Docket No. 50-336

B12284

Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Proposed Changes to Technical Specifications
Generic Letter 83-37 (NUREG-0737)

October, 1986

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
6. CONTAINMENT SUMP RECIRCULATION (SRAS)				
a. Manual SRAS (Trip Buttons)	N.A.	N.A.	R	N.A.
b. Refueling Water Storage Tank - Low	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3
7. CONTAINMENT PURGE VALVES ISOLATION				
a. Containment Radiation - High				
Gaseous Monitor	S	R	M	ALL MODES
Particulate Monitor	S	R	M	ALL MODES
8. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Undervoltage relays) - level one	S	R	M	1, 2, 3
b. 4.16 kv Emergency Bus Undervoltage (Undervoltage relays) - level two	S	R	M	1, 2, 3
9. AUXILIARY FEEDWATER				
a. Manual	N.A.	N.A.	R	N.A.
b. Steam Generator Level - Low	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M	1, 2, 3

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Spent Fuel Storage Criticality Monitor and Ventilation System Isolation	2	*	100 mR/hr	10^{-1} - 10^{+4} mR/hr	13 and 15
b. Control Room Isolation	1	ALL MODES	2 mR/hr	10^{-1} - 10^{4} mR/hr	16
c. Containment High Range	1	1, 2, 3, & 4	100 R/hr	10^{0} - 10^{8} R/hr	17
2. PROCESS MONITORS					
a. Containment Atmosphere-Particulate	1	ALL MODES**	the value determined in accordance with specification 4.3.2.1.4.	10 - 10^{+6} cpm	14 and (a)
b. Containment Atmosphere-Gaseous	1	ALL MODES**	the value determined in accordance with Specification 4.3.2.1.4.	10 - 10^{+6} cpm	14 and (a)

*With fuel in storage building.
**These radiation monitors are not required to be operable during Type "A" Integrated Leak Rate Testing.

TABLE 3.3-6 (Continued)

TABLE NOTATION

(a) During MODE 6, also comply with the ACTION requirements of Specification 3.9.9, as applicable.

ACTION 13 - With the number of area monitors OPERABLE less than required by the MINIMUM CHANNELS OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at least once per 24 hours.

ACTION 14 - With the number of process monitors OPERABLE less than required by the MINIMUM CHANNELS OPERABLE requirement either (a) obtain and analyze grab samples of the monitored parameter at least once per 24 hours, or (b) use a Constant Air Monitor to monitor the parameter.

ACTION 15 - With the number of area monitors OPERABLE less than required by the MINIMUM CHANNELS OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.13.

ACTION 16 - With the number of OPERABLE channels less than required by the MINIMUM CHANNELS OPERABLE requirement, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.

ACTION 17 - With the number of OPERABLE channels less than the MINIMUM CHANNELS OPERABLE, restore the inoperable channel(s) to OPERABLE status within 30 days, or else prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction, the plans for restoring the channel to OPERABLE status, and any alternate methods in effect for estimating the applicable parameter in the interim.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1. AREA MONITORS				
a. Spent Fuel Storage				
Criticality Monitor and Ventilation System Isolation	S	R	M	*
b. Control Room Isolation	S	R	M	ALL MODES
c. Containment High Range	S	R**	M	1, 2, 3, & 4
2. PROCESS MONITORS				
a. Containment Atmosphere-Particulate	S	R	M	ALL MODES
b. Containment Atmosphere-Gaseous	S	R	M	ALL MODES

*With fuel in storage building
**Calibration of the sensor with a radioactive source need only be performed on the lowest range. Higher ranges may be calibrated electronically.

TABLE 3.3-11

ACCIDENT MONITORING INSTRUMENTATION

Instrument	Total No. of Channels	Minimum Channels Operable	Action
1. Pressurizer Water Level	2	1	1
2. Auxiliary Feedwater Flow Rate	2/S. G.	1/S.G.	1
3. RCS Subcooled/Superheat Monitor	2	1	2
4. PORV Position Indicator Acoustic Monitor	1/valve	1/valve	3
5. PORV Block Valve Position Indicator	1/valve	1/valve	3
6. Safety Valve Position Indicator Acoustic Monitor	1/valve	1/valve	3
7. Containment Pressure (Wide Range)	2	1	4
8. Containment Water Level (Narrow Range)	1	1	4
9. Containment Water Level (Wide Range)	2	1	4
10. Core Exit Thermocouples	4 CETs/core quadrant	2 CETs in each of 2 core quadrants	1
11. Reactor Vessel Coolant Level	2*	1*	5
12. Noble Gas Effluent Monitor (High Range)(Unit 2 Stack)	1	1	4

*A channel is eight (8) sensors in a probe. A channel is OPERABLE if four (4) or more sensors, two (2) or more in the upper four and two (2) or more in the lower four, are OPERABLE.

TABLE 3.3-11 (Continued)

ACTION STATEMENTS

ACTION 1 - With the number of OPERABLE channels less than the MINIMUM CHANNELS OPERABLE requirements of Table 3.3-11, either restore the inoperable channel(s) to OPERABLE status within 30 days or be in HOT STANDBY within the next 12 hours.

ACTION 2 - With the number of channels OPERABLE less than the MINIMUM CHANNELS OPERABLE, determine the subcooling margin once per 12 hours.

ACTION 3 - With any individual valve position indicator inoperable, obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. This action is not required if the PORV block valve is closed with power removed in accordance with Specification 3.4.3.a or 3.4.3.b.

ACTION 4 - With the number of OPERABLE channels less than the MINIMUM CHANNELS OPERABLE requirements of Table 3.3-11, either restore the inoperable channel(s) to OPERABLE status within 30 days or submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction, the plans for restoring the channel to OPERABLE status, and any alternate methods in effect for estimating the applicable parameter during the interim.

ACTION 5 - With the number of OPERABLE Channels one less than the MINIMUM CHANNELS OPERABLE in Table 3.3-11, either restore the inoperable channel(s) to OPERABLE status within 48 hours if repairs are feasible without shutting down or:

1. Prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 30 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status; and

2. Restore the system to OPERABLE status at the next scheduled refueling.

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

	INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1.	Pressurizer Water Level	M	R
2.	Auxiliary Feedwater Flow Rate	M	R
3.	Reactor Coolant System Subcooled/Superheat Monitor	M	R
4.	PORV Position Indicator (Acoustic Monitor)	M	R
5.	PORV Block Valve Position Indicator	N.A.	R
6.	Safety Valve Position Indicator (Acoustic Monitor)	M	R
7.	Containment Pressure	M	R
8.	Containment Water Level (Narrow Range)	M	R
9.	Containment Water Level (Wide Range)	M	R
10.	Core Exit Thermocouples	M	R*
11.	Reactor Vessel Coolant Level	M	R*
12.	Noble Gas Effluent Monitor (High Range)	M	R

*Electronic calibration from the ICC cabinets only.

INSTRUMENTATION

POST-ACCIDENT SAMPLING SYSTEM

LIMITING CONDITION FOR OPERATION

3.3.3.11 The Post-Accident Sampling System shall be OPERABLE.

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

ACTION:

a. With the Post-Accident Sampling System inoperable, either restore the inoperable system to OPERABLE status within 30 days or submit a Special Report to the Commission within the next 10 days outlining the cause of the malfunction, the plans for restoring the system to OPERABLE status and any alternate methods in effect for estimating the applicable parameter during the interim.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.11 The Post-Accident Sampling System shall be demonstrated OPERABLE at least once per 6 months by:

a. Demonstrating the ability to obtain a containment atmosphere sample, and

b. Demonstrating the ability to obtain a reactor coolant sample.

REACTOR COOLANT SYSTEM VENTS

LIMITING CONDITION FOR OPERATION

3.4.11 At least one reactor coolant system vent path consisting of at least two valves in series powered from emergency buses shall be OPERABLE and closed at each of the following locations:

a. Reactor Vessel head

b. Pressurizer steam space

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With the Pressurizer vent path inoperable, STARTUP and/or POWER OPERATION may continue provided that i) the inoperable vent path is maintained closed with power removed from the valve actuator of all the valves in the inoperable vent path and ii) one power operated relief valve (PORV) and its associated block valve is OPERABLE; otherwise, restore either the inoperable vent path or one PORV and its associated block valve to OPERABLE status within 30 days, or, submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the path to OPERABLE status.

b. With the Reactor Vessel Head vent path inoperable, STARTUP and/or POWER OPERATION may continue provided that the inoperable vent path is maintained closed with power removed from the valve actuator of all the valves in the inoperable vent path; restore the Reactor Vessel Head vent path to OPERABLE status within 30 days or submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the path to OPERABLE status.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.11 Each reactor coolant system vent path shall be demonstrated OPERABLE at least once per 18 months by:

1. Verifying all manual isolation valves in each vent path are locked in the open position.

2. Cycling each valve in the vent path through at least one complete cycle of full travel from the control room during COLD SHUTDOWN or REFUELING.

3. Verifying flow through the reactor coolant vent system vent paths during venting during COLD SHUTDOWN or REFUELING.

3/4.3.3.11 POST-ACCIDENT SAMPLING SYSTEM

The OPERABILITY of the post-accident sampling system ensures that additional information is available on selected plant parameters to monitor and assess these variables during and following an accident.

3/4.4.11 Reactor Coolant System Vents

Reactor Coolant System Vents are provided to exhaust noncondensible gases and/or steam from the primary system that could inhibit natural circulation core cooling. The OPERABILITY of at least one reactor coolant system vent path from the reactor vessel head and the pressurizer steam space ensures the capability exists to perform this function.

The valve redundancy of the reactor coolant system vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply or control system does not prevent isolation of the vent path.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator, Region I, U. S. Nuclear Regulatory Commission, within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.3.

b. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.

c. Safety Class 1 Inservice Inspection Program Review, Specification 4.4.10.1.

d. ECCS Actuation, Specifications 3.5.2 and 3.5.3.

e. Fire Detection Instrumentation, Specifications 3.3.3.7.

f. Fire Suppression Systems, Specifications 3.7.9.1 and 3.7.9.2.

g. RCS Overpressure Mitigation, Specification 3.4.9.3

h. Radiological Effluent Reports required by Specifications 3.11.1.2, 3.11.2.2, 3.11.2.3 and 3.11.4.

i. Specific activity levels, Specification 3.4.8.

j. Degradation of containment structure, Specification 4.6.1.6.4.

k. Steam Generation Tube Inspection, Specification 4.4..5.1.5.

l. Snubber Deletions, Table 3.7-1a and 3.7-1b.

m. Accident Monitoring Instrumentation, Specification 3.3.3.8.

n. Radiation Monitoring Instrumentation, Specification 3.3.3.1.

o. Post-Accident Sampling System, Specification 3.3.3.11.

p. Reactor Coolant System Vents, Specification 3.4.11.

Docket No. 50-336

B12284

Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Description of Individual Proposed Changes to
Technical Specifications

Generic Letter 83-37 (NUREG-0737)

October, 1986

Generic Letter 83-37/NUREG-0737
Related Technical Specification Changes

The format of this attachment follows that of Generic Letter 83-37 and addresses each item listed therein. For each section, the changes proposed by NNECO are compared to those recommended by the NRC Staff, the differences are identified and justification is provided. The basis for concluding that each change enhances plant safety is outlined as well.

(1) RCS Vents (Item II.B.1)

NRC Recommendation:

At least one reactor coolant system vent path (consisting of at least two valves in series which are powered from emergency buses) shall be operable and closed at all times (except for cold shutdown and refueling) at each of the following locations:

a. Reactor Vessel Head
b. Pressurizer steam space
c. Reactor coolant system high point

If one of the vent paths becomes inoperable, restore it to service within 30 days or be in hot standby within 6 hours and in cold shutdown within the following 30 hours. Two or more vent paths inoperable require restoration of at least two of the paths within 72 hours or be in hot standby within 6 hours and cold shutdown within the following 30 hours.

Surveillance is required every 18 months by verifying all manual valves locked open, cycling remotely operated valves and verifying flow through the system.

NNECO Recommendation:

Proposed technical specification 3.4.11 requires that vent paths be operable from both the reactor vessel head and the pressurizer steam space. Millstone Unit No. 2 does not have a vent path that corresponds with "c. Reactor Coolant System High Point Vent" as listed in Generic Letter 83-37. If the pressurizer vent path is inoperable, remove power from the valves in that path and ensure that at least one PORV path is operable. Restore either the PORV or the pressurizer vent path to operable status within 30 days or submit a special report to the Commission outlining cause and correction. If the reactor vessel head vent path is inoperable, restore it to operability within 30 days or submit a special report to the Commission outlining both cause and correction. A proposed change to Section 6.9.2 reflects the requirement for these reports. Surveillance requirements proposed by NNECO are the same as those recommended in Generic Letter 83-37.

Justification for Deviation

The RCS vent system at Millstone Unit No. 2 is not required for any design basis events but is intended to provide assistance for corrective measures against low probability events beyond the design basis. It is the position of NNECO that a shutdown requirement when this system becomes partially or totally inoperable would be inappropriate since its function is for events

that are of low probability and outside the design basis.[1] This is consistent with the philosophy of the technical specifications in general, in that limitations on continued plant operation, given the loss of equipment governed by LCO's, are derived by assessing design basis events. This system is not required for safe shutdown of the unit.

Safety Analysis:

The proposed change to add the above described technical specification for the Millstone Unit No. 2 RCS Vent System is safe and is not considered an unreviewed safety question. RCS venting capability is not required for any design basis accident at Millstone Unit No. 2. Use of a PORV and its associated block valve as an alternate vent path is technically justified due to the ability of the PORV to relieve non-condensable gases in the pressurizer. The requirement for two valves in series to be operable minimizes the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply or control system does not prevent isolation of the vent path.

The Millstone Unit No. 2 RCS vents consist of four valves with two parallel trains of two valves in series. The proposed technical specification requires only one train of two valves to be operable, thus system redundancy is not ensured. However, this is acceptable since the RCS vents are not required for any design basis events. Also, this is consistent with NRC recommendations. With an RCS vent inoperable, the action statement ensures that the system will be restored to operable within 30 days or a Special Report is to be submitted to the NRC. The Special Report ensures NRC cognizance of the malfunction and plans for restoration. These actions are acceptable. Restricting plant operation due to an inoperable RCS vent is not warranted since the system is not required for any design basis events.

The surveillance interval (18 months) is acceptable since a smaller interval would require valve stroking at power which is not advisable due to the potential for inadvertent actuation. The surveillances are specified to be performed during cold shutdown or refueling, thereby eliminating the potential of causing an unnecessary plant transient.

The NRC Staff has approved of the RCS Vent System at Millstone Unit No. 2 as described in the Safety Evaluation dated September 20, 1983.[2]

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(1) It is NNECO's interpretation of regulatory guidance that the RCS high point vents were installed and placed into operation solely to address events beyond the design basis of the plant. This position was outlined in the J.F. Opeka letter to A. C. Thadani, "Reactor Coolant System High Point Vents", dated March 27, 1986, which reflected earlier docketed correspondence regarding this interpretation.

(2) James R. Miller letter to W. G. Counsil, "NUREG-0737, Item II.B.1, Reactor Coolant System Vents - Millstone Nuclear Power Station, Unit No. 2", dated September 20, 1983.

(2) Post Accident Sampling (Item II.B.3)

NRC Recommendation:

Licensees should ensure that their plant has the capability to obtain and analyze reactor coolant and containment atmosphere samples under accident conditions. An administrative program should be established, implemented and maintained to ensure this capability. The program should include:

a) training of personnel
b) procedures for sampling and analysis, and
c) provisions for maintenance of sampling and analysis equipment

It is acceptable to the Staff, if the licensee elects to reference this program in the administrative controls section of the Technical Specifications and include a detailed description of the program in the plant operation manuals. A copy of the program should be easily available to the operating staff during accident and transient conditions.

NNECO Recommendation:

Proposed technical specification 3.3.3.11 provides an LCO requiring the Post-Accident Sampling System (PASS) to be operable or restored to operability within 30 days or a special report is to be submitted to the Commission outlining the cause, corrective actions and alternate methods of analysis. A proposed change to Section 6.9.2 reflects the requirement to submit this report. A surveillance requirement specifies that system operability is to be demonstrated every 6 months.

Justification for Deviation:

NNECO has proposed requirements that are more restrictive than those of the NRC Staff to a small degree. The reasons NNECO is proposing LCO's and Surveillance Requirements is to eliminate any ambiguity regarding what actions are required if the system becomes inoperable.

Safety Analysis:

The proposed change to add the above described technical specifications for the PASS is safe and considered to be not an unreviewed safety question. The proposed change helps ensure that the system is available for use by operations personnel. Presently, NNECO takes RCS and containment air samples once per six months in accordance with approved station procedures. Therefore the proposed change formalizes existing NNECO practices and does not impose any new or previously unevaluated requirements.

The post accident sampling system for Millstone Unit No. 2 was approved by the NRC Staff as described in a Safety Evaluation dated June 14, 1984.[3]

(3) Long Term Auxiliary Feedwater System Evaluation (Item II.E.1.1)

NRC Recommendation:

The objective of this item is to improve the reliability and performance of the auxiliary feedwater (AFW) system. Technical Specifications depend on the results of the licensee's evaluation and staff review of each plant. The limiting conditions of operation (LCO) and surveillance requirements for the AFW system should be similar to safety-related systems. Typical generic Technical Specifications are provided in Enclosure 3. These specifications are for a plant which has three auxiliary feedwater pumps. Plant specific Technical Specifications could be established by using the generic Technical Specifications for the AFW system.

NNECO Recommendation:

NNECO currently has in place LCO's and surveillance requirements that conform to those proposed by the NRC Staff in Generic Letter 83-37. Also, NNECO is proposing an addition to surveillance requirement Table 4.3-2, "ESFAS Instrumentation Surveillance Requirements" that specifies a monthly channel functional test for the automatic actuation logic for AFW.

Justification for Deviation:

This addition to the technical specifications was requested by the NRC Staff in a letter dated June 13, 1984.[4]

Safety Analysis:

This change is administrative in nature and serves to increase the level of safety in plant operations. The change formalizes the current plant practice of testing the logic for the automatic AFW initiation logic on a monthly basis in accordance with existing plant procedures. As such, this proposed change does not increase the probability or the consequences of an accident, nor does it introduce a potential new accident nor does it result in a decrease in the margin as defined in the basis for any technical specifications.

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(3) James. R. Miller letter to W. G. Counsil, "NUREG-0737, Item II.B.3 - Evaluation of Post-Accident Sampling Capabilities", dated June 14, 1984.

(4) J. R. Miller letter to W. G. Counsil, dated June 13, 1984.

(4) Noble Gas Effluent Monitors (Item II.F.1.1)

NRC Recommendation:

Individual release points should be monitored with pre-established alarm/trip setpoints. With the number of channels operable less than the minimum number required, initiate alternate methods of monitoring within 72 hours and either restore the channels to operability within 7 days or prepare a special report to the Commission within 14 days outlining the cause, and the plan and schedule for correction.

NNECO Recommendation:

Proposed changes to Table 3.3-11 include the "High Range Noble Gas Effluent Monitor" in the list of accident monitoring instrumentation to be operable. The monitor provides high range coverage for releases from the Millstone Unit No. 2 stack. With the number of channels operable less than the minimum number specified, either restore the channels to operability within 30 days or submit a special report to the Commission within the next 10 days outlining the cause, plans for restoration and those methods in offset to take samples in the interim. A proposed change to Section 6.9.2 reflects the requirement for this report. Existing Millstone Unit No. 2 technical specifications 3/4.3.3.10 contain LCO's and surveillance requirements covering "Radioactive Gaseous Effluent Monitoring Instrumentation". The proposed specifications on the high range noble gas supplement the specifications already in place.

Justification for Deviations:

The proposed specifications for the high range noble gas effluent monitor allow a thirty day period to restore the inoperable monitor to operation. This is consistent with the existing Millstone Unit No. 2 Specifications in Section 3.3.3.10. However, once the 30 days have passed, a special report must be submitted to the Commission outlining the cause, plans for restoration and any interim measures taken. This is similar to the model specifications included in Generic Letter 83-37. It is the position of NNECO that this proposal represents a proper balance between existing specifications and those proposed by the NRC Staff.

Safety Analysis:

The addition of the high range noble gas effluent monitor to the technical specifications helps to ensure that this instrument will be available should it be necessary for post-accident monitoring. Since the proposed change does not effect current operation or design other than provide added assurance of operability, and since this monitor provides no control function, the proposed change does not increase the probability or consequences of an analyzed accident, does not create the possibility for a new accident nor does it decrease the margin of safety as defined in the basis of any technical specifications. Therefore NNECO has concluded that this change does not constitute an unreviewed safety question.

(5) Sampling and Analysis of Plant Effluents (Item II.F.1.2)

NNECO currently has technical specifications in place for Millstone Unit No. 2 (Section 6.14 and 6.15) that generally conform to those recommended by the NRC Staff in Generic Letter 83-37. No additional changes are proposed by NNECO.

(6) Containment High-Range Radiation Monitor (Item II.F.1.3)

NRC Recommendation:

Two containment high range radiation monitors shall be operable at all times except for during cold shutdown and refueling. A failed monitor is to be restored to operability within 7 days or a special report is to be submitted to the Commission within 14 days following the event outlining the cause, corrective action and schedule for restoration. A proposed change to Section 6.9.2 reflects the requirement for this report. Surveillance requirements are to include monthly functional tests and calibration at refueling.

NNECO Recommendation:

Proposed changes to Table 3.3-6 include having containment high range radiation monitors operable during Modes 1, 2, 3, and 4. If both of the monitors become inoperable, at least one is to be restored to operable status within 30 days, otherwise a special report is to be submitted to the Commission within the following 10 days outlining the cause, plans for restoration and any alternate methods to be employed for estimating this parameter in the interim. Surveillance requirements call for a monthly channel functional test and a channel calibration during refueling outages. There is a table notation that says higher ranges are calibrated electronically.

Justification for Deviation:

Millstone Unit No. 2 has two high range containment radiation monitors in operation. Specifying one channel as the minimum number of channels required to be operable helps ensure that one is always available for post-accident monitoring. This is consistent with most other radiation monitors included in Table 3.3-6. Allowing for 30 days with less than the minimum channels operable is consistent with other existing technical specifications for required instrumentation. The provision to calibrate the higher ranges of the instruments electronically as opposed to using a source is due to the lack of such a portable high level source on site. This situation was documented to the NRC Staff in a letter dated September 3, 1981.(5)

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(5) W. G. Counsil letter to D. G. Eisenhut, dated September 3, 1981.

Safety Analysis:

The addition of the containment high range radiation monitors to the technical specifications helps to ensure that these instruments will be available should they be necessary for post-accident monitoring. Since the proposed change does not affect current operation or design other than provide added assurance of operability, and since these monitors provide no control functions, the proposed change does not increase the probability or consequences of an analyzed accident, does not create the possibility for a new accident nor does it decrease the margin of safety as defined in the basis of any technical specifications. Therefore NNECO has concluded that this change does not constitute an unreviewed safety question.

(7)&
(8) Containment Pressure and Water Level Monitors (Items II.F.1.4 & II.F.1.5)

NRC Recommendation:

LCO's:

		Total Required Channels	Minimum Operable
Containment Pressure		2	1
Containment Water Level,	Narrow Range	1*	1*
	Wide Range	2	1

(* operation may continue for up to 30 days with less than the minimum channels operable for the narrow range instruments)

Action statements for the above LCO's specify that with the number of channels operable less than the total channels required operable, the inoperable channel(s) are to be restored to operability within 7 days or be in hot shutdown within the next 12 hours. With the number of channels operable less than the minimum channels required, restore the inoperable channels within 48 hours or be in hot shutdown within 12 hours. Surveillance requirements call for a monthly channel check and a calibration during refueling outages.

NNECO Recommendations:

Proposed changes to Table 3.3.11 ("Accident Monitoring Instrumentation") of the Technical Specifications are as follows:

LCO's:

		Total Required Channels	Minimum Operable
Containment Pressure		2	1
Containment Water Level,	Narrow Range	1	1
	Wide Range	2	1

The Action Statement for the above LCO's specify that if the total channels operable are less than the minimum channels operable, either restore the inoperable channels within 30 days or submit a special report to the Commission outlining the cause, plans for restoration and any alternate methods to be employed in the interim for estimating these parameters. A proposed change to Section 6.9.2 reflects the requirement for this report. The surveillance requirements call for a monthly channel check and a calibration every refueling outage.

Justification for Deviation:

Both the basic LCO's and the surveillance requirements conform to those recommended by Generic Letter 83-37. However the action statements differ. It is the position of NNECO that the action statements proposed are much more commensurate with the actual function of the instrumentation involved. Neither the containment pressure nor the containment water level monitoring systems are required for the safe shutdown of Millstone Unit No. 2 for any design basis accident. Therefore a shutdown requirement is deemed by NNECO to be inappropriate. However, since these instruments, as with others covered in this amendment request, do enhance the ability of the operator to monitor and assess these variables during and following an accident, actions in response to inoperable instrumentation have been proposed.

Safety Analysis:

The addition of the containment pressure and water level monitoring instrumentation to the Technical Specifications helps to ensure that these instruments will be available should they be necessary for post-accident monitoring. Since the proposed change does not affect current operation or design other than provide added assurance of operability, and since these monitors provide no control functions, the proposed change does not increase the probability or consequences of an analyzed accident, does not create the possibility for a new accident nor does it decrease the margin of safety as defined in the basis of any technical specifications. Therefore NNECO has concluded that these changes do not constitute an unreviewed safety question.

The containment pressure and water level monitoring instrumentation at Millstone Unit No. 2 was evaluated and approved by the NRC Staff as described in the Safety Evaluation dated June 27, 1983.[6]

(9) Containment Hydrogen Monitor (Item II.F.1.6)

NRC Recommendation:

Two independent containment hydrogen monitors should be operable at all times when the reactor is operating in Power Operation or Startup modes.

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(6) Robert A. Clark letter to W. G. Counsil, "NUREG-0737, Item II.F.1.4, Containment Pressure Monitor, II.F.1.5, Containment Water Level Monitor, II.F.1.6, Containment Hydrogen Monitor", dated June 27, 1983.

LCO for these monitors should include the requirement that with one hydrogen monitor inoperable, the monitor should be restored to operable status within 30 days or the plant should be brought to at least a hot standby condition within the next 6 hours. If both monitors are inoperable, at least one monitor should be restored to operable status within 72 hours or the plant should be brought to at least hot standby condition within the next 6 hours.

NNECO Recommendation:

Millstone Unit No. 2 has existing technical specifications (Section 3/4.6.4, "Combustible Gas Control") that generally conform to those proposed in Generic Letter 83-37. These technical specifications were part of the original license issued to NNECO on August 1, 1975. No additional changes are proposed by NNECO.

(10) Instrumentation for Detection of Inadequate Core Cooling (Item II.F.2)

NRC Recommendation:

Subcooling margin monitors should have already been included in the present Technical Specifications. Technical Specifications for core exit thermocouples and the reactor coolant inventory tracking system should be included with other accident monitoring instrumentation in the present Technical Specifications. Four core-exit thermocouples in each core quadrant and two channels in the reactor coolant tracking system are required to be operable when the reactor is operating in any of the above mentioned modes. Minimum of two core-exit thermocouples in each quadrant and one channel in the reactor coolant tracking system should be operable at all times when the reactor is operating in any of the above mentioned modes. Typical acceptable LCO and surveillance requirements for accident monitoring instrumentation are as follows:

LCO's:	Total Required Channels	Minimum Operable
Core Exit Thermocouples	4/core quadrant	2/core quadrant
Reactor Coolant Inventory Tracking System	2	1

The action statements applied to the above LCO's specify that with the number of operable channels less than the total channels required, restore the inoperable channel(s) within 7 days or be in hot shutdown within the next 12 hours. With the number of operable channels less than the minimum channels operable, restore the inoperable channels to operability within 48 hours or be in hot shutdown within the next 12 hours. Surveillance requirements specify a monthly channel check and a channel calibration during each refueling outage.

NNECO Recommendation:

Although the technical specifications already include the "RCS Subcooling Margin Monitor", the proposed changes to Table 3.3-11 and Table 4.3-7, "Accident Monitoring Instrumentation" include changing the title of the "RCS Subcooling Margin Monitor" to "RCS Subcooled/Superheat Monitor" to better reflect the function that it performs. In addition the "Total Number of Channels" has been changed to "2" (From "1") to reflect the actual situation. Additional proposed changes to Table 3.3-11 in the area of ICC instrumentation are as follows:

LCO's:	Total Channels	Minimum Operable	Action
Core Exit Thermocouples	4 CETS/core quadrant	2 CETS in each of 2 core quadrants	1
Reactor Vessel Coolant Level	2*	1*	5

(* a channel is 8 sensors in a probe. A channel is operable if 4 or more sensors, 2 or more in the upper 4 and 2 or more in the lower 4 are operable)

Action Statement 1 for the core exit thermocouples specifies that with the number of operable channels less than the minimum channels operable, restore the inoperable channels within 30 days or be in hot shutdown within the next 12 hours. The changes to Action Statements 1 and 2 on Page 3/4 3-48 are simply editorial. Certain words were capitalized in accordance with standard practice for Technical Specifications.

Action Statement 5 for the reactor vessel coolant level are based on the sample ICC Technical Specifications transmitted to the NRC Staff in a letter from the Combustion Engineering Owner's Group dated, February 19, 1985.(7) The action statement proposed by NNECO specifies that with the number of operable channels less than the minimum channels operable, either restore the inoperable channels within 48 hours or:

1) submit a special report to the Commission within 30 days of the event outlining the cause and plans for restoration and

2) restore the system to operable status during the next refueling outage.

The only difference between the NNECO proposal and those in Reference (7) is the statement regarding "initiating an alternate method of monitoring the reactor vessel inventory". NNECO did not include this in the action statement since no specific procedure could be written to give the operators clear "step-by-step" guidance on how to meet this step. Though there are parameters by which vessel level can be inferred generally, this

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(7) R. W. Wells letter to Hugh L. Thompson, dated February 19, 1985, "Technical Specifications for the Reactor Vessel Level Monitoring System".

could not be realistically proceduralized. A proposed change to Section 6.9.2 reflects the requirement to submit special reports to the NRC Staff. Surveillance requirements proposed in Table 4.3-7 include a monthly channel check and a channel calibration during refueling outages. This calibration is an electronic calibration from the ICC cabinets only. Since authentic stimulation of the Core Exit Thermocouples or the Reactor Vessel Coolant Level Monitoring System cannot be conducted due to their physical location and range.

Justification for Deviations:

The LCO's and surveillance requirements proposed by NNECO are essentially the same as those proposed by the NRC Staff in Generic Letter 83-37, with exception of the electronic channel calibration discussed above.

The action statement for the Core Exit Thermocouples proposed by NNECO does require a shutdown after 30 days if both channels become inoperable. This is more liberal than that proposed by the NRC Staff, but NNECO has concluded this to be appropriate since, though this system is important, it is not required to safely shutdown the plant. The action statement proposed by NNECO for the Reactor Vessel Coolant Level is very similar to that proposed by the CE Owner's Group as previously described and is appropriate since this system is similarly not required for safe shutdown either.

Safety Analysis:

The addition of the Core Exit Thermocouples and the Reactor Vessel Coolant Level instrumentation to the technical specifications helps to ensure that these instruments will be available should they be necessary for post-accident monitoring. Since the proposed change does not affect current operation or design other than provide added assurance of operability, and since these monitors provide no control functions, the proposed change does not increase the probability or consequences of an analyzed accident, does not create the possibility for a new accident nor does it decrease the margin of safety as defined in the basis of any technical specifications. Therefore NNECO has concluded that these changes do not constitute an unreviewed safety question.

The NRC Staff has completed their review of ICC instrumentation at Millstone Unit No. 2 as described in two Safety Evaluations dated June 4, 1984[8] and August 28, 1986[9] respectively.

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(8) J. R. Miller letter to W. G. Counsil, "Evaluation of Proposed Inadequate Core Cooling Instrumentation System for Millstone Unit No. 2", dated June 4, 1984.

(9) D. H. Jaffe letter to J. F. Opeka, dated August 28, 1986.

(11) Control Room Habitability Requirements (Item III.D.3.4)

Millstone Unit No. 2 currently has in place Technical Specifications (Section 3/4 3.3.6, "Chlorine Detection Systems"; Section 3/4 7.6, "Control Room Emergency Ventilation System") that address this subject and are similar to those proposed by Generic Letter 83-37. No additional changes are proposed by NNECO.

Docket No. 50-336

B12284

Attachment 3

Millstone Nuclear Power Station, Unit No. 2

Description of Individual Proposed Changes
to Technical Specifications

Additional Changes

October, 1986

Additional Changes to the Technical Specifications

(1) PORV Position Indicator Acoustic Monitor

The proposed change to Table 3.3-11 for this instrument simply involves deleting the word "Flow" from the title. This change brings about consistency between Table 3.3-11 and Table 4.3-7.

Since this change is purely editorial and does not involve any substantive additions or deletions to the technical specifications, there is no unreviewed safety question connected with this change.

(2) Snubber Deletions

The proposed change to Section 6.9.2, "Special Reports", to add Item D, "Snubber Deletions", simply brings this section of the technical specifications into conformance with Tables 3.7-1a and 3.7-1b. These tables require that a special report be submitted to the NRC Staff whenever any snubbers are added or deleted from those lists.

Since this change does not involve any substantive additions or deletions to the technical specifications, their is no unreviewed safety question connected with this change.