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RELATED CORRESPONDENCE

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
before the
ATOMIC SAFETY AND LICENSING BOARD

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OFFICE OF SECRETARY
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In the Matter of)
VERMONT YANKEE NUCLEAR)
POWER CORPORATION) Docket No. 50-271-OLA-4
(Vermont Yankee Nuclear) (Operating License
Power Station)) Extension)

INTERROGATORIES PROPOUNDED BY THE STATE OF VERMONT
TO THE
VERMONT YANKEE NUCLEAR POWER CORPORATION
(Set No. 2)

Pursuant to 10 C.F.R. § 2.740b, the State of Vermont hereby propounds the following interrogatories to the Vermont Yankee Nuclear Power Corporation.

DEFINITIONS

1. "Document" as used herein is used in its broadest sense as expressed in Rule 34(a) of the Federal Rules of Civil Procedure, and specifically includes copies of every instrument or device by which, through which, or on which information has been recorded, including those reflecting meetings, discussions or conversations: notes; letters; memoranda (including internal Vermont Yankee Nuclear Power Corporation memoranda); manifests; tables; drawings; files; graphs; charts; maps; photographs; deeds; studies; data sheets; notebooks; books; appointment calendars; telephone bills; telephone messages; receipts; vouchers; minutes of meetings; pamphlets; computations; calculations; accounting statements; financial statements; voice recordings; computer printouts and disks; or any other device or media on which or through which information of any type is transmitted, recorded, or preserved. The term "document" also means every copy of a document when such copy is not an identical duplicate of the original.

2. "Person" as used herein is used in its broadest sense to include natural persons, public or private corporations and their subsidiaries or

divisions, proprietorships, partnerships, governmental entities, associations, organizations, groups, trusts, estates and any other form of entity. Any reference herein to any "person," whether or not a party herein, that is a corporation, partnership, or any entity other than a natural person, shall be construed as including all past and present officers, directors, employees, and agents or members of the Board of Directors of the entity.

3. "Vermont Yankee" and "licensee" each refer to Vermont Yankee Nuclear Power Corporation, its predecessors, successors, parents, subsidiaries, affiliates, segments or divisions, including all past and present officers, directors, employees, agents or members of the Board of Directors of Vermont Yankee.

4. "Vermont Yankee plant" refers to the Vermont Yankee Nuclear Power Station.

5. The term "identify" means describe with particularity and provide the following information:

(a) When used with reference to a natural person, state his or her full name and present (or last known) business and residential addresses, present (or last known) business and residential telephone numbers, present (or last known) business affiliation, and employment position and relationship to Vermont Yankee at the time of the act to which the interrogatory relates;

(b) When used with reference to any entity other than a natural person, state its full name, the address of its principal place of business and its organizational form;

(c) When used with reference to a document, state its type (e.g., letter, contract, chart, memorandum), date, author(s), the name and address of each addressee, its title or heading, its substance, its present (or last known) location and custodian, the identity of each person to whom a copy was sent, and the date of such transmittal; and

(d) When used with regard to a communication, state the identity of each person making, receiving or present during the communication, the date and location of the communication, the substance of the communication, the manner in which the communication was made and, in the case of a written communication, the identity of the document comprising the communication.

6. "The application" refers to Vermont Yankee letter to NRC, BVY 89-41 of April 27, 1989, Proposed Amendment to Vermont Yankee Operating License to Extend the License Expiration to 40 years from Date of Issuance.

7. "Structures, systems, and components," unless otherwise qualified, refers to structures, systems, and components (and their supporting systems) whose failure could significantly affect the safety or security of the facility, and which are included in the plant's current licensing basis. This includes those systems, structures, and components (a) relied upon for the integrity of the reactor coolant pressure boundary, safe shutdown capability, and accident prevention and mitigation; (b) whose failure can cause or adversely affect a transient or accident that significantly challenges structures, systems and components relied upon for the integrity of the reactor coolant pressure boundary, safe shutdown, or accident mitigation; and (c) other structures, systems and components not included above that provide reasonable assurance that the facility can be operated without undue risk to the public and plant personnel health and safety or to common defense and security (Draft Regulatory Guide DG-1001, Section C.1).

8. "Components" refers to items from which equipment is assembled (for example, attachments, bearings, bolts, capacitors, connectors, governors, inspection access ports, instrument sensors, locking devices, position indicators, resistors, seals, sight glasses, springs, switches, transistors, tubes, wires, etc), or to items from which systems are assembled (for example, piping, valves, pumps, heat exchangers, strainers, instrumentation, etc.).

9. "Equipment" refers to an assembly of components designed and manufactured to perform specific functions.

10. "Safety-related" structures, systems and components refers to structures, systems and components that are relied upon to remain functional during and following design basis events to ensure (i) the integrity of the reactor coolant pressure boundary, (ii) the capability to shutdown the reactor and maintain it in a safe shutdown condition, and (iii) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the 10 CFR Part 100 guidelines. Design basis events are defined as conditions of normal operation, including anticipated operational occurrences, design basis accidents, external events, and natural phenomena for which the plant must be designed to ensure functions (i) through (iii) above. (10 CFR 50.49(b)(1))

11. "Nonsafety-related" structures, systems and components refers to all structures, systems and components that are not safety-related.

12. "Current licensing basis," refers to the original licensing basis as described in the licensee's Final Safety Analysis Report (FSAR), plus those additional requirements that have been made by the licensee during the period of plant operation up to the present. This includes, but is not limited to, plant-specific compliance with the Commission regulations as prescribed in parts 2, 19, 20, 21, 30, 40, 50, 51, 55, 72, 73, 100, and the appendices thereto of title 10 of the Code of Federal Regulations; orders; license conditions; exemptions; adjudicatory decisions; and written commitments made in correspondence such as responses to NRC bulletins and generic letters and other licensee correspondence (54 FR 4194).

13. "Qualified life" refers to the period of time, prior to the start of a design basis event, for which the structure, system or component was demonstrated to meet the design requirements for the specified service conditions.

14. "Design life" refers to the time during which satisfactory performance can be expected for a specified set of service conditions.

15. "Installed life" refers to the interval from installation or construction to removal during which the structure, system or component may be subject to design service conditions and system demands.

16. "Environmental conditions" refer to temperature, pressure, humidity, radiation, chemicals, and submergence in the area or, for the equipment or components in question.

17. "Mild environment" refers to an environment that would at no time be significantly more severe than the environment that would occur during normal plant operation, including anticipated operational occurrences (10 CFR 50.49 (c)).

18. "Harsh environment" refers to an environment that is not a mild environment.

19. "Age-degradation mechanism" refers to the following aging phenomena: Fatigue, vibration, corrosion, erosion, service wear, thermal embrittlement, radiation embrittlement, chemical and biological effects, creep, shrinkage, degradation due to operational environment (Proposed rule for Plant License Extension, XX.9.(c).(3), 54 FR 41985).

INSTRUCTIONS

1. The response to each Interrogatory is to be numbered in a manner consistent with these Interrogatories.
2. In responding to these Interrogatories, furnish all responsive information that is available to Vermont Yankee, including information that is in the possession of any of Vermont Yankee's officers, employees, agents, contractors, consultants, assigns and attorneys or otherwise subject to Vermont Yankee's custody or control.
3. In responding to these Interrogatories, Vermont Yankee shall identify the person or persons providing the information contained in its answers.
4. If any requested information is withheld pursuant to an objection or claim of privilege, Vermont Yankee shall identify the specific Interrogatory (including subparagraph) requesting the withheld information, state the nature of the objection or privilege and the precise grounds upon which the objection is made or the privilege is claimed, and identify each person who has knowledge of such information.
5. If any document is not produced because Vermont Yankee has not retained it or because it is being withheld pursuant to an objection or claim of privilege, Vermont Yankee shall identify the document by stating:
 - (a) the name(s) and affiliation(s) of the document's author(s) or originator(s);
 - (b) the name(s) and affiliation(s) of the document's addressee(s);
 - (c) the document's date;
 - (d) the document's title or heading;
 - (e) the document's subject matter;
 - (f) the document's type (e.g., letter, contract);
 - (g) the name(s) and affiliation(s) of the present or last known custodian(s) of the original document or copies thereof;
 - (h) the current or last known business and residential addresses of such custodian(s); and
 - (i) the name(s) and affiliation(s) of all recipients of copies of the document.
6. If anything is deleted from a document produced in response to an interrogatory, Vermont Yankee shall state the reason for the deletion and the subject matter of the deleted material.
7. If any Interrogatory is objected to in part, for any reason, the remainder of the Interrogatory is to be responded to fully.

8. All responses must be supplemented as provided for in 10 C.F.R. § 2.740(e).

INTERROGATORIES

1. Please state quantitatively and describe in detail all "financial or other incentives offered to such [future maintenance] personnel" (reference Vermont Yankee Interrogatory (Set No. 3) No. 10) which are included within the "projected [in 2007] 8.6 cents per kilowatt hour" stated in Attachment 2 of the application at page 9.
2. Please state quantitatively and describe in detail the maintenance costs which are included within the "projected [in 2007] 8.6 cents per kilowatt hour" stated in Attachment 2 of the application at page 9, that are envisioned by the following statement from the application:

"[R]egardless of the age of the overall facility, these programs assure that the structures, systems and components will be refurbished and/or replaced to maintain component functional capability and margins of safety required by the Technical Specifications (Application, Attachment 1 at pages 1 and 2; at page 3; and at page 4)."
3. Regarding the statement from Attachment 1 of the application at page 2, "No changes to the above programs [which include the maintenance program] are necessary for assuring that during the proposed amendment term, Vermont Yankee continues to perform as intended by its design," please answer the following:
 - a. Was the statement true and correct as of the date of the application?
 - b. Is the statement true and correct as of the date of your response to these interrogatories?
 - c. Is Vermont Yankee willing to have this proceeding adjudicated on the basis of the maintenance program as it existed on the date of the application?

- d. If your response to sub-part c is anything other than an unqualified affirmative, state every reason for your answer.
4. Regarding the statement from Attachment 2 of the application at page 27, "[t]he passive components (tanks, pump casings, and valve bodies) associated with safety-related systems are designed to the same codes as the components that comprise the Reactor Coolant System pressure boundary," please identify the "code" for each "passive component (tanks, pump casings, and valve bodies) associated with safety-related systems."
 5. Regarding the statement from Attachment 2 of the application at page 27, "consideration was given to possible aging effects of corrosion, erosion and thermal cycling fatigue [for passive components associated with safety-related systems]," please describe in detail each and every "consideration" which "was given to possible aging effects."
 6. Regarding the statement from Attachment 2 of the application at page 27, "the expected service life of these passive components is greater than 40 years," please state each and every reason that "expected service life ... is greater than 40 years," and for each reason:
 - a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
 7. Regarding the statement from Attachment 2 of the application at page 27, "[m]any of the active (moving or rotating) mechanical components ... are expected to wear out and be periodically replaced during the plant's operating lifetime," please state, by name and equipment identification number, each and every "active (moving or rotating) mechanical component[]" which is "expected to wear out and be periodically replaced during the plant's operating lifetime."
 8. Regarding the statement from Attachment 2 of the application at page 31, "experience in other industries with similarly designed structures

indicates that, with an aggressive inspection and maintenance program, a service life well in excess of 40 years can be anticipated [for Vermont Yankee plant structures other than the Mark I primary containment]," please answer the following:

- a. State each of the "other industries" to which the statement refers.
 - b. Describe in detail the "experience" (from these industries) to which the statement refers.
 - c. Describe in detail what is meant by "an aggressive inspection and maintenance program".
9. Please state each and every structure, system, or component for which the predictive maintenance method of vibration analysis is performed.
10. For each structure, system and component stated in response to the foregoing interrogatory:
- a. Please identify the procedure(s) in which vibration analysis is required.
 - b. Please state the date that the requirement for vibration analysis was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all vibration analyses in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which vibration analysis is believed to detect.
11. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which vibration analysis is believed to detect, please state each and every reason why you believe vibration analysis can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
- a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.

- c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
- 12. Please state each and every structure, system, or component for which the predictive maintenance method of acoustic analysis is performed.
- 13. For each structure, system and component stated in response to the foregoing interrogatory:
 - a. Please identify the procedure(s) in which acoustic analysis is required.
 - b. Please state the date that the requirement for acoustic analysis was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all acoustic analyses in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which acoustic analysis is believed to detect.
- 14. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which acoustic analysis is believed to detect, please state each and every reason why you believe acoustic analysis can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
 - a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that

Vermont Yankee does not rely upon the expertise of any person for the reason.

15. Please state each and every structure, system, or component for which the predictive maintenance method of lube oil analysis is performed.
16. For each structure, system and component stated in response to the foregoing interrogatory:
 - a. Please identify the procedure(s) in which lube oil analysis is required.
 - b. Please state the date that the requirement for lube oil analysis was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all lube oil analyses in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which lube oil analysis is believed to detect.
17. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which lube oil analysis is believed to detect, please state each and every reason why you believe lube oil analysis can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
 - a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

18. Please state each and every structure, system, or component for which the predictive maintenance method of radio frequency monitoring is performed.
19. For each structure, system and component stated in response to the foregoing interrogatory:
 - a. Please identify the procedure(s) in which radio frequency monitoring is required.
 - b. Please state the date that the requirement for radio frequency monitoring was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all radio frequency monitoring in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which radio frequency monitoring is believed to detect.
20. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which radio frequency monitoring is believed to detect, please state each and every reason why you believe radio frequency monitoring can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
 - a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
21. Please state each and every structure, system, or component for which the predictive maintenance method of infrared thermography is performed.

22. For each structure, system and component stated in response to the foregoing interrogatory:
- a. Please identify the procedure(s) in which infrared thermography is required.
 - b. Please state the date that the requirement for infrared thermography was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all infrared thermography evaluations in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which infrared thermography is believed to detect.
23. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which infrared thermography is believed to detect, please state each and every reason why you believe infrared thermography can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
- a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
24. Please state each and every structure, system, or component for which the predictive maintenance method of ferrography is performed.
25. For each structure, system and component stated in response to the foregoing interrogatory:
- a. Please identify the procedure(s) in which ferrography is required.

- b. Please state the date that the requirement for ferrography was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all ferrography evaluations in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which ferrography is believed to detect.
26. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which ferrography is believed to detect, please state each and every reason why you believe ferrography can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
- a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
27. Please state each and every structure, system, or component for which the predictive maintenance method of grease analysis is performed.
28. For each structure, system and component stated in response to the foregoing interrogatory:
- a. Please identify the procedure(s) in which grease analysis is required.
 - b. Please state the date that the requirement for grease analysis was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all grease analyses in the last five years.

- d. Please state each and every age-degradation mechanism applicable to the structure, system or component which grease analysis is believed to detect.
29. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which grease analysis is believed to detect, please state each and every reason why you believe grease analysis can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
- a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
30. Please state each and every structure, system, or component for which the predictive maintenance method of bearing temperature trending is performed.
31. For each structure, system and component stated in response to the foregoing interrogatory:
- a. Please identify the procedure(s) in which bearing temperature trending is required.
 - b. Please state the date that the requirement for bearing temperature trending was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all bearing temperature trending in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which bearing temperature trending is believed to detect.

32. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which bearing temperature trending is believed to detect, please state each and every reason why you believe bearing temperature trending can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
- Please state each and every fact upon which your reason is based.
 - Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
33. Please state each and every structure, system, or component for which the predictive maintenance method of in-leakage detection is performed.
34. For each structure, system and component stated in response to the foregoing interrogatory:
- Please identify the procedure(s) in which in-leakage detection is required.
 - Please state the date that the requirement for in-leakage detection was incorporated into the procedure(s).
 - Please identify the documentation of results of all in-leakage detection evaluations in the last five years.
 - Please state each and every age-degradation mechanism applicable to the structure, system or component which in-leakage detection is believed to detect.
35. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which in-leakage detection is believed to detect, please state each and every reason why you believe in-leakage detection can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:

- a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
36. Please state each and every structure, system, or component for which the predictive maintenance method of insulation resistance (meggering) evaluation is performed.
37. For each structure, system and component stated in response to the foregoing interrogatory:
- a. Please identify the procedure(s) in which insulation resistance (meggering) evaluation is required.
 - b. Please state the date that the requirement for insulation resistance (meggering) evaluation was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all insulation resistance (meggering) evaluations in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which insulation resistance (meggering) evaluation is believed to detect.
38. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which insulation resistance (meggering) evaluation is believed to detect, please state each and every reason why you believe insulation resistance (meggering) evaluation can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
- a. Please state each and every fact upon which your reason is based.

- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
- 39. Please state each and every structure, system, or component for which the predictive maintenance method of polarization index evaluation is performed.
- 40. For each structure, system and component stated in response to the foregoing interrogatory:
 - a. Please identify the procedure(s) in which polarization index evaluation is required.
 - b. Please state the date that the requirement for polarization index evaluation was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all polarization index evaluations in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which polarization index evaluation is believed to detect.
- 41. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which polarization index evaluation is believed to detect, please state each and every reason why you believe polarization index evaluation can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
 - a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.

- c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
- 42. Please state each and every structure, system, or component for which the predictive maintenance method of eddy current testing is performed.
- 43. For each structure, system and component stated in response to the foregoing interrogatory:
 - a. Please identify the procedure(s) in which eddy current testing is required.
 - b. Please state the date that the requirement for eddy current testing was incorporated into the procedure(s).
 - c. Please identify the documentation of results of all eddy current testing in the last five years.
 - d. Please state each and every age-degradation mechanism applicable to the structure, system or component which eddy current testing is believed to detect.
- 44. For each age-degradation mechanism stated in response to sub-part d of the foregoing interrogatory which eddy current testing is believed to detect, please state each and every reason why you believe eddy current testing can detect this age-degradation mechanism before failure of the structure, system or component, and for each reason:
 - a. Please state each and every fact upon which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
 - c. For each reason, either provide the technical qualification (education, employment history, licenses and certificates, experience, or other qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

45. Does Vermont Yankee agree without qualification with the following statement:

"The probability of an accidents evaluated in the FSAR is increased as the structures, systems and components of the plant age."

If your answer is anything other than an unqualified affirmative, then please provide every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
46. Please describe in detail all studies and investigations which Vermont Yankee has performed, or which have been performed for Vermont Yankee, regarding the effect of aging of equipment on the probability of accidents evaluated in the FSAR.
47. Does Vermont Yankee believe that the current state-of-the-art of probabilistic risk analysis allows evaluation of the effect of aging equipment on the probability of accidents evaluated in the FSAR? Please describe in detail each and every reason for your answer.
48. Does Vermont Yankee believe that age degradation increases the probability of failure of any Vermont Yankee structure, system or

component? Please describe in detail each and every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
49. Please identify all analyses and evaluations of equipment performance performed by Vermont Yankee:
- a. For INPO Component Failure Analysis Reports (CFARs);
 - b. Using CFAR data.
50. Please identify all INPO CFAR system input Vermont Yankee has provided to INPO.
51. Please identify all INPO CFAR system results Vermont Yankee has received.
52. Please identify all documents describing the results of INPO evaluations of maintenance activities at Vermont Yankee.
53. Please identify all quarterly reports of the following indicators provided to INPO since 1980:
- a. Equivalent availability
 - b. Unplanned automatic scrams
 - c. Unplanned safety system actuations

- d. Forced outage rate
 - e. Thermal performance (gross heat rate)
 - f. Lost-time accident rate
 - g. Solid waste volumes
54. Please identify all semi-annual reports received from INPO since 1980 showing trends and comparative histograms for the indicators listed in the foregoing interrogatory.
55. Please identify the "extensive self-assessment of the maintenance program (i.e., meeting INPO guidelines)," referenced in IR 89-80 at page 9, and please:
- a. State the date(s) of the self-assessment.
 - b. Describe in detail the conclusions of the assessment.
 - c. State the recommendations for improvement from the assessment.
56. Does Vermont Yankee agree that the phrase from Contention VII, "the safety standards applicable to this plant and upon which this plant was originally granted its operating license," refers to the current licensing basis for the plant as defined at 54 FR 41984? If your answer is anything other than an unqualified affirmative, please:
- a. State each reason for your answer.
 - b. State what Vermont Yankee believes to be the safety standards applicable to the Vermont Yankee plant and upon which the plant was originally granted its operating license. Provide citations to all regulations upon which Vermont Yankee relies for its response.
57. Does Vermont Yankee agree that the definition of "maintenance" for use in this proceeding is the definition found on pages A.21 and A.22 of NUREG/CP-0099, "NRC Rulemaking of Maintenance of Nuclear Power

Plants," November 1988? If your answer is anything other than an unqualified affirmative, please:

- a. State each reason for your answer.
- b. State Vermont Yankee's definition of "maintenance" for use in this proceeding.

58. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that the current licensing basis for the Vermont Yankee Plant has been completely and accurately described."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

59. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that all structures, systems, and

components (and their supporting systems) whose failure could significantly affect the safety or security of the facility, and which are included in the plant's current licensing basis, have been identified."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

60. Does Vermont Yankee agree without qualification with the following statement:

"The definition for structures, systems and components (and their supporting systems) whose failure could significantly affect the safety or security of the facility is: those systems, structures, and components (a) relied upon for the integrity of the reactor coolant pressure boundary, safe shutdown capability, and accident prevention and mitigation; (b) whose failure can cause or adversely affect a transient or accident that significantly challenges structures, systems and components relied upon for the integrity of the reactor coolant pressure boundary, safe shutdown, or accident mitigation; and (c) other structures, systems and components not included above that provide reasonable assurance that the facility can be operated without undue risk to the public and plant personnel health and safety or to common defense and security."

If your answer is anything other than an unqualified affirmative, then please:

- a. State each and every part of the above definition with which Vermont Yankee does not agree.
 - b. For each part of the definition with which Vermont Yankee does not agree stated in the foregoing sub-part, state each reason for the disagreement.
 - c. State the definition of "structures, systems and components (and their supporting systems) whose failure could significantly affect the safety or security of the facility" which Vermont Yankee believes to be correct for this proceeding.
 - d. State each and every reason why Vermont Yankee believes the definition from the foregoing sub-part is correct instead of the quoted definition in the interrogatory.
61. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that all applicable degradation mechanisms have been identified for structures, systems and components whose failure could significantly affect the safety or security of the facility, including degradation mechanisms which began and were present in the construction period."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont

Yankee does not rely upon the expertise of any person for the reason.

62. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate compliance with the requirements of 10 C.F.R. Part 50, Appendix B as they apply to the activities to determine, maintain and replace aging structures, systems and components whose failure could significantly affect the safety or security of the facility."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
63. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that appropriate actions have been or will be taken with respect to degradation of those systems, structures, and components whose failure could significantly affect the safety or security of the facility."

- a. If your answer is anything other than an unqualified affirmative, then please state every reason for your answer:
- b. If your answer is affirmative, state every "action" Vermont Yankee believes is "appropriate" to be "taken with respect to degradation of those systems, structures, and components whose failure could significantly affect the safety or security of the facility."

64. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate qualified life for all structures, systems and components whose failure could significantly affect the safety or security of the facility."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

65. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public,

it is necessary to demonstrate that the qualified life of each structure, system and component has been shown either:

- (1) To extend to the end of the extended period, with an acceptable margin; or
- (2) To be included within a proceduralized program with a functioning tracking system for replacement before the end of its qualified life."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

66. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that an effective program of identifying, evaluating and trending the effects of all relevant degradation mechanisms for all structures, systems and components whose failure could significantly affect the safety or security of the facility has been implemented."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.

- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

67. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that a maintenance program has been implemented which conforms with current industry initiatives."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

68. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary to demonstrate that the maintenance program has been indexed to and its effectiveness is evaluated with performance indicators."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
69. Please describe in detail the performance indicators that Vermont Yankee believes to be appropriate for monitoring the effectiveness of its maintenance program for determining and replacing aging components in the extended period.
70. Please state each and every reason why Vermont Yankee believes the performance indicators described in the foregoing interrogatory are appropriate for monitoring the effectiveness of its maintenance program for determining and replacing aging components in the extended period. If you have responded to the foregoing interrogatory by stating that no performance indicator is appropriate, state each and every reason why you believe this to be so.
71. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary that the maintenance program has been demonstrated to be effective in maintaining, determining and replacing aging equipment over a five-year period with no events in which:

- (1) Actions in the maintenance program result in a reportable event;
- (2) Surveillances are missed; or
- (3) End-of-life is reached before the end of qualified life of structures, systems and components, and is undetected by the maintenance program."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
72. Describe in detail the assessment methods Vermont Yankee believes are sufficient to demonstrate that each and every change it has made to its maintenance program since tendering the application will be effective in maintaining, determining and replacing aging equipment.
- a. State every reason why Vermont Yankee believes these assessment methods are sufficient to demonstrate that each and every change it has made to its maintenance program since tendering the application will be effective in maintaining, determining and replacing aging equipment.

- b. State the duration of time for using these assessment methods that Vermont Yankee believes is necessary to result in demonstrating each and every change it has made to its maintenance program since tendering the application will be effective in maintaining, determining and replacing aging equipment.
73. Does Vermont Yankee believe its maintenance program is demonstrated to be effective in maintaining, determining and replacing aging equipment if events occur in which:
- (1) Actions in the maintenance program result in a reportable event;
 - (2) Surveillances are missed; or
 - (3) End-of-life is reached before the end of qualified life of structures, systems and components, and is undetected by the maintenance program.

If your answer is anything other than an unqualified negative, please state every reason for your answer.

74. Please state how many of the events described by (1), (2) and (3) of the foregoing interrogatory that Vermont Yankee believes may occur and still result in a conclusion that its maintenance program is demonstrated to be effective in maintaining, determining and replacing aging equipment, and:
- a. State every reason for your answer.
 - b. State each and every fact on which your reasons are based.
 - c. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - d. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont

Yankee does not rely upon the expertise of any person for the reason.

75. Does Vermont Yankee agree without qualification with the following statement:

"In order to demonstrate reasonable assurance that the activities which would be authorized by the proposed amendment can be conducted without endangering the health and safety of the public, it is necessary that the containment leakage rate has been either:

- (1) Demonstrated as acceptable by passing two successive 10 C.F.R. Part 50, Appendix J, leakage rate tests; or
- (2) Adjusted to the highest as-found leakage rate from Appendix J tests, and demonstrated by calculation to be acceptable in meeting the requirements of 10 C.F.R. Part 100. The calculation must be performed using the methodology in NUREG-0800."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
 - b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
 - c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.
76. Please define the measure or standard of "reasonable assurance" which Vermont Yankee believes is applicable to this proceeding.
77. Does Vermont Yankee agree that the following statement from IR 89-80 at page 13 was true and correct at the time of writing:

"[N]o plans are currently underway or scheduled in the near future to systematically evaluate the [maintenance] program in the light of past experiences and plant aging."

If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.

78. Does Vermont Yankee contend that its maintenance program can be effective in maintaining, determining and replacing aging equipment, as claimed in the application, without:

"a comprehensive set of documents to formalize and upgrade existing practices; thereby, providing an infrastructure capable of sustaining future good performance in light of the certainty of staff turnover (IR 89-80 at page 5)."

If your answer is anything other than an unqualified negative, please state every reason for your answer, and for each reason:

- a. State each and every fact on which your reason is based.
- b. Describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee contends establishes each such fact.
- c. For each reason, either provide the technical qualifications (education, employment history, licenses and certificates, experience, or other information that Vermont Yankee contends establishes the qualifications of the person), of any person on whose expertise Vermont Yankee relies for the reason or state that Vermont Yankee does not rely upon the expertise of any person for the reason.

79. Has the document, INPO 85-038, "Guidelines for the Conduct of Maintenance at Nuclear Power Stations," been reviewed, commented on,

or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:

- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
- b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
- c. Please identify all documents which record, describe or mention this review, comment or use.

80. Has the document INPO 82-002, "Maintenance History Program (MA-310)," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:

- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
- b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
- c. Please identify all documents which record, describe or mention this review, comment or use.

81. Has the document, INPO 82-002, "Snubber Maintenance Program (MA-313)," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:

- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
82. Has the document, INPO 83-024, "Planned Valve Repacking as Preventive Maintenance," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
83. Has the document, INPO 83-045, "Plant Material Deficiency Identification," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have

reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.

- c. Please identify all documents which record, describe or mention this review, comment or use.
84. Has the document, INPO 83-047, "Component Verification and System Validation Guidelines," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
85. Has the document, INPO 84-010, "Vendor Equipment Technical Information Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.

86. Has the document, INPO 84-025, "Operations Surveillance Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
87. Has the document, INPO 84-026, "Setpoint Change Control Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
88. Has the document, INPO 84-028, "Control of Vendor Manuals," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:

- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
89. Has the document, INPO 85-001, "Performance Objectives and Criteria for Operating and Near-term Operating License Plants," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
90. Has the document, INPO 85-010, "Surveillance and Periodic Task Scheduling Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.

- b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
- 91. Has the document, INPO 85-013, "Plant Modification Control Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
 - a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
- 92. Has the document, INPO 85-016, "Temporary Modification Control," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
 - a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.

- c. Please identify all documents which record, describe or mention this review, comment or use.
93. Has the document, INPO 85-026, "Writing Guideline for Maintenance, Test and Calibration Procedures," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
94. Has the document, INPO 85-031, "Guidelines for the Conduct of Technical Support Activities at Nuclear Power Stations," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.

95. Has the document, INPO 85-032, "Preventive Maintenance," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
96. Has the document, INPO 86-002, "Maintenance History Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
97. Has the document, INPO 86-014, "Snubber Maintenance Program," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:

- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
98. Has the document, INPO 86-018, "Guidelines for Training and Qualification of Maintenance Personnel," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
99. Has the document, INPO 87-009, "Control of Vendor Manuals," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have

reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.

- c. Please identify all documents which record, describe or mention this review, comment or use.
100. Has the document, INPO 87-028, "Post-Maintenance Testing," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
101. Has the document, INPO 88-022, "Vendor Manual Specification and Procurement," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.

102. Has the document, INPO 89-009, "Plant Predictive Maintenance," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
103. Has the document, INPO O & MR-308, "Operations and Maintenance Reminder," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
104. Has the document, INPO 87-030, "Performance Objectives and Criteria for Corporate Evaluations," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:

- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
105. Has the document, INPO 85-002, "The Accreditation of Training in the Nuclear Power Industry," been reviewed, commented on, or used in the development of Vermont Yankee's maintenance program by any Vermont Yankee employee (direct or contract), or for Vermont Yankee by Yankee Atomic Electric Company? If your answer is yes:
- a. Please describe in detail the degree to which the guidelines of this document are incorporated into the Vermont Yankee maintenance program.
 - b. Please identify all Vermont Yankee employees (direct or contract) and all Yankee Atomic Electric Company employees who have reviewed, commented on, or used in the development of Vermont Yankee's maintenance program this document for Vermont Yankee.
 - c. Please identify all documents which record, describe or mention this review, comment or use.
106. Does Vermont Yankee intend to offer into evidence the testimony of any expert witness or witnesses? If so, then for each such witness, provide:
- a. An identification of the witness.
 - b. The technical qualifications (education, employment history, licenses and certificates, experience, or other information which Vermont Yankee contends establishes the qualifications of the witness), if any, of the witness in each area in which Vermont Yankee contends the witness to be technically qualified.

- c. The subject matter on which the expert is expected to testify.
 - d. The substance of facts with specific reference to treatises, publications or any other documents or things upon which the expert may rely in his or her anticipated testimony.
 - e. The substance of all other facts to which the expert is expected to testify.
 - f. Each opinion to which the expert is expected to testify.
 - g. A summary of the grounds for each opinion to which the expert is expected to testify.
107. Does Vermont Yankee intend to offer into evidence the testimony of any witness or witnesses other than the expert witnesses noted in response to the previous interrogatory? If so, then please identify each such witness and state the substance of his or her anticipated testimony.

By its Attorney,



Kurt Janson
Special Assistant Attorney General
Department of Public Service
120 State Street
Montpelier, Vermont 05602
(802) 828-2811

Dated: June 6, 1990

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RELATED CORRESPONDENCE

UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION
 before the
 ATOMIC SAFETY AND LICENSING BOARD

DOCKETED
USNRC

'90 JUN -8 P4:26

In the Matter of
 VERMONT YANKEE NUCLEAR
 POWER CORPORATION
 (Vermont Yankee Nuclear
 Power Station)

OFFICE OF SECRETARY
 DOCKETING & SERVICE
 Docket No. 50-271-OLA-4
 (Operating License
 Extension)

CERTIFICATE OF SERVICE

I hereby certify that on June 5, 1990, I made service of "Interrogatories Propounded By the State of Vermont to the Vermont Yankee Nuclear Power Corporation (Set No. 2)" in accordance with rules of the Commission by mailing a copy thereof postage prepaid to the following:

Administrative Judge
 Robert M. Lazo, Chairman
 Atomic Safety and Licensing Board
 U.S. Nuclear Regulatory Commission
 Washington, DC 20555

Administrative Judge
 Jerry Harbour
 Atomic Safety and Licensing
 Board
 U.S. Nuclear Regulatory
 Commission
 Washington, DC 20555

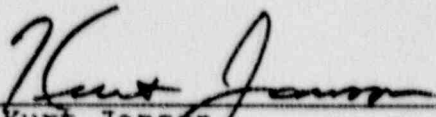
Administrative Judge
 Frederick J. Shon
 Atomic Safety and Licensing Board
 U.S. Nuclear Regulatory Commission
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 Atomic Safety and Licensing
 Board Panel
 U.S.N.R.C.
 Washington, DC 20555


 Kurt Janson
 Special Assistant
 Attorney General

Dated: June 6, 1990
 *Sent Federal Express Overnight Mail

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