

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Consumer Protection and Safety Division
Rail Transit and Crossings Branch
Rail Crossings Engineering Section

RESOLUTION SX-98
Date: July 28, 2011

RESOLUTION

RESOLUTION SX-98 PURSUANT TO SECTION 13.1 OF GENERAL ORDER 75-D AUTHORIZING LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (METRO) TO DEVIATE FROM THE PROVISIONS OF SECTION 9.5 OF GENERAL ORDER 75-D BY MODIFYING THE DURATION OF THE AUDIBLE COMPONENT OF THE GRADE CROSSING WARNING DEVICES AT THE ARLINGTON BOULEVARD, 7TH STREET, 11TH/DEGAN BOULEVARD, BUCKINGHAM ROAD, AND HAUSER BOULEVARD GRADE CROSSINGS OF THE EXPOSITION CORRIDOR LIGHT RAIL LINE IN THE CITY OF LOS ANGELES, LOS ANGELES COUNTY.

SUMMARY

The Exposition Metro Line Construction Authority (Expo Authority) on behalf of the Los Angeles County Metropolitan Transportation Authority (Metro), by letters dated May 18, 2010 and, November 16, 2010, has requested authority pursuant to Section 13.1 of Commission General Order (GO) 75-D, to modify the operation of the automatic highway-rail grade crossing warning device bells at six crossings along its Metro Exposition Line (Expo Line) light rail transit project phase 1 alignment. The Expo Authority requests authorization to adjust the warning device systems to silence the crossing warning device bells after the gate arms reach a horizontal position. The crossing device warning lights will continue to function throughout the entire warning operating cycle, however the bells would

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silence once the gates are fully deployed and in the horizontal position. Expo Authority is requesting an exemption at the following highway-rail crossings:

1. Arlington Boulevard
2. 7th Street
3. 11th/Degan Boulevard
4. Buckingham Road
5. Farmdale Avenue
6. Hauser Boulevard

BACKGROUND

Phase 1 of the Expo Line is an 8.74 mile light rail line extension that runs from downtown Los Angeles to Culver City. The line will subsequently be extended to Santa Monica during Phase 2 of the extension project. Phase 1 of the Expo Line has been approved by the Commission and will consist of forty grade crossings. Thirteen of the crossings are grade-separated crossings, while the remaining 27 are at-grade motor vehicle or pedestrian crossings.

Of the 27 at-grade crossings, six of these motor vehicle and pedestrian crossings are along the Metro's exclusive right-of-way alignment and are equipped with standard highway-rail crossing warning devices that include flashing light signals, four-quadrant gates and bells. The remaining at-grade crossings are along the street-running alignment and are controlled by traffic signals, dedicated train signals, and active "TRAIN" LED warning signs. Since light rail vehicles, motor vehicles, bicycles and pedestrians are controlled by traffic signal systems along the street-running portion of the system, crossing bells are neither required nor necessary.

Expo Authority is requesting the exemption at each of the six motor vehicle and pedestrian crossings along the exclusive right-of-way alignment to mitigate the noise to adjacent residential neighborhoods. Residential dwellings are located in close proximity of several of the two-track grade crossings. Metro plans to operate Expo light rail vehicle (LRV) service 7 days a week, with LRVs ultimately operating on 10-minute headways during peak periods. Metro service currently begins at 4:00 AM and ends at 2:00 AM daily with extended hours on weekends.

DISCUSSION

Section 9.5 of Commission General Order 75-D states:

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“Audible Warning Devices. Bells or other audible warning devices shall be included in all automatic warning device assemblies (except as provided in Section 10) and shall be operated in conjunction with the flashing light signals. See American Railway Engineering and maintenance of Way Associations *Communications and Signals Manual of Recommended Practice* for reference.”

The modification of the automatic crossing warning devices would allow for the bells to sound when triggered by the approaching LRV, while the gate arm is moving from the vertical to the horizontal position. The bells would then stop sounding once the gate arm reaches the down (horizontal) position. At this point, the absence of an audible alert from the crossing warning devices will be mitigated by the sounding of the LRV’s onboard “quacker” device in accordance with Commission regulations in General Order 143-B sections 3.04 and 7.09 and Metro’s established rules and procedures.

Expo Authority’s request for this exemption is in accordance with guidelines found in industry standards promulgated by the Federal Highway Administration (FHWA) and the American Railway Engineering and Maintenance of Way Association (AREMA), and therefore consistent with the provisions of Section 9.5 of GO 75-D referencing that standard.

FHWA’s Railroad-Highway Grade Crossing Handbook: Chapter IV(C) (3), page 114, states in part “When gates are used, the bell may be silenced when the gate arms descend to within 10 degrees of the horizontal position. Silencing the bell when the train reaches the crossing or when the gates are down may be desired to accommodate residents of suburban areas.”

Part 3.1.15(E)(8) of the AREMA Communications and Signals Manual of Recommended Practices states: “Bell, when used, shall sound a warning from the time the flashing light signals start to operate at least until the gate arm(s) have descended to within 10 degrees of the horizontal position.”

Metro has received deviations from this Commission requirement in the past for a number of their Gold Line crossings. Expo Authority and Metro believe that the exemption sought at the six crossings, for silencing the bells while the gates are in the horizontal positions, is a practical and reasonable approach for mitigating noise in the communities, and that safety will not be compromised if the exemption is granted.

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The Commission's Consumer Protection and Safety Division – Rail Crossings Engineering Section (RCES) has visited the crossing locations, reviewed and analyzed Expo Authority's request. RCES Recommends that the requested deviation from the requirements of GO 75-D be granted in part and denied in part.

RCES recommends that the Farmdale Avenue crossing be excluded from the Expo Authority's request under Section 13.1 of Commission General Order (GO) 75-D. The Farmdale Avenue crossing was the subject of a Commission proceeding in which the design and safety of the crossing were thoroughly investigated. Due to the crossing's proximity to Dorsey High School, and the Commission's Decision (D.) 10-07-026 in Application (A.) 07-05-013 that approved the at-grade crossing design for Farmdale Avenue inclusive of the crossing bells, RCES believes that the audible warning provided by the continuous sounding of the warning device bells should remain for the Farmdale Avenue crossing.

RCES further recommends that the Expo Authority's request be granted for the remaining five crossings:

1. Arlington Boulevard
2. 7th Street
3. 11th/Degan Boulevard
4. Buckingham Road
5. Hauser Boulevard

NOTICE

On June 20, 2011 the Expo Authority request was published in the Commission's Daily Calendar.

COMMENTS

The draft Resolution of the Consumer Protection and Safety Division in this matter was mailed in accordance with Section 311 of the public Utilities Code and Rule 14.2 (c) of the Commission's Rules of Practice and Procedure. No comments were received.

FINDINGS

1. Expo Authority requests authority for a deviation from the requirements of Commission General Order 75-D Section 9.5 to silence the crossing warning device bells after the gate arms reach a horizontal position, at the six crossings

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of the Metro Exposition Line light rail extension at Arlington Boulevard (CPUC No. 084S-103.40), 7th Street (CPUC No. 084S-103.80), 11th/Degan Boulevard (CPUC No. 084S-104.10), Buckingham Road (CPUC No. 084S-104.70), Farmdale Avenue (084S-105.00), and Hauser Boulevard (CPUC No. 084S-106.10) in the City of Los Angeles, Los Angeles County.

2. Commission staff has reviewed Expo Authority's proposal and finds that the request is a practical and reasonable approach for mitigating noise in the communities and, that safety will not be compromised at the five crossings of Arlington Boulevard (CPUC No. 084S-103.40), 7th Street (CPUC No. 084S-103.80), 11th/Degan Boulevard (CPUC No. 084S-104.10), Buckingham Road (CPUC No. 084S-104.70), and Hauser Boulevard (CPUC No. 084S-106.10) in the City of Los Angeles, Los Angeles County.
3. The Farmdale Avenue (084S-105.00) crossing is adjacent to Dorsey High School and substantial pedestrian activity is expected at this crossing location.
4. The design and safety of the Farmdale Avenue crossing was addressed by Commission proceeding A. 07-05-013 and D. 10-07-026, and therefore Staff recommends omitting it from Expo Authority's request.
5. Staff recommends that this resolution be adopted.

THEREFORE, IT IS ORDERED THAT:

Exposition Metro Line Construction Authority (Expo Authority) on behalf of the Los Angeles County Metropolitan Transportation Authority (Metro) be granted authority to modify the crossing warning device bells to sound, once activated, until the gate arms reach the down (horizontal) position at the five crossings of Arlington Boulevard (CPUC No. 084S-103.40), 7th Street (CPUC No. 084S-103.80), 11th/Degan Boulevard (CPUC No. 084S-104.10), Buckingham Road (CPUC No. 084S-104.70), and Hauser Boulevard (CPUC No. 084S-106.10) in the City of Los Angeles, Los Angeles County.

Expo Authority is not authorized to modify the crossing warning device bells at the crossing of Farmdale Avenue (084S-105.00), and shall ensure that the warning device bells sound continuously throughout the warning device activation cycle.

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The following requirements shall apply to the modification of the automatic crossing warning devices at Arlington Boulevard, 7th Street, 11th/Degan Boulevard, Buckingham Road, and Hauser Boulevard:

1. The automatic crossing warning devices shall continue to operate for a minimum of 20 seconds prior to the LRV reaching the crossing, and gate arms must be in the fully down (horizontal) position prior to the LRV's arrival at the crossing.
2. The warning device bells shall continue to sound until the gate arms reach a horizontal position.
3. Expo Authority shall notify the City of Los Angeles and the Commission's Rail Crossings Engineering Section Staff when the modifications to the Arlington Boulevard, 7th Street, 11th/Degan Boulevard, Buckingham Road, and Hauser Boulevard automatic grade crossing warning devices are completed and pre-revenue testing of the warning systems are scheduled.

This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted by the Commission at its regularly scheduled meeting on July 28, 2011. The following Commissioners voted favorably thereon:

MICHAEL R. PEEVEY

President

TIMOTHY ALAN SIMON

MICHEL PETER FLORIO

CATHERINE J.K. SANDOVAL

MARK FERRON

Commissioners

/s/

PAUL CLANON

Executive Director