segments of the City that are divided by the State Route 4 freeway. There is an interchange at the Route 4-Railroad Avenue intersection which provides access to the City for traffic utilizing the freeway. Railroad Avenue is also the northerly extension of Kirker Pass Road and Ygnacio Valley Road from Walnut Creek. The Southern Pacific crossing is one-half mile north of the State Route 4 freeway, and the Santa Fe crossing is seven-tenths of a mile north of the freeway.

Both crossings were nominated for the Commission's Grade Separation Priority List in the years 1966 through 1969. By letter dated September 18, 1968, the Pittsburg City Manager stated that while the City recognized the problem presented by these crossings, insufficient funds were available to defray its share of the cost of a grade separation project.

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<sup>1/</sup> "Whether any other order or orders shall be issued by the Commission in the lawful exercise of its jurisdiction."

Since installation of the two Standard No. 8 flashing light signals in 1950 at the Santa Fe crossing, there have been 30 train-vehicle accidents resulting in injuries to 11 persons, and one pedestrian accident. Since the flashing light installation in 1949 at the Southern Pacific crossing, there have been eight accidents resulting in injuries to seven persons. Since the addition of two flashing lights in the median of the Southern Pacific crossing in 1964, there has been one vehicular accident and two pedestrian accidents.

Southern Pacific Crossing of Railroad Avenue (B-48.9)

This planked right angle crossing has three tracks, a single track main line and two side tracks, and has existed as a public crossing prior to the commencement of the Commission's crossing records in 1926. Protection consists of four Standard No. 8 flashing light signals, two of which are mounted on islands in the center median. Railroad Avenue is 83 feet wide in this area and has two traffic lanes in each direction. Two signals were installed in April, 1949 and two were added in April, 1964 when Railroad Avenue was widened. The northeast quadrant contains the railroad depot; the southeast quadrant contains a gasoline service station; the southwest quadrant is comprised of Parkside Drive (60 feet wide) and an adjacent gasoline service station, and the northwest quadrant is comprised of Leslie Drive (28 feet wide) and an adjacent tire shop.

Santa Fe Crossing of Railroad Avenue (2-1155.7)

This asphalt crossing at an approximate 75° angle has three tracks, a single track main line and two side tracks, and has existed as a public crossing prior to the commencement of the Commission's crossing records in 1926. Protection consists of two Standard No. 8 flashing light signals installed on June 14, 1950. Railroad Avenue narrows on north side of the crossing to 55 feet, but four lanes of traffic are maintained by elimination of the

center median. The northeast and southeast quadrants contain empty buildings. A supermarket is located in the southwest quadrant, while an open field occupies the northwest quadrant.

#### Discussion

A Commission staff engineer testified in support of a study made by him of the crossings in question. Primarily on the basis of the character and traffic on both railroads and on the street, he recommended that the flashing lights be supplemented by automatic gate arms. Staff studies have indicated that gate-arm installations are clearly superior to warning-only systems in reducing crossing hazards. Because the railroad operations at both crossings consist both of very low and moderate speed operations and because of the fact that the avenue is the principal arterial in the City, sophisticated control equipment was recommended to minimize signal over-actuation and, consequently, the traffic blockage caused by gate arms.

The staff engineer also indicated that the grades of approach at the Santa Fe crossing were excessive, and the pavement near the tracks was deteriorated. He recommended elimination of both conditions.

The pavement narrows north of the Santa Fe crossing to 55 feet, four lanes of traffic being maintained by the elimination of the median strip. In his exhibit he recommended that the roadway north of the crossing be widened to the same width as the roadway between the crossings.

Subsequently, Santa Fe and the City supported a proposal that would eliminate the median and center line gate installation north of the Santa Fe crossing. Staff interposed no objection to such a solution.

During formal view of the crossing, the staff engineer noted that street maintenance accomplished since the date of his last investigation had substantially reduced the grade and rough pavement problems as described in that portion of his exhibit

relating to the Santa Fe crossing. It was also noted that there were well-developed pedestrian walkways on either side of the Santa Fe crossing, but there was no connecting pavement across the tracks.

The record indicates substantial overactuation of the existing signal systems at both crossings. We deduce that pedestrians accustomed to signals which operate even when no train enters the crossing might tend to ignore the warning aspect of the modified signalization, thus not utilizing the benefits of the improved protection ordered herein.

We think it appropriate to require the railroads to install signs to inform pedestrians on established walkways adjacent to both crossings that it is hazardous to cross when signals are operating and of the amount of advance warning designed into the system. These signs should be in place when the modified signal installation is operative.

There was also evidence concerning the necessity for a no turn signal to be placed at the intersection of Railroad Avenue and Parkside Drive which is parallel and immediately south of the Southern Pacific crossing.

Upon analysis of the evidence, we are of the opinion that the turning movements do not so significantly impinge on the safety and use of the crossing itself as to require an order by this Commission to determine whether such movements should be automatically prohibited during signal operation. Since the affected railroad can provide an interconnection for such a signal without significant cost, it should be ordered to do so, and the City left free to determine whether and when such a signal should be installed.

#### Findings

1. Automatic gates if installed at the crossings will provide an increase in safety for vehicles and pedestrians and for railroad employees.

2. To ensure maximum vehicular use of Railroad Avenue, the installation of control devices at both crossings, which ensure that gates are actuated no more than a fixed time before railroad equipment arrives at the crossing, is necessary.

3. Installation of a walkway within the railroad right-of-way adjacent to the Santa Fe crossing will improve safety by encouraging pedestrians to avoid the vehicle roadway.

4. It has not been demonstrated whether the public safety and convenient vehicular use of the Southern Pacific crossing requires the installation of an automatic no turn signal at the intersection of Parkside Drive and Railroad Avenue.

5. The additional cost of providing a connection to the signal control system ordered herein, which would allow such a traffic signal, if constructed, to be controlled in conjunction with railroad signal devices, will be insignificant.

#### Conclusion

Each of the modifications to the crossings in question and of the associated signal and control devices set forth in the ordering paragraphs below are required by the public convenience, necessity and safety.

#### O R D E R

IT IS ORDERED that:

1. Southern Pacific Transportation Company (Southern Pacific) shall modify the automatic protection at its Crossing No. B-48.9 to provide four automatic gate arms and Standard No. 8 signals with a control system designed for full deployment of the gate arms not less than 20 and not more than 30 seconds before the arrival of railroad equipment at the crossing.

2. The Atchison, Topeka and Santa Fe Railway Company (Santa Fe) shall modify the automatic protection at its Crossing No. 2-1155.7 to provide two automatic gate arms and Standard No. 8 signals with additional flashing light signals on cantilever arms with a

control system designed for full deployment of the gate arms not less than 20 and not more than 30 seconds before the arrival of railroad equipment at the crossing.

3. Southern Pacific shall provide a connection to its control system to allow control of a no turn signal at Parkside Drive.

4. Santa Fe shall construct a pedestrian crossing of all-weather paving material within its right-of-way adjacent to the west side of its Crossing No. 2-1155.7.

5. Each railroad respondent shall, at the same time as the improved signal control mechanisms required by ordering paragraphs 1 and 2 shall be placed in operation, provide for each established pedestrian crossing adjacent to its own crossing, a permanent sign indicating that it is hazardous to cross when signals are operating and indicating the amount of warning time designed into the installed control system.

6. Each of the ordering paragraphs above shall be complied with within one year from the effective date of this order.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 28<sup>th</sup> day of MARCH, 1972.

William Lyons - J. Chairman  
Vernon L. Sturgeon  
[Signature] Commissioners

Commissioner J. P. Vukasin, Jr., being necessarily absent, did not participate in the disposition of this proceeding.