

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Consumer Protection and Safety Division  
Rail Transit and Crossing Branch  
Rail Transit Safety Section

Resolution ST-107  
November 20, 2009

**RESOLUTION**

RESOLUTION ST-107 GRANTING LOS ANGELES COUNTY  
METROPOLITAN TRANSPORTATION AUTHORITY VARIANCE  
FROM GENERAL ORDER 143-B, SECTION 9.06 c (2) CLEARANCES

**SUMMARY**

This resolution grants Los Angeles County Metropolitan Transportation Authority's (LACMTA) request for a variance to General Order (GO) 143-B, Section No. 9.06 c (2) Side Clearance requirements along the Metro Gold Line Eastside Extension (MGLEE) alignment between Lorena Street and Indiana Avenue for the installation of a fence to prevent pedestrians illegally crossing the MGLEE right-of-way.

**PROJECT DESCRIPTION**

LACMTA rail operations consist of the LACMTA Red, Blue, Green, and Gold Lines. The LACMTA rail system carries an average of 310,000 passengers per day.

LACMTA's Eastside Extension is an extension of the existing LACMTA Pasadena Gold Line. The new six-mile extension has eight new stations. It will connect the East Los Angeles to Downtown LA, Pasadena, San Fernando Valley, South Bay, Long Beach and dozens of points in between.

**BACKGROUND**

By a letter dated September 14, 2009, LACMTA requested a variance to GO 143-B, Section 9.06 c (2) to install a four- (4) foot high fence along the center of the right-of-way on the MGLEE alignment, from Lorena Street to Indiana Avenue, to prevent pedestrians illegally crossing the right-of-way. The letter requests a variance from the minimum eighteen- (18) inch side clearance requirements for the installation of this new fence.

GO 143-B, Safety Rules and Regulations Governing Light Rail Transit, Section 9.06 states:

CLEARANCES. c. The minimum side clearance to obstructions higher than eight (8) inches above top-of-rail and the clearances between LRVs and streetcars located on parallel tracks used exclusively for light rail transit operations shall be governed by the following requirements:

(2) at locations and in areas where passengers, employees, and other persons are normally prohibited while trains are in motion, the minimum clearance shall be eighteen (18) inches. Fixed wayside structures less than five (5) feet in length (e.g. catenary and signal poles, switching equipment) shall be excluded from this requirement provided approved measures are taken to give warning of restricted clearances...

LACMTA's request letter, dated September 14, 2009, specified that LACMTA has deployed Safety Ambassadors at various grade crossings to educate and inform pedestrians and motorists about safe behavior. The Safety Ambassadors also gathered information as it relates to unsafe behaviors of pedestrians and motorists. However, despite LACMTA's best efforts to educate and inform the public, the Safety Ambassadors observed many pedestrians jaywalking across the right-of-way between Lorena Street and Indiana Avenue.

LACMTA's studies and analysis of the proposed four-foot high pedestrian fence between the northbound and southbound trains are as follows:

1. The pedestrian fence and fence signs will mitigate and deter jaywalkers.
2. If an imaginary line is projected from the top of the proposed four-foot pedestrian fence to six foot seven inches, the standard headroom clearance, the required eighteen inch side clearance is only compromised by one inch.
3. An independent panel of experts from a June/July 2009 peer review affirmed LACMTA's proposal of the pedestrian fence.

### **DISCUSSION**

To maintain a safe operating system, LACMTA is proposing to install a new four-foot high fence to prevent pedestrians illegally crossing on the MGLER alignment from Lorena Street to Indiana Avenue. The proposed fence will intrude within the eighteen- (18) inch side clearance required by GO 143-B, Section 9.06 c (2).

The Rail Transit and Crossing Branch (RTCB) staff evaluated this variance request from the vantage point of its impact on public safety. Based on the available anthropometric data, the available clearance area should allow the vast majority of the general public, in an emergency, to lean on the fence while trains are moving.

According to anthropometrical data available to staff,<sup>1</sup> the eighteen inch clearance available between the fence and the train dynamic envelope on MGLER between Lorena Street and Indiana Avenue meets the necessary side clearance for a 97.5 percentile American male to assume a stand-up position within the clearance area. The 97.5 percentile American male is the accepted standard, in the United States, for architectural design consideration to accommodate large persons.

In addition, to further warn the public and LACMTA's personnel, LACMTA will post standard signage warning everyone that the area is of reduced clearance and prohibiting trespassing. Warning signs will be posted at intervals of approximately every one hundred feet (100').

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<sup>1</sup> Niels Diffrient, Alvin R. Tilley, Joan Bardagjy, Human Scale 4/5/6, MIT Press, 1981.

Staff has reviewed LACMTA's request and believes that granting the variance will not have an adverse effect on system safety.

### **NOTICE**

On October 20, 2009, LACMTA's exemption request was published on the Commission's Daily Calendar.

### **COMMENTS**

This is an uncontested matter in which the resolution grants the relief requested. Accordingly, pursuant to Section 311(g)(2) of the Public Utilities Code and Rule 14.6(c)(2) of the Commission's Rules and Practice and Procedure, the otherwise applicable 30-day period for public review and comment is waived.

### **FINDINGS**

1. By a letter dated September 14, 2009, LACMTA requested a permanent variance to the eighteen- (18) inch side clearance required by GO 143-B, Section 9.06 c (2) for the area between Lorena Street and Indiana Avenue.
2. LACMTA proposes to install a new four-foot high pedestrian fence along the centerline of the right-of-way between Lorena Street and Indiana Avenue in an attempt to provide safer operating system.
3. General Order 143-B, Section 9.06 (c) (2), requires providing a minimum eighteen- (18) inch clearance at locations and areas where passengers, employees, and other persons are normally prohibited while trains are in motion.
4. Clearance between the fence and train vehicle's dynamic envelope, at six-foot two inches high, is seventeen inches.
5. The proposed clearance area would provide horizontal space that is adequate for the general public to stand still while a train is moving.

6. LACMTA and RTCB staffs are in agreement that the proposed reduced fence to the vehicle's dynamic envelope clearance will not significantly impact public safety.

**THEREFORE, IT IS ORDERED THAT:**

1. Los Angeles County Metropolitan Transportation Authority's request, dated September 14, 2009, for a permanent variance to General Order 143-B, Section No. 9.06 c (2) Side Clearance requirements of eighteen inches for the area between Lorena Street and Indiana Avenue for the pedestrian fence to be reduced to seventeen inches track is granted.
2. This resolution is effective today.

I certify that this resolution was adopted by the Public Utilities Commission at its regular meeting held on November 20, 2009. The following Commissioners voting favorably thereon:

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PAUL CLANON  
Executive Director