

RELATED CORRESPONDENCE

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

(Vermont Yankee Nuclear
Power Station)

)
)
) Docket No. 50-271-OLA-4
) (Operating License
) Extension)
)
)

INTERROGATORIES PROPOUNDED BY THE STATE OF VERMONT
TO THE
VERMONT YANKEE NUCLEAR POWER CORPORATION
(Set No. 3)

Pursuant to 10 C.F.R. §§ 2.740b and 2.741, 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.

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 identify all persons who participated in the preparation of answers to Vermont Interrogatories (Set No. 2):
 - a. Describe in detail the specific portions of each response to which each person contributed.
 - b. Provide the most current resume available for each identified individual.
 - c. Describe the qualifications of each identified individual, including training and papers published.

2. Please identify all persons who participated in the preparation of answers to these interrogatories:
 - a. Describe in detail the specific portions of each response to which each person contributed.
 - b. Provide the most current resume available for each identified individual.
 - c. Describe the qualifications of each identified individual, including training and papers published.

3. The following containment leakage rates are stated in licensing basis sources as follows:

- (1) 0.5 %/day @ 43.5 psig, FSAR at page 14.6-26 (Rev. 2);
- (2) 0.9 %/day @ 44 psig, SER(6/1/71) at page 64;
- (3) 0.8 %/day @ 44 psig, Tech. Spec. 3.7.A.3;
- (4) 1.5 %/day @ 44 psig, Tech. Spec. Bases 4.7.A at page 142.

- a. Please state the current licensing basis for allowable containment leakage rate.
- b. Please explain why the value chosen is the current licensing basis.
- c. Please explain the reasons why the other values in (1), (2), (3) or (4) above are not the current licensing basis for allowable containment leakage rate.

4. Does Vermont Yankee agree that, if the containment integrity has not been maintained such that the containment leakage rate less than or equal to the allowable containment leakage rate in the current licensing basis, then containment integrity no longer meets the safety standards applicable to the Vermont Yankee plant?

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.

5. Does Vermont Yankee agree that, if the containment integrity has not been maintained such that had a design basis loss-of-coolant accident occurred with the single worst effect active failure and with radiological consequence (calculated in accordance with Standard Review Plan 15.6.5 with Appendices and Regulatory Guide 1.3) for such event calculated to be greater than the exposure limits of 10 CFR Part 100, then the containment integrity no longer meets the safety standards applicable to the Vermont Yankee plant?

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.
6. Does Vermont Yankee agree that, based on the results of LERs 89-07, 87-07, 85-07 and 84-11, the Vermont Yankee plant was operated while technical specifications 3.7.A.3, 3.7.A.4, and 3.7.A.8 were not met?

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.
7. How long does Vermont Yankee believe the Vermont Yankee plant was operated while technical specifications 3.7.A.3, 3.7.A.4, and 3.7.A.8 were not met? 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.
8. If it cannot be determined how long the Vermont Yankee plant was operated while technical specifications 3.7.A.3, 3.7.A.4, and 3.7.A.8 were not met, does Vermont Yankee agree with the conservative assumption (for the purpose of consequence evaluation) that the plant operated the entire operating cycle in such condition?

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. State the conservative assumption (for consequence evaluation) and its basis with which Vermont Yankee does agree.
9. LER 89-07 at page 3 of 5 states,
- "Even though valve FDW-96A could not be pressurized, minimum pathway leakage would probably not be affected for the following reasons...." (emphasis added)
- a. Please explain what is meant by "probably not."
 - b. What is the probability that "minimum pathway leakage would ... not be affected?"
 - c. Please describe in detail each and every effort to determine the probability that "minimum pathway leakage would ... not be affected?"
 - d. Please identify each and every individual who participated in the determination that "minimum pathway leakage would probably not be affected."
 - e. Please identify each and every document which records the determination that "minimum pathway leakage would probably not be affected."
10. Is it Vermont Yankee's current licensing basis to assume valve V2-28B will provide isolation "even though not tested (LER 89-07 at page 3 of 5)?"
- If your answer is affirmative, please provide a specific reference to the "facility operating license (including Technical Specifications, Applicable Commission Regulations, Certain NRC orders (those amounting to license amendments) [or] Certain licensee commitments" (quote from Vermont Yankee response to Interrogatory (Set No. 1) No. 6) within your current licensing basis which allows this assumption.
11. LER 89-07 at page 4 of 5 states,

"There is reasonable assurance that, with the exception of a feedwater line break (in the same line as FDW-96A), there would have been enough time for the motor operated valves at the discharge of the high pressure feedwater heaters to be closed before there was any escape of containment atmosphere." (emphasis added)

Please state each and every reason why Vermont Yankee believes there is "reasonable assurance" that "there would have been enough time for the motor operated valves at the discharge of the high pressure feedwater heaters to be closed before there was any escape of containment atmosphere," 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.

12. LER 89-07 at page 4 of 5 states,

"There is reasonable assurance that, with the exception of a feedwater line break (in the same line as FDW-96A), there would have been enough time for the motor operated valves at the discharge of the high pressure feedwater heaters to be closed before there was any escape of containment atmosphere." (emphasis added)

- a. State the measure or standard of "reasonable assurance" that Vermont Yankee has used to make this statement.
- b. Identify the calculation performed to demonstrate this reasonable assurance.
- c. Has this calculation been reviewed and approved in accordance with YOQAP-I-A, Section III, Design Control? If your answer is affirmative, please state the date of approval and the name of the reviewer and approver.

- d. Has this calculation been submitted to the NRC staff for review? If your answer is affirmative, please identify the document provided to the NRC staff.
13. Is it Vermont Yankee's current licensing basis to assume "there would [be] enough time for the motor operated valves at the discharge of the high pressure feedwater heaters to be closed before there was any escape of containment atmosphere?"
- If your answer is affirmative, please provide a specific reference to the "facility operating license (including Technical Specifications, Applicable Commission Regulations, Certain NRC orders (those amounting to license amendments) [or] Certain licensee commitments" (quote from Vermont Yankee response to Interrogatory (Set No. 1) No. 6) within your current licensing basis which allows this assumption.
14. Is it Vermont Yankee's current licensing basis not to assume "a feedwater line break (in the same line as FDW-96A)?" If your answer is anything other than an unqualified affirmative:
- a. Please identify your calculation which provides the radiological consequence for this accident with the containment integrity in the "as-found" condition described in BVY 89-64 (for the 1989 Type A, B and C tests).
- b. If no calculation has been performed which provides the radiological consequence for this accident with the containment integrity in the "as-found" condition described in BVY 89-64 (for the 1989 Type A, B and C tests), please state the radiological consequences of this accident using engineering judgement, consistent with the assumptions of Vermont Yankee's current licensing basis.
- c. For the engineering judgement requested in the foregoing sub-part, please 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 such judgement.
15. BVY 89-64 at page 13 of 18 states,

"Vermont Yankee believes that there is reasonable assurance that this penetration [X-9B] will be water sealed after a design basis accident."
(emphasis added)

Please state each and every reason why Vermont Yankee believes there is "reasonable assurance" that "this penetration [X-9B] will be water sealed after a design basis accident," 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.

16. BVY 89-64 at page 13 of 18 states,

"Vermont Yankee believes that there is reasonable assurance that this penetration [X-9B] will be water sealed after a design basis accident"
(emphasis added).

- a. State the measure or standard of "reasonable assurance" that Vermont Yankee has used to make this statement.
- b. Identify the calculation performed to demonstrate this reasonable assurance.
- c. Has this calculation been reviewed and approved in accordance with YOQAP-I-A, Section III, Design Control? If your answer is affirmative, please state the date of approval and the name of the reviewer and approver.
- d. Has this calculation been submitted to the NRC staff for review? If your answer is affirmative, please identify the document provided to the NRC staff.

17. Is it Vermont Yankee's current licensing basis to assume "this penetration [X-9B] will be water sealed after a design basis accident?"

If your answer is affirmative, please provide a specific reference to the "facility operating license (including Technical Specifications, Applicable Commission Regulations, Certain NRC orders (those amounting to license amendments) [or] Certain licensee commitments" (quote from Vermont Yankee response to Interrogatory (Set No. 1) No. 6) within your current licensing basis which allows this assumption.

18. Does Vermont Yankee agree with the following statement:

"The Vermont Yankee maintenance program had, as of February, 1989, failed to maintain and/or determine and replace valve FDW-96A, found not to meet the current licensing basis (by exceeding technical specification 3.7.A.4 leakage limits) reported in LER 83-10, and again in LER 84-11, and again in LER 85-07; such that FDW-96A was found again in February, 1989, not to meet the current licensing basis (by exceeding technical specification 3.7.A.4) in LER 89-07."

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.
19. Does Vermont Yankee agree that the following statement from LER 89-07 at page 4 of 5 is true?

"No similar events have been reported to the Commission on CA-89C in the last five years."

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

20. BVY 89-64 at page 8 of 18 states,

"Vermont Yankee does not believe that the leak rate history [of valve CA-89C] warrants any further action at this time."

- a. Please state each and every reason why Vermont Yankee believes "that the leak rate history [of valve CA-89C] warrants [no] further action at this time."
- b. How many times must CA-89C fail the Type C leakage test before Vermont Yankee believes "further action" is warranted?
- c. Please state every reason for your answer to the foregoing sub-part.

21. Please state whether Vermont Yankee believes that calculated radiological consequences of the design basis accident(s) would exceed the limits of 10 CFR Part 100 for the 2-hour site boundary thyroid and whole body doses using the following assumptions:

- (1) TID-14844 fission product release fractions.
- (2) Standby gas system filter efficiency of 90% for halogens, 95% for particulates.
- (3) Loss of offsite power.
- (4) The worst effect single failure.
- (5) Design Basis Earthquake, with failure of equipment and structures consistent with Vermont Yankee's current licensing basis.
- (6) The "as-found" 1989 containment leakage rates (assuming no credit for isolation of the leakage from FDW-96A and assuming the worst effect single failure on the containment isolation function).

Type A leakage - 0.531%/day
 Type B leakage - 0.15 %/day
 Type C leakage -
 FDW-96A Could not pressurize
 LRW-83 10 lbm/hr
 LRW-94 0.856 lbm/hr
 LRW-95 5.33 lbm/hr
 CA-89C Could not pressurize
 PCAC-6, -7, -6A, -6B, -7A, -7B
 > 25.12 lbm/hr
 PCAC-8, -9, -10, -23
 3.295 lbm/hr
 Other valves per BVY 89-64, Appendix C

- (7) Other assumptions consistent with Vermont Yankee's current licensing basis.

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.

22. In the foregoing interrogatory, does Vermont Yankee believe that any of the assumptions (1) through (7) are not part of, or are not consistent with, the current licensing basis? If the answer is affirmative:

- a. Please state each assumption that Vermont Yankee believes is not part of, or not consistent with, the current licensing basis.
- b. Please describe the reason why Vermont Yankee believes each stated assumption is not part of, or not consistent with, the current licensing basis.

23. Each of the solenoid valves for isolation valves PCAC-6, -7, -6A, -6B, -7A, -7B, -8, -9, -10 and -23 are indicated with the designation, "VAC-A, CKT-12" on drawing G-191175, sheet 1 of 2.

- a. Does the designation "VAC-A, CKT-12" mean that all of the solenoid valves for isolation valves PCAC-6, -7, -6A, -6B, -7A, -7B, -8, -9, -10 and -23 are on the same circuit?
- b. If your answer to the foregoing sub-part is affirmative, does choosing the assumed single failure to be "not developing the containment isolation signal in this 'same circuit'" alter your response to the foregoing interrogatory?
- c. Please state every reason for your response to the foregoing sub-part.

24. Does Vermont Yankee agree with the following statement:

"The Vermont Yankee maintenance program failed to maintain and/or determine and replace PCAC exhaust valves (penetration X-25), which were found to have aged to a point where they no longer met the safety standards applicable to Vermont Yankee in 1987 by exceeding the allowable leakage rate in technical specification 3.7.A.4, such that these same valves failed again in 1989 to meet the safety standards by exceeding the allowable leakage rate in technical specification 3.7.A.4 as stated in BVY 89-64, 'the total penetration leakage could not be measured with onsite testing equipment ... the root cause of the torn seats revealed that the damage was due to normal wear.'" (emphasis added)

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.

25. Please describe in detail the "plans to develop a preventive maintenance schedule for replacing the seats [of the PCAC exhaust valves]" (quoted from BVY 89-64 at page 9 of 18).
26. For maintenance on the PCAC exhaust valves:
 - a. Please identify by Maintenance Request number and date all maintenance performed on these valves since February 1989.
 - b. Please state which, if any, of the maintenance activities identified in the foregoing sub-part included replacing the valve seats.
27. Does Vermont Yankee agree with the following statement:

"The Vermont Yankee maintenance program failed to maintain and/or determine and replace containment isolation valves LRW-83, -94, -95, which were found to have aged to a point where they no longer met the safety standards applicable to Vermont Yankee in 1987 by exceeding the allowable leakage rate in technical specification 3.7.A.4, such that these same valves failed again in 1989 to meet the safety standards by exceeding the allowable leakage rate in technical specification 3.7.A.4 with the stated root cause identified in BVY 89-64 as, 'wear of the seating surface [over time] resulted in the increased leakage.'"

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.

28. Please describe in detail all "additional action[s]" taken "to improve this penetration's [sic - this refers to penetrations X-18 and X-19] reliability" (quoted from BVY 89-64 at page 8 of 18).
29. Please state the date of each of each "additional action" described in the foregoing interrogatory.
30. Does Vermont Yankee agree with the following statement:

"The Vermont Yankee maintenance program failed to maintain and/or determine and replace containment isolation valves PCAC-8, -9, -10 and -23 (penetration X-26) which were found to have aged to a point where they no longer met the safety standards applicable to Vermont Yankee in 1987 by exceeding the allowable leakage rate in technical specification 3.7.A.4, such that these same valves failed again in 1989 to meet the safety standards by exceeding the allowable leakage rate in technical specification 3.7.A.4 by a greater amount."

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.
31. Does Vermont Yankee agree with the following statement:

"The root cause of the leakage [from valve PCAC-8] revealed that the sealing material was changed [by or as a result of the Vermont Yankee Maintenance Program]. The new material [was] a synthetic material which [was] not as soft or pliable as the previously installed seats. This result[ed] in a less effective seal to resist leakage."

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.

32. Please identify by number and date all Maintenance Requests which allowed replacing the seating material of valve PCAC-8 with a new "synthetic material which is not as soft or pliable as the previously installed seats."
33. Did Vermont Yankee receive concurrence for the vendor of valve PCAC-8 prior to (or after) replacing the seating material of valve PCAC-8 with a new "synthetic material which is not as soft or pliable as the previously installed seats?"
34. If the answer to the foregoing interrogatory is negative, does Vermont Yankee agree that the replacement of the seating material of valve PCAC-8 with a new "synthetic material which is not as soft or pliable as the previously installed seats" is an example of an instance where VYNPS did not have "the qualifications and expertise within its staff to make [this] type of assessment..." (quoted from Vermont Yankee response to Interrogatory (Set No. 1) No. 53, sub-part b).

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.

35. Does Vermont Yankee agree that the failure of valve PCAC-8 to maintain containment integrity within the limits of technical specification 3.7.A.4 due to replacement of the seating material of valve PCAC-8 with a new "synthetic material which is not as soft or pliable as the previously installed seats," is an example in which an action of the maintenance program caused a condition to occur in which the seating material of valve PCAC-8 was found to have aged to a point where it no longer met the safety standards (due to exceeding technical specification 3.7.A.4 leakage rate) of the Vermont Yankee plant?

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.

36. Please describe in detail the "plans to access the availability of returning to the previously installed seats or developing a preventive maintenance

schedule using new seats [for the PCAC-8 valve]" (quoted from BVY 89-64 at page 10 of 18).

37. For maintenance on the PCAC-8 valve:
 - a. Please identify by Maintenance Request number and date all maintenance performed on this valve since February 1989.
 - b. Please state which, if any, of the maintenance activities identified in the foregoing sub-part included replacing the valve seats.

38. Please describe in detail the staffing history of the maintenance department from 1972 to the present date. The description should include, but not be limited to, identification of the following for each and every major organizational element of the maintenance department (e.g., instrumentation & control, electrical, mechanical, etc.):
 - a. Average annual total number of personnel, including Vermont Yankee employees and contractors;
 - b. Average annual number of Vermont Yankee managerial and supervisory personnel;
 - c. Average annual number of contractor personnel; and
 - d. Average annual number of other personnel, if any, who performed plant equipment maintenance, repair, replacement or installation.

39. Please describe in detail the staffing history of the technical services department from 1972 to the present date. The description should include, but not be limited to, identification of the following:
 - a. Average annual total number of personnel, including Vermont Yankee employees and contractors;
 - b. Average annual number of Vermont Yankee managerial and supervisory personnel; and
 - c. Average annual number of contractor personnel.

40. Please describe in detail the amount of relevant job experience possessed by each and every person in the maintenance and technical service departments. The description should include, but not be limited to, the following for each and every person:
- a. Total years of relevant work experience;
 - b. Total years of experience at commercial nuclear power plants;
 - c. Total years of experience at Vermont Yankee;
 - d. Total years in current position; and
 - e. Anticipated retirement date.
41. Please describe in detail Vermont Yankee's qualification and experience requirements for each and every position in the maintenance and technical services departments.
42. Please describe in detail Vermont Yankee's plans to maintain its desired experience level for each and every position in the maintenance and technical service departments from now through the extended period.
43. Please identify each and every documentation of Vermont Yankee's plans to maintain its desired experience level for each and every position in the maintenance and technical service departments from now through the extended period.
44. Does Vermont Yankee agree that limiting conditions of operation (LCO's) are not a current licensing basis, but rather LCO's are the lowest functional capability or performance levels of equipment required for safe operation of the facility such that when an LCO is not met the licensee shall shut down the reactor?
- 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; and

- 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.
45. Please describe in detail each and every reason why corrosion has been discovered during periodic inspections of the torus and drywell if inerting of the containment does, in fact, preclude the "corrosion process during most circumstances" as asserted by Vermont Yankee in its response to Vermont Interrogatory (Set No. 1) No. 94. The description should include, but not be limited to, identification of the following:
- a. Each and every reason for drywell and torus corrosion;
 - b. Each and every document that defines the design basis and allowable limits for drywell and torus corrosion rate(s); and
 - c. Each and every document that compares the actually observed drywell and torus corrosion rate(s) with the design corrosion rate(s).
46. Please describe in detail each and every documentation of Vermont Yankee "following the efforts of EPRI" as asserted in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 105. The description should include, but not be limited to, identification of the following:
- a. Each and every individual involved;
 - b. Each and every document produced; and
 - c. Each and every method by which "significant aging mechanisms" were determined by following EPRI efforts.
47. Please describe in detail each and every example that demonstrates Vermont Yankee established the significance of degradation by evaluating "the rate of

degradation" as asserted in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 106. The description should include, but not be limited to, identification of the following:

- a. Each and every individual involved;
- b. Each and every document produced; and
- c. Each and every method by which the rate of degradation was evaluated by Vermont Yankee.

48. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 106 that aging mechanisms could "be significant from a safety perspective" and "Typically, aging mechanisms have not been determined to be significant from this perspective" Please describe in detail each and every example that demonstrates Vermont Yankee determined aging mechanisms were not significant from a safety perspective. The description should include, but not be limited to, identification of the following:

- a. Each and every individual involved;
- b. Each and every document produced; and
- c. Each and every method by which aging mechanisms were evaluated by Vermont Yankee.

49. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 106 that "An aging mechanism can also be significant from the perspective of cost" Please describe in detail each and every example that demonstrates the cost significance of aging mechanisms. The description should include, but not be limited to, identification of the following:

- a. Each and every documentation of aging mechanism cost; and
- b. Each and every method by which aging mechanism cost is determined.

50. Please describe in detail each and every reason why Vermont Yankee asserts in its answer to Vermont Interrogatory (Set No. 1) No. 110 there will be a

"high degree of confidence" that the primary containment has the ability to meet its design basis requirements. For each reason, please describe:

- a. Each and every fact upon which your reasons are based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- c. Either 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.

51. Please describe in detail what Vermont Yankee means by "essentially precluded" in its response to Vermont Interrogatory (Set No. 1) No. 110 with regard to potential oxidation of the containment surface. The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your statement is based;
- b. The extent to which your statement applies to interior and exterior surfaces of the primary containment; and
- c. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.

52. Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 1) No. 110 that the decision not to reapply topcoat material over the inorganic zinc primer was appropriate.

- a. Please describe in detail each and every reason that demonstrates this decision was appropriate;
- b. Please identify each and every individual involved in the decision;
- c. Please identify each and every document produced concerning the decision;

- d. Please describe each and every basis for deciding not to reapply topcoat material; and
 - e. Please describe each and every criterion used to determine if reapplication of either primer or topcoat material will be required at a future date.
53. Does Vermont Yankee assert that its evaluation of the effects of drywell paint degradation discovered in the 1989 refueling outage conforms with the following:
- "The available interceptor area used in determining the design coolant velocity should conservatively account for blockage that may result." (quoted, but not interpreted as regulatory minima, from NRC Regulatory Guide 1.82, Rev.1, "Water Sources for Long-term Recirculation Cooling Following a Loss-of-Cooling Accident")
- If your answer is anything other than an unqualified negative, then please state every reason why Vermont Yankee asserts its evaluation is conservative, 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; and
 - c. State either 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.
54. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 111 that the "probability of significant paint chip transport to the ECCS suction strainers in the torus is very low".
- a. Please describe each and every reason why Vermont Yankee so states;

- b. Please describe all of the evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes the probability of that event;
 - c. Please describe each and every calculation regarding the significance of paint chip transport to the ECCS suction strainers;
 - d. Please describe each and every technical and quantitative bases for concluding such probability is very low; and
 - e. Please describe the potential consequences of significant paint chip transport, either alone or in combination with other potential debris, to the ECCS suction strainers.
55. Please identify the Potentially Reportable Occurrence (PRO) evaluation performed for the drywell paint failures discovered during the 1989 refueling outage. If no PRO evaluation was performed, state each and every reason why it was not performed.
56. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 113 that the "effectiveness of our maintenance program is demonstrated by a number of independent parameters, including independent assessments performed by NRC." Please identify each and every NRC audit, inspection, surveillance, report and other document that demonstrates the effectiveness of Vermont Yankee's maintenance program.
57. For each and every document identified in Vermont Yankee's response to the preceding interrogatory, please describe in detail all findings, conclusions, recommendations, strengths, weaknesses, deviations and violations related to the effectiveness of Vermont Yankee's maintenance program.
58. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 113 that the "effectiveness of our maintenance program is demonstrated by a number of independent parameters, including independent assessments performed by INPO." Please identify each and every INPO audit, inspection, surveillance, report and other document that demonstrates the effectiveness of Vermont Yankee's maintenance program.

59. For each and every document identified in Vermont Yankee's response to the preceding interrogatory, please describe in detail all findings, conclusions, recommendations, strengths, weaknesses, deviations and violations related to the effectiveness of Vermont Yankee's maintenance program.
60. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 113 that the "effectiveness of our maintenance program is demonstrated by a number of independent parameters, including independent assessments performed by YNSD." Please identify each and every YNSD audit, inspection, surveillance, report and other document that demonstrates the effectiveness of Vermont Yankee's maintenance program.
61. For each and every document identified in Vermont Yankee's response to the preceding interrogatory, please describe in detail all findings, conclusions, recommendations, strengths, weaknesses, deviations and violations related to the effectiveness of Vermont Yankee's maintenance program.
62. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 113 that the "effectiveness of our maintenance program is demonstrated by a number of independent parameters, including independent assessments performed by QA." Please identify each and every QA audit, inspection, surveillance, report and other document that demonstrates the effectiveness of Vermont Yankee's maintenance program.
63. For each and every document identified in Vermont Yankee's response to the preceding interrogatory, please describe in detail all findings, conclusions, recommendations, strengths, weaknesses, deviations and violations related to the effectiveness of Vermont Yankee's maintenance program.
64. Please describe in detail the process of Vermont Yankee "continually assessing industry initiatives that would further enhance our programs" as asserted in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 113. The description should include, but not be limited to, identification of the following:
- a. Each and every industry initiative assessed by Vermont Yankee;

- b. The methodology for assessing each such initiative;
 - c. Each and every individual involved; and
 - d. Each and every document produced as a result of such assessment.
65. Vermont Yankee asserts, in part, in its response to Vermont Interrogatory (Set No. 1) No. 113 that the turnover rate in maintenance occupations for the five year period between 1985 and 1989 is indicative of a very stable workforce. Please describe in detail each and every reason why maintenance workforce stability will continue in the extended period. For each reason, please describe:
- a. Each and every fact upon which your reasons are based;
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
 - c. Either 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. Please describe in detail the confirmation referenced in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 113 in connection with the Nucleonics Week article. The description should include, but not be limited to, identification of the following:
- a. The person(s) who conducted the investigation;
 - b. The person(s) who provided the information;
 - c. A full description of the information; and
 - d. A full description of all other facts learned.
67. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 116 that trends "must then be analyzed by knowledgeable

people....with corrective action recommendations is sent to the Maintenance Supervisor." Please describe in detail:

- a. Either 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 such analysis or state that Vermont Yankee does not rely upon the expertise of any person for such analysis.
- b. The criteria used to develop corrective action recommendations.

68. Please describe in detail each and every reason why Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 1) No. 116 that trend analysis "is based on conservative limits with conservative safety factors applied." For each reason, please describe:

- a. Each and every fact upon which your reasons are based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- c. Either 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. Does Vermont Yankee agree that regulatory requirements for commercial nuclear power plant maintenance have increased since the Vermont Yankee plant was granted its original license?

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; and
- 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.

70. Does Vermont Yankee agree that industry knowledge of commercial nuclear power plant maintenance requirements has increased since the Vermont Yankee plant was granted its original license?

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; and
- 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.

71. Does Vermont Yankee agree that commercial nuclear power plant maintenance technology has increased since the Vermont Yankee plant was granted its original license?

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; and
- 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.

72. Does Vermont Yankee agree that a maintenance program found acceptable by the NRC licensing process at the time the Vermont Yankee plant was granted its original license is not necessarily an acceptable maintenance program for the extended 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; and
- 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.

73. Please describe in detail each and every reason why Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 1) No. 116 that it has "high expectations for the benefits of the trending analysis." For each reason, please describe:
- Each and every fact upon which your reasons are based;
 - All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
 - Either 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.
74. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 117 "the fact that some components will not last for the duration of the plant's potential service life was anticipated by the original designers and by the Commission." Please describe in detail each and every component that the original designers and the Commission anticipated would not last for the duration of the plant's potential service life. The description should include, but not be limited to, identification of the following:
- Each and every such component;
 - Each and every document that demonstrates the original designers anticipated that some components will not last for the duration of the plant's potential service life; and
 - Each and every document that demonstrates the Commission anticipated that some components will not last for the duration of the plant's potential service life.
75. Please describe in detail each and every reason why Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 1) No. 117 that exclusive reliance is not placed upon design life when determining if a component must be replaced, requalified or upgraded. The description should include, but not be limited to, identification of the following:

- a. The methodology used by Vermont Yankee to determine when a component will exceed its service life; and
 - b. Each and every procedure used to control the process for making such determinations.
76. Please describe in detail each and every reason why Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 1) No. 117 that "industry programs have shown that many components are capable of lasting much longer than their original specified 'design life' with no loss of safety margin." The description should include, but not be limited to, the following:
- a. Identification of each and every industry program;
 - b. Identification of each and every document describing such industry programs; and
 - c. The methodology Vermont Yankee uses to incorporate such industry programs in its decision making process.
77. Please describe in detail each and every reason why Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 1) No. 117 that it is "continually assessing industry initiatives that could further enhance the effectiveness of our programs." The description should include, but not be limited to, the following:
- a. Identification of each and every industry initiative that could further enhance Vermont Yankee's maintenance program;
 - b. Identification of each and every document describing such industry initiatives; and
 - c. The methodology Vermont Yankee uses to incorporate such industry initiatives in its decision making process.
78. Vermont Yankee states, in part, in its response to Vermont Interrogatory (Set No. 1) No. 120 that "The maintenance of the structural integrity of plant structures is accomplished by routine tours and inspections of the plant structures" Please describe in detail all procedures related to tours

and inspections of plant structures that include specific attributes and/or inspection criteria for plant structures.

79. Vermont Yankee asserts in item 10 (dated March 17, 1986) identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "NSD recommends that all loosely adhering paint be removed by hand scraping prior to start-up." Please describe in detail each and every action taken in accordance with this recommendation to "preclude the possibility of degrading ECCS pump capability due to entrainment of paint fragments."
80. Please identify each and every MR associated with either drywell or torus paint scraping at the Vermont Yankee plant at any time since January 1, 1989.
81. Vermont Yankee asserts in item 18 (BVY 89-69, dated July 1, 1989) identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that YNSD "recommended that all loosely adhering drywell paint be removed by hand scraping prior to startup from the outage." Please identify each and every supervisor who was responsible for drywell paint scraping activities at the Vermont Yankee plant at any time since January 1, 1989. As to each such person, provide the following information:
 - a. What was his or her precise responsibility or responsibilities for paint scraping at the Vermont Yankee plant?
 - b. Describe in detail the precise instructions he or she received in the performance of the drywell scraping.
 - c. Describe in detail the manner in which he or she received instructions.
 - 1) Who provided the instruction?
 - 2) In what form was it provided?
 - 3) Identify all documentation that exists to verify that the instructions were provided and received.
 - d. Identify his or her dates of employment by Vermont Yankee.
 - e. For each person identified, state his or her qualifications and training, and provide the most current resume available.

82. Vermont Yankee asserts in item 18 (BVY 89-69, dated July 1, 1989) identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that YNSD "recommended that all loosely adhering drywell paint be removed by hand scraping prior to start-up from the outage." Please identify each and every craftsperson who did drywell paint scraping activities at the Vermont Yankee plant at any time since January 1, 1989. As to each such person, provide the following information:
- a. What was his or her precise responsibility or responsibilities for paint scraping at the Vermont Yankee plant?
 - b. Describe in detail the precise instructions he or she received in the performance of the paint scraping.
 - c. Describe in detail the manner in which he or she received instructions.
 - 1) Who provided the instruction?
 - 2) In what form was it provided?
 - 3) Identify all documentation that exists to verify that the instructions were provided and received.
 - d. Identify his or her dates of employment by Vermont Yankee.
 - e. For each person identified, state his or her qualifications and training.
83. Vermont Yankee asserts in item 18 (BVY 89-69, dated July 1, 1989) identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "routine scraping of the torus topcoat was in progress at the time of the inspection." Please identify each and every supervisor who was responsible for torus paint scraping activities at the Vermont Yankee plant at any time since January 1, 1989. As to each such person, provide the following information:
- a. What was his or her precise responsibility or responsibilities for paint scraping at the Vermont Yankee plant?
 - b. Describe in detail the precise instructions he or she received in the performance of the drywell scraping.
 - c. Describe in detail the manner in which he or she received instructions.
 - 1) Who provided the instruction?
 - 2) In what form was it provided?

- 3) Identify all documentation that exists to verify that the instructions were provided and received.
 - d. Identify his or her dates of employment by Vermont Yankee.
 - e. For each person identified, state his or her qualifications and training, and provide the most current resume available.
84. Vermont Yankee asserts in item 18 (BVY 89-69, dated July 1, 1989) identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "routine scraping of the torus topcoat was in progress at the time of the inspection." Please identify each and every craftsperson who was responsible for torus paint scraping activities at the Vermont Yankee plant at any time since January 1, 1989. As to each such person, provide the following information:
- a. What was his or her precise responsibility or responsibilities for paint scraping at the Vermont Yankee plant?
 - b. Describe in detail the precise instructions he or she received in the performance of the paint scraping.
 - c. Describe in detail the manner in which he or she received instructions.
 - 1) Who provided the instruction?
 - 2) In what form was it provided?
 - 3) Identify all documentation that exists to verify that the instructions were provided and received.
 - d. Identify his or her dates of employment by Vermont Yankee.
 - e. For each person identified, state his or her qualifications and training.
85. Please describe in detail each and every reason why Vermont Yankee asserts in item 10 (dated March 17, 1986) identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "the primer coat will provide adequate corrosion protection as long as it is maintained in good condition." The description should include, but not be limited to, the following:
- a. Identification of each and every program and procedure for primer coat inspection and maintenance;

- b. Identification of each and every area of the drywell and torus that are continually contaminated and/or wetted;
- c. Identification of each and every area of the drywell and torus that has no topcoat;
- d. Identification of each and every document describing programs intended to maintain the primer coat in good condition; and
- e. Identification of the criteria Vermont Yankee uses to determine if the primer coat is in "good condition".

86. Does Vermont Yankee agree that "any continually contaminated or wetted areas should have the Waterproof topcoat to prevent contamination or water from being absorbed", as asserted in item 10 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79?

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; and
- 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.

87. Does Vermont Yankee agree that all continually contaminated or wetted areas of the drywell shell have the Waterproof topcoat?

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; and
 - 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.
88. Please describe in detail each and every action taken to determine the root cause(s) of topcoat failure in the drywell and torus. The description should include, but not be limited to, identification of the following:
- a. Each and every root cause determined;
 - b. Each and every documentation of root cause(s); and
 - c. Each and every action taken as a result of the root cause analysis, if any.
89. Please state the qualifications and training, and provide the most current resume available, for the SWEC consultant, C. Hansen, who prepared memorandum VYS 46/86, Drywell Paint, dated March 11, 1986.
90. Does Vermont Yankee agree that SWEC consultant C. Hansen is qualified to evaluate the Vermont Yankee plant's drywell paint?
- 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; and
 - 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.

91. Does Vermont Yankee agree that "all loosely adhering paint will come off during a DBA-LOCA" and that "a small amount of paint could seriously affect" ECCS pump performance as asserted in item 10 identified in its response to Vermont Interrogatory (Set No. 1) No. 79?

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; and
- 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.

92. Does Vermont Yankee agree that "very little data is available concerning transportation of paint fragments in a Mark I configuration" as asserted in item 10 identified in its response to Vermont Interrogatory (Set No. 1) No. 79?

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; and
- 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.

93. Does Vermont Yankee agree that "there is no data available with regard to paint chip transport or plugging of strainers by paint chips, with or without combination with insulation fibers" as asserted in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79?

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; and
- 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.

94. Please state the qualifications and training, and provide the most current resume available, for the SWEC consultant, R.L. Martin, who prepared letter J.O. No. 18973.00 Drywell and Torus Coatings Vermont Yankee Station Yankee Atomic Electric Company, dated April 4, 1989.

95. Does Vermont Yankee agree that SWEC consultant R.L. Martin is qualified to evaluate the Vermont Yankee plant's drywell and torus coatings?

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; and

- 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.

96. Does Vermont Yankee agree that "the topcoat materials failed by delamination and produced chips as large as one square foot. Transport of these chips to the safety system suction strainers could potentially result in partial blockage of the strainers." as asserted in item 13 identified in its response to Vermont Interrogatory (Set No. 1) No. 79?

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; and
- 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.

97. Does Vermont Yankee agree that, "due to the installation of fiberglass insulation on the replacement reactor coolant recirculation piping, the amount of loose topcoat material that falls from the drywell and torus surfaces has now become an even more important factor in the strainer blockage analysis for a DBA/LOCA event" as asserted in item 13 identified in its response to Vermont Interrogatory (Set No. 1) No. 79?

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; and
- 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.

98. Please describe in detail all touchup repairs made to the exposed primer of the drywell and torus. The description should include, but not be limited to, identification of the following:

- a. Each and every repair, including date of the repair;
- b. Each and every documentation of such repair(s);
- c. Each and every procedure that controls the repair work;
- d. The qualification and training requirements for each and every individual performing the repair work; and
- e. Each and every assessment or evaluation of the probable long term success of such repairs.

99. Please describe in detail what Vermont Yankee means by "relatively small" in item 13, page 1, identified in its response to Vermont Interrogatory (Set No. 1) No. 79 with regard to the amount of top coat material that has loosened between scrapings. Please describe in detail all the bases for such statement, including, but not to be limited to, the following:

- a. Each and every fact upon which your statement is based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- 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.

100. Please describe in detail what Vermont Yankee means by "a significant amount" in reference to the topcoat loosely adhering to the drywell walls in item 13, page 2, identified in its response to Vermont Interrogatory (Set No. 1) No. 79. Please describe in detail all the bases for that statement, including, but not to be limited to, the following:
- a. Each and every fact upon which your statement is based;
 - b. All 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 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; and
 - d. Each and every potential consequence of a significant amount of topcoat becoming loose during a DBA - LOCA event.
101. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "In a DBA/LOCA event, the topcoat remaining on the surface may delaminate from the primer." Please describe in detail the significance of topcoat delamination and/or peeling in terms of the potential to degrade ECCS pump capability due to entrainment of paint fragments either alone or in combination with other potential debris.
102. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "adhesion strength of the topcoat to the primer" is one of the four factors that directly affects the amount of topcoat material that may be removed from the drywell during a DBA-LOCA. Please describe in detail the bases for that assertion, including, but not to be limited to, the following:
- a. Each and every fact upon which the assertion is based;

- b. All 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 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; and
- d. Each and every documentation of adhesion strength tests and/or measurements.

103. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "a break in the coolant recirculation piping in the lower portion of the drywell may not remove large amounts of topcoat by impingement." Please describe in detail the bases for that assertion, including, but not to be limited to, the following:

- a. Each and every fact upon which the assertion is based;
- b. All 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 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; and
- d. The significance of loosening "large amounts" of topcoat and fiberglass insulation during a DBA-LOCA in terms of the potential to degrade ECCS pump capability due to entrainment of paint fragments and other debris.

104. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "failure of the topcoat in the upper section of the drywell was related, in part, to

thermal aging by long term exposure to elevated temperatures (approximately 180 - 200 F)."

- a. Please describe in detail each and every reason why failure of the topcoat was related, in part, to thermal aging by long term exposure to elevated temperatures;
 - b. Describe each and every reason for the elevated temperatures;
 - c. Identify each and every document that describes the elevated temperatures;
 - d. Please describe in detail all evidence either in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes identifies topcoat failure mechanisms; and
 - e. Identify each and every component and/or structure that may be affected by thermal aging due to elevated drywell temperatures.
105. Please describe in detail each and every reason why Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that the coating failure mechanism caused by condensation "can be controlled with regular maintenance." Please describe in detail the basis for that assertion, including, but not limited to the following:
- a. Each and every fact upon which the assertion is based;
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
 - c. Each and every regular maintenance activity performed on the zinc primer.
106. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that in a touchup repair situation the torus coating material "will eventually peel in the overlap around the periphery of the touchup area." Please describe in detail the significance of such peeling in terms of the potential to degrade ECCS pump capability due to entrainment of paint fragments either alone or in combination with other potential debris.

107. Please describe in detail each and every reason why Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "It is probable that the drywell topcoat material was K&L E-1 od D-1 Series epoxy." Please describe in detail the basis for that assertion, including, but not limited to the following:
- a. Each and every fact upon which the assertion is based; and
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
108. Please describe in detail each and every reason why Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that the "decontamination process will remove some of the zinc coating thickness." Please describe in detail the basis for that assertion, including, but not limited to the following:
- a. Each and every fact upon which the assertion is based; and
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
109. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that the "decontamination process will remove some of the zinc coating thickness." Please state:
- a. The significance of removing some of the zinc coating thickness;
 - b. The minimum allowable zinc coating thickness and the criteria for that minimum;
 - c. The date, based on the current zinc coating thickness and estimated future zinc coating thinning from each and every cause, when generalized repair and/or replacement of the zinc coating will be required; and
 - d. The sufficiency of zinc coating for the extended period.

110. Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "Failure of the exposed inorganic zinc primer will not produce chips that could potentially cause blockage of safety system suction strainers." Please describe in detail the bases for that assertion, including, but not to be limited to, the following:

- a. Each and every fact upon which the assertion is based; and
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.

111. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that General Electric Report MDE-184-0855, DRF AOO-01713, Revision 1, "Effects of Fiberglass Insulation Debris on Vermont Yankee ECCS Pump Performance", dated January, 1986 is a conservative assessment of the potential reduction in ECCS pump NPSH which may occur as a result of a DBA-LOCA. The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your statement is based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- c. Either 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.

112. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "The existing primer provides excellent protection of the underlying metal surfaces." The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your statement is based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- c. Either 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.

113. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that inspection of the torus scraping effort on March 17, 1989 concluded "satisfactory results." The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your statement is based; and
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.

114. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "paint dislodged from either the drywell or torus surfaces would be of no consequence with regard to ECCS strainers and ECCS pump performance." The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your statement is based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- c. Either 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.

115. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "insulation fibers would be more apt to remain in suspension in the torus and be swept onto an ECCS intake screen than would paint chips." The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based; and
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
116. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "the probability of significant paint transport to the torus in the first 30 seconds is very low." The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based; and
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
117. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "paint chips would not be within the high velocity LOCA flow stream, it would be expected that the majority of failed paint chips would remain on the drywell floor." The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based;
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact;

- c. Each and every documentation of estimates of the amount loose paint and other debris currently in the drywell and/or torus; and
 - d. Each and every documentation of estimates of the amount loose paint and other debris that will be generated in the drywell and/or torus during the extended period.
118. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "A pipe break in either region could result in significant debris from either fibrous insulation damage, or the dislodging of a quantity of loose paint from the upper drywell, but not both." The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based; and
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
119. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "a break of a main steam line in the upper drywell region could directly affect loose paint in this region, thus there could be paint debris but no gross failure of NUKON insulation." The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based; and
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.
120. Please describe in detail each and every reason why Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "as long as essentially all loosely adhering topcoat is removed by the start of the operating cycle it would be reasonable to assume that most of the remaining topcoat would remain intact long after the first 30 seconds into the LOCA." The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based;

- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact; and
- c. Either 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.

121. Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that the RHR and core spray pumps have a "clean screen NPSH margin." Please describe in detail the NPSH margin that would exist based on current ECCS strainer cleanliness and the postulated ECCS strainer blockage caused by insulation, paint chips and other debris.

122. Vermont Yankee asserts in item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "The lower portion of the torus (under the water line) does not appear to be experiencing much failure of topcoat." Please describe in detail the topcoat failure in the lower portion of the torus. The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your description is based;
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact;
- c. The extent of topcoat failure anticipated to occur during the extended period; and
- d. The significance of each and every potential topcoat failure mode (e.g., delaminating, peeling, flaking, etc.)

123. Please describe in detail each and every reason for the assumption in reference 1 (General Electric Report MDE-184-0855, Revision 1, Effects of Fiberglass Insulation Debris on Vermont Yankee ECCS Pump Performance,

dated January 1986) of item 18 identified in its response to Vermont Interrogatory (Set No. 1) No. 79 that "shredded [NUKON insulation] debris is assumed to be uniformly distributed throughout the suppression pool." The description should include, but not be limited to, identification of the following:

- a. Each and every fact upon which your statement is based; and
- b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact.

124. Please state each and every reason why Vermont Yankee states in its response to Vermont Interrogatory (Set No. 2) No. 1 that "financial or other incentives offered to such [future maintenance] personnel" are "such a small component" of overall costs. For each reason, please:

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

125. Please state each and every reason why Vermont Yankee states in its response to Vermont Interrogatory (Set No. 2) No. 2 that component refurbishment or replacement costs are "such a small component" of overall costs. For each reason, please:

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

126. Please define the phrase "fundamental changes" as it is used by Vermont Yankee in its response to Vermont Interrogatory (Set No. 2) No. 3.
127. Please define the phrase "discrete changes" as it is used by Vermont Yankee in its response to Vermont Interrogatory (Set No. 2) No. 3.
128. Please describe in detail the meaning of the phrase "to account separately" as it is used by Vermont Yankee in its response to Vermont Interrogatory (Set No. 2) No. 3.
129. Does Vermont Yankee consider Revision No. 17 of AP 0021 (06/01/90), in which the entire system of processing and controlling preventive and corrective maintenance requests is changed, to be a fundamental change to the methods of its maintenance program?
- If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason, please:
- 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; and
 - 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.
130. Please describe in detail each and every basis for the generalization stated at page 27 of Attachment 2 of the application, "[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." For every basis for the statement, please:

- a. State each and every fact on which your basis 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; and
- c. For each basis, 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 basis.

131. Vermont Yankee states at page 27 of Attachment 2 of the application, "[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." In response to Vermont Interrogatory (Set No. 2) No. 7, it is stated that "no exhaustive list was in mind or available when the generalization quoted was made, and to prepare such a list would require extensive original research." Please describe in detail each and every reason why Vermont Yankee believes that "mechanical components ... expected to wear out" will be "periodically replaced during the plant's operating lifetime" when no list of such "expected" components is maintained. For each reason, please:

- 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; and
- 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.

132. Please describe in detail each and every equipment with a probability of being replaced prior to 1998 as identified in the "Vermont Yankee Nuclear Power Corporation, Plant Equipment Depreciation Study, Final Report,

September 24, 1984" (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 7).

133. Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 2) No. 8 that experience with aggressive inspection and maintenance programs in the Fossil Fuel Electrical, Nuclear Submarine and Weapons Grade Nuclear Production industries indicates that a service life well in excess of 40 years can be anticipated. Please describe in detail the basis for that assertion. The description should include, but not be limited to, identification of the following:
- a. Each and every fact upon which your statement is based;
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact;
 - c. Differences between the commercial nuclear power industry and the "other" industries; and
 - d. Each and every component subject to aggressive inspection and maintenance programs in the "other" industries that is substantially similar to components in the Vermont Yankee nuclear power plant.
134. Please define the phrase "current design condition" as it is used by Vermont Yankee in its response to Vermont Interrogatory (Set No. 2) No. 8.
135. Please describe in detail every specific method by which the Vermont Yankee maintenance program "demonstrates the capacity to preserve the equipment in its current design condition" as Vermont Yankee uses this phrase in Vermont Interrogatory (Set No. 2) No. 8. State each and every reason why you believe each method makes such a demonstration, and for each reason, please:
- 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; and
 - 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.

136. Please describe in detail each and every case in which vibration analysis may detect the chemical and biological effects age degradation mechanism (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 10).
137. Please describe in detail each and every reason why Vermont Yankee asserts in its response to Vermont Interrogatory (Set No. 2) No. 17 that current oil change frequencies have been developed in part "to assure that equipment failure due to an oil related cause is quite unlikely." The description should include, but not be limited to, identification of the following:
 - a. Each and every fact upon which your statement is based;
 - b. All evidence in Vermont Yankee's possession or of which Vermont Yankee has knowledge that Vermont Yankee believes establishes each such fact;
 - c. The methodology used by Vermont Yankee to determine the likelihood of equipment failure due to an oil related cause; and
 - d. Each and every criteria used by Vermont Yankee to determine the acceptable level of equipment failure potential due to an oil related cause.
138. Please describe in detail each and every documentation of YNSD's evaluation of infrared thermography for Vermont Yankee (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 21). The description should include, but not be limited to, identification of the following:
 - a. Each and every document produced;
 - b. Each and every individual involved;
 - c. Either 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 evaluation or state that Vermont Yankee does not rely upon the expertise of any person for the evaluation; and

- d. Each and every method by which infrared thermography is evaluated by YNSD.
-
- 139. Please describe in detail each and every case in which bearing temperature trending may detect the vibration age degradation mechanism (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 31).
 - 140. Please describe in detail the methodology employed and identify the procedures used to evaluate bearing temperature trends for the purpose of predictive maintenance (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 31).
 - 141. Please describe in detail each and every instance, not limited to "in-leakage" as defined by Vermont Yankee, in which leakage detection may be used for predictive maintenance (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 33). The description should include, but not be limited to, identification of the following:
 - a. Each and every structure, system or component for which leakage detection is performed;
 - b. Each and every procedure in which leakage detection is required for predictive maintenance;
 - c. The date(s) that the requirements for leakage detection was(were) incorporated into the procedures;
 - d. Each and every documentation of leakage detection evaluation used for predictive maintenance within the past five years; and
 - e. Each and every age degradation mechanism that is believed by Vermont Yankee to be identified by leakage detection and the applicability to each and every structure, system or component.

142. Please describe in detail each and every case in which insulation resistance (meggering) evaluation may detect the chemical and biological effects age degradation mechanism (reference: Vermont Yankee's response to Vermont Interrogatory (Set No. 2) No. 37).
143. Vermont Yankee identified, in its response to Vermont Interrogatory (Set No. 2) No. 55, twenty-one recommendations for enhancement of the maintenance program. Vermont Yankee further stated in response to Interrogatory No. 55 that "[t]he implementation of each of these recommendations is underway." For each recommendation, please:
- a. Describe in detail how each recommendation is being implemented.
 - b. Describe in detail the current status of the implementation of each recommendation;
 - c. State the completion schedule for the implementation of each recommendation; and
 - d. Describe in detail the impact such recommendations will have on the maintenance program during the extended period.
144. State all the safety standards that Vermont Yankee asserts are applicable to the resolution of this proceeding.
145. Describe in detail the methodology that Vermont Yankee asserts will demonstrate that there is reasonable assurance that its maintenance program will provide adequate protection to the public health and safety in the extended period.
146. Please provide each and every reason why MR 90-0178, initiated on January 22, 1990, was presented to Vermont in discovery on form VYAPF 0021.01, AP 0021 Rev. 17, which did not go into effect until June 1, 1990.
147. Please identify each and every maintenance request initiated before June 1, 1990, which has been processed with form VYAPF 0021.01, AP 0021 Rev. 17.

148. Please describe in detail each and every reason why Vermont Yankee Audits VY-88-06 and VY-89-06A did not uncover the maintenance discrepancies or weaknesses described in Westec, Inc.'s SSFI findings, LRS Reports (as stated in sub-part j to Contention VII) or the NRC Maintenance Team Report. For each such reason, please:

- 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; and
- 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.

149. In response to Vermont's request for documents No. 23, dated June 19, 1990, Vermont Yankee provided form VYOPF 4115.04, Rev 18., Visual Inspection of Primary Containment Surfaces Data Sheet, dated September 29, 1987. That form indicates "some paint scaling above the upper spray ring header." Stone & Webster's coating specialist asserts in item 13 identified in Vermont Yankee's response to Vermont Interrogatory (Set No. 1) No. 79 that "According to Yankee Atomic personnel, the loose coating had been scraped off the walls two outages prior to the inspection but not during the last outage." Did Vermont Yankee remove all loose topcoat during the 1987 outage?

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. Identify each and every documentation of Vermont Yankee's paint scaling evaluation(s) done as a result of inspection(s) in 1987; and

- d. Describe in detail each and every acceptance criteria for visual inspection of primary containment surfaces.

150. Does Vermont Yankee believe that removal of all loose topcoat material in the drywell and torus should be done during every outage that includes the opportunity to do an inspection of the drywell and/or torus?

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; and
- 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.

151. Does Vermont Yankee believe that failure to remove all loose topcoat material in the drywell and torus, during every outage that includes the opportunity to do an inspection of the drywell and/or torus, has safety significance and has the potential to impair ECCS pump performance?

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; and
- 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.

152. Does Vermont Yankee believe that failure to remove all loose topcoat material in the drywell and torus, during every outage that includes the opportunity to do an inspection of the drywell and/or torus, is indicative of "an aggressive inspection and maintenance program?"

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

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

- 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.

- 153. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for 16" NBS check valves V2-27A, 28A, 28B and 96A. That form requires "stilman seal replacement at the end of every cycle." Please state every reason for this requirement, and for each reason:
 - a. State each and every fact on which your reason is based; and
 - 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.

- 154. Please describe in detail the qualified life of the stilman seals for 16" NBS check valves V2-27A, 28A, 28B and 96A.

- 155. Identify all documents pertaining to the qualified life of the stilman seals for 16" NBS check valves V2-27A, 28A, 28B and 96A.

- 156. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for 16" NBS check valves V2-27A, 28A, 28B and 96A. That form contains no record of stilman seal replacement during the operating cycles ending in 1987.
 - a. Did Vermont Yankee perform the required seal replacement in 1987? If your answer is anything other than an unqualified affirmative, then please state every reason for your answer, and for each reason:
 - 1. State each and every fact on which your reason is based;
 - 2. 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;

- b. Identify each and every documentation of Vermont Yankee's replacement of Stilman seals for 16" NBS check valves V2-27A, 28A, 28B and 96A in 1987; and
- c. If the seals were not replaced in 1987, describe in detail each and every reason why the seals were not replaced in 1987.

157. Does Vermont Yankee believe that failure to replace the stillman seals in 16" NBS check valves V2-27A, 28A, 28B and 96A at the end of every operating cycle has safety significance due to the potential to degrade containment integrity?

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; and
- 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.

158. Does Vermont Yankee believe that failure to replace the stilman seals in 16" NBS check valves V2-96A at the end of every operating cycle contributed to the failure in 1989 to initially pass its containment local leak rate test?

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; and
- 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.

159. Does Vermont Yankee believe that failure to replace the stillman seals in 16" NBS check valves V2-27A, 28A, 28B and 96A at the end of every operating cycle is indicative of "an aggressive inspection and maintenance program?"

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

- a. State each and every fact on which your reason is based; and
 - 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.
160. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for 16" NBS check valves V2-27B and 96B. That form requires "visual inspection of valve internals" at the end of every cycle and directs the reader to "see check valve PM program file for actual inspection schedule and details."
- a. Please describe the requirement(s) for such visual inspection and state every reason for the requirement(s), and for each reason:
 1. State each and every fact on which your reason is based; and
 2. 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.
 - b. Describe in detail the valve PM program file.
 - c. Describe in detail each and every inspection schedule and detail for 16" NBS check valves V2-27B and 96B.
161. Please describe in detail the qualified life of the valve internals for 16" NBS check valves V2-27B and 96B.
162. Identify all documents pertaining to the qualified life of the valve internals for 16" NBS check valves V2-27B and 96B.
163. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for containment isolation valves V20-82, 83, 94

and 95. That form lists no inspection and maintenance requirements. Please describe in detail the requirement(s), if any, for such inspection and maintenance and state every reason for the requirement(s), and for each reason:

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

164. Does Vermont Yankee believe that failure to indicate the required preventive maintenance operations for containment isolation valves V20-82, 83, 94 and 95 on Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, is indicative of "an aggressive inspection and maintenance program?"

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

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

165. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves V20-82, 83, 94 and 95. That machine repair record indicates that no inspection and maintenance was done on these valves during the period November 12, 1981 through September 9, 1987. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valves V20-82, 83, 94 and 95 during a period of nearly six years is indicative of "an aggressive inspection and maintenance program?"

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

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

- 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.
166. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for containment isolation valves SB-16-19-7A, 7B, 8, 9 and 10. That form lists no inspection and maintenance requirements. Please describe in detail the requirement(s), if any, for such inspection and maintenance and state every reason for the requirement(s), and for each reason:
- a. State each and every fact on which your reason is based; and
- 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.
167. Does Vermont Yankee believe that failure to indicate the required preventive maintenance operations for containment isolation valves SB-16-19-7A, 7B, 8, 9 and 10 on Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, is indicative of "an aggressive inspection and maintenance program?"
- If your answer is anything other than an unqualified negative, then please state every reason for your answer, and for each reason:
- a. State each and every fact on which your reason is based; and
- 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.
168. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-16-19-7A, 7B, 8, 9 and 10. That machine repair record indicates that no inspection and maintenance was done on valve SB-16-19-7A during the period June 27, 1973 through March 22, 1989. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-16-19-7A during a period

of nearly sixteen years is indicative of "an aggressive inspection and maintenance program?"

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

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

169. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-16-19-7A, 7B, 8, 9 and 10. That machine repair record indicates that no inspection and maintenance was done on valve SB-16-19-7B prior to March 25, 1989. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-16-19-7B during a period of more than seventeen years is indicative of "an aggressive inspection and maintenance program?"

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

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

170. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-16-19-7A, 7B, 8, 9 and 10. That machine repair record indicates that no inspection and maintenance was done on valve SB-16-19-9 during the period June 11, 1982 through March 27, 1989. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-16-19-9 during a period of nearly seven years is indicative of "an aggressive inspection and maintenance program?"

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

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

171. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-16-19-7A, 7B, 8, 9 and 10. That machine repair record indicates that no inspection and maintenance was done on valve SB-16-19-10 since July 25, 1977. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-16-19-10 during a period of nearly twelve years is indicative of "an aggressive inspection and maintenance program?"

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

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

172. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for containment isolation valves SB-16-19-6A and 6B. That form lists no inspection and maintenance requirements. Please describe in detail the requirement(s), if any, for such inspection and maintenance and state every reason for the requirement(s), and for each reason:

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

173. Does Vermont Yankee believe that failure to indicate the required preventive maintenance operations for containment isolation valves SB-16-19-6A and 6B on Visirecord preventive maintenance system form S-801,

Preventive Maintenance Work Order, is indicative of "an aggressive inspection and maintenance program?"

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

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

174. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-16-19-6A and 6B. That machine repair record indicates that no inspection and maintenance was done on valve SB-16-19-6A during the period October 19, 1973 through March 22, 1989. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-16-19-6A during a period of more than fifteen years is indicative of "an aggressive inspection and maintenance program?"

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

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

175. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-16-19-6A and 6B. That machine repair record indicates that no inspection and maintenance was done on valve SB-16-19-6B during the period October 1, 1977 through March 22, 1989. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-16-19-6B during a period of more than eleven years is indicative of "an aggressive inspection and maintenance program?"

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

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

176. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for containment isolation valve SB-6. That form indicates a requirement for seat ring inspection and adjustment or replacement, if necessary, on a refueling outage frequency. The Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valve SB-6 indicates that no inspection and maintenance was done on that valve during the 1989 outage. The Visirecord preventive maintenance system form S-803B, Summary of Preventive Maintenance Done, for containment isolation valve SB-6 indicates "PM cancelled due to corrective maintenance performed during 1989 outage." Does Vermont Yankee agree that such inconsistencies in maintenance records are indicative of a breakdown in 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; and
- 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.

177. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-6. That machine repair record indicates inspection and/or maintenance was done on valve SB-6 only once since February 3, 1980. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-6 more than once during a period exceeding ten years is indicative of "an aggressive inspection and maintenance program?"

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

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

- 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.

178. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for containment isolation valve SB-7. That form indicates a requirement for seat ring inspection and adjustment or replacement, if necessary, on a refueling outage frequency. The Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valve SB-7 indicates that no inspection and maintenance was done on that valve during the 1989 outage. The Visirecord preventive maintenance system form S-803B, Summary of Preventive Maintenance Done, for containment isolation valve SB-7 indicates "PM cancelled due to corrective maintenance performed during 1989 outage." Does Vermont Yankee agree that such inconsistencies in maintenance records are indicative of a breakdown in 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; and
- 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.

179. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for containment isolation valves SB-7. That machine repair record indicates that inspection and/or maintenance was done on valve SB-7 only once since February 3, 1980. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valve SB-7 more than once during a period exceeding ten years is indicative of "an aggressive inspection and maintenance program?"

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

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

- 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.

- 180. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for 3" NBS gate valve V2-77. That form requires valve inspection "approx. every third refueling." Please state every reason for this requirement, and for each reason:
 - a. State each and every fact on which your reason is based; and
 - 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.

- 181. Has Vermont Yankee reviewed and determined to be correct, since Vermont Yankee adopted a refueling outage cycle of approximately once each eighteen months, the required inspection frequency ("approx. every third refueling") for 3" NBS gate valve V2-77?

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; and
 - 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.

- 182. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for 1-1/2" Circle Seal check valves V72-89B, 89C and 103. That form requires "visual inspection of valve internals" at the end of every cycle. Please state every reason for this requirement, and for each reason:
 - a. State each and every fact on which your reason is based; and

- 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.

- 183. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-803A, Machine Repair Record, for 1-1/2" Circle Seal check valves V72-89B, 89C and 103. That form contains no record of inspection and maintenance prior to March 16, 1989. Does Vermont Yankee believe that failure to perform inspection and maintenance on containment isolation valves V72-89B, 89C and 103 prior to March 16, 1989 is indicative of "an aggressive inspection and maintenance program?"

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

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

- 184. In response to Vermont's request for documents, Vermont Yankee provided the Visirecord preventive maintenance system form S-801, Preventive Maintenance Work Order, for 1-1/2" Circle Seal check valve V72-89C. That form requires disassembly and inspection of valve internals and replacement of O-rings "every two outages." Please state every reason for this requirement, and for each reason:
 - a. State each and every fact on which your reason is based; and
 - 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.

- 185. Has Vermont Yankee reviewed and determined to be correct, since Vermont Yankee adopted a refueling outage cycle of approximately once each eighteen months, the required inspection frequency ("every two outages") for 1-1/2" Circle Seal check valve V72-89C?

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; and
 - 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.
-
186. Please describe in detail the qualified life of the O-rings for 1-1/2" Circle Seal check valve V72-89C.
 187. Identify all documents pertaining to the qualified life of the O-rings for 1-1/2" Circle Seal check valve V72-89C.
 188. Please describe in detail how the "excessive seat leakage," listed as the 'Description of Problem/Symptom' on Maintenance Request 87-0787 for Valve FW-28B, was determined to exist.
 189. Please identify the maintenance craftsman(s) who determined the existence of the "excessive seat leakage" listed as the 'Description of Problem/Symptom' on Maintenance Request 87-0787 for Valve FW-28B.
 190. Please identify all documents which record the existence of the "excessive seat leakage" listed as the 'Description of Problem/Symptom' on Maintenance Request 87-0787 for Valve FW-28B.
 191. Please describe quantitatively the rate at which the valve seat of Valve FW-028B was leaking:
 - a. At the time Maintenance Request 87-0787 was initiated on April 27, 1987.
 - b. At the time just before the work of Maintenance Request 87-0787 was accomplished in March, 1989.

192. Please state each and every reason why the seat leakage of Valve FW-028B was not repaired in the 1987 refueling outage. For each reason, please:
- 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; and
 - c. 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.
193. Please state each and every reason why the seat leakage of Valve FW-028B, discovered in April 1987, was not repaired before March 1989, considering FW-028B is an inboard containment isolation valve. For each reason, please:
- 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; and
 - c. 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.
194. Does Vermont Yankee agree with the statement from LER 89-07 at page 3, as it was meant to apply to the as-found condition of containment penetration X-9B:

"The inboard isolation valve V2-28B, even though not tested, will provide an isolation function in combination with V2-96A."

If your answer is anything other than an unqualified negative, then please state every reason for your answer considering Maintenance Request 87-0787, 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; and
- c. 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.

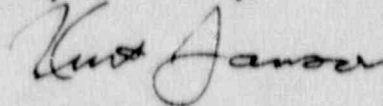
195. Does Vermont Yankee believe that failure to correct the "excessive seat leakage" of containment isolation valve FW-028B for 23 months (from April 1987 until March 1989) is indicative of "an aggressive inspection and maintenance program?"

If your answer is anything other than an unqualified negative, 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; and

- c. 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.

By its Attorney,



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

Dated: July 24, 1990

RELATED CORRESPONDENCE

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

DUCKETED
USNRC

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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

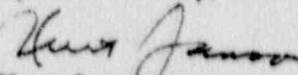
(Vermont Yankee Nuclear
Power Station)

)
)
) Docket No. 50-271-OLA-4
) (Operating License
) Extension)
)
)

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 9:30 a.m. on the 27th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of Christopher Hansen of Yankee Atomic Electric Company, Bolton, Massachusetts, on matters concerning drywell and torus paint degradation, upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,


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

Dated: July 24, 1990

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

DOCKETED
USNRC

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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

)
)
) Docket No. 50-271-OLA-4
) (Operating License
) Extension)
)
)

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 11:30 a.m. on the 27th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of Richard Martin of Stone & Webster, 245 Summer Street, Boston, Massachusetts, on matters concerning drywell and torus paint degradation, upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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

DOCKETED
USNRC

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

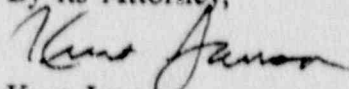
(Vermont Yankee Nuclear
Power Station)

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)
) Docket No. 50-271-OLA-4
) (Operating License
) Extension)
)
)

NOTICE OF DEPOSITIONS

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 1:30 p.m. on the 27th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the depositions of the craftspersons and supervisors involved in drywell and torus scraping activities at the Vermont Yankee plant, as requested to be identified in Interrogatory Nos. 81, 82, 83 and 84 (Vermont Set No. 3), on matters concerning drywell and torus paint degradation and scraping, upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Depositions, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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

DOCKETED
USNRC

'90 JUL 27 P4:07

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)

VERMONT YANKEE NUCLEAR)
POWER CORPORATION)

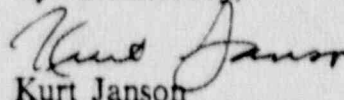
(Vermont Yankee Nuclear)
Power Station))

) Docket No. 50-271-OLA-4
) (Operating License
) Extension)

NOTICE OF DEPOSITIONS

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 9:30 a.m. on the 28th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the depositions of the Vermont Yankee personnel who spoke with LRS, Inc. personnel as reported in LRS Report #3-88 as requested to be identified in Interrogatory No. 102 (Vermont Set No. 1), on matters discussed in LRS Report #3-88, upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Depositions, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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

DOCKETED
USNRC

'90 JUL 27 P4:07

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

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Docket No. 50-271-OLA-4
(Operating License
Extension)

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 9:30 a.m. on the 29th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of Francis J. Helin of Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont, on matters discussed in responses to all interrogatories (Vermont Set No. 1), upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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

DOCKETED
USNRC

'90 JUL 27 P4:07

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

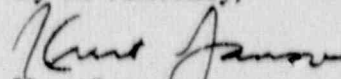
(Vermont Yankee Nuclear
Power Station)

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) Docket No. 50-271-OLA-4
) (Operating License
) Extension)
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NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 1:00 p.m. on the 29th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of Robert J. Wanczyk of Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont, on matters discussed in responses to Interrogatories No. 2, 3, 8, 16, 50, 51, 52, 53, 54, 116, 117, and 122 (Vermont Set No. 1), upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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USNRC

'90 JUL 27 P4:07

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

) Docket No. 50-271-OLA-4
) (Operating License
) (Extension)

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NOTICE OF DEPOSITION

By its Attorney,

Kura Janova

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

Dated: July 24, 1990

DOCKETED
USNRC

'90 JUL 27 P4:08

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Docket No. 50-271-OLA-4
(Operating License
Extension)

(Vermont Yankee Nuclear
Power Station)

Dated: July 24, 1990

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
before the
ATOMIC SAFETY AND LICENSING BOARD '90 JUL 27 P4:08

DOCKETED
USNRC

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

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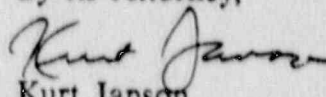
Docket No. 50-271-OLA-4
(Operating License
Extension)

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 1:00 p.m. on the 30th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of James M. DeVincentis of Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont, on matters discussed in responses to Interrogatories No. 9, 19, and 118 (Vermont Set No. 1), upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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

DOCKETED
USNRC

'90 JUL 27 P4:08

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

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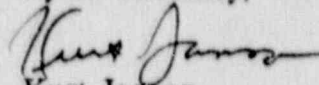
Docket No. 50-271-OLA-4
(Operating License
Extension)

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 3:00 p.m. on the 30th day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of Charles Rice, of LRS, Inc., c/o Vermont Yankee Nuclear Power Corporation, Brattleboro, Vermont, on matters discussed in responses to Interrogatories No. 102, 103, and 104 (Vermont Set No. 1), upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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'90 JUL 27 P4:09

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

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) Docket No. 50-271-OLA-4
) (Operating License
) Extension)

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

Dated: July 24, 1990

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

DOCKETED
USNRC

'90 JUL 27 P4:09

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

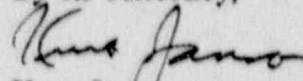
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) Docket No. 50-271-OLA-4
) (Operating License
) Extension)
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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 1:00 p.m. on the 31st day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of M. P. Saniuk of Yankee Atomic Electric Company, Bolton, Massachusetts, on matters discussed in responses to Interrogatories No. 22, 23, 25, 47, and 48 (Vermont Set No. 1), upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

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

DOCKETED
USNRC

'90 JUL 27 P4:09

In the Matter of

VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

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Docket No. 50-271-OLA-4
(Operating License
Extension)

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

NOTICE OF DEPOSITION

PLEASE TAKE NOTICE that, pursuant to 10 C.F.R. § 2.740a, at 3:00 p.m. on the 31st day of August, 1990, at the office of the Vermont Department of Public Service, 120 State Street, Montpelier, Vermont (or at such other time and location as may be mutually agreed upon by the parties), the State of Vermont will take the deposition of R. E. Swenson of Yankee Atomic Electric Company, Bolton, Massachusetts, on matters discussed in responses to Interrogatories No. 24, 25, 41, 43, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, and 93 (Vermont Set No. 1), upon oral examination, before a Court Reporter of Capital Court Reporters, P.O. Box 329, Burlington, Vermont 05402. The Deposition, unless otherwise agreed by the parties, will continue from day to day until completed.

By its Attorney,



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

Dated: July 24, 1990

RELATED CORRESPONDENCE

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

DOCKETED
USNRC

'90 JUL 27 P4:04

In the Matter of
VERMONT YANKEE NUCLEAR
POWER CORPORATION

(Vermont Yankee Nuclear
Power Station)

Docket No. 50-271-OLA-4
(Operating License
Extension)

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

CERTIFICATE OF SERVICE

I hereby certify that on July 19, 1990, I made service of an "Document Production Requests Propounded by the State of Vermont to the Vermont Yankee Nuclear Power Corporation (Set No. 3)"; "Interrogatories Propounded by the State of Vermont to the Vermont Yankee Nuclear Power Corporation (Set No. 3)"; and thirteen Notices of Depositions filed on July 24, 1990, 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 R. Kline
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
Washington, DC 20555

Ann P. Hodgdon, Esq.
Patricia A. Jehle, Esq.
Office of the General Counsel
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

R. K. Gad, III, Esq.
Ropes & Gray
One International Place
Boston, MA 02110

Anthony Z. Roisman, Esq.
Cohen, Milstein, Hausfeld &
Toll
Suite 600
1401 New York Avenue, N.W.
Washington, D.C. 20005

Adjudicatory File
Atomic Safety and Licensing
Board Panel
U.S.N.R.C.
Washington, DC 20555

In addition, I made service to each of the following individuals of the Notice of Deposition for that individual, in accordance with rules of the Commission by mailing a copy thereof postage prepaid:

Francis J. Helin
Robert J. Wanczyk
Richard P. Lopriore
David L. Phillips
James M. Devinentis

all at the following address:
Vermont Yankee Nuclear Power Corporation
RD #5, Box 169
Ferry Road
Brattleboro, Vt 05301

Christopher Hansen
Yankee Atomic Electric Company
Bolton, Massachusetts 01740

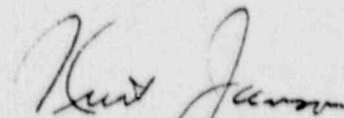
Richard Martin
Stone & Webster
245 Summer Street
Boston, Massachusetts 02210

Charles Rice
LRS, Inc.
c/o Vermont Yankee Nuclear
Power Corporation
RD #5, Box 169
Ferry Road
Brattleboro, Vt 05301

P. J. Donnelly
Yankee Atomic Electric Company
Bolton, Massachusetts 01740

M. P. Saniuk
Yankee Atomic Electric Company
Bolton, Massachusetts 01740

R. E. Swenson
Yankee Atomic Electric Company
Bolton, Massachusetts 01740



Kurt Janson
Special Assistant
Attorney General

Dated: July 24, 1990