

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

Rail Safety and Carriers Division  
Rail Engineering Safety Branch  
Rail Transit Safety Section

Resolution ST- 45  
Date: December 16, 1999

**RESOLUTION**

**RESOLUTION ST- 45. GRANTING THE SANTA CLARA VALLEY TRANSPORTATION AUTHORITY (VTA) A VARIANCE FROM G.O. 95, RULE 74.4-E, ALONG THE DEPRESSED AREA OF THE TASMAN WEST LINE FROM STATION 160+60 THROUGH STATION 184+40.**

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**Summary**

This resolution grants VTA a variance from the trolley contact conductor minimum height clearance requirement of G.O. 95, Rule 74.4-E, from station 160+60 through station 184+40 of the proposed Tasman West Light Rail Project.

**Background**

Commission General Order 95, Rule 74.4-E states that in an exclusive right-of-way and at a minimum clearance height of 14 feet, the maximum trolley contact conductor voltage allowed is 750 volts. The Tasman West Line from station 160+60 to station 184+40 is in a depressed section categorized as an exclusive right-of-way. The trolley contact conductor clearance height varies from 14 to 15 feet above top of rail, and the nominal voltage is 800 volts; 50 volts above the maximum permitted at this clearance height. VTA has requested a variance to operate light rail vehicles through this section at a nominal voltage 50 volts above the maximum normally permitted for trolley contact conductors at a clearance height of 14 feet. The height of the trolley contact conductor cannot be raised any higher because of a nearby airport runway.

**Discussion**

Commission staff measured the vertical clearance of the trolley contact conductor and confirmed that the clearance height between station 160+60 to station 184+40 varies from a minimum of 14 feet to a maximum of 15 feet.

This section of the Tasman West Line is adjacent to NASA property opposite runway 32R. Federal Aviation Administration (FAA) flight path height restrictions preclude raising the trolley contact conductor any higher than it is now.

**Findings**

The Rail Safety and Carriers Division and the Consumer Services Division recommend that the Commission approve the VTA request for a variance for the following reasons:

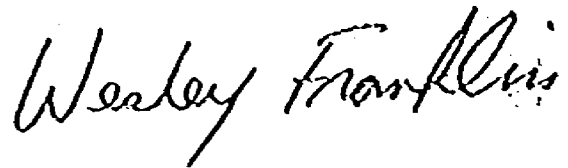
- FAA flight path height restrictions preclude raising the height of the trolley contact conductor any higher than it is now.
- The proposed increase in voltage from 750 to 800 volts occurs on an exclusive right-of-way where pedestrians and vehicles other than light rail vehicles cannot enter.
- No apparent additional safety hazards are introduced by the increase of 50 volts on the trolley contact conductors.

Accordingly, pursuant to PU Code Section 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived.

**THEREFORE, IT IS ORDERED that:**

The request for a variance from G.O. 95, Rule 74.4-E to allow VTA to operate light rail vehicles at a nominal voltage of 800 volts with a minimum trolley contact conductor clearance height of 14 feet from station 160+60 to station 184+40 on the Tasman West Line is granted.

I certify that this resolution was adopted by the Public Utilities Commission of the State of California at its regular meeting in San Francisco held on December 16, 1999. The following Commissioners voting favorably thereon:



Wesley M. Franklin  
Executive Director

Richard A. Bilas  
President  
Henry M. Duque  
Josiah L. Neeper  
Joel Z. Hyatt  
Carl W. Wood  
Commissioners