

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)

PUBLIC SERVICE COMPANY OF)
NEW HAMPSHIRE, et al.)

(Seabrook Station, Units 1 and 2))
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)

Docket Nos. 50-443
50-444

NECNP SECOND SET OF INTERROGATORIES AND
REQUESTS FOR DOCUMENTS TO NRC STAFF ON
CONTENTIONS I.A.2., I.B.1., I.C., I.D.2.,
I.F., I.I., and I.M.

INSTRUCTIONS FOR USE

The following interrogatories are to be answered in writing and under oath by an employee, representative or agent of the Applicants with personal knowledge of the facts or information requested in each interrogatory.

The following definitions shall apply to thes interrogatories:

1. "Document" shall mean any written or graphic matter of Communication, however produced or reproduced, and is intended to be comprehensive and include without limitation any and all correspondence, letters, telegrams, agreements, notes, contracts, instructions, reports, demands, memoranda, data, schedules, notices, work papers, recordings, whether electronic or by other means, computer data, computer print-outs, photographs, microfilm, microfiche, charts, analyses, intra-corporate or intra-office communications, notebooks, diaries, sketches, diagrams, forms, manuals, brochures, lists, publications, drafts, telephone minutes, minutes of

meetings, statements, calendars, journals, orders, confirmations and all other written or graphic materials of any nature whatsoever.

2. "Identify" shall mean with respect to any document, to state the following respecting the document: its title, its date, the author of the document, the person to whom the document was sent, all persons who received or reviewed the document, the substance and nature of the document, and the present custodian of the document and of any and all copies of the document.

3. "Identify" with respect to any action or conduct shall mean state the following regarding any such action or conduct: the person or persons proposing and taking such action; the date such action was proposed and/or taken; all persons with knowledge or information about such action; the purpose or proposed effect of such action; any document recording or documenting such action.

4. "Describe" with respect to any action or matter shall mean state the following regarding such action or matter: the substance or nature of such action or matter; the persons participating in or having knowledge of such action or matter; the current and past business positions and addresses of such persons; the existence and location of any and all documents relating to such action or matter.

I.A.2. Qualification of Electric Valve Operators

1. Does the NRC Staff distinguish between components or system which are "safety related" and those which are "Class 1E"? If so, explain the distinction and any differences in environmental qualification between safety grade and Class 1E equipment.

2. Define "safety grade", "safety related" and "important to safety" as the NRC Staff uses these terms. Describe all differences in environmental qualification of the three types of equipment.

a) In light of these definitions, explain how the Commission's final rule on environmental qualification, 10 CFR 50.49 (promulgated January 6, 1982) applies to residual heat removal equipment at Seabrook.

3. Identify all high pressure residual heat removal systems at Seabrook of which the NRC Staff is aware, and state whether they are required to be environmentally qualified.

4. On page one of its response to NECNP First Set of Interrogatories, the NRC Staff states that "Applicants have not yet made their environmental qualification submittal to the NRC."

a) Is the environmental qualification submittal required by NRC regulation or practice?

b) If so, please identify the source of the requirement and the scope and contents of the report required.

c) Describe the nature of the NRC Staff's review of this document.

5. Has the NRC Staff reviewed Applicants' recircu-

lating fluid radiation dose study, referred to on page 11 of Applicants' Answers to NECNP First Set of Interrogatories on Contentions I.A.2., I.B.1., I.B.1., I.B.2. and I.C.? If so, describe the results of that evaluation and provide access to all relevant documents.

I.B.1. Qualification of Residual Heat Removal System

6. State the type and duration of accidents postulated by NRC in determining the necessary qualification time for residual heat removal equipment. What margin is postulated to account for uncertainties?

7. In response to NECNP Interrogatory I.B.1-24c, the NRC Staff stated that it is unaware of any tests or studies in which residual heat removal equipment has been examined after more than one year of use to determine whether it is still environmentally qualified. In its answer, did the NRC Staff consider normal surveillance and operating procedures in other plants? Please explain whether those procedures reveal whether equipment is still qualified, and why or why not.

I.C. Emergency Feedwater Pumphouse HVAC

8. In its response to NECNP Interrogatory I.C.-31, the Staff stated that "Once the EFW pumps are operating, its own heat generation will protect the equipment in the pumphouse from freezing." Has the NRC Staff analyzed the risk that standing water in the system will freeze before the EFW pumps are operating? If so, describe the results of that analysis.

9. Has the NRC Staff examined the heat sensor, the low temperature alarm, and associated equipment in the EFS HVAC pump room to determine whether it is qualified to withstand extremely cold temperatures? If so, please indicate to what temperatures the equipment is qualified.

10. Is the NRC aware of whether the heating system, heat sensor, and alarm in the EFS HVAC pump room are attached to an emergency power system? If so, please describe the power sources for those systems.

I.D.2. Testing of Protection Systems and Actuation Devices

11. In answering NECNP Interrogatory I.D.2-12, the NRC Staff stated that the phrase "Acceptably low probability" means "the Applicant should use qualitative engineering judgment to determine that the protection system will not fail to initiate the operation of actuated equipment during reactor operation."

a) Against what standard does the NRC Staff assess the "qualitative engineering judgment" employed by the Applicants?

b). Does the NRC Staff require any quantitative assessment of probability? Have Applicants submitted any such assessment?

c) Please refer NECNP to the specific portions of the FSAR where Applicants demonstrate the exercise of "qualitative engineering judgment" with regard the probability that untested equipment will operate.

I.F. Diesel Generator Qualification

12. Explain or identify and provide access to any

documents in NRC's possession which discuss the reasons for the changes made to the 1975 IEEE-338 standard by the 1977 standard.

13. In answering NECNP Interrogatory I.F.-7, the Staff was not responsive. NECNP did not ask whether Applicants have indicated compliance with IEEE 323-1974, but rather whether it is the Staff's position that compliance with IEEE 323-1974 is necessary to meet the requirements of GDC 17 and/or to provide a reasonable assurance that a nuclear facility can be operated safely. Please answer the question.

I.I. Inadequate Provision for Achieving Cold Shutdown

14. In answering NECNP Interrogatory I.B.1-16, the Staff stated that the safety related steam generator power operated atmospheric relief valves are used to vent vaporized secondary coolant. This action discharges secondary fluid directly to the atmosphere. If steam generator tubes are leaking at this time, either due to a deteriorated condition prior to the accident or leakage developed during the accident, primary coolant containing radioactivity has a direct path to the atmosphere. Is the NRC Staff aware of whether the Seabrook design has any means to detect the discharge of such radioactivity and an appropriate method to isolate the correct steam generator?

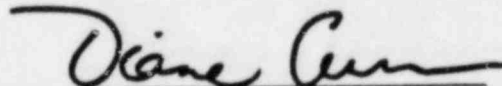
15. Please explain the reasons for the Staff's statement in response to NECNP Interrogatory I.I.-4 that only one path to cold shutdown need be shown by Applicants.


I.M. Fire Protection

16. In the Probabilistic Risk Assessment study for the Zion plant, also a Westinghouse plant, cable tray

fire was identified as a dominant risk contributor. Does the NRC Staff consider that the plant design for Seabrook reduces such a possibility to an acceptable level?

Respectfully Submitted


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