

Southern California Edison Company



P. O. BOX 800
2244 WALNUT GROVE AVENUE
ROSEMEAD, CALIFORNIA 91770

September 8, 1983

Director, Office of Nuclear Reactor Regulation
Attention: D. M. Crutchfield, Chief
Operating Reactors Branch No. 5
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206
SEP Topic III-2, Wind and Tornado Loadings
San Onofre Nuclear Generating Station
Unit 1

Reference: Letter, W. Paulson, NRC to R. Dietch, SCE, SEP Topic III-2,
Wind and Tornado Loadings, February 1, 1983

The referenced letter provided us with your evaluation of SEP Topic III-2, Wind and Tornado Loadings. Based upon our technical review of the evaluation the following comments are provided:

1. Page A-5: It is overly conservative to model the masonry block walls of the Reactor Auxiliary Building as cantilever walls. Since the top of the block wall was designed as a bond beam with two No. 7 rebars at top and bottom, and is laterally supported by the roof deck and steel beams, it is more realistic to assume that the block wall is simply-supported at the top and bottom. This will increase the capacity of the walls by a factor of 4.
2. Page A-6: The NRC indicated that the allowable stress for reinforcing steel can be increased to $0.9 F_y$ due to tornado loads. We feel that an allowable stress of F_y is more appropriate since this is allowed by the Standard Review Plan, Section 3.8.4.
3. Page A-6, A-7: In calculating the tornado dynamic pressure, the NRC (a) did not consider the size factor (C_s) which is based on the physical dimension of the structural member, and (b) uses a roof dead load which is less than the actual load.

The omission of the size factor and utilizing a lower roof dead load will result in the walls and the roof beams having a lower load carrying capacity.

8309140155 830908
PDR ADOCK 05000206
PDR

A035
1/0

September 8, 1983

4. Page C-10: We disagree with the conclusion that only the eave beam (12B19) resists the horizontal load. The eave beam is attached to the roof deck which serves as a horizontal shear diaphragm and it is therefore, the eave beam/roof diaphragm combination which resists the horizontal load.

It is requested that you revise the evaluation in accordance with the above discussed comments. We conclude that all of the structural elements identified in your evaluation will be capable of resisting the site-specific wind speed of 55 mph.

If you have any questions regarding the above discussed information, please let me know.

Very truly yours,



R. W. Krieger
Supervising Engineer
San Onofre Unit 1 Licensing