## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

EVALUATION AND COMPLIANCE DIVISION Service and Safety Branch

RESOLUTION E-3023 March 6, 1987

## RESOLUTION

ORDER AUTHORIZING SACRAMENTO REGIONAL TRANSIT TO DEVIATE FROM RULE 37 OF GENERAL ORDER NO. 95 RELATING TO GROUND CLEARANCE OF TROLLEY CONTACT WIRES

By letters dated September 24, 1986, October 23, 1986, and January 12, 1987, Sacramento Regional Transit (SRT) has requested authorization to deviate from the requirement of Rule 37 of General Order No. 95 which specifies that trolley contact conductors have a clearance of 19 feet when crossing thoroughfares.

The facts are as follows:

- 1. SRT has constructed a light rail system consisting of track in the Sacramento metropolitan region with numerous grade crossings with public streets. Its trains are powered by overhead trolley wires at nominally 750 volts DC.
- 2. SRT had constructed its line beneath a freeway bridge structure near its Roseville Road station where the bridge is 19'-7" above the rail.
- 3. The trolley contact wire is supported by a feeder messenger wire catenary and because of the distance between the two wires the clearance of the contact wire above the track under the bridge was 15'-0".
- 4. At this location there exists a one-way exit from the Roseville Road Transit Station parking lot. The roadway crosses the tracks under the contact wire and becomes the I-80 East freeway on-ramp.
- 5. General Order No. 95 requires a clearance of 19'-0" for the contact wire above the roadway.
- 6. Members of the Commission staff from the Transportation Division and Evaluation and Compliance Division evaluated the possibilities of attaining the maximum additional clearance of the contact wire above the roadway at the crossing.

- 7. SRT was asked to review methods of obtaining the maximum possible clearance. By reducing the distance between the messenger and the contact wire and attaching the messenger to the bridge structure at an estimated cost of \$12,900, SRT can obtain a clearance of 16'-8" for the contact wire. SRT requests a deviation to allow installation of the contact wire at 16'-8" clearance.
- 8. SRT also proposes to install a warning sign and archway with level top bar 30 feet ahead of the crossing warning roadway traffic of the low conductor. The sign and archway will be 13'-11" above the roadway. 5" above the maximum legal height of a highway truck. The archway will be a rigid 4" pipe fabricated structure and will act as a barrier to protect the trolley contact wire. A 5 MPH speed limit sign will also be installed.
- 9. SRT's request and its alternative proposals have been reviewed by the Commission staff. The 16'-8" clearance is as much as can reasonably be obtained. The staff believes it will provide safety to the general public and the safe operation of trains at this location, and recommends authorization of a deviation from the requirements of Rule 37 of General Order No. 95.
- 10. We find that SRT's proposal to install the contact wire with 16'8" clearance above the crossing and install the protective warning signs and height barrier with 13'-11" clearance 30 feet ahead of the crossing, is a reasonable and safe alternative to the 19'-0" clearance prescribed in General Order No. 95.

## THEREFORE:

- 1. Sacramento Regional Transit is authorized to deviate from Kule 37 of General Order No. 95 to install the trolley contact wire with 16'-8" clearance above the crossing of the one-way exit roadway to I-80 East from its Roseville Road Station parking lot.
- 2. As a condition for this deviation Sacramento Regional Transit will install and maintain the protective warning and speed limit signs and barrier archway 13'-11" above the roadway 30 feet ahead of the crossing. This Resolution is effective today.

I certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on March 6, 1987. The following Commissioners approved it:

STANLEY W. HULETT President DONALD VIAL FREDERICK R. DUDA G. MITCHELL WILK Commissioners.

Executive Director