

RELATED CORRESPONDENCE

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U.S. DEPT. OF SECURITY
DOCKETING & SERVICE
BRANCH

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	DOCKET NOS. STN 50-529
ARIZONA PUBLIC SERVICE)	STN 50-530
COMPANY, et al.,)	
)	
(Palo Verde Nuclear)	JOINT APPLICANTS' SECOND
Generating Station, Units 1,)	SET OF NON-UNIFORM
2 and 3))	INTERROGATORIES TO WEST
)	VALLEY AGRICULTURAL
)	PROTECTION COUNCIL, INC.

TO: WEST VALLEY AGRICULTURAL PROTECTION COUNCIL, INC. and
its attorneys.

Under authority of 10 C.F.R. §2.740(b) you are
hereby requested to answer in writing and under oath, within
thirty (30) days from the receipt hereof, the following
interrogatories:

INSTRUCTIONS FOR USE

- A. All information is to be divulged which is in the pos-
session of the individual or corporate party, his at-
torneys, investigators, agents, employees, or other
representatives of the named party and his attorney.
- B. Where an individual interrogatory calls for an answer
which involves more than one part, each part of the

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1 answer should be clearly set out so that it is under-
2 standable.

3 C. Where the term "you," or "defendant" is used, it is
4 meant to include every individual party and separate
5 answers should be given for each person named as a
6 party, if requested.

7 D. A space has been provided on the Form of Interroga-
8 tories for your answer. Two copies are served here-
9 with. Complete all copies and serve a copy of each
10 separate counsel representation, retaining a copy in
11 your file. Attach a verification and certificate of
12 mailing.

13 E. In the event the space provided is not sufficient for
14 your answer to any of the questions, please attach a
15 separate sheet of paper with the additional informa-
16 tion.

17 F. These interrogatories are intended as continuing inter-
18 rogatories, requiring you to answer by supplemental
19 answer, setting forth any information within the scope
20 of the interrogatories as may be acquired by you, your
21 agents, attorneys, or representatives following your
22 original answers.

23 DEFINITIONS

24 The following definitions are applicable to all
25 Interrogatories contained herein:

26 A. Any pronoun shall be deemed to designate the masculine,
feminine or neuter gender, and singular or plural, as
in each case may be appropriate.

B. "Any," "each" and "all" shall be read to be all inclu-
sive, and to require the enumeration of each and every
item of information or document responsive to the
interrogatory in which such term appears.

C. "And" and "or" and any other conjunctions or disjunc-
tions used herein shall be read both conjunctively and
disjunctively so as to require the enumeration of all
information responsive to all or any part of each
interrogatory in which any conjunction or disjunction
appears.

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- 1 D. "Person" means an individual, firm, corporation, as-
2 sociation, organization or other entity.
- 3 E. "You" and "your" as used herein shall refer to the West
4 Valley Agricultural Protection Council, Inc., and to
5 any and all of its members, agents, representatives, or
6 employees, and unless otherwise indicated, shall be
7 read to include West Valley's attorneys.
- 8 F. "Document" as used herein means any physical thing
9 containing information, including without limitation of
10 the generality of the foregoing any affidavit, agree-
11 ment of any kind (or memorandum thereof), analysis,
12 application, appointment calendar, appraisal, assign-
13 ment, audit, bankbook, bank statement, bill, bill of
14 lading, bill of sale, blueprint, book of account,
15 bulletin, cancelled check, card, certificate (of any
16 kind), chart, check, checkbook, check stub, compilation
17 of data or statistics, computer input or output ma-
18 terial (including but not limited to any computer
19 program, printout or plotter output), computer storage
20 device (including but not limited to any magnetic tape,
21 paper tape, magnetic disk, magnetic card, punch card,
22 mass storage device, diskette, floppy disk, core
23 storage or other computer memory), contract, corre-
24 spondence (sent or received), data sheet, diagram,
25 diary, diploma, drawing, evaluation, examination or
26 examination results, film (whether or not developed),
financial statement, financing statement, forecast or
projection, form (whether or not filled out), graph,
instructions, instrument (including but not limited to
any negotiable or non-negotiable instrument), inven-
tory, invoice, ledger or ledger sheet, list, log or
logbook, manuscript, map, memorandum, message (in-
cluding but not limited to any report of any telephone
conversation, conference or other conversation),
microfilm, notebook, note or notes or summarization of
any communication (including but not limited to any
conversation, telephone conversation, personal inter-
view or conference), notes or summarization of any
meeting (including but not limited to any negotiation,
class, seminar, conference, rally, convention, lecture,
session or formal or informal discussion), outline,
painting, paper, patent or patent application, photo-
graph or photographic negative (including but not
limited to any x-ray, slide, movie or videotape),
plans, planning materials, preliminary drawing, prom-
issory note or other evidence of indebtedness, position
paper, prospectus, publication (including but not
limited to any book, booklet, circular, magazine,
newspaper, pamphlet or periodical), purchase order,

questionnaire, raw or uncompiled data or statistics, receipt, recording of any kind (whether or not transcribed), register, report, schedule, schematic, scroll, specifications, statement, study, survey, tablet, telegram (sent or received), telex, test or test results, ticket or ticket stub, voucher, warrant, working paper, writing, or other data compilation from which information can be obtained or translated through detection devices to reasonably usable form when translation is practicable or necessary, and includes any original, draft (with or without notes or changes thereon) or copy (with or without notes or changes thereon) of any of the foregoing. Any such document bearing on any portion thereof any mark (including but not limited to initials, stamped indicia, comments or notations of any character) not a part of the original text or photographic reproduction thereof, is to be considered as a separate document.

- G. "Identify" as used herein with respect to a document shall be read to require a statement of all of the following information relative to such document: (1) title; (2) nature and subject matter; (3) date; (4) author; (5) addressee; (6) file number or other identifying mark or code; (7) location by room, building, address, city and state; (8) identification of custodian; and (9) whether or not it is claimed that such document is privileged, and if so, the type of privilege claimed and a statement of all the circumstances which will be relied upon to support such claim of privilege.
- H. "Identify" as used herein with respect to any individual shall be read to require a statement of all of the following information pertaining to such individual: (1) present home address; (2) present home telephone number; (3) employer; (4) present or last known business address; (5) business telephone number; (6) job description; (7) title; and (8) employment history (if any) with the party answering, including dates, job descriptions and job titles.
- I. "Identify" as used herein with respect to any entity other than an individual shall be read to require a statement of all of the following information relating to such entity: (1) full name or title; (2) principal place of business; (3) nature or type of entity; and (4) its principal business.
- J. "Identify" as used herein with respect to any conversation (including any telephone communication) or meeting

1 shall be read to require a statement of all of the fol-
2 lowing information relating to such conversation or
3 meeting: (1) the date on which it occurred; (2) the
4 identity of each and every person who was present or
5 who participated; (3) the place at which it occurred
6 or, in the case of a telephone communication, the loca-
7 tion of each party; and (4) a detailed statement of the
8 substance of what was discussed or what actions were
9 taken.

6 K. "Petition" as used herein shall refer to the "Petition
7 to Intervene and Request for Preparation of Supple-
8 mental or Revised Environmental Impact Statement,
9 Hearing and Other Relief" dated October 13, 1982.

9 L. "West Valley" as used herein shall refer to the West
10 Valley Agricultural Protection Council, Inc.

10 M. "PVNGS" as used herein shall refer to the Palo Verde
11 Nuclear Generating Station.

11 N. "Joint Applicants" as used herein shall refer to
12 Arizona Public Service Company ("APS"), Salt River
13 Project Agricultural Improvement and Power District, El
14 Paso Electric Company, Southern California Edison
15 Company, Public Service Company of New Mexico, and
16 Southern California Public Power Authority.

15 1. State whether each of the following indi-
16 viduals is a current director of West Valley:

17 (a) Dan Saylor

23 (b) Rick Ladra

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(c) Phil Ladra

(d) Paul Perry

(e) Harry W. Porterfield

(f) Gary Accomazzo

(g) Bob Sheppard

(h) Jim Gladden

(i) Delbert Beyer

(j) Don Narramore

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(k) Bill Odom

(l) F. Ronald Rayner

(m) Stephen P. Pavich

(n) Jackie Meck

1 (o) W. T. Gladden
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7 2. State the precise legal description of the
8 area which you believe will be affected by the Salt drift
9 which you claim will result from the Operation of PVNGS.
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15 3. In your Petition, you allege that West Valley
16 has 56 farmer members. Identify the 56 members who comprise
17 West Valley and state, for each, his or her address.
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23 4. For each member named in response to the pre-
24 ceding interrogatory, state the precise legal description of
25 the land owned and/or leased and/or operated by such member,
26 using the UTM or Arizona Coordinate System to describe such

1 property; also state the total number of acres owned and/or
2 operated by each such member.
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9 5. For each parcel of property described in
10 answer to the preceding interrogatory, state whether you
11 claim that such parcel, or any part thereof, will be af-
12 fected or may potentially be affected by salt drift deposi-
13 tion from the PVNGS. If you claim that only a portion of
14 any parcel listed herein will or may be affected, describe
15 specifically the part thereof which you claim will or may be
16 affected.
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23 6. For each parcel of property listed in answer
24 to the preceding interrogatory, state the amount of drift
25 per acre which you claim will be deposited thereon on a
26 daily, monthly and annual basis.

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6 7. Describe the precise method by which the
7 deposition figures given in response to the preceding inter-
8 rogatory were calculated. Include in your answer all facts,
9 assumptions, and calculations upon which such figures are
10 based.

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16 8. Your answer to Interrogatory No. 7, Joint
17 Applicants' First Set of Non-Uniform Interrogatories, states
18 that the "facts on which they [Professors Davis and Golay]
19 will rely are set forth in the answers to these interroga-
20 tories and in the Davis and Golay reports." Identify the
21 specific facts upon which Drs. Davis and Golay will rely,
22 or, alternatively, the precise answer(s) to Joint Appli-
23 cants' First Set of Non-Uniform Interrogatories in which
24 such facts are contained. Also specify the exact pages of
25 the Davis and Golay reports which purportedly contain such
26 facts.

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6 9. For each parcel of land described in answer
7 to Interrogatory No. 4, state whether the farmer member of
8 West Valley owns such land, leases it, or farms it under any
9 other form of ownership or control. If the farmer member
10 leases the land described, state the name of the owner/
11 lessor; if the farmer member does not own or lease such
12 property, describe the relationship pursuant to which the
13 farmer member operates the land in question.
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19 10. Identify each person having knowledge, or
20 claiming to have knowledge, of the facts set forth in your
21 answer to the preceding interrogatory. As to each such
22 person, state the specific facts concerning which they have
23 knowledge or claim to have knowledge.
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3 11. Identify each and every document which refers
4 or relates in any way to the facts set forth in your answer
5 to Interrogatory No. 9.
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11 12. For each parcel of land described in response
12 to Interrogatory No. 4, indicate for each of the last ten
13 years, the percentage of such acreage which was actually
14 planted in crops and further state for each of the last ten
15 years:
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17 (a) The crop(s) which were planted on such
18 acreage, or any part thereof, and the number of acres which
19 were planted in each such crop.
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25 (b) For each crop identified in response to
26 subpart (a) of this interrogatory, state the approximate

1 date upon which each crop was planted, the approximate leaf-
2 out date of such crop and the harvest date thereof.
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8 (c) Define the yield (in pounds, bales,
9 bushels, etc. per acre) of each crop planted on each of the
10 parcels of property described in response to Interrogatory
11 No. 4.
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17 (d) As a continuation of the preceding sub-
18 parts of this interrogatory, state the market price per
19 harvest unit of the crops identified in subpart (a) above,
20 for each parcel of land listed in response to Interrogatory
21 No. 4.
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1 (e) With respect to the information provided
2 in subpart (d) of this interrogatory, state the individual
3 or entity to whom the crop(s) or any part thereof was sold,
4 the date upon which the crop was sold and the means by which
5 the sale price was established.
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12 13. Identify each person having knowledge, or
13 claiming to have knowledge, of the facts set forth in your
14 answer to the preceding interrogatory. As to each such
15 person, state the specific facts concerning which they have
16 knowledge or claim to have knowledge.
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22 14. Identify each and every document which refers
23 or relates in any way to the facts set forth in your answer
24 to Interrogatory No. 12.
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4 15. For each parcel of land described in response
5 to Interrogatory No. 4, indicate for each of the last three
6 years, the percentage of such acreage which was actually
7 planted in crops and further state for each of the last
8 three years:

9 (a) The crop(s) which were planted on such
10 acreage, or any part thereof, and the number of acres which
11 were planted in each such crop.

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17 (b) For each crop identified in response to
18 subpart (a) of this interrogatory, state the approximate
19 date upon which each crop was planted, the approximate leaf-
20 out date of such crop and the harvest date thereof.
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1 (c) Define the yield (in pounds, bales,
2 bushels, etc. per acre) of each crop planted on each of the
3 parcels of property described in response to Interrogatory
4 No. 4.
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10 (d) As a continuation of the preceding sub-
11 parts of this interrogatory, state the market price per
12 harvest unit of the crops identified in subpart (a) above,
13 for each parcel of land listed in response to Interrogatory
14 No. 4.
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20 (e) With respect to the information provided
21 in subpart (d) of this interrogatory, state the individual
22 or entity to whom the crop(s) or any part thereof was sold,
23 the date upon which the crop was sold and the means by which
24 the sale price was established.
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5 16. Identify each person having knowledge, or
6 claiming to have knowledge, of the facts set forth in your
7 answer to the preceding interrogatory. As to each such
8 person, state the specific facts concerning which they have
9 knowledge or claim to have knowledge.
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15 17. Identify each and every document which refers
16 or relates in any way to the facts set forth in your answer
17 to Interrogatory No. 15.
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23 18. For each parcel of property listed in re-
24 sponse to Interrogatory No. 4, and for each crop which you
25 claim was grown thereon during the past ten years, identify
26 the irrigation method used for each such crop and the fre-

1 quency with which such crop was irrigated. Your answer
2 should include, but not be limited to, the total quantity of
3 water applied per acre per day, per month, and per growing
4 season, and the source of the irrigation water.
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10 19. Identify each person having knowledge, or
11 claiming to have knowledge, of the facts set forth in your
12 answer to the preceding interrogatory. As to each such
13 person, state the specific facts concerning which they have
14 knowledge or claim to have knowledge.
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20 20. Identify each and every document which refers
21 or relates in any way to the facts set forth in your answer
22 to Interrogatory No. 18.
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2 21. For each parcel of property listed in response
3 to Interrogatory No. 4, and for each crop which you claim
4 was grown thereon during the past three years, identify the
5 irrigation method used for each such crop and the frequency
6 with which such crop was irrigated. Your answer should
7 include, but not be limited to, the total quantity of water
8 applied per acre per day, per month, and per growing season,
9 and the source of the irrigation water.

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15 22. Identify each person having knowledge, or
16 claiming to have knowledge, of the facts set forth in your
17 answer to the preceding interrogatory. As to each such
18 person, state the specific facts concerning which they have
19 knowledge or claim to have knowledge.

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24 23. Identify each and every document which refers
25 or relates in any way to the facts set forth in your answer
26 to Interrogatory No. 21.

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6 24. Describe the water quality (i.e., the content
7 in parts per million (ppm)), for the irrigation water refer-
8 red to in Interrogatory No. 18, of any minerals, nutrients,
9 or other solids, including -- but not limited to -- salt;
10 further state the source of your information regarding the
11 water quality described herein.
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17 25. Identify each person having knowledge, or
18 claiming to have knowledge, of the facts set forth in your
19 answer to the preceding interrogatory. As to each such
20 person, state the specific facts concerning which they have
21 knowledge or claim to have knowledge.
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1 26. Identify each and every document which refers
2 or relates in any way to the facts set forth in your answer
3 to Interrogatory No. 24.
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9 27. For each crop planted on each parcel of prop-
10 erty described in response to Interrogatory No. 4, and for
11 each of the last ten years, identify any and all crop and/or
12 soil treatments applied to the crop at any time during its
13 growing season. Your answer should include, but not be
14 limited to, a description of all herbicides, pesticides,
15 fertilizers, soil leaching practices, etc., administered to
16 the crop and/or to the soil, and a description of the phase
17 of the crop's life at which such practices were adminis-
18 tered. Further include in your answer, the purpose of such
19 practice, the method of administration, the frequency
20 thereof, and the approximate cost of each administration.
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1 28. Identify each person having knowledge, or
2 claiming to have knowledge, of the facts set forth in your
3 answer to the preceding interrogatory. As to each such
4 person, state the specific facts concerning which they have
5 knowledge or claim to have knowledge.
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10 29. Identify each and every document which refers
11 or relates in any way to the facts set forth in your answer
12 to Interrogatory No. 27.
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18 30. Your Petition alleges that West Valley mem-
19 bers produce ninety six million dollar's (\$96,000,000) worth
20 of agricultural products per year. Describe in precise
21 detail the method by which you arrived at the \$96,000,000
22 figure and the year or growing season(s) to which such
23 figure applies. Also state the alleged value of crops grown
24 by each farmer member for each of the last ten years, or by
25 his predecessor if the farmer member has not owned, leased
26 or operated his land for the last ten years.

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6 31. Identify each person having knowledge, or
7 claiming to have knowledge, of the facts set forth in your
8 answer to the preceding interrogatory. As to each such
9 person, state the specific facts concerning which they have
10 knowledge or claim to have knowledge.
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16 32. Identify each and every document which refers
17 or relates in any way to the facts set forth in your answer
18 to Interrogatory No. 30.
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24 33. Your Petition (paragraph 1, pg. 2) alleges
25 that all West Valley members are located "within the area
26 likely to be affected" by salt deposition. Give the legal

1 description, the owner of each parcel thereof, and the total
2 acreage included, in your definition or calculation of the
3 area which you claim will be affected.
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9 34. In response to Interrogatory No. 30, Joint
10 Applicants' First Set of Non-Uniform Interrogatories, you
11 claim that the "statement which is made concerning
12 isokinetic sampling systems is based upon Professor Golay's
13 experience in conducting a comparative assessment of drift
14 measurement methods in which various devices were tested in
15 a spectrum of simulated environments." With specific ref-
16 erence to "Professor Golay's experience," state the follow-
17 ing:
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23 (a) Each and every test, examination, or
24 study which constitutes the "experience" in connection with
25 comparative assessments of drift measurement methods.
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4 (b) Each and every document relating to or
5 generated as a result of the Golay experience.
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11 35. With specific reference to the "simulated
12 environments" mentioned in your answer to Interrogatory No.
13 30, state the following:

14 (a) The specific environemtal parameters
15 which were simulated.
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21 (b) The data surveys upon which such simu-
22 lated environments were based.
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2 (c) The person or persons responsible for
3 conducting or preparing the environmental simulations.
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9 (d) The date upon which each such simulated
10 environmental drift measurement was conducted.
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16 (e) A description of the quality assurance
17 program under which each such measurement was conducted.
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23 36. Contention I.A.(ii) alleges that the sampling
24 methods utilized in determining the drift ratio failed to
25 recognize wind effects within the fill and drift elimination
26 system. Describe precisely the wind effects which you claim

1 were not recognized and further describe the precise manner
2 in which you claim such wind effects will impact upon the
3 drift ratio.
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9 37. Identify each person having knowledge, or
10 claiming to have knowledge, of the facts set forth in your
11 answer to the preceding interrogatory. As to each such
12 person, state the specific facts concerning which they have
13 knowledge or claim to have knowledge.
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19 38. Identify each and every document which refers
20 or relates in any way to the facts set forth in your answer
21 to Interrogatory No. 36.
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1 39. Interrogatory No. 39, Joint Applicants' First
2 Set of Non-Uniform Interrogatories, asked for a description
3 of the draft losses which you claim will arise from the
4 water distribution canal and the manner in which such losses
5 will contribute to or affect the drift rates. Your answer
6 to that interrogatory states that any losses would add to
7 the total. State the precise amount of saft you claim will
8 be added.
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14 40. Identify each person having knowledge, or
15 claiming to have knowledge, of the facts set forth in your
16 answer to the preceding interrogatory. As to each such
17 person, state the specific facts concerning which they have
18 knowledge or claim to have knowledge.
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24 41. Identify each and every document which refers
25 or relates in any way to the facts set forth in your answer
26 to Interrogatory No. 39.

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5 42. Contention I.D.(ii) alleges that records from
6 the Buckeye Irrigation Company show that some water samples
7 taken from the Phoenix sewage effluent which will be uti-
8 lized at the PVNGS contain twice the salt content listed in
9 the ER and the EIS. Describe each and every "record" which
10 you are relying on to support that allegation and further
11 state:

12 (a) The date upon which each and every
13 sample referenced in such records was collected.
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19 (b) The person or persons responsible for
20 the collection of the sample.
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1 (c) The collection methods utilized to
2 obtain the samples.
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9 43. Identify each person having knowledge, or
10 claiming to have knowledge, of the facts set forth in your
11 answer to the preceding interrogatory. As to each such
12 person, state the specific facts concerning which they have
13 knowledge or claim to have knowledge.
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20 44. Identify each and every document which refers
21 or relates in any way to the facts set forth in your answer
22 to Interrogatory No. 42.
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2 46. Contention I.F.(ii) alleges that the ER un-
3 realistically expects refueling intervals for each tower to
4 be one month per year when experience at most other similar
5 stations has shown that a larger value would be more realis-
6 tic. Identify each and every station to which that allega-
7 tion refers, the dates of refueling outages at each such
8 station and the "larger value" which you allege would be
9 more realistic for refueling intervals.
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15 46. Identify each person having knowledge, or
16 claiming to have knowledge, of the facts set forth in your
17 answer to the preceding interrogatory. As to each such
18 person, state the specific facts concerning which they have
19 knowledge or claim to have knowledge.
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24 47. Identify each and every document which refers
25 or relates in any way to the facts set forth in your answer
26 to Interrogatory No. 45.

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6 48. Identify each and every fact upon which you
7 rely for your selection of the "larger value" referred to
8 in contention I.F.(ii).
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14 49. Identify each person having knowledge, or
15 claiming to have knowledge, of the facts set forth in your
16 answer to the preceding interrogatory. As to each such
17 person, state the specific facts concerning which they have
18 knowledge or claim to have knowledge.
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24 50. Identify each and every document which refers
25 or relates in any way to the facts set forth in your answer
26 to Interrogatory No. 48.

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5 51. Contention III.A.(i) alleges that it is "un-
6 likely" that the rain events in the PVNGS region would re-
7 move salts accumulated on crop leaves. Identify each and
8 every fact, theory, premise or conclusion upon which you
9 rely to support that allegation.
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15 52. Identify each person having knowledge, or
16 claiming to have knowledge, of the facts set forth in your
17 answer to the preceding interrogatory. As to each such
18 person, state the specific facts concerning which they have
19 knowledge or claim to have knowledge.
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25 53. Identify each and every document, particu-
26 larly those containing the meteorological data, if any,

1 which refers or relates in any way to the facts set forth in
2 your answer to Interrogatory No. 51.
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10 54. Dr. Davis' report at page 6, further that
11 "several persons connected with the project have been con-
12 tacted to discuss various details of the model." With
13 reference to that statement, identify the following:

14 (a) Each person contacted.
15
16
17
18
19

20 (b) The individual who contacted each per-
21 son, if other than Dr. Davis.
22
23
24
25
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1 (c) The manner in which and the place at
2 which each person was contacted.
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8 (d) The substance of each and every conver-
9 sation held with each individual listed in response to sub-
10 part (a) hereof.
11
12
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16 (e) Whether or not any notes, memorandum or
17 other written memorializations were made regarding the con-
18 versations referred to above. ____ If your answer to sub-
19 part (e) hereof is in the affirmative, identify the custo-
20 dian of such reports, notes, or other memorializations.
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1 55. Your answer to Interrogatory No. 175, Joint
2 Applicants' First Set of Non-Uniform Interrogatories, fails
3 to include an address of G. Fisher. Please provide Mr.
4 Fisher's address.
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10 56. Do you or your attorneys, have in your pos-
11 session, or know the existence of, any written or recorded
12 statements from any of the persons (excluding West Valley
13 member) identified in your answer to Interrogatory No. 188,
14 Joint Applicant's First Set of Non Uniform Interrogatories,
15 or from any other person or entity who has any knowledge or
16 the facts and events related to the issues in this pro-
17 ceeding?
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23 57. In your Answer to Interrogatory No. 5, Joint
24 Applicants' First Set of Non-Uniform Interrogatories, you
25 state that Petitioner has turned over to the NUS Corporation
26 a computer tape of the cooling tower drift model relied upon

1 in the Davis report. With specific reference to that
2 cooling tower drift model, state the following:

3 (a) The name, or other descriptive title, by
4 which such model is referred to or known.
5
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10 (b) Describe any and all validation efforts,
11 including calculations, undertaken or performed in connec-
12 tion with, or as a result of, the above-referenced model.
13
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18 (c) Describe each and every equation and/or
19 algorithm upon which the model is based, or which is uti-
20 lized in the model.
21
22
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1 (d) State whether any hard copies of such
2 drift model exist, and, if so, the present custodian of each
3 such copy.
4
5
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9 (e) Describe the quality assurance program
10 in connection with the development, utilization and inter-
11 pretation of the model.
12
13
14
15

16 (f) Identify the originators and developers
17 of the model.
18
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23 (g) State the basis upon which the model re-
24 ferred to above, in lieu of any others, was utilized by Dr.
25 Davis in connection with his work in this case.
26

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5 (h) Describe specifically the output data
6 which the above referenced model is capable of generating.
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12 58. In your answer to Interrogatory No. 5, Joint
13 Applicants' First Set of Non-Uniform Interrogatories, you
14 state that "petitioner's preliminary calculations of these
15 and other relevant figures are contained in its experts'
16 reports." With reference to your phrase "preliminary cal-
17 culations," state the following:

18 (a) Each and every fact, theory, or assump-
19 tion upon which the preliminary calculations are based, in-
20 cluding all data and other specific factual input upon which
21 such calculations are based.
22
23
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1 (b) Identify all documents, including spe-
2 cifically, notes and/or records, upon which such preliminary
3 calculations are based, or which were generated as a result
4 of such preliminary calculations.
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10 (c) Identify each and every person involved
11 in the calculation or interpretation of the "preliminary cal-
12 culations" to which you refer in answer to Interrogatory
13 No. 5.
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19 (d) The date upon which said preliminary
20 calculations were developed.
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1 (e) Describe the quality assurance program
2 utilized in connection with the development, calculation,
3 and/or interpretation of your "preliminary calculations."
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9 59. If you are claiming that the PVNGS operations
10 will result in decreased yields and/or decreased marketabil-
11 ity of agricultural products of the West Valley members,
12 provide the following:

13 (a) The name of each and every agronomist,
14 plant pathologist, plant physiologist, county extension
15 agent, or other individual having any expertise, or claiming
16 to have any expertise relating to that specific subject, who
17 you have contacted or who has provided you with any informa-
18 tion relative to that specific subject.
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25 (b) Describe each and every document in your
26 custody or control relating to that specific subject.

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6 60. Your answer to Interrogatory No. 42, Joint
7 Applicants' first set of Non-Uniform Interrogatories, refers
8 to "subsequent verbal reports" to Proefessor Mulchi. With
9 specific reference to those "verbal reports," state the fol-
10 lowing:

11 (a) The name of the person making the
12 report, and the entity on behalf of which the report was
13 mde.
14
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19 (b) The date upon which each such report was
20 purportedly made.
21
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1 (c) The subject matter of each such report.
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7 (d) Whether there were any other witnesses,
8 other than Professor Golay and the reporter, to such reports.
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12 (e) The identification of each and every
13 document, notation, or other memorialization relating to any
14 such reports.
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23 61. In response to Interrogatory No. 58, Joint
24 Applicants First Set of Non-Uniform Interrogatories, you
25 state that the fifteen downwind distances utilized in con-
26 nection with the FOG model result in droplets being released

1 "too high" above the ground. With specific reference to the
2 phrase "too high," please state the distance (in feet or
3 meters) at which you claim the droplets are released, and
4 further state the distance (in feet or meters) at which you
5 claim they should be released.
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11 62. Your answer to Interrogatory No. 69, Joint
12 Applicants' First Set of Non-Uniform Interrogatories, which
13 asked for an identification of each person having knowledge
14 of the facts set forth in your answer to Interrogatory No.
15 68, merely references your answer to No. 52, which in turn
16 identifies Professor Davis. State whether Professor Davis
17 is the only individual with knowledge of the facts upon
18 which your answer to Interrogatory No. 68 is based. If your
19 answer is in the negative, please state the name, address,
20 current employment, and telephone number of each and every
21 other individual who has knowledge of such facts. Also,
22 state the role or responsibility of each such individual
23 with respect to the preparation, conduct, or analysis of the
24 reference studies.
25
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4 63. Your answer to Interrogatory No. 75, Joint
5 Applicants' First Set of Non-Uniform Interrogatories, uses
6 the term "all Petitioner's experts." If that phrase is in-
7 tended to refer to Drs. Golay, Mulchi, and Davis only,
8 please so state. If there are experts in addition to Drs.
9 Davis, Golay and Mulchi, please identify such individuals,
10 and state the particular area of expertise for each.

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15 64. In response to Interrogatory No. 77, Joint
16 Applicants' First set of Non-Uniform Interrogatories, you
17 state, at a(5): "Salt drift from the cooling towers into
18 the water storage area will increase the salinity of the
19 tower makeup water." Specify the exact amount of salinity
20 increase which you allege will result from salt drift into
21 the water storage area.

1 (a) Identify each and every fact, theory,
2 premises, calculation or conclusion upon which your answer
3 to this interrogatory is based.
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9 (b) Identify each and every document re-
10 ferring or relating to the facts set forth in response to
11 this interrogatories.
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17 65. In response to Interrogatory No. 77, Joint
18 Applicants' First Set of Non-Uniform Interrogatories, you
19 state at subpart (c): "Salinity records show variability in
20 the salinity of the waste treatment water from the City."
21 Specify each and every record to which your answer refers,
22 and include a description of the data or information con-
23 tained therein. Also, describe each and every calculation,
24 or assumption upon which you rely to base your conclusion
25 that there is a variability in the salinity of the waste
26 water from the City.

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5 66. Your answer to Interrogatory No. 79, Joint
6 Applicants First Set of Non-Uniform Interrogatories, refers
7 to "Buckeye Irrigation Co. records." Specify each and every
8 record upon which you rely, and include a description of the
9 data or information contained therein.
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15 67. Your answer to subpart (b) of Interrogatory
16 No. 79, Joint Applicants' First Set of Non-Uniform Inter-
17 rogatories, refers to "records at the Phoenix Waste Water
18 Treatment Plant." Specify each and every record upon which
19 you rely, and include a description of the data or informa-
20 tion contained therein.
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1 71. Your answer to Interrogatory No. 89, Joint
2 Applicants' First Set of Non-Uniform Interrogatories, ref-
3 erences only "the Davis report." Specify the particular
4 facts within that report upon which you rely for the infor-
5 mation contained in answer to Interrogatory No. 89, or, al-
6 ternatively, state the specific page(s) of the report upon
7 which you rely.

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13 69. Interrogatories No. 121, Joint Applicants'
14 First Set of Non-Uniform Interrogatories, asks for a defini-
15 tion of the term "PVNGS region" as used in your contention
16 III.A.(i). Your answer was "the area surrounding the
17 PVNGS." Specify the specific coordinates, or the precise
18 legal description, of the area to which you are referring.

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24 70. Your answer to Interrogatory No. 122, Joint
25 Applicants' First Set of Non-Uniform Interrogatories. states
26 that the amount of water, "will be ample" to wash the salts

1 from the crop foliage. Describe precisely your definition,
2 or calculation, of the amount of water which will "be ample"
3 to wash the salts from the crops.
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9 (a) Identify each and every fact, theory,
10 premise, calculation or conclusion upon whatever answer to
11 this interrogatory is based.
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17 (b) Identify each and every document re-
18 ferring or relating to the facts set forth in reponse to the
19 interrogatories.
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25 74. In answer to Interrogatory No. 122, Joint
26 Applicants' First Set of Non-Uniform Interrogatories, you

1 referenced certain "research studies simulating cooling
2 tower drift" which were apparently conducted during 1977.
3 For each such study, state the following:

4 (a) Each and every fact, theory or conclu-
5 sion upon which the development of the simulation was prem-
6 ised.

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12 (b) All documents pertaining to the develop-
13 ment of the simulation.

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19 72. Your answer to interrogatory No. 122, Joint
20 Applicants' First Set of Non-Uniform Interrogatories, refers
21 to "trace" precipitation. With specific reference to that
22 term, describe specifically the amount of precipitation to
23 which you refer.

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3 73. In answer to Interrogatory No. 138, Joint
4 Applicants' First Set of Non-Uniform Interrogatories, you
5 set forth two equations, one applicable to soy beans and one
6 applicable to corn. State the source of each of those equa-
7 tions.
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14 74. In response to Interrogatory No. 143, Joint
15 Applicants' First Set of Non-Uniform Interrogatories, you
16 state that "salt stress studies conducted during 1973 and
17 1978 identified numerous cases in which plant symptoms re-
18 sembled drought distress symptoms." State the precise
19 method by which salt stress was induced in the studies to
20 which you refer. Include also a description of the studies,
21 including the individual(s) responsible for the conduct of
22 the studies, and any and all documents generated as a result
23 of, or which refer to, such studies.
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3 75. Interrogatory No. 169, Joint Applicants'
4 First Set of Non-Uniform Interrogatories, asked for a pre-
5 cise definition of your term "near the plant" as utilized in
6 contention III.C(ii). Your answer failed to define that
7 term; please define that term as used in contention
8 III.C.(ii).
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14 76. In answer to Interrogatory No. 177, Joint
15 Applicants First Set of Non-Uniform Interrogatories, you
16 state merely "see Davis report." Please specify the precise
17 page(s) of the Davis report upon which you rely to support
18 the facts referenced in Interrogatory No. 177.
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1 DATED this 27th day of April, 1983.

2 SNELL & WILMER

3
4 By 

5 Arthur C. Gehr

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
ARIZONA PUBLIC SERVICE)	
COMPANY, et al.)	Docket Nos. STN 50-529
)	STN 50-530
(Palo Verde Nuclear)	
Generating Station,)	
Units 2 and 3))	
_____)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Joint Applicants' Second Set of Interrogatories to West Valley Agricultural Protection Council, Inc." 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.

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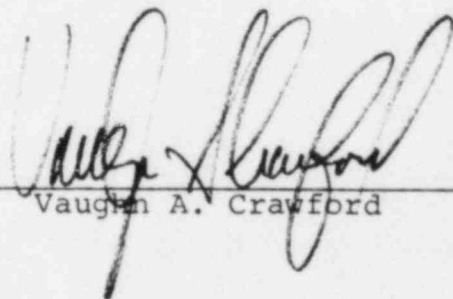
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