

30303

Decision No. _____

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of
COUNTY OF LOS ANGELES, HIGHWAY BARRIERS, INC.,
a California corporation, and LINDGREN &
SWINERTON, INC., a California corporation,
for a certificate of public convenience and
necessity.

Case No. 4215

PACIFIC ELECTRIC RAILWAY COMPANY, a California
corporation,

Respondent.

J. H. O'Connor, for the County of Los Angeles.
O'Melveny, Tuller & Myers, and Homer L. Mitchell,
for Highway Barriers, Inc., and Lindgren & Swinerton, Inc.,
Frank Karr and C. W. Cornell, for Pacific Electric Railway
Company, Respondent, and for Southern Pacific Company,
Protestants.
E. E. Bennett, for Union Pacific Railroad Company,
Protestant.
Robert Brennan, and L. E. Siebert, for The Atchison,
Topeka and Santa Fe Railway Company, Protestant.
Curtis W. Shields, for the City of Beverly Hills.

RILEY, Commissioner -

O P I N I O N

In the above entitled proceeding applicants seek an order authorizing the installation of a yielding type of highway barrier for the protection of the grade crossing of Florence Avenue with Pacific Electric Railway Company's four-track Los Angeles-Watts-Long Beach Line in the County of Los Angeles. (Crossing No. 6L-5.23).

Public hearings were conducted in this proceeding at
Los Angeles, California, on June 22, and 23, 1937.

¹
Testimony on June 23rd was taken by Examiner W.R. Williams.

The grade crossing of Florence Avenue with Pacific Electric Railway Company's tracks which is involved herein, is an important one from a traffic standpoint. The record shows that between 25,000 and 30,000 vehicles per day pass over this crossing with a maximum travel of over 2,000 per hour between the hours of 4:00 p.m. and 6:00 p.m.²

Four tracks of Pacific Electric Railway Company are involved in this grade crossing. The two inner tracks accommodate high speed interurban trains operating between Los Angeles and the South Coast beach towns, also Redondo Beach and Santa Ana, while traffic on the two outer tracks consists of local passenger trains operating between Los Angeles and Watts, as well as freight traffic.

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Exhibit 17 shows results of the vehicular traffic count taken at this crossing between the hours of 5:00 a.m., Wednesday, June 16th, and 5:00 a.m., Thursday, June 17, 1937, as follows:

	<u>Between</u>	<u>Westbound</u>	<u>Eastbound</u>	<u>Total</u>
5:00 AM	and 6:00 AM	94	180	274
6:00 AM	" 7:00 AM	340	655	995
7:00 AM	" 8:00 AM	741	1124	1865
8:00 AM	" 9:00 AM	621	902	1523
9:00 AM	" 10:00 AM	560	719	1279
10:00 AM	" 11:00 AM	634	643	1277
11:00 AM	" 12:00 M	693	552	1245
12:00 M	" 1:00 PM	610	548	1158
1:00 PM	" 2:00 PM	696	705	1401
2:00 PM	" 3:00 PM	731	727	1458
3:00 PM	" 4:00 PM	882	864	1746
4:00 PM	" 5:00 PM	1332	909	2241
5:00 PM	" 6:00 PM	1289	957	2246
6:00 PM	" 7:00 PM	939	753	1692
7:00 PM	" 8:00 PM	973	956	1929
8:00 PM	" 9:00 PM	812	929	1741
9:00 PM	" 10:00 PM	677	594	1271
10:00 PM	" 11:00 PM	588	517	1105
11:00 PM	" 12:00 PM	449	457	906
12:00 PM	" 1:00 AM	277	268	545
1:00 AM	" 2:00 AM	123	129	252
2:00 AM	" 3:00 AM	81	94	175
3:00 AM	" 4:00 AM	48	60	108
4:00 AM	" 5:00 AM	44	74	118
	TOTAL	- 14234	14316	28550

The record shows that the normal rail traffic over this line consists of approximately 300 interurban, 200 local, 40 freight and miscellaneous movements per day.³

At the present time this grade crossing is provided with the following protection: Human flagman for 18 hours per day between the hours of 6:00 a.m. and 12:00 midnight, and two automatic wigwags. This protection is maintained at the sole expense of the Pacific Electric Railway Company.

The particular type of yielding highway barrier proposed herein consists of a wire rope gate supported horizontally between two hollow steel posts on either side of the roadway, the posts being fixed to concrete foundations and connected across the top. Upon the approach of a train, it is lowered across the highway to stop the passage of vehicular traffic. It is so devised that when the gate is in its lowered position, and is struck by a vehicle, counterweights in the hollow steel posts will be lifted and a braking mechanism actuated, thus bringing the vehicle to a gradual stop within 30 feet, which is the maximum distance the vehicle can travel after striking the barrier. When in its clear position, the gate has vertical clearance of about 17 feet above the surface of the roadway.

The driveway of Florence Avenue is 70 feet in width. Under applicants' plan of installing the proposed highway barriers, this roadway will be divided into two equal portions as one of the supports for each gate will be constructed in the center of this street. In this way each gate will reach halfway across the street and barricade only traffic on the right hand half of the highway. Although the proponents allege that it is practical to operate these

³ The actual count taken June 7, 1937, which purports to indicate average train operations, shows the following for a 24-hour period: 290 interurban, 198 local, 20 freight and 18 miscellaneous, total 526 trains. This check further shows that during the time of peak travel, from 7:00 to 8:00 a.m., and from 5:00 to 6:00 p.m., 26 interurban, 12 local and 2 miscellaneous rail movements passed over the crossing, during each of these hourly periods, averaging one train for each 1½ minutes.

barriers automatically, the installation proposed herein is to be manually controlled and electrically operated. The estimated cost of constructing the proposed installation is approximately \$20,000.

Exhibit No.9 shows that between March 24, 1927, and February 24, 1937, the grade crossing involved herein was the scene of 49 reportable accidents to the Commission, which resulted in the death of 8 persons and injury to 15 others. Of the 8 fatal accidents, 5 resulted from accidents where the vehicle ran into the side of the moving trains.

The record shows that a barrier of this general type had its initial installation at a grade crossing in Chicago in 1921. Subsequent to that time there has been one other installation at a grade crossing located at Racine, Wisconsin. In addition to these two installations at grade crossings, several others have been installed at draw bridges in Eastern cities. If the proposed installation is made, it will be the first of its type constructed in the West.

Applicants' showing, in a general way, surrounds the testimony of witnesses who expressed their opinions as to the desirability of affording the County an opportunity to demonstrate whether or not this type of protection is an effective means of preventing grade crossing accidents. The thought appears to be that, if after a fair trial, it develops that the gate fails to show favorable and desirable results, it can be removed. These witnesses consisted of engineers who are connected with the design, manufacture and marketing of the barriers, and officials of Los Angeles County.

The testimony of these witnesses might be summed up as follows: Witnesses representing the manufacturer of the barriers allege that it has been developed to a point where its operation is dependable from a mechanical standpoint, and that it has been

effective at locations where it has been installed in the way of stopping traffic without serious accidents. The witnesses for the county, consisting of representatives from the Road Commissioners' office and County Planning Commission, testified that in their opinions, this rather hazardous grade crossing should be afforded more adequate and effective protection, and that the most ideal method would be to provide a grade separation. The expense of such improvement, however, was most prohibitive at this time. That if the proposed barriers prove to be effective in preventing accidents, it would be in public interest to invest the necessary money for this installation, and that only a trial could determine whether or not this type of protection was desirable at this location.

The granting of this application was opposed by Pacific Electric Railway Company, as well as a number of other rail carriers in the Los Angeles district. It is the rail carriers' contention that:

(a) The proposed barriers will seriously interfere with the handling of vehicular traffic over the grade crossing and will not reduce the hazard, in that vehicles which fail to stop upon warning, will collide with the gates and serious accidents will result from such impact.

(b) This type of gate has never been installed at a grade crossing similar to the one involved herein, particularly with respect to the volume of traffic of both the highway and railway.

(c) That it is ill advised to spend public funds for the installation of these barriers at this location where it is a question as to whether or not they can handle the traffic more safely.

(d) If they are constructed, they should not be required to contribute toward the expense of constructing the barriers, or their maintenance thereafter, alleging that the sole responsibility should rest with the applicant County.

(e) The plan of constructing a fender for the barriers in the center of the street will in itself present a hazard, and that it is the common practice in highway construction to avoid installing piers or any form of obstruction in the driveway.

(f) It would be impractical and hazardous for one man to attempt to operate these gates during times of peak travel on the highway and railroad, in that it would be most difficult for one man to lower the two gates safely through two and at times three lanes of traffic in each direction. Therefore, in their opinions, it would be necessary that each gate be operated independently during the major portion of the day when the traffic is heavy on both the rail and highway.

A thorough review of this record leads to the following conclusions:

1. The grade crossing involved herein is an important one and there appears to be need for improvement over the present method employed in protecting it.
2. The record shows that due to heavy structural costs and property damage expense, a grade separation at this location cannot reasonably be financed at this time.
3. Only by actual use will the measure of effectiveness of the proposed barriers be established; it therefore seems that the County's wish to finance a trial installation should be given serious consideration, particularly in the absence of any testimony supporting the conclusion that the barriers would present an unduly hazardous situation.
4. While the Commission has no desire to place itself in the position of sponsoring or advocating the installation of any patented device such as is proposed herein, it is,

nevertheless, our responsibility to pass upon all questions of grade crossing protection in this state. We are desirous of affording new types of grade crossing protective devices an opportunity for trial where it has been shown that such devices are worthy of trial. This is particularly true where responsible public officials come before the Commission and urge that a new form of protection should be afforded an opportunity to demonstrate its worth and such demonstration is to be financed by funds appropriated by the responsible governing body.

5. The Commission should grant the County of Los Angeles an opportunity to install the yielding barriers at the grade crossing involved herein with the definite understanding, however, that such installation is to be on a trial basis. If, after trial, the barriers prove to be unsatisfactory, they will be removed and replaced with some other form of protection of a type to be approved by the Commission.
6. The following features should be added to applicants' plan:
 - (a) Individual control towers for each of the two barriers should be provided and during the hours of heavy travel (between 6:00 a.m. and 10:00 p.m.) of each day, the barriers should be independently operated by an operator in each tower. Between the hours of 10:00 p.m. and 6:00 a.m. both barriers may be operated by one operator.
 - (b) Reflectorized traffic buttons should be installed along the center of the roadway for a distance of not less than 100 feet in advance of the fenders.

(c) Lowering of the barriers should be accompanied by the sounding of a bell or gong, the tone of which should be distinctive from the gong on the advance warning signs.

7. Until further order of this Commission, the installation, maintenance, and operation of these barriers should be on the following basis:

Installation Cost - The entire cost of installing the barriers should be borne by applicants.

Maintenance - The entire operation and maintenance shall be conducted and financed by the County of Los Angeles.

8. This matter should be held open for further consideration for a period of one year from the date of completion of the installation of the barriers. At that time the Commission should give further consideration to the question of the division of cost of maintenance and operation of these barriers, as well as to the permanency of the installation. During the period of trial operation, the existing wigwags should be disconnected and banners hooded, but not removed.

9. Applicants' prayer to the Commission is that it issue a certificate of public convenience and necessity for the installation of the barriers as proposed herein. This does not appear to be a matter in which a certificate is necessary.

O R D E R

Public hearing having been held on the above entitled proceeding, and the matter being under submission and now ready for decision,

IT IS HEREBY ORDERED that the County of Los Angeles is hereby authorized to install yielding highway barriers across Florence Avenue at the grade crossing with Pacific Electric Railway Company's tracks, Crossing No. 6L-5.23, subject to the following conditions:

I. Until further order of this Commission, the cost of installation, maintenance and operation of the barriers shall be on the following basis:

(a) Installation Cost: The entire cost of installing the barriers shall be borne by applicants.

(b) Maintenance: The entire operation and maintenance shall be conducted and financed by the County of Los Angeles.

II. The barriers shall be of a type substantially as shown on Exhibit "B" attached to the application but, in addition, the following features shall be added:

(a) Individual control towers for each of the two barriers shall be provided and during the hours of heavy travel (between 6:00 A.M. and 10:00 P.M. of each day), the barriers shall be independently operated by an operator in each tower. Between the hours of 10:00 P.M. and 6:00 A.M., both barriers may be operated by one operator.

- (b) Reflectorized traffic buttons shall be installed along the center of the roadway for a distance of not less than 100 feet in advance of the fenders.
- (c) The barriers shall be equipped with a bell or gong, the tone of which shall be distinctive from the gong on the advance warning sign.
- III. The barriers shall be in their lowered restrictive positions not less than fifteen seconds in advance of any train operated over the crossing.
- IV. The advance warning signs shall be installed not less than 300 feet in advance of the crossing and shall begin to function not less than five seconds prior to the lowering of the gates.
- V. The authority herein granted is for a trial period of one year from the date of the completion of the installation and at the expiration of that time the Commission will give further consideration to the question of the division of cost of the maintenance and operation of these barriers as well as to the permanency of the installation.
- VI. During the period of the trial operation, the existing wigwags at this location shall be disconnected and the banners hooded, but the wigwags shall not be removed.
- VII. Each control tower shall be completely equipped with flagging equipment and in cases of failure of the barriers, the operators shall take positions on the street where they shall act as human flagmen.
- VIII. Applicants shall file with the Commission a set of plans and specifications covering the proposed installation, prior to the time the actual construction is commenced.

- IX. A complete and detailed record of accidents and failures of these barriers shall be maintained by the County of Los Angeles and it shall file this information with the Commission on a monthly basis, not later than thirty (30) days after the month to which it applies.
- X. Within thirty (30) days after the completion of the installation as authorized herein, the Commission shall be so advised in writing.
- XI. The Commission reserves the right to make such further orders in this proceeding as to it may seem right and proper, and to revoke this order if, in its judgment, public convenience and necessity demand such action.
- XII. The authorization herein granted shall lapse and become void if not exercised within one year from the date hereof.

The effective date of this Order shall be twenty days from the date hereof.

The foregoing Opinion and Order are hereby approved and ordered filed as the Opinion and Order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 1st day of November, 1937.

Robert M. ...
Leon O'Connell
Frank P. ...
Raymond ...
Ray L. Rice
Commissioners.