

ORIGINAL

Decision No. 69894

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation into the status, safety, maintenance, use and protection or closing of the crossing at grade of the lines of the PACIFIC ELECTRIC RAILWAY COMPANY in the CITY OF HUNTINGTON BEACH, California, with Edinger Avenue; Crossing No. 6NC-30.20.

Case No. 8103
(Filed January 12, 1965)
(Amended March 23, 1965)

Randolph Karr and Walt A. Steiger, by
Randolph Karr, for Pacific Electric
Railway Company, and Arthur L. Kassan,
for City of Huntington Beach, respondents.
Elmer Sjostrom, for the Commission staff.

O P I N I O N

A public hearing on the above-entitled matter was held before Commissioner Grover and Examiner Patterson in Santa Ana on May 12 and 13, 1965. The matter was heard on a consolidated record with Cases Nos. 8105 and 8111, involving Pacific Electric Railway crossings in the City of Santa Ana and the City of Stanton, respectively. All three matters were submitted on May 13, 1965, and separate decisions will be rendered in each.

Another matter, Case No. 8104, involving two crossings of the Southern Pacific Company in the County of Orange, was continued to a date to be set, upon statements of counsel that agreement had been reached between Southern Pacific Company and the County of Orange to install automatic gates at the two crossings.

Investigation herein concerns the crossing at grade of Edinger Avenue with tracks of the Pacific Electric Railway Company

in the City of Huntington Beach (Crossing No. 6NC-30.20). The investigation was instituted to determine whether or not public health, safety and welfare require the relocation, widening, closing or other alteration of the crossing; the installation and maintenance of additional or improved protective devices at the crossing; and, if any changes are made, on what terms the work should be done and how the cost should be apportioned.

An Associate Transportation Engineer of the Commission staff prepared and presented a report (Exhibit 1) covering his analysis and recommendations for improved protection at the three Pacific Electric Railway Company crossings. His evidence concerning the Edinger Avenue crossing may be summarized as follows: The crossing consists of one branch line track and one siding track each at a 90-degree angle with Edinger Avenue, which runs east and west. Width of the crossing and approaches is 28 feet. Visibility is impaired for eastbound vehicle drivers by a large bean warehouse located adjacent to the crossing in the southwest quadrant, the visibility to the right being only 40 feet at a distance of 100 feet from the track. During a six-hour traffic check commencing at noon, Monday, March 1, 1965, the staff engineer counted 4,346 vehicles using the crossing including 34 school buses, some of which did not contain pupils. The observed speed of the automobiles was approximately 50 miles per hour. He testified that the City of Huntington Beach engineer has estimated the total daily traffic to be 10,000 vehicles. The train traffic consists of one round trip per day plus required switching. During the period of the traffic check the staff engineer observed one southbound train and two switching movements all at approximately 2:00 p.m. In the northeast quadrant of

the crossing a large shopping area is being developed with some portions scheduled for completion in the Fall of this year. A school is planned for construction in the northwest quadrant. The San Diego freeway passing northeast of the crossing is scheduled for completion as far as Beach Boulevard by November 1965. A full interchange with the freeway will exist at Beach Boulevard just north of Edinger Avenue. He testified the completion of this interchange and other nearby interchanges with the freeway should result in increased traffic on Edinger Avenue.

The accident record at the crossing since January 1, 1960, consists of two accidents in which three persons were injured. Present protection consists of two Standard No. 1 reflectorized crossing signs with two reflectorized advance warning signs.

Based on the use of the crossing by approximately 10,000 vehicles per day, the speed of such vehicles and the restricted visibility in one quadrant, the staff engineer concluded that better protection than that presently provided is needed. He recommended that there be installed two Standard No. 8 flashing light signals supplemented with automatic gates, the installation cost to be apportioned 50-50 between the Railway and the City. He recommended the use of automatic gates rather than flashing lights alone because installations with automatic gates have proven superior. In this regard a report he had prepared dated October 1, 1964, entitled "Effectiveness of Automatic Crossing Gates in Southern California, 1954 through 1963" was introduced (Exhibit 2). This report, which was a study of accident experience over a ten-year period at 132 points in Southern California where automatic crossing gates were in place on December 31, 1963, shows that of the 101 installations where crossing protection had been

upgraded to automatic gates, accidents have been decreased by 57 percent, deaths decreased by 89 percent and injuries decreased by 88 percent.

A Public Projects Engineer for the Railway testified that in recent years significant improvements have been made in equipment and techniques for crossing protection. He stated that in the early stages of crossing protection it was considered necessary only to warn motorists of the presence of the track and for many years a signal device such as a crossing sign or a crossing sign augmented with flashing lights was deemed sufficient. He stated, however, that as the volume and speed of motor vehicle travel have increased this type of protection has become less adequate, so that the presence of a positive barrier to the motorist, it now has been concluded, is the best crossing protection available, except for grade separation, and that lesser types of automatic protection are not economically justified. He stated that, in his opinion, the installation of flashing lights without crossing gates would provide little or no added protection over the presently installed Standard No. 1 crossing signs. He pointed out further that there is an additional accident hazard existing at the Edinger Avenue crossing because of the switching movements which are made at this crossing and because of the frequent positioning of cars on the siding, which may lead a motorist to believe that warning signals have been actuated by the cars on the siding rather than by an approaching train.

The installation proposed by the Railway at this crossing would include a Marquardt GCP Control Predictor. Predictors such as this, which have been in general use for about three years, have made the installation of automatic gates, particularly at

crossings where switching is performed, much more feasible than in the past, as the predictor eliminates unnecessary operation of the gates.

A Maintenance and Construction Engineer for the Railway presented in Exhibit 3 estimates of costs for upgrading the crossing protection. His estimate for installation of two Standard No. 8 flashing lights with Marquardt GCP Control is \$14,835 with an annual maintenance cost of \$672. If automatic gates are added to the installation, the total cost is estimated to be \$20,585 with an annual maintenance cost of \$896. He gave an approximate estimate that if the predictor control were to be eliminated from either installation the cost would be reduced by an amount of \$4,500 to \$5,000.

The City of Huntington Beach takes the position that conditions at the crossing do not warrant the expenditure of funds in excess of those necessary to install flashing lights. The City's traffic engineer testified that at the Warner Avenue crossing approximately one mile south of Edinger Avenue and which carries approximately 12,000 vehicles per day the protection was upgraded to flashing lights within the last two years and gates were neither recommended nor installed. He also stated that, since checks have revealed the 85 percentile speed of vehicles on Edinger Avenue to be approximately 40 miles per hour, this section of the street will be posted for a maximum speed limit of 40 miles per hour. In addition he testified that construction of a new school east of Beach Boulevard to serve Fountain Valley should eliminate more than two thirds of the school buses now using the crossing.

Based upon the evidence of high speed and heavy volume of vehicular traffic carried by Edinger Avenue, the regular train movements of one round trip per day plus required switching, the presence of the siding track, the restricted visibility for motorists in one quadrant, the use of the crossing by school buses, and the rapid commercial development the surrounding area is experiencing, the Commission finds that the protection provided at the crossing is inadequate. The Commission further finds that public health, safety and welfare require that the crossing be protected by two Standard No. 8 flashing light signals supplemented with automatic gates equipped with predictor controls and that the cost of the installation should be apportioned 50 percent to the City and 50 percent to the Railway. The Commission concludes that such additional protection should be ordered, with the cost of installation apportioned as hereinafter provided.

O R D E R

IT IS ORDERED that:

1. Pacific Electric Railway Company shall, within 180 days after the effective date hereof, replace its existing protection at the Edinger Avenue crossing in the City of Huntington Beach (Crossing No. 6NC-30.20.) with two Standard No. 8 flashing light signals supplemented with automatic gates equipped with predictor controls.
2. The installation costs for said protective devices shall be apportioned on the basis of 50 percent to be paid by the City of

Huntington Beach and 50 percent to be paid by Pacific Electric Railway Company.

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

Dated at San Francisco, California, this 2nd day of NOVEMBER, 1965.

Frederick B. Holcomb
President

John E. ...

George A. ...
Auditor

William ...
Commissioners