

PROPOSED RESOLUTION

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

RAIL SAFETY DIVISION
RAIL CROSSINGS AND ENGINEERING BRANCH

Resolution SX-133
March 12, 2020

RESOLUTION

RESOLUTION SX-133 GRANTING AUTHORITY TO LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY, TO DEVIATE FROM THE PROVISIONS OF SECTION 9.5 OF COMMISSION GENERAL ORDER 75-D BY MODIFYING THE AUDIBLE COMPONENT OF THE GRADE CROSSING WARNING DEVICES AT SIX AT-GRADE HIGHWAY-RAIL CROSSINGS OF THE CRENSHAW/LAX TRANSIT CORRIDOR PROJECT IN THE CITIES OF LOS ANGELES AND INGLEWOOD, LOS ANGELES COUNTY.

SUMMARY

By letter dated May 20, 2019, received on June 5, 2019, and pursuant to Section 13.1 of California Public Utilities Commission General Order 75-D, the Los Angeles County Metropolitan Transportation Authority (Metro), requests authority to deviate from Section 9.5 of California Public Utilities Commission General Order 75-D, which requires the railroad crossing warning device system to sound the bells during operation. Metro proposes to shorten the bells sounding duration by silencing them when the warning device gate arms are in the horizontal position at six at-grade highway-rail crossings, along the Crenshaw/LAX Transit Corridor Project.

The crossing device warning lights will continue to function throughout the entire warning operating cycle; however, the bells will silence once the gates are fully deployed and in the horizontal position.

BACKGROUND

The Crenshaw/LAX Transit Corridor Project (Crenshaw/LAX Project) extends approximately 8.5 miles from the Crenshaw Boulevard and Exposition Boulevard transfer point with the Exposition Line, south to the Green Line transfer point at Imperial Highway and Aviation Boulevard. The Crenshaw/LAX Project consists of 33 crossings. Thirteen of the crossings are grade-separated including one private pedestrian underpass. The remaining 20 crossings are at-grade and include three in-station pedestrian crossings. Of the 20 at-grade crossings, 13 are located on semi-exclusive right-of-way and are equipped with standard highway-rail crossing warning devices that include flashing light signals, entrance and exit vehicular gates, pedestrian gates, swing gates, fencing to channelize pedestrians, and bells. The remaining seven at-grade crossings are located along a street-running alignment on Crenshaw Boulevard in City of Los Angeles, and are controlled by traffic signals, dedicated train signals, and active "TRAIN" light emitting diode warning signs.

Metro requests the exemption at six at-grade highway-rail crossings along the semi-exclusive right-of-way alignment to mitigate the noise to adjacent residential neighborhoods. Single and multi-family residential areas are in proximity of the six crossings. Metro plans to operate light rail vehicle (LRV) service seven days a week, with LRVs ultimately operating on 5-minute headways during peak periods. Metro service on existing lines begins at 0400 and ends at 0200 daily with extended hours on weekends. The six subject crossings are identified in the table below.

CPUC Crossing Number	Street Name	City
84A-5.01	Brynhurst Avenue	Los Angeles
84A-4.92	West Boulevard	Inglewood/Los Angeles
84A-4.12	Centinela Avenue	Inglewood
84A-3.43	Ivy Avenue	Inglewood
84A-3.30	Eucalyptus Avenue	Inglewood
84A-2.88	Oak Street	Inglewood

DISCUSSION

Community concerns regarding noise from the sounding of bells and other audible warning devices at grade crossings are a continuous issue. The issue has been previously addressed by the California Public Utilities Commission (Commission) and several light rail transit agencies. The development and expansion of light rail transit systems has increased these concerns and the Commission's Rail Safety Division (RSD) Rail Crossings and Engineering Branch (RCEB) is working with California's light rail transit agencies to address the concerns without degrading safety at grade crossings.

Section 9.5 of Commission General Order (GO) 75-D states:

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 Association's Communications and Signals Manual of Recommended Practice for reference.

The modification of the automatic crossing warning devices will allow 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 will stop sounding once the gate arm reaches the 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 audible warning in accordance with GO 143-B Sections 3.04 and 7.09 and Metro's established standard operating procedures.

Metro'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, Revised Second Edition (2007): Chapter IV(I) (9), page 110, 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)(10) of the AREMA Communications and Signals Manual of Recommended Practices states:

Pedestrian bell or other audible warning device shall sound for the duration of the warning system activation, except when gates are being raised, unless otherwise determined by the Diagnostic Team or ordered by a public agency.

On August 18, 2016, Commission's RCEB and Rail Transit Safety Branch (RTSB) inspected the six crossings on the Crenshaw/LAX project for which Metro requests a gate down bell variance exemption from GO 75-D.

The Commission has granted Metro deviations from this requirement in the past for several of its Gold Line and Expo Line crossings. Metro believes that the exemption sought at the crossings, for silencing the bells when the gates reach the horizontal position, is a practical and reasonable approach for mitigating noise in the communities it serves, and that safety will not be compromised if the exemption is granted.

RCEB has reviewed and analyzed Metro's request. RCEB recommends that the requested exemption from the requirements of GO 75-D, Section 9.5 be granted. RCEB will coordinate with Metro and witness testing of the modified audible warning systems.

NOTICE

On February 4, 2020, this Resolution was published on the Commission's Daily Calendar.

COMMENTS

The Draft Resolution of the RSD was mailed to all parties in accordance with California Public Utilities Code Section 311(g).

_____ comments were received.

FINDINGS

1. Metro requests authority for a deviation from the requirements of Commission GO 75-D Section 9.5 to silence the crossing warning device bells, after the gate arms reach the horizontal position, at six Crenshaw/LAX Project crossings in the Cities of Inglewood and Los Angeles, Los Angeles County.
2. Metro's request for this exemption is in accordance with guidelines found in industry standards promulgated by AREMA and therefore consistent with the provisions of Section 9.5 of Commission GO 75-D referencing that standard.
3. On August 18, 2016, Commission's RCEB and RTSB inspected the six crossings on the Crenshaw/LAX project for which Metro requests a gate down bell variance exemption from Commission GO 75-D.
4. Commission staff has reviewed Metro's proposal and finds that the request is a practical and reasonable approach for mitigating noise in the community and safety will not be compromised.
5. Commission staff will coordinate with Metro to witness testing of the modified audible warning system.
6. Commission staff recommends that this resolution be adopted.

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THEREFORE, IT IS ORDERED THAT:

1. Los Angeles County Metropolitan Transportation Authority is granted authority to deviate from Section 9.5 of California Public Utilities Commission General Order 75-D, by shortening the bell sound duration on its warning devices, by silencing the bells when the gate arms reach the horizontal position, at the six at-grade highway-light rail crossings of Brynhurst Avenue (CPUC No. 084A-5.01), West Boulevard (CPUC No. 084A-4.92), Centinela Avenue (CPUC No. 084A-4.12), Ivy Avenue (CPUC No. 084A-3.43), Eucalyptus Avenue (CPUC No. 084A-3.30) and Oak Street (CPUC No. 084A-2.88) in the Cities of Inglewood and Los Angeles, Los Angeles County.
2. The following requirements shall apply to the modification of the crossing warning devices at Brynhurst Avenue, West Boulevard, Centinela Avenue, Ivy Avenue, Eucalyptus Avenue and Oak Street:
 - a) The automatic crossing warning devices shall continue to operate for a minimum of 20 seconds prior to the light rail vehicle reaching the crossing, and gate arms must be in the fully down (horizontal) position prior to the light rail vehicle arrival at the crossing.
 - b) The crossing warning device bells shall continue to sound until the gate arms reach the horizontal position.
 - c) Los Angeles County Metropolitan Transportation Authority shall notify the Cities of Inglewood and Los Angeles, and the California Public Utilities Commission's Rail Crossings and Engineering Branch when the modifications to the crossing warning devices are completed.
 - d) Los Angeles County Metropolitan Transportation Authority shall coordinate with Rail Crossings and Engineering Branch for the testing of the audible warning devices. Rail Crossings and Engineering Branch shall witness testing and compliance with applicable California Public Utilities Commission requirements and this Order.

- e) The California Public Utilities Commission's Rail Safety Division is delegated the power to rescind the authority granted by this resolution under the following conditions:
 - i. If Los Angeles County Metropolitan Transportation Authority modifies the number, type, and functionality of the standard warning devices at the crossings without prior California Public Utilities Commission approval.
 - ii. If the light rail vehicle operators do not sound an audible warning device when approaching the crossing, as required by California Public Utilities Commission General Order 143-B Section 7.09.
 - iii. The California Public Utilities Commission's Rail Safety Division is authorized to temporarily suspend the authority granted by this resolution subsequent to any collision, or near collision, while the California Public Utilities Commission's Rail Safety Division is investigating whether a causal link exists, pending the findings of that investigation, if the California Public Utilities Commission's Rail Safety Division suspects that light rail vehicle involved collisions, or near collisions, at the crossing may have been caused by any of the authority granted by this resolution.
 - iv. If the California Public Utilities Commission's Rail Safety Division determines that light rail vehicles involved in collisions, or near collisions, at the crossing have been caused by any of the authority granted by this resolution, the California Public Utilities Commission's Rail Safety Division Director is authorized to suspend the authority granted by this resolution.

3. This resolution is effective today.

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I certify that this resolution was adopted by the Public Utilities Commission at its regular meeting held on March 12, 2020. The following Commissioners voting favorably thereon:

ALICE STEBBINS
Executive Director