NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

B22702

DOCKET NUMBER 50-206/361/362

FILE NUMBER PSAR/FSAR AMDT DIST.

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO:	FROM:	DATE OF DOCUMENT
Mr. Karl Kniel	Southern California Edison Co. Rosemead, California K. P. Baskin	8/11/77
		DATE RECEIVED 8/12/77

☑ LETTER ☑ ORIGINAL ☐ COPY	☐ NOTORIZED ☑ UNCLASSIFIED	PROP	INPUT FORM	NUMBER OF COPIES RECEIVED 1 SIGNED

DESCRIPTION

(1-P)

ENCLOSURE

Consists of inadvertently omitted pages from previously submitted report (7/28/77) entitled "Final Report of the Onshore Tracer Tests Conducted December 1976 through March 1977 at the San Onofre Nuclear Generating Station".....

(7-P)

DO NOT REMOVE

ACKNOWLEDGED

63 encl.

PLANT NAME: San Onofre 1-2-3
RJL 8/12/77

FOR ACTION/INFORMATION

ASSIGNED AD: (LTR)	
BRANCH CHIEF: (2) w/ltr.	
~~PROJECT MANAGER:~~	
~~LICENSING ASST: (LTR)~~	
BURGER	

INTERNAL DISTRIBUTION

REG FILE		LAINAS	
NRC PDR		IPPOLITO	
I & E		F. ROSA	
OELD (LTR)		GAMMILL (2)	
P. COLLINS		VOLLMER (LTR)	
HOUSTON		BUNCH	
HELTEMES		J. COLLINS	
CASE (LTR)		KREGER	
MIPC (LTR)		[redacted]	
KNIGHT (LTR)		J. GOLL	
BOSNAK			
SIHWEIL			
PAWLICKI			
ROSS (LTR)			
NOVAK			
ROSZTOCZY			
CHECK			
TEDESCO (LTR)			
BENAROYA			

EXTERNAL DISTRIBUTION

LPDR:	
TIC	
NSIC	
ACRS 16 CYS SENT CATEGORY	

CONTROL NUMBER

MA 2

772240048

GD

Southern California Edison Company

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

K. P. BASKIN
MANAGER, GENERATION ENGINEERING

TELEPHONE
213-572-1401

August 11, 1977

Regulatory File Cy.

Director of Nuclear Reactor Regulation
ATTN: K. Kniel, Chief
Light Water Reactors Branch #2
Division of Project Management
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

Subject: Docket Nos. 50-206, 50-361 and 50-362
Onshore Tracer Test Program
San Onofre Nuclear Generating Station
Units 1, 2 and 3

By letter dated July 28, 1977, sixty-three (63) copies of the report entitled "Final Report of the Onshore Tracer Tests Conducted December 1976 through March 1977 at the San Onofre Nuclear Generating Station" were transmitted to you. Following submittal, it has come to our attention that pages 4-21, 4-22, 4-23, 4-24, 4-77, 4-78 and/or C-23 were inadvertently omitted from some copies of the final report. Sixty-three (63) copies of these pages are enclosed for incorporation, as necessary, in copies of the final report previously submitted to you.

In addition, we would like to call your attention to two errors in our July 28, 1977 submittal:

(1) The transmittal letter erroneously identified the date of the report as "June 1977" rather than "July 1977" which has been identified as the date of the report and

(2) The table numbering in Section 4.3 erroneously begins with Table 4.3-2.

We regret any inconvenience caused by the above identified errors. If you have any questions concerning this matter, please let me know.

Very truly yours,

K P Baskin

Enclosures
cc: Jack B. Moore

Albert Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors
U. S. Nuclear Regulatory Commission

772240048

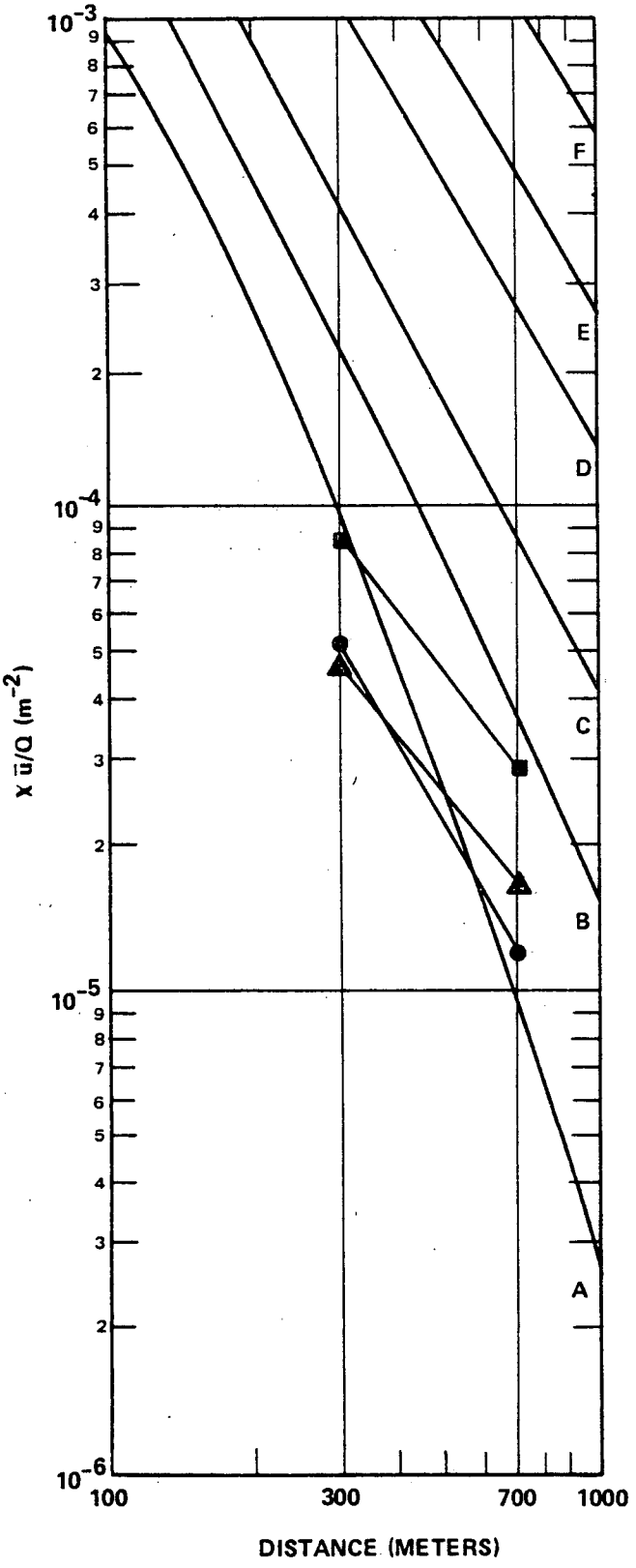

FIGURE 4.2-2

GEOMETRIC MEAN PEAK $\chi\bar{u}/Q$ VERSUS DOWNWIND DISTANCE BY STABILITY FOR BLUFF TOWER ΔT

The lines labeled with symbols (see key below for stability class represented) represent the means for the test data. This mean was determined for each stability class by using the individual values and assuming a nominal downwind distance of 300 or 700 m as appropriate. The individual values were based on observed tracer materials, the 10-m wind speed, and ΔT(40-10m) stability class. The standard Pasquill dispersion curves (no building wake included) are added for reference.

KEY

A – ■

C – ▲

D – ●

stability classified by σ_θ. The curves plotted in the background are for reference and represent at each distance the standard value of peak $\chi\bar{u}/Q$ using Pasquill dispersion parameters without a building-wake factor. Figures 4.2-4 and 4.2-5 show the same information for the Inland Tower.

The figures show that the peak $\chi\bar{u}/Q$ is not well ordered by stability classification. This is particularly so for the unstable categories and for data classified by ΔT measurements. There appears to be a better ordering of the observed mean concentration values and meteorological measurements when the data are classified by σ_θ, perhaps because of the broader range of stability classes when σ_θ is used as the classifier (see Table 4.1-5). However, as discussed in Section 4.0 in general the use of either σ_θ or ΔT results in conservative dispersion estimates.

It is noted that the peak $\chi\bar{u}/Q$ values, particularly for the neutral and slightly stable categories, are much lower than Pasquill dispersion parameters would predict. This is discussed further in the following sections.

As noted in Section 3 the dual tracers were used during the test program. For four of the successful tests the tracer was released at ground level from Unit 2 with simultaneous

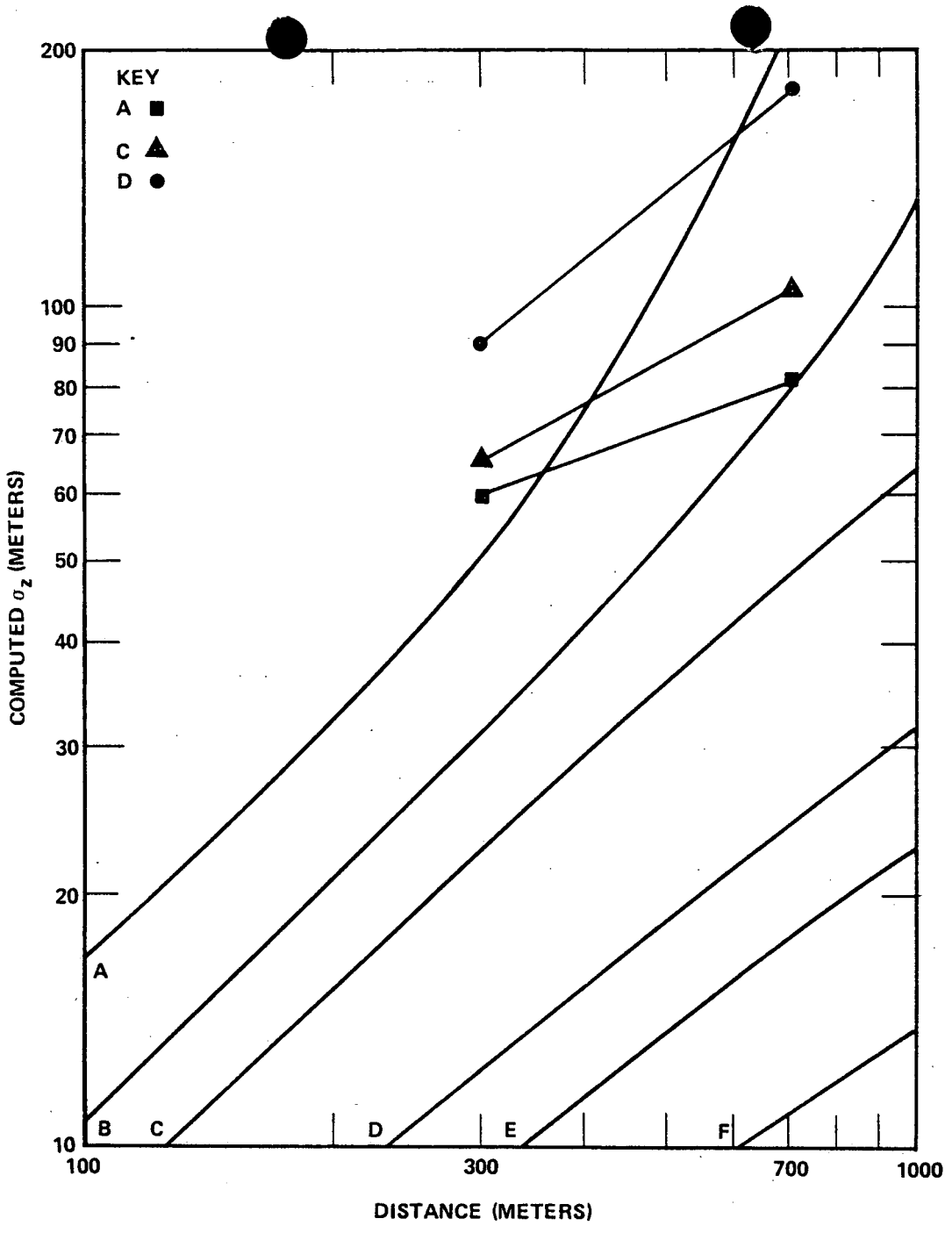

FIGURE 4.5-5

GEOMETRIC MEAN COMPUTED σz
VERSUS DISTANCE BY STABILITY
FOR BLUFF TOWER ΔT

The geometric mean of the computed σz is presented as a function of stability class (see key). The individual values were computed by using the observed peak and σy values and the 1-h average, 10-m level wind speed. Stability class was based on the 1-h average ΔT(40m-10m). The standard Pasquill dispersion parameter curves are included for reference.

APPENDIX C - REFERENCES

Sagendorf, J. F., May, 1974: A Program for Evaluating Atmospheric Dispersion From a Nuclear Power Station. NOAA Technical Memorandum ERL ARL-42, Air Resources Laboratories, Idaho Falls, Idaho.

Septoff, M. and L. Teuscher, April, 1976: Report of Tracer Tests Conducted at the San Onofre Nuclear Generating Station. NUS Corporation, Rockville, Maryland, NUS-1702 (Interim).

Southern California Edison Company, December 3, 1975: Amendment 52 to the Analysis, San Onofre Nuclear Generating Station, Unit 1. Docket No. 50-206.

Southern California Edison Company, November, 1976: Final Safety Analysis Report, San Onofre Nuclear Generating Station, Units 2 and 3, Volume 2. Docket Nos. 50-361 and 50-362.

United States Nuclear Regulatory Commission, April, 1977: Safety Evaluation in Support of Amendment 25 to Provisional Operation License No. DPR-13 for San Onofre Nuclear Generating Station. Docket No. 50-206.

Wilson, R. B., G. E. Start, C. R. Dickson and N. R. Ricks, August, 1976: Diffusion Under Low Wind Speed Conditions Near Oak Ridge, Tennessee. NOAA Technical Memorandum ERL ARL-61, Air Resources Laboratories, Idaho Falls, Idaho.