

B22702

50-206/361/362

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

PSAR/FSAR AMDT DIST.

TO:  
  
Mr. Karl Kniel

FROM:  
Southern California Edison Co.  
Rosemead, California  
K. P. Baskin

DATE OF DOCUMENT  
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)

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

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".....

**DO NOT REMOVE**

**ACKNOWLEDGED**

63 encl.

FOR ACTION/INFORMATION

ASSIGNED AD: (LTR)			
BRANCH CHIEF: (2) w/LTR.			
PROJECT MANAGER:			
LICENSING ASST: (LTR)			
<b>BURGER</b>			

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)	<del>XXXXX</del>		
KNIGHT (LTR)	J. GOLL		
BOSNAK			
SIHWEIL			
PAWLICKI			
ROSS (LTR)			
NOVAK			
ROSZTOCZY			
CHECK			
TEDESCO (LTR)			
BENAROYA			

EXTERNAL DISTRIBUTION

CONTROL NUMBER

LPDR:			
TIC			
NSIC			
ACRS 16 CYS SENT CATEGORY			

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

August 11, 1977

TELEPHONE  
213-572-1401

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,

*KP Baskin*

Enclosures

cc: Jack B. Moore

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

772240048

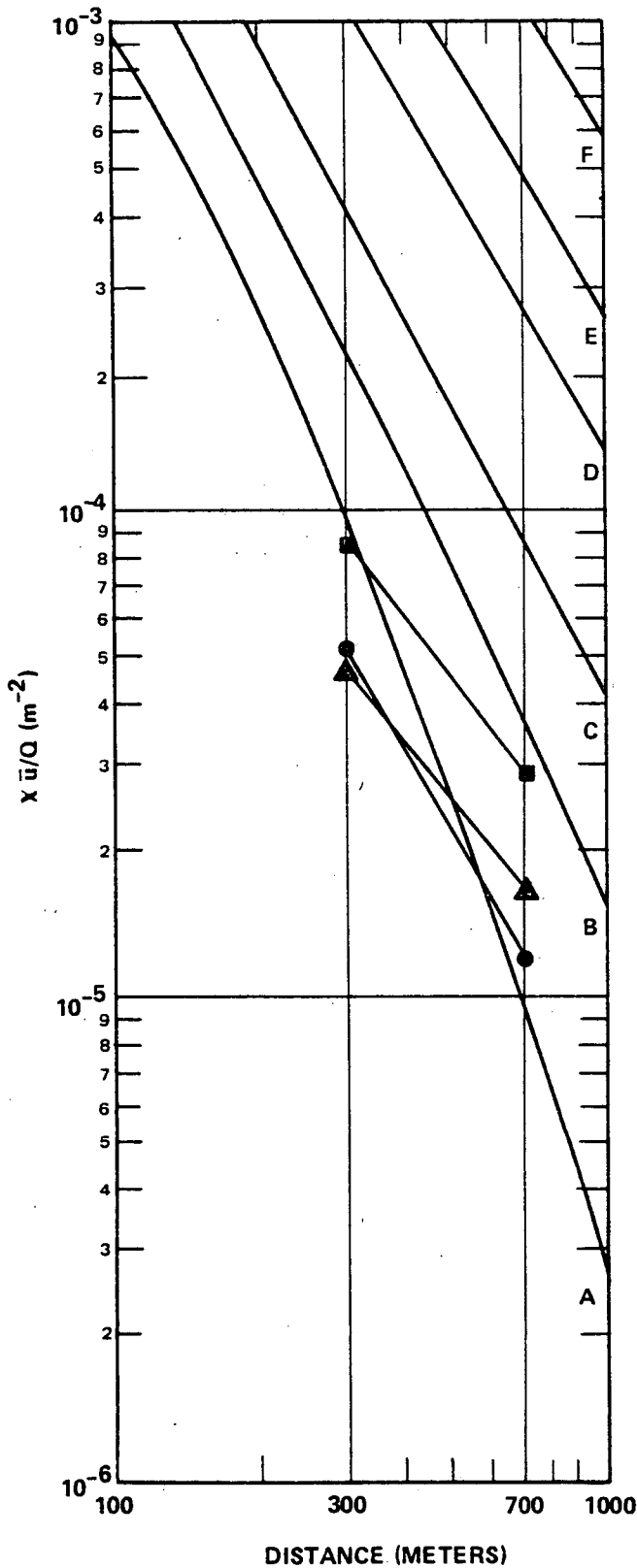


FIGURE 4.2-2

GEOMETRIC MEAN PEAK  $X \bar{u}/Q$  VERSUS  
DOWNWIND DISTANCE BY STABILITY  
FOR BLUFF TOWER  $\Delta T$

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  $\Delta T(40-10m)$  stability class. The standard Pasquill dispersion curves (no building wake included) are added for reference.

KEY  
A - ■  
C - ▲  
D - ●

stability classified by  $\sigma_\theta$ . 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  $\Delta T$  measurements. There appears to be a better ordering of the observed mean concentration values and meteorological measurements when the data are classified by  $\sigma_\theta$ , perhaps because of the broader range of stability classes when  $\sigma_\theta$  is used as the classifier (see Table 4.1-5). However, as discussed in Section 4.0 in general the use of either  $\sigma_\theta$  or  $\Delta T$  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

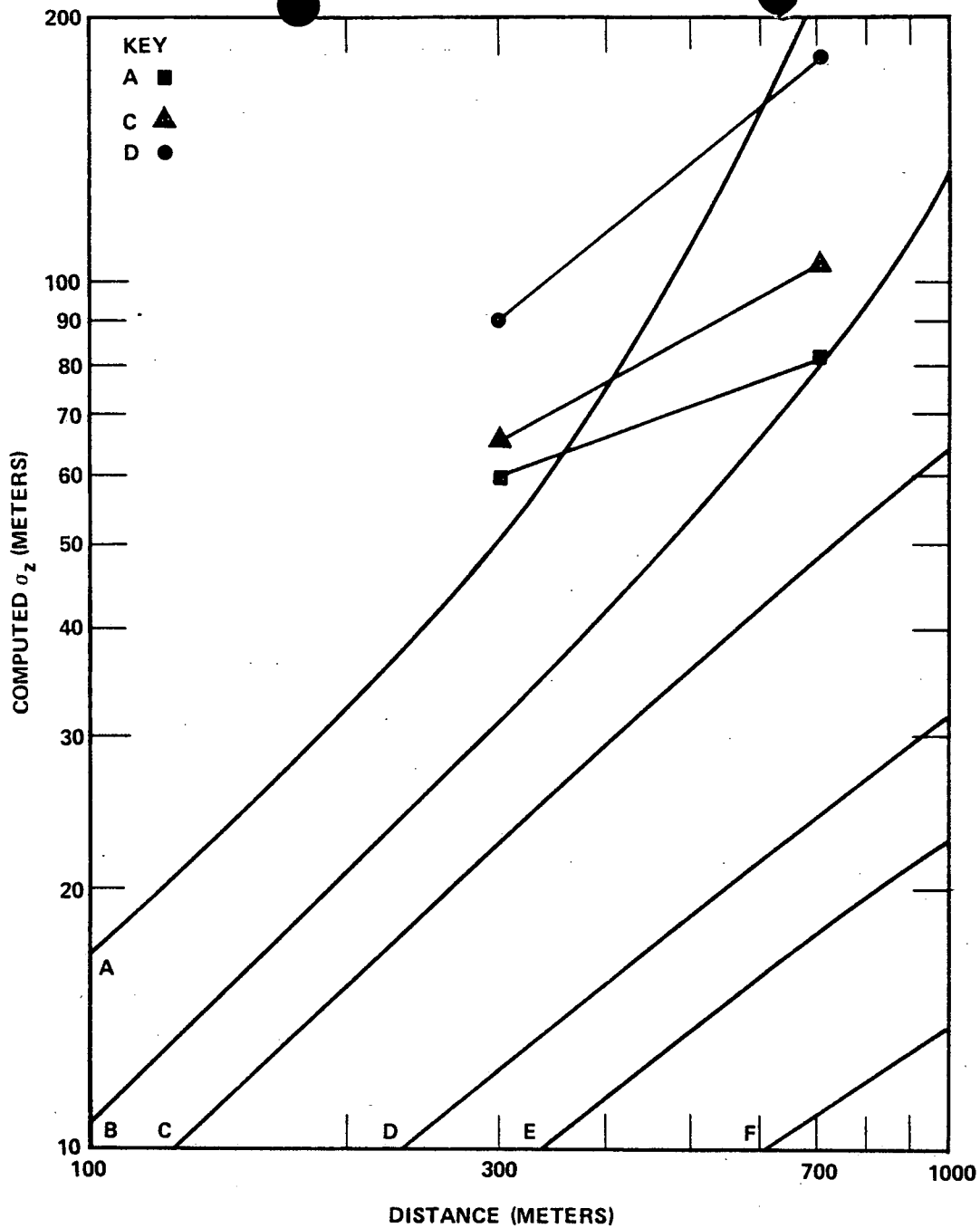


FIGURE 4.5-5

GEOMETRIC MEAN COMPUTED  $\sigma_z$   
 VERSUS DISTANCE BY STABILITY  
 FOR BLUFF TOWER  $\Delta T$

The geometric mean of the computed  $\sigma_z$  is presented as a function of stability class (see key). The individual values were computed by using the observed peak and  $\sigma_y$  values and the 1-h average, 10-m level wind speed. Stability class was based on the 1-h average  $\Delta T(40m-10m)$ . 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.