

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of )  
 )  
ARIZONA PUBLIC SERVICE COMPANY )  
 )  
(Palo Verde Nuclear Generating )  
Station, Units 2 and 3) )

Docket Nos. STN 50-529  
50-530

PETITIONER WEST VALLEY AGRICULTURAL  
PROTECTION COUNCIL, INC.'S SECOND SET OF  
INTERROGATORIES DIRECTED TO JOINT APPLICANTS

Pursuant to 10 C.F.R. §2.740b, and pursuant to the Atomic Safety and Licensing Board Order governing discovery in this matter dated March 23, 1983, petitioner West Valley Agricultural Protection Council, Inc. (West Valley) requests Joint Applicants to answer the following interrogatories, under oath and in writing, by May 18, 1983.

DEFINITIONS AND INSTRUCTIONS

1. As used herein "document" shall mean the original and any non-identical copies and drafts of any written, recorded or graphic matter, however produced or reproduced.

2. As used herein "person" includes, without limitation, a natural person, partnership, corporation, association, joint venture, trust, estate, or any other form of organization or association.

3. "Identify" when used herein in reference to a natural person, shall mean to state his full name and present

address, his present or last known position and business affiliation, and his position at the time in question.

4. "Identify" when used herein in reference to any entity other than a natural person, shall mean to state its full name and the address of its principal place of business.

5. "Identify" when used herein in reference to a document, shall mean to state the type of document, its date and author, any other characteristics necessary to identify the document, and its present location or custodian.

6. "Identify" when used herein in reference to an oral communication, shall mean to (i) identify the person making the oral communication; (ii) identify the recipient or intended recipient of the oral communication; (iii) state whether the communication was face-to-face or by telephone or other means; (iv) state the date and place of the communication, and if not face-to-face, also the place of its receipt; (v) identify each person who was present and otherwise aware of the content of the oral communication; (vi) state its substance; and (vii) identify each document which in anyway refers to, reports, or summarizes the communication.

7. As used herein "and" means and/or and "or" means and/or.

8. As used herein, PVNGS refers to the Palo Verde Nuclear Generating Station.

9. As used herein, Joint Applicants refers to the Arizona Public Service Company and all other entities with an ownership interest in the Palo Verde Nuclear Generating Station.

10. ER as used herein refers collectively to the Environmental Report--Construction Permit and the Environmental Report--Operating License prepared for the PVNGS.

11. NUS as used herein refers to the NUS Corporation of Gaithersburg, Maryland.

12. Bechtel as used herein refers to the Bechtel Power Corporation of San Francisco, California.

13. Marley as used herein refers to the Marley Cooling Tower Company of Mission, Kansas.

14. "Fog" model as used herein refers to a drift dispersion and deposition model, a proprietary computer program developed by NUS.

15. EIS as used herein refers collectively to the final Environmental Statement--Construction Permit and the final Environmental Statement--Operating License prepared for the PVNGS.

16. EIS-OS as used herein refers to the Final Environmental Statement--Operating License prepared for the PVNGS.

17. Petition as used herein refers to Petitioner's Petition to Intervene filed October 14, 1982.

18. Use of the plural in these interrogatories shall be deemed to include the singular.

19. These interrogatories shall be deemed continuing so as to require supplemental answers if Joint Applicants obtain information between the time the answer is served and the time of the hearing.

INTERROGATORIES

1. Identify all oral communications concerning any delays in the projected date for fuel loading Unit 2 which occurred:

- a. before filing of the Petition;
- b. subsequent to filing of the Petition.

2. Identify all documents, including but not limited to all reports and correspondence, relating or referring to cooling tower salt emissions, prepared:

- a. between completion of the EIS-OS and filing of the Petition (but not including Marley Telecon Memo, dated September 29, 1982, listed in response to Petitioner's First Set of Interrogatories, No. 3(b);

- b. subsequent to filing of the Petition.

3. Identify all documents, including but not limited to all reports and correspondence, relating or referring to spray pond salt emissions, prepared:

- a. between completion of the EIS-OS and filing of the Petition;

- b. subsequent to filing of the Petition.

4. Identify all documents, including but not limited to all reports and correspondence, relating or referring to evaporation ponds salt emissions, prepared:

- a. between completion of the EIS-OS and filing of the Petition;

- b. subsequent to filing of the Petition.

5. The Answer to Petitioner's First Set of Interrogatories, No. 9(a), states that 1971 data from Research-Cottrell, Inc. were the basis for the salt drift droplet size distribution analysis in the ER.

a. Identify the documents which present those data;

b. State the reasons for choosing Research-Cottrell's 1971 size distribution rather than Marley's size distribution.

6. The Answer to Petitioner's First Set of Interrogatories, No. 11, states that the rate of blowdown to the evaporation ponds exceeds the evaporation rate from the ponds.

a. Identify the documents which support that conclusion;

b. State any other basis for reaching that conclusion.

7. Identify all documents, including but not limited to reports and correspondence, relating or referring to salt drift deposition patterns, prepared:

a. between completion of the EIS-OS and the filing of the Petition;

b. subsequent to filing of the Petition.

8. NUS used its proprietary model, "FOG," to describe salt drift deposition patterns.

a. State when the "FOG" model was first used;

b. Identify all documents concerning application of the "FOG" model to power plants other than PVNGS.



9. Identify all documents, including but not limited to reports and correspondence, relating or referring to effects on crops, prepared:

a. between completion of the EIS-OS and filing of the Petition;

b. subsequent to filing of the Petition.

10. The Answer to Petitioner's First Set of Interrogatories, No. 29, states that six samplers for radiological monitoring have collected salt data since October, 1982. Identify all documents which present or analyze those salt data.

11. The Answer to Petitioner's First Set of Interrogatories, No. 30, describes monitoring devices which are being used or planned to be used. Identify:

a. all documents that relate to the accuracy and reliability of each device;

b. all documents (other than those identified in response to the preceding interrogatory) that present or analyze salt data collected to date;

c. state when and in what form monitoring data will be reported hereafter from each type of device.

12. The Answer to Petitioner's First Set of Interrogatories, No. 42, identifies 12 month cooling tower operation as an off design condition considered before completion of the EIS-OS.

a. State whether any additional off design conditions were considered;

b. Describe any such conditions and their influence upon evaluation undertaken in the ER;

c. State whether any off design conditions have been considered since completion of the EIS-OS and filing of the Petition;

d. State whether any off design conditions have been considered subsequent to filing of the Petition;

e. Describe any off design conditions identified in response to c. and d. above and your plans to take them into account in operating PVNGS;

f. Identify all documents that describe or analyze any off design conditions identified in response to this interrogatory.

13. Identify the documents that serve as a basis for the figures contained in the ER and EIS concerning the salinity of effluent to be used for cooling at PVNGS.

14. The Answer to Petitioner's First Set of Interrogatories, No. 48, identifies documents relating or referring to PVNGS cooling tower drift elimination.

a. State whether this answer includes documents relating to both the structure and the operation of the drift eliminators;

b. If the Answer fails to include the former, identify all such documents.

15. State whether the cooling tower vendor:

a. makes or has made cooling towers of the type being installed at PVNGS incorporating a system that removes more drift than the system chosen for PVNGS; and

b. can make such a system.

16. If your answer to the preceding interrogatory is yes, describe:

a. the drift elimination systems;

b. the places of their use; and

c. state the basis for choosing the drift elimination system used in the PVNGS cooling towers.

17. Identify which of the documents identified in response to Petitioner's First Set of Interrogatories, No. 50, specifically address alternatives to the cooling tower drift elimination system chosen for PVNGS.

18. For each individual identified in response to Petitioner's First Set of Interrogatories now or previously affiliated or involved with:

a. NUS;

b. Bechtel;

c. Marley;

d. APS;

e. University of Arizona Crop Study

state:

a. a summary of his formal education;

b. the name and address of each school where he received any special education or training relevant to the subject



matter of the interrogatory in response to which his name was identified and a description of the training;

c. the name or description of each degree he has received, including the date each was received, and the name of the school from which he received such degree;

d. the books, papers, and articles which he has authored;

e. his employment over the past ten years, including employer, dates, and duties.

To the extent that this information is included in the Appendices to the University of Arizona Crop Study, it need not be repeated here.

19. Has any expert or technician conducted, or will any expert or technician conduct, any tests, examinations, or inspections in connection with this proceeding? If so, please identify each such person.

20. If your answer to the preceding interrogatory is yes, identify any record or report of his findings including:

a. the date of submission or expected submission of each such report;

b. the person to whom it was or is expected to be submitted;

c. the person who has or is expected to have custody of each such report;

d. the subject matter and finding of each such report;

21. State the amount each expert identified in response to Petitioner's First Set of Interrogatories, No. 56, is to be paid or has been paid and the basis on which his compensation is to be determined.

22. Identify each exhibit which you propose to utilize at the hearing.

23. Identify each person other than Joint Applicants' attorneys, who prepared answers to these and the preceding set of interrogatories and the specific interrogatories on which each such person worked.

Dated: April 27, 1983  
Washington, D.C.

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_____	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the attached Petitioner West Valley Agricultural Protection Council, Inc.'s Second Set of Interrogatories Directed To Joint Applicants, dated April 27, 1983, have been served upon the following listed persons by deposit in the United States mail, properly addressed and with postage prepaid, this 27th day of April 1983.

Robert M. Lazo, Esq., Chairman  
Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Comm.  
Washington, D.C. 20555

Dr. Richard F. Cole  
Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Comm.  
Washington, D.C. 20555

Dr. Dixon Callihan  
Administrative Judge  
Union Carbide Corporation  
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Snell & Wilmer  
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Dated: Feb 27 1983

Geri L. Kelly  
Secretary to:

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Attorney for Petitioner  
West Valley Agricultural  
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