

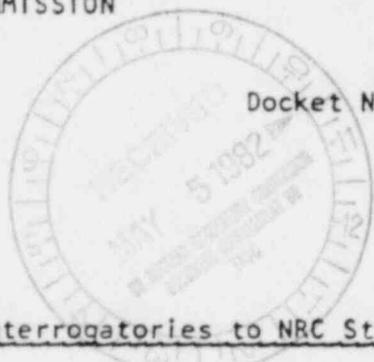
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKET

'82 MAY -3 P;  
50-440  
50-441 *emp*

For the matter of:  
The Cleveland Electric  
Illuminating Co., et al

(Perry Nuclear Power Plant,  
Units 1 and 2)



Sunflower Alliance, Inc., et al. Second Set of Interrogatories to NRC Staff.

These Interrogatories (Second Set) are filed by Sunflower Alliance Inc, et al, pursuant to the previous orders of the Atomic Safety and Licensing Board and pursuant to 10 CFR 2.740 b. These interrogatories are directed to the NRC Staff and pertain to one or more of the seven issues that have been admitted to date in this proceeding.

It is required that each interrogatory be answered separately and fully in writing under oath or affirmation, within 14 days after service. These interrogatories shall be continuing in nature and the answers must be immediately supplemented or amended, as appropriate, should the staff offer any new or differing information responsive to the Interrogatories.

For purposes of these Interrogatories the term "documents" means all records of every type in the possession, control or custody of the staff or of the staff's attorney (s), including, but not limited to, memoranda, correspondence, reports, surveys, tabulations, charts, books, pamphlets, photographs, maps, bulletins, minutes, notes, speeches, articles, transcripts, voice recordings, and all other writings, recordings or video tapes of any kind. "Documents" shall also mean copies of documents even though the originals thereof are not in the possession, custody, or control of the staff.

For purposes of these Interrogatories, a document shall be deemed to be within the 'control' of the staff or staff's attorney (s) if they have ownership, possession or custody of the document or copy thereof, or have the right to secure the document or copy thereof from any person or public or private entity having physical possession thereof.

When identification of a document is requested, briefly describe the document, i.e. letter, memorandum, book, pamphlet, etc., and state the following information as applicable to the particular document: name, title, number, author, date of publication and publisher, addresses, date written or approved, and the name and address of the person (s) having possession of the document.

*DS03  
5  
1/1*

Statement of Purpose: The following interrogatories are designed to assess the potential dangers of an unmitigated ATWS, the status of development and implementation of ATWS mitigation systems, and the degree of industry compliance with any regulations or other criteria concerning ATWS.

1. Table 1, p. 11, of NUREG-0460, Vol. 4 lists various alternatives for ATWS plant modifications. Alternative 4A is to be implemented by all plants (other than early operating plants) by January 1, 1984 (p. 13, Vol. 4). However, NUREG-0460, Vol. 4, p. 54 contains the following statement: "Each plant for which conformance to Alternative 4A is deemed not practical because of constraints improved by basic plant layout, diesel capacity, or completed seismically qualified structures, shall submit by December 31, 1980, the optimization study set forth in Section 2.4.1, including alternatives for achieving a level of safety equivalent to Alternative 4A. This alternative (sometimes called "Alternative 3 $\frac{1}{2}$ " is intended for operating plants and those well along in construction. Duplicate plants at the same site may be modified identically, even if the second unit is not as far along in construction as to fall within this provision if the first unit qualifies."
  - a) Explain the apparent contradiction between the statement on p. 13 and that on p. 54. Will or will not all plants (except early ones) be required to implement Alternative 4A by January 1, 1984?
  - b) Define the phrase "level of safety equivalent to Alternative 4A." How is this degree of safety quantified or otherwise determined? What types of alternatives are there for achieving this level or safety?
  - c) Define the phrase "well along in construction," either by percent completion of the plant as a whole or by the completion of specific systems or structures within the plant. Specifically, how would this phrase be defined for the Perry Nuclear Power Plant?

- d) Is the Perry Nuclear Power Plant, Unit 1, far enough along in construction, as defined above, to qualify for the consideration of "Alternative 3 $\frac{1}{2}$ "? If so, has the Applicant submitted the optimization study required? If so, produce this optimization study.
- e) If the Perry Nuclear Power Plant, Units 1 or 2, was not far enough along in construction to qualify for Alternative 3 $\frac{1}{2}$ , is it the Staff's opinion that PNPP will be required to implement Alternative 4A in its entirety? When will this hardware be required to be installed? How is the Applicant's compliance to be insured?
- f) If PNPP Unit 1 is far enough along in construction to qualify for Alternative 3 $\frac{1}{2}$ , will Unit 2 be permitted to be modified identically? Why has this provision (identical modification of duplicate same-site units) been included? Discuss why this provision will not degrade plant safety in the more easily modified second unit.
2. One of the modifications included in Alternative 4A for GE BWRs is modification of the scram discharge volume. Describe this modification in detail for the Perry Plant BWR/6 model. Has this been done at Perry?
3. Where does the PNPP design presently stand in regard to the alternatives listed in NUREG-0460, Vol. 4? E.g., does the current plant design implement Alternative 2A, 3A, or 4A?
4. What constitutes scram failure in a BWR/6 such as Perry? E.g., describe the combination of the following failures which will result in the loss of control of reactivity and failure to attain hot shutdown: insufficient rod insertion speed, percent of length withdrawn which results in failure, number and location of failed rods which results in scram failure.

5. Describe in detail, along with their frequency of occurrence for each year of plant operation, any and all transients capable of initiating reactor scram in a BWR/6.
6. Describe all scram system failures, including common-mode failures, capable of producing ATWs in a BWR/6.
7. For each of the transients listed in #5 above (and for any transient not listed in the response to #5 but included in Table A.2, Vol. 4 of NUREG-0460), perform a time-domain analysis, specific to the Perry Plant, assuming that control rod scram does not occur, but that the recirculation pump trip does function and the SLCS, as presently designed, is manually operated. Assume all plant systems to be as currently described in the FSAR. Include in the analysis any and all plant systems and functions affected by ATWS and any consequences thereof, including but not limited to core integrity, containment integrity, suppression pool effects, reactor internals, ECCS functions, dilution of SLCS boron by ECCS, power oscillations, and offsite radiation doses to the public. Present the analysis in this manner: the transient begins at  $t=0$ ; list time of occurrence for each major action or consequence during the ATWS (e.g., RPT, SLCS activation, containment isolation, and maximum and minimum values of the following parameters to be presented graphically) until such time as either the reactor is brought into cold shutdown or core melting occurs. List all assumptions made for operator actions. Present the following parameters graphically as a function of time (use appropriate units and scales): neutron flux, power levels, RPV pressure, suppression pool temperature, containment pressure, steamline pressure, water level in RPV, heat flux, and fuel cladding temperature and radiation doses to public at site boundary, 5 mile radius, 10 mile, 20 mile, and 50 mile radius. Also perform the analysis as described above for the following conditions:
  - 1) As above, only with automatic SLCS.
  - 2) Full implementation of Alternative 4A.

8. How many transients occurred in each of the years 1978, 1979, and 1980?
9. Does PNPP have the recirculation pump trip initiated by high pressure? What other conditions can initiate the RPT? Explain how this feature mitigates the consequences of ATWS; about what % negative reactivity does the RPT contribute? When was (or will be) the RPT feature installed?
10. Show that the RPT hardware conforms with the appropriate standard, below:
  - 1) if installed before July 1, 1981, the approved Hatch or Monticello designs (supply the appropriate design.
  - 2) if installed after July 1, 1981, Appendix C of Vol. 3, NUREG-0460.
11. Demonstrate that the ARI system meets the criteria of IEEE Standard 279, and that the RPT and SLCS logic meet the criteria of Appendix C of Vol. 3, NUREG-0460.
12. Have the code verification tests for BWRs described on p. B-3 of Vol. 4, NUREG-0460 been performed? If not, why not, and when will they be performed? If so, what were the results of these tests?
13. Describe the effects of power oscillations, such as are described on P. A-67, Vol. 4, NUREG-0460, on fuel and containment integrity and any other affected system at PNPP.
14. Give a cost estimate for the installation of an automated standby liquid control system at PNPP, Units 1 and 2: provide documentation to support this estimate. Include in the estimate any necessary modifications to other systems, e.g., addition of sufficient diesel generator capacity. Also give a cost estimate for the complete implementation of Alternative 4A as described in Vol. 4 of NUREG-0460.

15. Give an estimate of the cost and downtime associated with the cleanup of an inadvertant activation of the SLCS. Give the waste storage tank capacity and evaporator capacity; compare these with other BWRs, and indicate how these systems are involved in the boron cleanup.
16. The FSAR describes the neutron poison used in the SLCS as sodium pentaborate, produced by dissolving stoichiometric quantities of borax and boric acid in demineralized water. These boron compounds are described as consisting of natural boron. Does this mean that the boron is a mixture of the 2 predominant isotopes in the ratio that they occur naturally, i.e.,  $5B^{10}$  at 19.78% and  $5B^{11}$  at 80.22%? Boron-10 is the only isotope that is effective at neutron capture; thus, if the sodium pentaborate is 80% boron-11, is not the poison then only 20% effective? Has this effect been considered in the assessment of the SLCS capabilities?
17. Has the use of different chemicals as neutron poisons, e.g., gadolinium, been investigated? If not, why not? If so, with what results?
18. Perform a value/impact analysis, like that in Nureg-0460, specific to PNPP for:  
(1) the automation of the SLCS (2) complete implementation of Alternative 4A.  
Both modifications are assumed to be made during construction on both Units 1 and 2.

Statement of Purpose: The following interrogatories on the ECCS issue are designed to discover more information and evidence that can be used as evidence on the hearing of this cause.

19. Section 6.3.1.1.2 of the PNPP FSAR states that, as a minimum, the following equipment shall make up the ECCS:

- 1 High Pressure Core Spray
- 1 Low Pressure Core Spray
- 3 Low Pressure Coolant Injection Loops
- 1 Automatic Depressurization System

Does the Emergency Core Cooling System at Perry have any other systems above and beyond these minimum requirements?

20. The Applicant's FSAR states (Sections 1.5.1.1, 3.9.2.4) that Perry is the prototype 238 size BWR/6 plant. Describe in detail any special, more stringent testing requirements for prototype plants, especially those pertaining to the ECCS.
21. In the opinion of the Staff, has the ECCS evaluation model for General Electric 238 size BWR/6s met all the criteria of 10 CFR 50.46 and Appendix K of Part 50? If not, specify what parts of the evaluation model do not comply.
22. Which of the four ECCS component systems listed in #1 would be under test in a full scale 30° sector steam test?
23. Would the full scale 30° sector steam test involve other, auxiliary systems not directly related to the phenomena at question, but nonetheless necessary for ECCS operation under real conditions (e.g., diesel generators)?
24. In the opinion of the Staff, is full scale testing mandated by 10 CFR Part 50 Appendix K?
25. Describe in detail any controversy concerning the independence and separability of thermal and hydraulic effects in the specific calculations used to demonstrate compliance of the GE 238 size BWR/6 (generic) and PNPP (specific) ECCS evaluation model(s) with 10 CFR Part 50 Appendix K.
26. Describe the status of Task Action Plan A-16: produce any and all documents relating to TAP A-16 (see NUREG-0410).
27. What bearing has TAP A-16 upon the PNPP ECCS evaluation?
28. Describe in detail the ECCS tests in Europe that demonstrated unpredicted effects and which led, in part, to the formulation of TAP A-16. Explain how these tests relate to PNPP.
29. In the opinion of the Staff, to what degree is core spray distribution predictable?

30. In the opinion of the Staff, is the ADS entirely sufficient and functional in all its expected operational modes?
31. Name any BWRs in this country which have been required to perform a full scale 30 degree sector steam test before being authorized for operation by the NRC.

Statement of Purpose: The following interrogatories on the Emergency Planning issue relate the effectiveness and feasibility of Applicant's Emergency Planning and are designed to discover evidence to be used at the hearing.

32. Produce any and all documents, correspondence, or memoranda between CEI and the NRC, FEMA, local or state governments or any other entity relating to the use of thyroid blocking agents by CEI employees, emergency workers, or the general public.
33. Demonstrate and discuss how emergency response facilities meet each and every criterion listed in NUREG-0814; answer all questions therein. (Emergency response facilities include the control room, Technical Support Center, Operational Support Center and Emergency Operations Facility.)
34. NCRP Report No. 55 at pp. 16-17 indicates that engineered safeguards at reactors may reduce the release of radioiodine during a nuclear accident. For each safeguard listed therein (and below), describe the system, if any, that will be in place at PNPP, explain how the system works to reduce iodine release, and indicate how efficient said system is at reducing radioiodine levels.
  - (1) various methods for condensing the radioiodine-bearing steam that would be released to the reactor building.
  - (2) enclosing the reactor in a sealed containment structure.

- (3) recirculating the contained atmosphere through absorbents and filters that remove radioiodines.
  - (4) operation of sprays containing chemicals capable of absorbing the radioiodines and reducing their concentration in the atmosphere of the containment building.
35. Explain how the plume exposure pathway EPZ depicted in Figure 11-2 of Appendix D of Appendix 13A of FSAR was derived. Explain precisely how each and every one of the following factors was considered in the determination of the extent of the plume exposure EPZ: demography, including permanent and seasonal residents and transients; meteorology; topography; land use characteristics; access routes; local jurisdictional boundaries; release time and energy characteristics; release height; radionuclide content of release, including release fractions; plume dispersion, including plume rise; deposition velocity; dose-effects; sheltering and shielding; radiation treatment; breathing rates; time of year of release.
  36. Does Staff agree with this EPZ area.
  37. Describe in detail the methods and standards by which the evacuation time estimates contained in Tables V-4 and V-5 in Appendix D of Appendix 13A of FSAR were evaluated.
  38. What consequences (including early fatalities, delayed fatalities, early injuries, delayed injuries, developmental and genetic birth defects, and land and water contamination) would be associated with each of the evacuation time estimates listed in the FSAR?
  39. What range of estimates would be acceptable to the Staff? State specifically the highest evacuation time estimate which would be acceptable to the Staff for each evacuation sub-area drawn in the FSAR, and describe the consequences (as categorized above) which would be associated with each such evacuation time.

40. Has the Staff or Applicant (or anyone on their behalf or to their knowledge) conducted any generic or site-specific consequence analysis for (or having relevance to) releases from PNPP equivalent to the BWR-1 to BWR-4 releases defined in WASH-1400? If so, set forth in detail the methodology, assumptions, and results if any such study, including calculations of early fatalities, delayed fatalities, early injuries, delayed injuries, developmental or genetic birth defects, and land and water contamination. If not, by whom was the decision made that such a study was unnecessary and what were the reasons for that decision? What process was followed in reaching that decision?
41. Has the Staff or Applicant (or anyone on their behalf or to their knowledge) conducted any generic or site-specific accident consequence analysis for accidents with containment failure modes such that the radioactive releases exceed those set forth in the design basis accident assessment described in Chapter 15 of the PNPP FSAR? If so, answer Interrogatory #<sup>40</sup>~~40~~, specific to any such study.
42. In the Staff's opinion, is it possible to evacuate safely the total permanent, seasonal, and transient populations within each of the following areas at any time of day or any time of year? Describe in detail any assumptions made and indicate how your response would differ if that assumption were changed. Disclose any assumptions made with respect to an acceptable level of risk to the evacuating population.
- (a) The area designated as the plume exposure pathway EPZ for PNPP in the FSAR.
  - (b) The area which the Staff believes should constitute the plume exposure EPZ for PNPP.
  - (c) The circular zone surrounding PNPP having a 20-mile radius.
  - (d) The Mentor Headlands area.
  - (e) The entire City of Mentor.

43. In the Staff's opinion, would there ever be a need to order protective actions in any area outside of the plume exposure pathway EPZ proposed by the Applicant in the FSAR? If so, describe the circumstances therein, the areas so affected, and the nature of any such protective actions.
44. Has any consideration been made of the possibility of the voluntary and spontaneous evacuation of persons within the plume exposure pathway EPZ in the event of an accident at PNPP and how this might affect the ordered evacuation? If so, describe in detail any such study.
45. Has any consideration been made of the possibility of the voluntary and spontaneous evacuation of persons outside of the plume exposure pathway EPZ in the event of an accident at PNPP and how this might affect the ordered evacuation, especially the support organizations and facilities outside the EPZ? If so, describe in detail any such study.
46. In the Staff's opinion, are there adequate facilities available to shelter simultaneously the total permanent and peak seasonal and transient populations in each of the following areas?
- (a) The area designated by the Applicant in the FSAR as the plume exposure pathway EPZ.
  - (b) The area which the Staff believes should comprise the plume exposure pathway EPZ.
  - (c) The circular zone surrounding PNPP having a 20-mile radius.

With respect to each of these areas, describe the types of shelter available, indicate the numbers of each type of shelter available and the shielding factors associated with each type, describe the nature and location of the shelter to be used by transient populations, and disclose any assumptions made as to an acceptable level of risk to the public.

47. Describe in detail any design modifications which would be made to PNPP, Units 1 and 2 to reduce the early and/or delayed fatalities and/or health effects associated with accidents. Specify the type of accident(s), the consequences of which each such modification would reduce, and estimate, for each modification, the extent of reduction for each of the following effects: early fatalities, delayed fatalities, early injuries, delayed injuries, and developmental or genetic birth defects.
48. In the Staff's opinion, what constitutes an acceptable level of risk to the public surrounding PNPP in the event of an accident? Specifically, what is the uppermost number of each of the following health effects which is acceptable: early fatalities, delayed fatalities, early injuries, delayed injuries, and developmental or genetic birth defects? If your answer varies depending on the type of accident which occurs, provide answers with respect to releases at PNPP equivalent to the BWR-1 to BWR-4 releases defined in WASH-1400.
49. In the Staff's opinion, what constitutes an appropriate and safe distance from PNPP for the location of reception/mass care centers for evacuees? Describe any other criteria for the location of reception/mass care centers.
50. In the Staff's opinion, if an accident occurs on a weekday during working hours what percentage of the permanent population within the plume exposure pathway EPZ proposed by the Applicant will be working at locations outside the EPZ, leaving other family members at home without automobiles? Also, what percentage of the automobiles said to be available in the Applicant's Evacuation Study are operable?
51. Why has the Applicant not submitted separate evacuation time estimates for evacuating special facilities, as required by NUREG-0654, Appendix 4?

52. NUREG-0654, Appendix 4 provides that (at p. 4-2), in preparing evacuation time estimates, "The number of permanent residents shall be estimated using the U.S. Census data or other reliable data, adjusted as necessary, for growth." (Emphasis added) In the Staff's opinion, what is the appropriate target date for adjusting population figures for growth: the expected date of initial criticality, or the expected date for the termination of plant operations? Why have unadjusted population data been used to prepare evacuation time estimates? Provide evacuation time estimates using properly adjusted populations.
53. The Applicant's FSAR, Appendix 13A, Section 4.2 states that the Ohio DSA has adopted the EPA manual of protective action guidelines, EPA-520/1-75-001, and that recommendations to the State and local government will be based on these PAGs.
- (a) Is the Staff aware that this includes the administration of radioprotective drugs, such as potassium iodide?
- (b) If so, describe in detail any and all provisions for the purchase, storage, stockpiling, distribution (including public education on proper use of the drug), and effectiveness/side effects monitoring of such drugs.
- (c) In the Staff's opinion, would the administration of radioprotective drugs to individuals off-site ever be necessary or desirable in the event of an accident at PNPP? If not, why not? If so, to what radial distance from the site could dissemination of the drugs be necessary? What is the maximum quantity of potassium iodide or other radioprotective drug that could be needed? What repositories in the vicinity of the PNPP site currently stock such drugs and what quantities are maintained?
54. Explain precisely how each of the following possibilities was accounted for in the preparation of evacuation time estimates for PNPP:

- (a) Vehicles breaking down or running out of fuel during the evacuation.
  - (b) Abandoned vehicles.
  - (c) Vehicles having insufficient fuel at the commencement of the evacuation, to the knowledge of their owners.
  - (d) Disregard of traffic control devices.
  - (e) Evacuees using inbound traffic lanes for outbould travel.
  - (f) Blocking of cross-streets at intersections.
55. In the opinion of the Staff, does the Applicant's FSAR comply with each and every item applicable to BWRs in Regulatory Guide 1.97, Revision 2? If your answer is anything other than unconditionally affirmative, describe in detail every item of noncompliance, the alternative approach proposed by the Applicant, and the safety justification for that alternative approach.
56. In the opinion of the Staff, what constitutes a functional letter of agreement between a utility and off-site emergency response organizations? Does the Staff consider the letters of agreement contained in Appendix B of Appendix 13A of the PNPP FSAR to be functional and binding and legal?
57. What provisions have been made to ensure the cooperation of the public during a radiation emergency? Specifically, what authority do state and local governments have to force people to evacuate from their homes, to prevent spontaneous evacuation outside the EPZ (and possibly in the area of the reception/mass care centers), to compel the assistance of volunteers in the evacuation, and to control panic and subsequent uncooperative behavior in evacuees?
58. In the Staff's opinion, might a nuclear emergency occurring at PNPP ever require the imposition of martial law? If so, what areas around the site might be so affected and for how long?

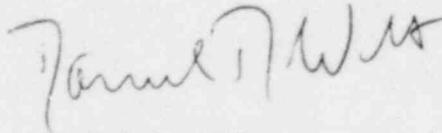
59. Has the State of Ohio Nuclear Power Plant Emergency Response Plan received concurrence from the NRC? If not, specify which portions of the plan do not comply with NRC criteria for concurrence. Provide these criteria.
60. NUREG-0654 at p. 13 states that "The range of times between the onset of accident conditions and the start of a major release is of the order of one-half hour to several hours." Section 5.2.4 of Appendix 13A of the PNPP FSAR states that the Emergency Duty Officer, who must be able to respond within 60 minutes, is responsible for recommending protective actions for the general public. In the Staff's opinion, in the event of a major release occurring within  $\frac{1}{2}$  hour, does this arrangement provide sufficient time for alerting the public and implementing the appropriate protective actions, including evacuation, such that no member of the general public would receive radiation doses in excess of the limits prescribed by 10 CFR Sec. 20.105?
61. What is the basis of legal authority (regulations, legislation at Federal, State, or local level) governing the cooperation of state, local, or private emergency response organizations with utilities operating nuclear power plants?
62. Describe in detail any independent monitoring for radiation around the PNPP site. (Independent monitoring here means monitoring by a governmental or private entity that is not an agent of the Applicant.) Include the types of monitors to be used, both mobile and stationary and detection/manufacture type, manner and frequency of reading/analysis, availability of instantaneous data, type of data link with the responsible agency, name and affiliation of responsible agency, type of meteorological monitors/data input, if any, means of calculating projected doses, and the source of funding of the responsible agency.

Statement of Purpose: The following interrogatories relate to the Quality Assurance contention ad admitted to date. In the event the contention is expanded further interrogatories will be filed. The interrogatories relate to the contention and are designed to provide information and evidence on the hearing.

63. Provide the name and last known address of the person who made allegations regarding the QC program at PNPP during a telephone call to NRC Region III on May 23, 1978. (See Investigation Report No. 50-440/78-08; 50-441/78-07, p.2) Provide also the name and last known address of the second individual interviewed on May 26, 1978. Provide transcripts of the interviews conducted with these persons on May 24 and 26, 1978.
64. Document each and every instance in which equipment and/or materials not meeting specifications were used "as is". For each case, name all personnel responsible for this decision to "use as is" and their qualifications, list any instance in which an engineering judgement was used in reaching that decision and the basis of that judgement, and indicate any applicable operational experience.
65. Provide all documentation concerning corrective actions taken regarding the improper alignment of the Unit 1 RPV (see Unresolved Item 440/78-12-05). The following questions relate to the closure of above unresolved item in the inspection report and related correspondence dated Nov. 21, 1979.
  - (a) On what previous experience was the "use as is" decision made by GE safety/reliability personnel based?
  - (b) Was this decision based on any engineering judgement? If so, provide the basis of that judgement.
  - (c) Give the names of the GE personnel responsible for that decision.
  - (d) Provide the qualifications of all persons named in (c).

66. Provide all applicable documentation of the interviews with site construction craftsmen conducted by Region III personnel, including names of the craftsmen and the NRC interviewers and transcripts, notes, tapes, etc. of the interviews conducted on October 16-18, 1979 and November 14-15, 1979, and at any previous or subsequent time. (See inspection reports and related correspondence: 50-440/79-10 and 50-441/79-10, dated Nov. 21, 1979; 50-440/79-11 and 50-441/79-11, dated Dec. 17, 1979)
67. What are the flammability requirements for electrical cable and related components, such as connectors, tees, terminations, insulation, etc.? Has the material used at PNPP met these requirements?
68. Describe in detail the "fabrication deficiencies" which caused rejection of service water intake structures, as documented in Inspection Report No. 50-440/80-09 and 50-441/80-09, p. 4.
- (a) Were any design changes made as a result of this problem?
- (b) Provide the names of all personnel involved in this decision and give their qualifications.
- (c) Was this decision based on any engineering judgement? If so, give the basis of that judgement.
69. After it had been discovered that an inspector's initials had been forged on an inspection document (see Investigation Report 50-440/78-08, 50-441/78-07), were any other documents checked for signature authenticity? If not, why not? If so, list all documents so checked, and indicate any which did not meet with approval.

Respectfully submitted,



Daniel D. Wilt

Attorney for Sunflower Alliance, Inc., et. al.

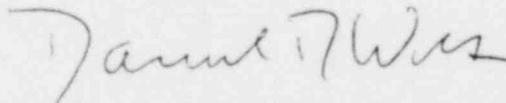
7301 Chippewa Road

Brecksville, Ohio 44141

(216) 526-2350

Proof of Service

A copy of these second set of interrogatories to NRC staff has been sent to all persons on the attached service list on this 30 day of April 1982.



Daniel D. Wilt

Attorney for Sunflower Alliance, Inc., et. al.