

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Safety and Enforcement Division

RESOLUTION SX-12  
September 7, 1995

R E S O L U T I O N

RESOLUTION SX-12 PURSUANT TO SECTION 12.2 OF GENERAL ORDER 75-C AUTHORIZING LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY TO PROCEED WITH A SAFETY DEMONSTRATION PROJECT (THE TRIAL INSTALLATION OF A FOUR QUADRANT GATE SYSTEM) AT THE 124TH STREET JOINT GRADE CROSSING OF THE LONG BEACH BLUE LINE AND SOUTHERN PACIFIC TRANSPORTATION COMPANY'S WILMINGTON BRANCH LINE IN LOS ANGELES COUNTY.

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SUMMARY:

Los Angeles County Metropolitan Transportation Authority (MTA), by letter dated April 7, 1995, has requested authority pursuant to Section 12.2 of Commission General Order (GO) 75-C, to conduct a trial installation of an experimental four quadrant gate system, at the 124th Street joint grade crossing of the Long Beach Blue Line (LBBL)-Crossing 84L-10.1 and Southern Pacific Transportation Company (SPT) Wilmington Branch Line-Crossing BBH-492.33 in the unincorporated Willowbrook area, of Los Angeles County.

Modification of the standard two quadrant gate system configuration will be required by installing additional gates in the two remaining quadrants to preclude motorists from driving around the lowered gates. The installation of additional gates will provide a greater degree of crossing safety, as more fully explained and described by the report and plans attached to MTA's April 7, 1995 letter.

During a one year period prior to MTA's April 7, 1995 request, numerous meetings were held with engineering railroad consultants, members of MTA's Office of Safety Management, Railroad Public Projects employees, the Commission's Safety and Enforcement Division staff and Los Angeles County Public Works engineers, regarding the proposed four quadrant gate installation. All participating parties were in agreement that MTA should proceed with the demonstration of the full closure

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crossing gate system at 124th Street.

This resolution authorizes the requested modification for a two year trial period (a combination of preliminary site construction and concluding with actual gate operations), as requested by MTA, subject to the criteria explained in the body of this resolution.

DISCUSSION:

MTA states that over the mid-corridor segment of the Long Beach Blue Line (LBBL), Light Rail Transit (LRT) trains operate as frequently as every six minutes in both directions at speeds of up to 55 miles per hour. As of December 1994, there have been numerous accidents and fatalities, generally caused by motorists colliding with trains, after driving around lowered gates, disregarding flashing lights and ringing bell warnings.

SPT also operates 18 freight trains each day at 25 miles per hour on the adjacent Wilmington Branch Line across 124th Street.

MTA further states the use of a four quadrant gate system offers an approach for eliminating or reducing grade crossing accidents without incurring the high cost and impact of constructing a grade separation bridge-like structure.

MTA will incorporate among other things, the following protective equipment and safety measures:

1. Exit Gates: Two additional Standard No. 9 automatic gate-type signals (GO-75-C) will be installed at the exit lanes, as more fully described in the MTA report.
2. Delay Factor-Exit Gates: The exit gates will be lowered on an adjustable basis from 7 to 11 seconds after the entrance gates have started their downward descent, as more fully described in the MTA report.
3. Highway Vehicle Detection System: The exit gates will not descend if a motor vehicle is detected in the track area, as more fully described in the MTA report.
4. Exit Gates to fail-safe in up position: The exit gates will be counter balanced so that, if they fail, they will fail in an upward position, as more fully described in the MTA report.

Upon review of factual material submitted by MTA, as well as an on-site inspection of the 124th Street grade crossing by the various participating parties, the Safety and Enforcement Division Staff is in agreement with MTA's proposal to proceed with the trial installation of an experimental four quadrant gate system for a period of two years, with the final year being the actual system operation, as indicated by Table 4 of the MTA report.

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PROTESTS:

There are no protests at this time. All agencies contacted by staff expressed support for the proposal.

FINDINGS:

1. MTA requests approval to proceed with the trial installation of an experimental four quadrant gate system for a period of two years as more fully described by Table 4 of the MTA Report at the 124th Street grade crossing of the Los Angeles to Long Beach Blue Line, and of the adjacent Southern Pacific Wilmington Branch, in Los Angeles County.

2. MTA has designed the two exit gates of the four quadrant gate system to fail in the up position, to reduce the possibility of trapping a motor vehicle in the crossing, in the event of an electronic malfunction.

3. MTA will operate the four quadrant gate system for a two year trial period, after which, a report will be prepared outlining the results thereof.

4. Staff has reviewed MTA's proposal and finds that request has merit and should be granted.

THEREFORE, IT IS ORDERED THAT:

Los Angeles County Metropolitan Transportation Authority (MTA) be granted interim authority, for a 24 month period from the effective date of this Resolution, to proceed with trial installation of an experimental four quadrant gate system at the 124th Street grade crossing of the Los Angeles to Long Beach Blue Line, and of the adjacent Southern Pacific Transportation Company Wilmington Branch Line.

The following requirements shall apply to the 124th Street four quadrant gate trial installation:

1. The entry gates' fail-safe features shall be designed to fail in the down position.

2. The exit gates' fail-safe features shall be designed to fail in the up position.

3. MTA shall notify the County of Los Angeles, the Southern Pacific Transportation Company, and the Commission's Safety and Enforcement Traffic Engineering Staff when the proposed 124th Street crossing modifications will be in operation.

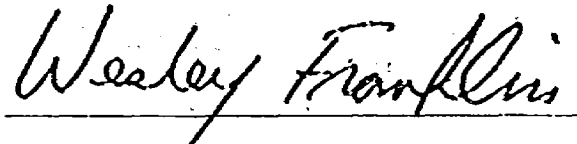
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4. MTA shall prepare a Preliminary Trial Installation Report within 90 days after the first six months of actual trial operation.

5. MTA shall prepare the Four Quadrant Gate Trial Installation Results Report within 90 days of the conclusion of the actual 12 month operational trial period, as more fully indicated on Table 4 of the MTA Report.

This resolution is effective today.

I hereby certify that this resolution was adopted by the Public Utilities Commission at its regular conference on September 7, 1995. The following Commissioners approved it.



WESLEY M. FRANKLIN  
Acting Executive Director

DANIEL Wm. FESSLER  
President  
P. GREGORY CONLON  
JESSIE J. KNIGHT, JR.  
HENRY M. DUQUE  
Commissioners