PSNH

Public Service of New Hampshire

September 12, 1986

SBN-1192
T.F. B7.1.2

United States Nuclear Regulatory Commission
Washington, DC 20555

Attention: Mr. Thomas M. Novak, Acting Director
Division of PWR Licensing-A

Reference: (a) Construction Permits CPPR 135 and CPPR-136, Docket No.'s 50-443 and 50-444.

Subject: Additional Comments on Seabrook Station Technical Specifications.

Dear Sir:

As a result of our continuing effort to assure the accuracy of the final Technical Specifications for Seabrook Station, we have identified several additional changes that must be incorporated into the Seabrook Station Technical Specifications prior to certification. Enclosure 1 to this letter provides marked up copies of the Seabrook Station Final Draft Technical Specifications which reflect our comments. Upon inclusion of these comments into the Seabrook Station Technical Specifications and our verification of this inclusion, certification of the Technical Specifications will be possible.

It is our desire to certify the technical specifications as soon as possible. Should you or your staff have any questions concerning these comments, please contact Mr. Warren Hall at (603) 474-9574 extension 4046.

Very truly yours,

J. DeVincentis
Director of Engineering

Enclosure

cc: ASLB Service List

B001
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TABLE 3.3-4 (Continued)

TABLE NOTATIONS

*Time constants utilized in the lead-lag controller for Steam Line Pressure-Low are $\tau_1 \geq 50$ seconds and $\tau_2 \leq 5$ seconds. CHANNEL CALIBRATION shall ensure that these time constants are adjusted to these values.

**The time constant utilized in the rate-lag controller for Steam Line Pressure-Negative Rate-High is ~~less~~ greater than or equal to 50 seconds. CHANNEL CALIBRATION shall ensure that this time constant is adjusted to this value.

TABLE 4.3-6 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	SOURCE CHECK	CHANNEL CALIBRATION	CHANNEL OPERATIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
3. GASEOUS WASTE PROCESSING SYSTEM (Providing Alarm and Automatic Termination of Release)					
a. Noble Gas Activity Monitor	D	N.A.	R(6)	Q(1)	*
4. TURBINE GLAND SEAL CONDENSER EXHAUST					
a. Iodine Sampler	~~W~~ NA	N.A.	N.A.	N.A	***
b. Particulate Sampler	~~W~~ NA	N.A.	N.A.	N.A.	***
c. Sampler Flow Rate Indicator	D	N.A.	N.A.	N.A.	*
5. RADIOACTIVE GAS WASTE SYSTEM CUBICLE EXPLOSIVE GAS MONITORING SYSTEM					
a. Hydrogen Monitors	D	N.A.	Q(4)	M	*

Same justification as on page 3/4 3-64

TABLE 4.3-6

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	SOURCE CHECK	CHANNEL CALIBRATION	CHANNEL OPERATIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
1. RADIOACTIVE GAS WASTE SYSTEM EXPLOSIVE GAS MONITORING SYSTEM					
Oxygen Monitor (Process)	D	N.A.	Q(5)	M	**
2. PLANT VENT-WIDE RANGE GAS MONITOR					
a. Noble Gas Activity Monitor	D	M	R(3)	Q(2)	*
b. Iodine Sampler	~~W~~ NA	N.A.	N.A.	N.A.	*
c. Particulate Sampler	~~W~~ NA	N.A.	N.A.	N.A.	*
d. Flow Rate Monitor	D	N.A.	R	Q****	*
e. Sampler Flow Rate Monitor	D	N.A.	R	Q	*

The above changes are required because Seabrook Station only has filters for these samplers. A channel check cannot be run on a filter

SEABROOK - UNIT 1

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EMERGENCY CORE COOLING SYSTEMS

ECCS SUBSYSTEMS - T_{avg} GREATER THAN OR EQUAL TO 350°F

SURVEILLANCE REQUIREMENTS

4.5.2 Each ECCS subsystem shall be demonstrated OPERABLE:

a. At least once per 24 hours by verifying that the following valves are in the indicated positions with power to the valve operators removed:

Valve Number	Valve Function	Valve Position
SI-V-3	Accumulator Isolation	Open *
SI-V-17	Accumulator Isolation	Open *
SI-V-32	Accumulator Isolation	Open *
SI-V-47	Accumulator Isolation	Open *
SI-V-114	SI Pump to Cold-Leg Isolation	Open
RH-V-14	RHR Pump to Cold-Leg Isolation	Open
RH-V-26	RHR Pump to Cold-Leg Isolation	Open
RH-V-32	RHR to Hot-Leg Isolation	Closed
RH-V-70	RHR to Hot-Leg Isolation	Closed
SI-V-77	SI to Hot-Leg Isolation	Closed
SI-V-102	SI to Hot-Leg Isolation	Closed

b. At least once per 31 days by:

1) Verifying that the ECCS piping is full of water by venting the ECCS pump casings and accessible discharge piping high points, and

2) Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.

c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment sump and cause restriction of the pump suctions during LOCA conditions. This visual inspection shall be performed:

1) For all accessible areas of the containment prior to establishing PRIMARY CONTAINMENT INTEGRITY, and

2) Of the areas affected within containment at the completion of each containment entry when PRIMARY CONTAINMENT INTEGRITY is established.

* These valves can be closed if RCS pressure ≤ 1000 psi

FINAL DRAFT

PLANT SYSTEMS

TURBINE CYCLE

ATMOSPHERIC RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.6 The atmospheric relief valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.*

ACTION:

~~With less than one atmospheric relief valve per steam generator OPERABLE, restore the required atmospheric dump valve to OPERABLE status within 72 hours, or be in at least HOT STANDBY within the next 6 hours.~~

a. With one less than the required atmospheric relief valves OPERABLE, restore the required atmospheric relief valve to OPERABLE status within 7 days or be in a least HOT STANDBY within the next 12 hours.

b. With Two less than the required atmospheric relief valves OPERABLE, restore at least one atmospheric relief valve to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.6 Each atmospheric relief valve shall be demonstrated OPERABLE:

a. At least once per 24 hours by verifying that the nitrogen accumulator tank is at a pressure greater than or equal to 500 psig.

b. Prior to startup following any refueling shutdown or cold shutdown of 30 days or longer, verify that all valves will open and close fully.

*When steam generators are being used for decay heat removal.

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PLANT SYSTEMS

3/4.7.5 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.5 The ultimate heat sink (UHS) shall be OPERABLE with:

a. A service water pumphouse water level at or above 5'-0" ~~[illegible] feet, Old Mean Sea Level, USGS datum, and~~

b. A mechanical draft cooling tower comprised of one cooling tower cell with one OPERABLE fan and a second cell with two OPERABLE fans, and a contained basin water level of equal to or greater than ~~[illegible]~~* 42.15 feet at a bulk average water temperature of less than or equal to 67.3°F, and

c. A portable tower makeup pump system stored to be OPERABLE for 30 days following a Safe Shutdown Earthquake.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

a. With the service water pumphouse inoperable, restore the service water pumphouse to OPERABLE status within 72 hours, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With the mechanical draft cooling tower inoperable, restore the cooling tower to OPERABLE status within 72 hours, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With the portable tower makeup pump system inoperable, continue operation and notify the NRC within 1 hour in accordance with the procedure of 10 CFR 50.72 of actions or contingencies to ensure an adequate supply of makeup water to the mechanical draft cooling tower for a minimum of 30 days.

Changes on this sheet made due to commitments to NRC to change meter scales to resolve HED deficiences.

*With the cooling tower in operation with valves aligned for tunnel heat treatment, the tower basin level shall be maintained at greater than or equal to 40.55 ~~[illegible]~~ feet and the bulk average temperature shall be maintained at less than or equal to 71°F.

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SURVEILLANCE REQUIREMENTS

4.7.5 The ultimate heat sink shall be determined OPERABLE:

a. At least once per 24 hours by:

1) Verifying the water level in the service water pumphouse to be at or above 5'-0" [redacted] mean sea level, and

2) Verifying the water in the mechanical draft cooling tower basin to be greater than or equal to a level of 42.15 feet.

b. At least once per week by verifying that the water in the mechanical draft cooling tower basin to be at a bulk average temperature of 67.3°F.

c. At least once per 31 days by:

1) Starting from the control room each UHS cooling tower fan that is required to be OPERABLE and operating each of those fans for at least 15 minutes, and

2) Verifying that the portable tower makeup pump system is stored in its design operational readiness state.

d. At least once per 18 months by verifying automatic actuation of each cooling tower fan on a Tower Actuation test signal.

See justification on previous page (3/4 7-14) for change

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3/4.7.6 CONTROL ROOM AREA VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6 Two independent Control Room Area Ventilation Systems shall be OPERABLE.

APPLICABILITY: All MODES.

ACTION:

MODES 1, 2, 3, and 4:

With one Control Room Area Ventilation System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6:

a. With one Control Room Area Ventilation System inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Area Ventilation System in the recirculation mode.

b. With both Control Room Area Ventilation Systems inoperable, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.7.6 Each Control Room Area Ventilation System shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the Control Room Area Ventilation System is maintaining the temperature of equipment and instrumentation in the control room area below its limiting equipment qualification temperature.

b. At least once per 18 months or after any significant modification to the Control Room Area Ventilation Systems by verifying a system flow rate of 25,700 cfm ± 10% through the air conditioner unit (3A and 3B) and a flow rate of ~~at least 500 cfm~~ 1200 cfm ± 10% makeup from each intake to the emergency filtration unit with a discharge of 2000 cfm ± 10% from the filtration unit.

This change supercedes the change submitted by SBN-1157 dated 7/15/86

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SURVEILLANCE REQUIREMENTS

4.8.1.1.2 (Continued)

a) Verifying deenergization of the emergency busses and load shedding from the emergency busses, and

b) Verifying the diesel starts on the ~~auto-start~~ loss of offsite power signal, energizes the emergency busses with ~~permanently~~ connected loads within 12 seconds, energizes the auto-connected shutdown loads through the emergency power sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.

5) Verifying that on an SI actuation test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test;

6) Simulating a loss-of-offsite power in conjunction with an SI actuation test signal, and tower actuation test signal (TA); and

a) Verifying deenergization of the emergency busses and load shedding from the emergency busses;

b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the auto-connected emergency (accident) loads through the emergency power sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test; and

c) Verifying that all automatic diesel generator trips, except engine overspeed, low lube oil pressure, 4160-volt bus fault, and generator differential, are automatically bypassed upon loss of voltage on the emergency bus concurrent with a Safety Injection actuation signal.

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3/4.9.6 REFUELING MACHINE

LIMITING CONDITION FOR OPERATION

3.9.6 The refueling machine and auxiliary hoist shall be used for movement of drive rods or fuel assemblies and shall be OPERABLE with:

a. The refueling machine used for movement of fuel assemblies having:

1) A minimum capacity of 4000 pounds, and

2) An overload cutoff limit less than or equal to 3900 pounds.

b. The auxiliary hoist used for ~~latching~~ unlatching drive rods having:

1) A minimum capacity of ~~3000~~ 2100 pounds, and

2) A load indicator which shall be used to prevent lifting loads in excess of 1000 pounds.

APPLICABILITY: During movement of drive rods or fuel assemblies within the reactor vessel.

ACTION:

With the requirements for refueling machine and/or hoist OPERABILITY not satisfied, suspend use of any inoperable refueling machine and/or auxiliary hoist from operations involving the movement of drive rods and fuel assemblies within the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.9.6.1 The refueling machine used for movement of fuel assemblies within the reactor vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 4000 pounds and demonstrating an automatic load cutoff when the refueling machine load exceeds 3900 pounds.

4.9.6.2 The auxiliary hoist and associated load indicator used for movement of drive rods within the reactor vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least ~~3000~~ 2100 pounds.

SURVEILLANCE REQUIREMENTS

4.9.12b (Continued)

1) Verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than ~~0.05%~~ 1.0 and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978,* and the system flow rate is ~~17,000~~ 16,450 cfm ± 10%;

2) Verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978,* meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, by showing a methyl iodide penetration of less than 1.0% when tested at a temperature of 30°C and at a relative humidity of 70% in accordance with ASTM-D3803; and

3) Verifying a system flow rate of ~~17,000~~ 16,450 cfm ± ~~10%~~ 10 during system operation when tested in accordance with ANSI N510-1980.

c. After every 720 hours of charcoal adsorber operation by verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978,* meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978,* by showing a methyl iodide penetration of less than 1.0% when tested at a temperature of 30°C and at a relative humidity of 95% in accordance with ASTM-D3803.

d. At least once per 18 months by:

1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of ~~17,000~~ 16,450 cfm ± 10%,

2) Verifying that the system maintains the spent fuel storage pool area at a negative pressure of greater than or equal to 1/4 inch Water Gauge relative to the outside atmosphere during system operation,

*ANSI N510-1980 shall be used in place of ANSI N510-1975 as referenced in Regulatory Guide 1.52, Rev. 2, March 1978.

SURVEILLANCE REQUIREMENTS

4.9.12d (Continued)

3) Verifying that the filter cross connect valve can be manually opened, and

4) Verifying that the heaters dissipate 95 ± 11 kW when tested in accordance with ANSI N510-1980.

e. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration leakage testing acceptance criteria of less than ~~0.05%~~ 1.0 in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of ~~17,000~~ 16,450 cfm ± 10%.

f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration leakage testing acceptance criteria of less than ~~0.05%~~ 1.0 in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of ~~17,000~~ 16,450 cfm ± 10%.

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RADIOACTIVE EFFLUENTS

GASEOUS EFFLUENTS

GAS STORAGE TANKS

LIMITING CONDITION FOR OPERATION

3.11.2.6 The quantity of radioactivity contained in the hydrogen purge tank shall be limited to less than or equal to 198,000 Curies of noble gases (considered as Xenon-133 equivalent).

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in the hydrogen purge tank exceeding the above limit, immediately suspend all additions of radioactive material to the tank, within 48 hours reduce the tank contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report pursuant to Specification 6.8.1.4.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.6 The quantity of radioactive material contained in each gas storage tank shall be determined to be within the above limit at least once per 24 hours when radioactive materials are being added to the tank.

This specification should be deleted as it is no applicable to Seabrook Station. Discussions between the NRC staff (Mr Charlie Willis) and NHY staff (Mr. Winfield) has provided sufficient justification and satisfied the concerns of the staff. It is therfore requested that this specification be deleted from the Seabrook Technical specifications.

SEP 8 1986

In Reply Refer To:
Docket: 50-298/86-01

Nebraska Public Power District
ATTN: J. M. Pilant, Manager, Technical
Staff-Nuclear Power Group
P. O. Box 499
Columbus, Nebraska 68601

Gentlemen:

This refers to the inspection conducted by Mr. J. R. Boardman of this office and two consultants during the period January 6-10, 1986, of activities authorized by NRC Operating License DPR-46 for the Cooper Nuclear Station. Our letter, dated March 14, 1986, forwarded the results of this inspection. As a result of this inspection, an enforcement conference was held in the Region IV offices on March 26, 1986.

After due consideration of the matters discussed at the enforcement conference and the aforementioned inspection report, we have concluded that certain activities conducted under your license were in violation of NRC requirements. Consequently, you are required to respond to this violation in writing, in accordance with the previsions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Your response should be based on the specifics contained in the enclosed Notice of Violation.

The response directed by this letter and the accompanying Notice of Violation is not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions, we shall be pleased to discuss them with you.

Sincerely,
Original Signed By
J. E. Gagliardo

J. E. Gagliardo, Chief
Reactor Projects Branch

Enclosure:
As stated

cc:
See next page

RIV:PS-A
JPJaudon:jc
9/4/86

RPB
JEGagliardo
9/5/86

IE01

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Kansas Radiation Control Program Director

Nebraska Radiation Control Program Director

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