

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SAFETY DIVISION
UTILITIES SAFETY BRANCH

RESOLUTION SU-14
Date August 11, 1992

RESOLUTION

DEVIATION FOR SACRAMENTO MUNICIPAL UTILITY DISTRICT
FROM GENERAL ORDER 95 RULE 59.3 B TO REDUCE
THE SIZE OF THE COMMON NEUTRAL CONDUCTOR

By letter of July 8, 1992, Sacramento Municipal Utility District (SMUD) requests a waiver of General Order (GO) 95, rule 59.3 B, to reduce the size of the common neutral conductor to 25% of the largest related primary phase conductor from the existing 50% of the largest related phase conductor size requirement.

SUMMARY

1. SMUD proposes to use a 25% of the largest related phase conductor size for the common neutral conductor size. The current size requirement for the common neutral conductor is 50% of the largest related phase conductor size. SMUD has immediate plans to install significant lengths of this common neutral in future expansions of their system.
2. Current plans for major modifications of GO 95 call for, among others, changing rule 59.3 B size from 50% to 25% of the size of the phase conductor. The modifications will be done by Commission resolution on or about November 1992. Allowing SMUD to adopt the 25% cross sectional-area size requirements now would not compromise safety or reliability.
3. The Utilities Safety Branch (USB) recommends that this deviation be granted.

BACKGROUND

1. By mutual agreement of the GO 95 Rules Committee, the standard for defining the size of conductors will be ampacity or current carrying capacity. The ampacity is related to the cross-sectional area. The GO 95 Rules Committee is comprised of representatives of every major electric and communications company and municipality under jurisdiction of GO 95 rules, as well as the USB.

2. The present requirement of the neutral conductor size, prescribed by rule 59.3 B of GO 95, is 50% ampacity of the largest related phase conductor. The proposed rule change to reduce the size requirement from 50% to 25% of the largest related phase conductor ampacity has been reviewed and unanimously approved by the GO 95 Rules Committee.
3. The rule 59.3 B change proposed does not compromise safety to persons or to electric system reliability. The USB will recommend that rule 59.3 B be changed in a future Commission resolution.
4. SMUD has immediate plans to use the 25% neutral conductor in their system expansion.
5. Anticipating the rule change in November 1992, the USB believes the best interests of safety and customer service would be served by allowing SMUD to use the 25% ampacity size common neutral conductor now.

FINDINGS

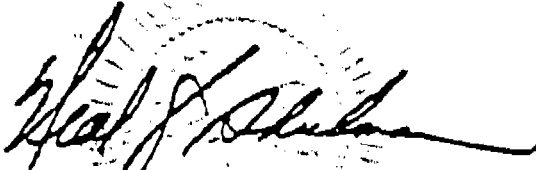
1. The deviation to GO 95 rule 59.3 B, allowing the reduction of the size of the common neutral conductor from 50% ampacity of the largest related phase conductor to 25% ampacity, requested by SMUD, would not compromise safety or system reliability.
2. The GO 95 Rules Committee and the USB have reviewed the change to rule 59.3 B and recommend it be accepted.
3. SMUD has immediate plans to use the 25% common neutral conductor size.
4. The rule change is scheduled to be adopted by Commission resolution in November, 1992. Allowing SMUD to adopt the change now would be in the best interest of safety and customer service.

THEREFORE, IT IS ORDERED THAT;

1. SMUD may deviate from General Order 95, rule 59.3 B, and use a common neutral conductor not less than 25% of the largest related phase conductor.
2. This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on August 11, 1992.
The following Commissioners approved it:

DANIEL Wm. FESSLER
President
PATRICIA M. ECKERT
NO. D. SHUMWAY
Commissioners


Executive Director

Commissioner John B. Ohanian,
being necessarily absent, did
not participate.