

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

August 21, 1985

Docket No. 50-423
B11671

Mr. B. J. Youngblood, Chief
Director of Nuclear Reactor Regulation
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: (1) B. J. Youngblood letter to J. F. Opeka, "Request for Additional Information for Millstone Nuclear Power Station, Unit No. 3, dated August 13, 1985.

Dear Mr. Youngblood:

Millstone Nuclear Power Station, Unit No. 3
Technical Specifications

The above referenced letter requested NNECO submit additional information concerning the draft Technical Specifications for Millstone Unit No. 3. Enclosed please find NNECO's response to the questions raised.

Because of the significant disagreement concerning inclusion of lists of design information or equipment in the Technical Specifications, NNECO hereby requests a meeting to resolve this issue as soon as possible. We will provide appropriate level management people to resolve this issue.

Reference (1) requested a response within seven days. We received notification of this letter on August 14, 1985 and are thus able to respond within seven days of receipt of the request.

8508290025 850821
PDR ADOCK 05000423
A PDR

Boo!
1/1

My Commission Expires March 31, 1988

Additional Information Required from Millstone 3

ITEMS

1. Based on discussions with Fire Protection reviewer, NU to propose new wording for Fire System Operational Test definition.

Response:

FIRE DETECTOR OPERATIONAL TEST

- 1.31 A FIRE DETECTOR OPERATIONAL TEST shall be the injection of a simulated signal into the channel at the primary sensor to verify Detector OPERABILITY and alarm transmission to the local zone panel.

2. Table 2.2-1: Values for trip setpoints/allowable values are preliminary values. NU needs to provide final values and setpoint methodology analysis report to finalize table.

Response:

Table 2.2-1, Reactor Trip System Instrumentation Trip Setpoints. The final draft of Table 2.2-1 will be submitted later.

3. NU needs to provide additional information to justify change of wording from STS for T/S 3.1.2.1.a.

Response:

The changes to specification 3.1.2.1.a and 3.2.2.2.a are necessary to make the specification consistent with the wording in specifications 3.1.2.5 and 3.1.2.6. The intent is that the specification be on minimum volume of boric acid, and this can be met with one boric acid tank on Millstone 3.

4. NU needs to provide additional information to justify change of wording from STS for T/S 3.1.2.2.a.

Response:

The changes to specification 3.1.2.1.a and 3.2.2.2.a are necessary to make the specification consistent with the wording in specifications 3.1.2.5 and 3.1.2.6. The intent is that the specification be on minimum volume of boric acid, and this can be met with one boric acid tank on Millstone 3.

5. T/S 3.1.1.1 Need SHUTDOWN MARGIN value.

Response:

The correct value for SHUTDOWN MARGIN is 1.6% $\Delta k/k$ in both 3 and 4 loop operation.

6. T/S 3.1.2.5 Need minimum borated water volume (gallons) for the Boric Acid Storage System and the RWST.

Response:

See the attached copy of Specification 3.1.2.5.

7. T/S 3.1.2.6 Need minimum borated water volume (gallons) for the Boric Acid Storage System.

Response:

See the attached copy of Specification 3.1.2.6.

8. T/S 3.1.3.4 Need RATED THERMAL POWER value for ACTION b.

Response:

The correct value for ACTION b is 65%.

9. Figure 3.1-1 Need new figure of good quality that is reproducible.

Response:

New Figure attached.

10. Figure 3.1-2 Need new figure of good quality that is reproducible.

Response:

New Figure attached.

11. Figure 3.2-1a Need new figure of good quality that is reproducible.

Response:

New Figure attached.

12. Figure 3.2-1b Need new figure of good quality that is reproducible.

Response:

New Figure attached.

13. Figure 3.2-2a Need new figure of good quality with grid background that is reproducible.

Response:

New Figure attached.

14. Figure 3.2-2b Need new figure of good quality with a grid background that is reproducible.

Response:

New Figure attached.

15. Table 3.3-4 Item 8 Need trip setpoint and allowable values.

Response:

See the attached portion of Table 3.3-4 for the current setpoints.

16. Table 3.3-5 Item 15 Need response times.

Response:

See Item 15.

17. T/S 4.3.3.2 Need justification for change in wording from STS.

Response:

Replace T/S 4.3.3.2 with the following:

4.3.3.2 The Movable Incore Detection System shall be demonstrated OPERABLE at least once per 24 hours by irradiating each detector used and determining the acceptability of its voltage curve for:

- a. Recalibration of the Excore Neutron Flux Detection system, or
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of F_{NH}^N , $F_{Q(Z)}$, and F_{xy} .

The above change makes the specification consistent with the method of testing described in the bases for this specification and the actual method used by the plant to meet the surveillance. Normalization of Detector output is done in computer software after a Flux map has been completed rather than before a map is done.

18. Table 3.3-11 Need updated no. of detectors to reflect total number of each functional type in each area.

Response:

See the attached list of detectors.

19. T/S 4.4.5.4a.6) Need value for tube plugging limit.

Response:

The tube plugging limit is 40% of the nominal tube wall thickness.

20. Figures 3.4-2 and 3.4-3 Provide figures.

Response:

New Figures attached.

21. T/S 3.4.9.2 Need value for spray water ΔT .

Response:

The value for spray water ΔT is 320°F.

22. T/S 3.4.9.3 Need value for RCS vent size (square inches).

Response:

The RCS vent size should be ≥ 7.0 square inches.

23. T/S 3.5.1 Need borated water volume values.

Response:

See the attached copy of specification 3.5.1.

24. T/S 4.5.2.f(4) Need value for containment recirculation pump differential pressure.

Response:

The value for Containment Recirculation pump differential pressure is ≥ 130 psid.

25. T/S 4.5.2.h.1)b) and 2)b) Need value for total pump flow rate.

Response:

See the attached copy of the specification for the correct numbers.

26. T/S 4.6.1.2.e Need value for combined bypass leakage rate.

Response:

The combined bypass leakage rate will be submitted later.

27. Table 3.6-1 Provide bypass leakage paths.

Response:

Table 3.6-1
Enclosure Building Bypass Leakage Paths

<u>Penetration</u>	<u>Release Location</u>
14	Ground Release
15	Ground Release
28	Plant Vent
29	Plant Vent
35	Plant Vent
36	Plant Vent
37	Plant Vent
38	Plant Vent
45	Plant Vent

Response 27 Continued:

Table 3.6-1 (CONTINUED)
Enclosure Building Bypass Leakage Paths

<u>Penetration</u>	<u>Release Location</u>
52	Turbine Building Roof Exhaust
54	Turbine Building Roof Exhaust
56	Ground Release
70	Ground Release
72	Plant Vent
85	Ground Release
86	Plant Vent
116	Plant Vent

28. T/S 4.6.1.3.b 2) Need submittal of Appendix J exemption to have provision remain in technical specifications.

Response:

The Millstone 3 air lock design requires the installation of a strong back on the inner door to permit pressurization to Pa (54.1 psia). The presence of the strong back for leak testing prior to start-up can hinder personnel access to the containment. Such access is often required for last minute operational leakage checks. To facilitate these operations, the following Appendix J exemption is suggested.

It is requested that the Staff permit Millstone 3 be exempt from complete air lock testing at Pa prior to establishing containment integrity (per 10CFR50 Appendix J Section D.2.b.ii) unless air lock maintenance that could affect sealing capability, has just been performed on the air lock.

The provisions of the proposed Millstone 3 surveillance, 4.6.1.3.a, would permit the air lock door seals to be tested at Pa just prior to start-up. This test of the double O-ring door seals is considered to meet the intent of Appendix J without pressurization of the entire air lock.

29. Figure 3.6-1 Provide new figure of good quality that is reproducible.

Response:

New Figure attached.

30. T/S 4.6.1.3.a Provide justification for change in method from STS Rev. 5.

Response:

A revision to the Rev. 5 method is requested for specification 3.6.1.3.a to provide more flexibility in performing the surveillance. Both methods of testing are correct and can supply a verification that the door will not leak. (See the attached copy of the specification for the proposed revision.)

31. T/S 4.6.1.5 Provide air temperature measurement locations.

Response:

The air temperature measurement locations of specification 4.6.1.5 will be determined during Pre-Core Hot Functional Testing, scheduled for September 1985, and the appropriate detectors location will be provided following this determination.

32. T/S 4.6.2.1 b) Provide value for pump differential pressure.

Response:

The value for Quench Spray Pump differential pressure is ≥ 114 psid.

33. T/S 4.6.2.2 b) Provide value for pump differential pressure.

Response:

The value for Containment Recirculation pump differential pressure is ≥ 130 psid.

34. T/S 4.6.2.3 d Provide method to verify flow path open.

Response:

T/S 4.6.2.3 d, Spray Additive System Surveillance to verify flow path. NNECO submitted justification to delete this surveillance August 12, 1985.

35. Table 3.6-2 Provide complete listing of values that correspond to penetrations listed in FSAR Table 6.2-65.

Response:

Table 3.6-2 is not intended to be a listing of all valves that service a containment penetration. Table 3.6-2 contains valves which get phase A or phase B isolation signals or manual valves which are controlled administratively during operation. Technical Specifications are not meant to be a document that duplicates all the design information contained in other docketed design documents (e.g., FSAR). FSAR describes the plant design and is also a controlled document. FSAR Table 6.2-65 contains far more information (i.e., all containment penetration valves) than that required for the operator to perform the necessary surveillance testing to ensure operability.

36. T/S 3.6.5.2 Provide justification to delete specification.

Response:

T/S 3.6.5.2, Mechanical Vacuum Pumps

NNECO submitted justification to delete this specification August 12, 1985.

37. T/S 3.7.6 Provide new T/S wording using Rev. 5 STS.

Response:

See the attached revised copy of specification 3/4.7.6.

38. T/S 4.7.12.1 Millstone to propose additional T/S to test dampers on 18-month basis.

Response:

The revised specification 4.7.12.1 is attached.

39. T/S 3.8.1.1.b 1) Provide minimum day tank volume.

Response:

The correct minimum Day tank volume should be 40% (205 gal).

40. T/S 3.8.1.1.b 2) Provide minimum fuel storage system volume.

Response:

The correct minimum storage tank volume should be 88% (32760 gal).

41. T/S 4.8.1.1.2 a 5) Provide justification for acceptability of 4160 (+240,-460).

Response:

Upon further review we agree with Standard Technical Specifications +420 volts is the correct value.

42. T/S 3.8.1.2 b 1) Provide minimum day tank volume.

Response:

The correct minimum Day tank volume should be 40% (205 gal).

43. T/S 3.8.1.2.b 2) Provide minimum fuel storage system volume.

Response:

The correct minimum storage tank volume should be 88% (32760 gal).

44. T/S 3.8.2.1 Provide detailed justification for proposed changes.

Response:

Millstone 3 has 4 vital 125 volt batteries and 4 vital 120 volt AC inverters. The two larger batteries (200 amp capacity) 301A-1 and 301B-1 supply both backup power to vital 120 volt AC inverters supplying 120 volt vital busses VIAC 1 and VIAC 2 and DC control power to Train A and Train B equipment. The two smaller batteries (50 amp capacity) 301A-2 and 301B-2 supply only backup power to the two other vital AC inverters supplying 120 volt vital AC busses VIAC 3 and VIAC 4.

The restoration time for channel power supply should be consistent with the plant specific design. As batteries 301A-2 and 301B-2 only serve as backup power supplies to vital AC inverters, the action statement for a loss of 301A-2 and 301B-2 should be consistent with the action statement for a loss of a vital inverter in specification 3.8.3.1 Action b(2).

Response 44 Continued:

The changes originally submitted to the Standard Technical Specifications are necessary to make Technical Specifications consistent with plant design and consistent within themselves.

45. Tables 3.8-2a and 3.8-2b Provide value listings.

Response:

Inclusion of a General listing of equipment or design information in Technical Specifications is inconsistent with the significant ongoing efforts to optimize Technical Specifications. Docketed information, principally the FSAR, provides equipment listings and design information concerning Millstone 3 and is a controlled document. Placing a listing of equipment in Technical Specifications creates two design documents causing control and management problems.

In effect, listings in Technical Specifications also preclude the resolution of future issues such as adding devices or equipment. General listings of equipment, such as snubbers, have already been removed from the Technical Specifications. It is NNECO's position that the inclusion of Tables 3.8-1, 3.8-2a and 3.8-2b is inconsistent with previous sections of the Technical Specifications. Placing a general listing of equipment in Technical Specifications makes the specifications confusing to work with and does not improve the operation or safety of the plant.

46. Table 3.8-1 Provide complete listing of protective devices.

Response:

Inclusion of a General listing of equipment or design information in Technical Specifications is inconsistent with the significant ongoing efforts to optimize Technical Specifications. Docketed information, principally the FSAR, provides equipment listings and design information concerning Millstone 3 and is a controlled document. Placing a listing of equipment in Technical Specifications creates two design documents causing control and management problems.

In effect, listings in Technical Specifications also preclude the resolution of future issues such as adding devices or equipment. General listings of equipment, such as snubbers, have already been removed from the Technical Specifications. It is NNECO's position that the inclusion of Tables 3.8-1, 3.8-2a and 3.8-2b is inconsistent with previous sections of the Technical Specifications. Placing a general listing of equipment in Technical Specifications makes the specifications confusing to work with and does not improve the operation or safety of the plant.

47. T/S 3.9.6 Millstone to provide new submittal.

Response:

Our revised submittal for Specification 3.9.6 is attached.

48. Figures 5.1-1, 5.1-2, 5.1-3 Provide figures.

Response:

New Figures attached.

49. Figures 6.2-1, 6.2-2 Provide figures.

Response:

New Figures attached.