



**Northeast
Nuclear Energy**

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The Northeast Utilities System

MAR 30 2000

Docket No. 50-336
B18068

Re: 10 CFR 50.90

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

**Millstone Nuclear Power Station, Unit No. 2
Additional Response to a Request for Additional Information
Technical Specification Amendment Request
Fuel Handling and Cask Drop Accidents (TAC NO. MA7712)**

In a letter dated December 14, 1999,⁽¹⁾ Northeast Nuclear Energy Company (NNECO) requested changes to the Millstone Unit No. 2 Technical Specifications and Final Safety Analysis Report. The majority of the proposed changes were the result of revised analyses of the fuel handling accident inside containment, the fuel handling accident in the spent fuel pool area, and the spent fuel cask drop accident in the spent fuel pool area. In a letter dated March 14, 2000,⁽²⁾ the Nuclear Regulatory Commission (NRC) requested additional information to support the review of the requested changes. This additional information is contained in Attachment 1.

There are no regulatory commitments contained within this letter.

⁽¹⁾ R. P. Necci letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Proposed Revision to Technical Specifications, Fuel Handling and Cask Drop Accidents," dated December 14, 1999.

⁽²⁾ A. B. Wong (NRC) letter to Northeast Nuclear Energy Company, "Millstone Nuclear Power Station, Unit No. 2, Request for Additional Information (RAI) RE: Fuel Handling and Cask Drop Accidents (TAC NO. MA7712)," dated March 14, 2000.

If you should have any questions on the above, please contact Mr. Ravi Joshi at (860) 440-2080.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



Raymond P. Necci
Vice President - Nuclear Technical Services

Sworn to and subscribed before me

this 30 day of March, 2000

Margaret M. Allen
Notary Public

My Commission expires JUN 30 2004 ^{MO} ~~2000~~

Attachment (1)

cc: H. J. Miller, Region I Administrator
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2

Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
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Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Additional Response to a Request for Additional Information
Technical Specification Amendment Request
Fuel Handling and Cask Drop Accidents

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Question 1: TS 3.9.4 Bases specifies a "designated" individual to close the containment air lock doors within 10 minutes as opposed to a "dedicated" individual who would have no other duties. Specify what other duties the designated individual will have and where they will be stationed relative to the air lock doors. For example, will this person be responsible for an inventory of people inside containment in addition to the other duties?

Response: Millstone Unit No. 2 Normal Operating Procedure OP 2264, "Conduct of Outages," provides guidance to plan and manage outage shutdown risk. This procedure currently requires development of written, approved closure plans for each open containment penetration including assigning designated personnel to perform the closure task. Per the procedure, the closure plan and closure team must be able to close containment prior to core boiling. To support the proposed Technical Specification change, procedure changes will add the new closure requirement of 10 minutes for the containment personnel air lock door during fuel handling activities inside containment. The designated individual will have to be able to obtain containment closure within 10 minutes. Similar to the current requirements for time to boil closure, containment personnel air lock door (during fuel handling activities inside containment) closure staffing will depend on how many hoses and cables are going through the air lock. If there are no hoses or cables through the containment personnel air lock, the individual may be able to perform additional activities in the containment personnel air lock area. If there are hoses or cables through the containment personnel air lock, the individual will likely have no other duties.

⁽¹⁾ R. P. Necci letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Proposed Revision to Technical Specifications, Fuel Handling and Cask Drop Accidents," dated December 14, 1999.

⁽²⁾ A. B. Wong (NRC) letter to Northeast Nuclear Energy Company, "Millstone Nuclear Power Station, Unit No. 2, Request for Additional Information (RAI) RE: Fuel Handling and Cask Drop Accidents (TAC NO. MA7712)," dated March 14, 2000.

Question 2: TS 3.9.4: What types of hoses and cables will be allowed to pass through the open air lock doors? What provisions will be made for the designated individual to separate these in order to close the air lock door while minimizing hazards from these hoses and cables?

Response: OP 2264 currently specifies that any lines running through the containment personnel air lock are labeled with service and supply, and have quick disconnects so they can be isolated quickly and removed. The same controls will apply to the hoses and cables that are allowed to run through the containment personnel air lock during fuel handling activities inside containment.

Question 3: The spent fuel pool handling analysis assumes a bypass flow associated with the Auxiliary Building elevator of 2%. Describe the testing and analysis used to derive this value. What factors might change this value over time, if any?

Response: Special Procedure SPROC 95-2-11, Rev. 0, Auxiliary Building Elevator Shaft "Smoke Hole" Flow Determination, was performed to determine the amount of air (smoke) that could pass through the uncovered elevator shaft opening under certain operating conditions. Testing was performed with elevator doors opened at the various auxiliary building levels with and without the Auxiliary Building Ventilation System operating. In many instances air was identified to be entering the spent fuel pool area from the elevator shaft. However, there were lineups where air did pass from the spent fuel pool area into the elevator shaft. The largest amount identified was 86 cubic feet per minute (cfm), with the Auxiliary Building Ventilation System in operation. 86 cfm was about 1 percent (8564 cfm measured for fan F25A) of the total measured air flow that the Enclosure Building Filtration System was processing at that time. To be conservative, the analysis doubled the measured flow that may pass out the smoke hole (2 percent of the measured enclosure building flow). Testing was performed using a pitot tube traverse with an installed temporary hood over the smoke hole to obtain the most accurate data possible.

Changes to the spent fuel boundary or to the associated ventilation systems (Enclosure Building Filtration and Auxiliary Building Ventilation Systems) could change the flow through the smoke hole. However, our existing design change control process should identify and revise the appropriate documents if any changes are necessary.

Question 4: TS 3.9.17: Does removing the requirement that the boron concentration in the spent fuel pool will be uniform change any plant procedures to ensure boron concentration uniformity or measurements taken of boron concentration?

Response: The proposed change to remove the uniformity requirement from Technical Specification 3.9.17 will not result in a change to the current approach that Millstone Unit No. 2 uses to maintain a sufficient spent fuel pool boron concentration. When a spent fuel pool sample is required, surveillance procedures currently require the pool to have been on continuous recirculation for a minimum of 15.8 hours using either the spent fuel pool cooling or shutdown cooling pumps since the last make-up to the pool. The procedures then allow a representative sample of the pool to be obtained using any one of the following five methods:

1. Sample collected at primary sample sink from the discharge side of the spent fuel pool cooling pumps. This is the normal sample point.
2. Sample collected at local point on suction side of either refueling water purification pump. This is the preferred secondary sample method, and requires the spent fuel pool to be on purification.
3. Sample collected at primary sample sink from either the suction-side, or discharge-side, of the shutdown cooling pumps when the shutdown cooling pumps and the shutdown cooling heat exchangers are being used for spent fuel pool cooling.
4. Sample collected at local point on suction side of either shutdown cooling pump when the shutdown cooling pumps and the shutdown cooling heat exchangers are being used for spent fuel pool cooling. From an ALARA standpoint this is the least desirable method.
5. Dip sample from anywhere in the pool. Although this method is used when the first two methods aren't available, it is not a preferred method due to the potential for an unrepresentative sample and the foreign material exclusion requirements associated with the spent fuel pool.

Question 5: TS 3.9.14/3.9.15: The requirement that the auxiliary building doors must be closed has been replaced by a requirement that spent fuel pool area integrity shall be maintained. Are these two requirements equivalent? If not, specify the differences?

Response: The two requirements are not equivalent since the requirement for spent fuel pool area integrity is a more restrictive requirement. Spent fuel pool area integrity includes the auxiliary building doors, in addition to all other aspects of area integrity (e.g., wall integrity and floor plugs). The auxiliary building doors are a subset of spent fuel pool area integrity.

During a telephone conference call on March 23, 2000, a copy of two additional documents was requested. These documents, which are listed below, are included in this attachment.

1. Technical Evaluation M2-EV-98-0186, Evaluate Containment Atmosphere Mixing During Purge Activities, Rev. 01, dated October 1, 1998.
2. Station Procedure RAC 02, Technical Specification Change Requests and Implementation of License Amendments, Rev. 1.

TECHNICAL EVALUATION
EVALUATE CONTAINMENT ATMOSPHERE
MIXING DURING PURGE ACTIVITIES

M2-EV-98-0186, REVISION 01

DATE: 10/1/98

Total pages: 21

PREPARER:

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1.0 PURPOSE

The purpose of this evaluation is to assess the adequacy of the containment purge ventilation system to mix containment atmosphere during fuel movement activities, and to evaluate the effectiveness of the rad monitor sensors in their present location. This evaluation is required to support a revision to Radiological Dose calculations.

The purpose of the revision is to change the fans F-24A/B identification number through out the text, based on the discovery phase of CR M2-98-2814 (Ref. b), which determined that some drawings have labeling errors, where fan F-24A is actually fan F-24B and vice versa.

2.0 BACKGROUND

CR M2-98-2494 (Ref. a) identified that the Rad Monitors RM-8123 A&B, and RM-8262 A&B may not perform their intended function, based on the existing rad monitor sensors mounting location, since they were relocated from the auxiliary recirculation fans F-24A/B ductwork. The rad monitor sensors were relocated in response of fan F-24A being taken out of service during refueling outage to accommodate the removal of a piece of ductwork at elevation 14'6" passing in front of the main access entrance way. This has been a normal evolution during refueling for a number of years. CR M2-98-2814 (Ref. b) identified that containment atmosphere mixing may not be adequate during purge activities associated with fuel movement based on ventilation fans line-up conditions.

The original dose calculation (Ref. c) and the submitted SER (Ref. e) assumed that the purge valves would isolate containment within 10 minutes based on operator actions by the area rad monitor alarm RM-7891. Automatic closure by process rad monitors RM-8123 A&B, and RM-8262 A&B would occur within 11 minutes, based on the containment air mixing inside the auxiliary fans F-24A & F-24B at the rate of 10.5 minutes and 5 seconds for purge valves closure time. The rationale for the 11 minutes was that the plume would be uniformly mixed with containment atmosphere by the recirculation fans (F-24A/B) mixing action.

CURRENT OPERATION

Design Engineering has concluded that the current containment purge/recirculation arrangement does not meet the intent of the licensing basis to have an uniform containment atmosphere mixture during refueling activities. This conclusion is based on the following evaluation of the current operation:

- o The current purge system line-up does not utilize auxiliary recirculation fan F-24A during refueling when ducting is removed during outages due to interferences at the containment equipment hatch. This has been a normal evolution during refueling for a number of years. OP 2315B (Ref. d) only requires one fan F-24A or F-24B to be in service.
- o Design Engineering has concluded that if a Fuel Handling Accident had occurred while moving fuel in Containment, approximately 70% of the resulting plume could escape before mixing with the remaining containment atmosphere. This Engineering Judgment is based on:

- a) The supply air from fan F-23 is distributed by the supply ductwork located away from the fuel pool, in the upper part of the containment $\approx 70'$ elevation;
 - b) Only one recirculation fan is required to be in used during outage by existing procedure OP 2314B (Ref. d); fan F-24B is usually the only fan available due to the removal of the ductwork associated with fan F-24A.
 - c) Fan F-24B is servicing the opposite side of the pool while operating in this scenario, which forms an air curtain on that side of the pool.
 - d) The purge exhaust ductwork (main exhaust fans F-34A/B/C ductwork interconnection) is mounted behind the East Block House with its center line at elevation 45', and approximately 35' away from the fuel pool;
- o Since a good mix in the immediate surface of the pool is not evident, (i.e. within the first 10 feet above the pool), the negative pressure created by the purge exhaust system (fans F-34A/B/C) would create a stronger force within the exhaust air path, moving between the pool area and the exhaust diffuser. Therefore, the plume may preferentially migrate to the purge exhaust diffuser versus being carried into the containment atmosphere for mixing.

3.0 DISCUSSION

MIXING CONTAINMENT ATMOSPHERE

A) AIR FLOW MIXING

The following discussion evaluates air mixing occurring inside containment during refueling activities, with the original purge system line-up which consists of auxiliary recirculation fans F-24A & F-24B, purge supply fan F-23, and purge exhaust system fans F-34A/B/C. See Attachment-1 Sketches of purge ventilation system layout and air flow patterns.

The main purpose of the purge mode is to provide personnel comfort (cooling), to the operators during the refueling activities. All the ventilation equipment related to the purge mode (i.e. supply fan F-23, auxiliary recirculation fans F-24A & F-24B, and Main Exhaust fans F34A/B/C), are Non-QA, since they do not serve a safety function (i.e. operators comfort). However, the rad monitors and related equipment (i.e. sensors, cables) and the purge isolation valves, 2-AC-4 & 5 supply air and 2-AC-6 & 7 exhaust air (Ref. j), are QA since they perform a safety related function, which is to isolate the containment, minimizing the radiological consequences of a Fuel Handling Accident.

The original plant configuration had a rad monitor sensor mounted inside the return/suction ductwork of each auxiliary recirculation system, fans F-24A & F-24B. Since these fans are taking their suction from the containment fuel pool working area (elevation 38' & up), they could promptly detect radiation activity should a fuel handling accident occurred. However, once the removal of fan F-24A from service during refueling activities was introduced, a problem with uniform mixture was created, and it became necessary to move the rad monitor sensors out of the fans F-24A & F-24B ductwork.

Fan F-24A is the key component to ensure proper containment atmosphere mixture during refueling evolution coincident to purge usage. Fan F-24A is located on the East side of the pool, and its air flow is perpendicular to the purge exhaust air flow, thus creating a forced mixture as the two air flows cross each other. | 2

As originally designed, the uniform containment atmosphere was ensured by the layout of the ductwork and the auxiliary recirculation fans F-24A & F-24B. The dynamic forces that create the uniform mixture during purge mode are:

- o The fresh air supply from purge fan F-23 is discharged at the rate of $\approx 26,000$ cfm (Ref. h) at the 70' elevation through a ductwork system mounted against the South wall and extending to the West wall. The supply air is distributed through 3 diffusers located on the South wall and 2 diffusers located on the West wall. These diffusers are designed to throw the air flow at a great distance above the containment fuel pool.

The fresh air is cooler than the containment atmosphere, otherwise there is no need to use the purge system to cool off containment, thus the flow will fall directly over the pool area as the cooler air drops down. This phenomenon by itself, in the absence of any other forces, would create an air movement over the pool as the cooled air drops down, the warmer air rises up toward the containment dome, thus creating some air mixture in the fuel pool region.

- o The purge exhaust air is drawn by the Main Exhaust System at the rate of $\approx 27,000$ cfm (Ref. i), through fans F-34A/B/C ductwork, toward the East wall since its inlet ductwork is located behind the East block house and its centerline is approximately at the 45' elevation ($\approx 8'$ above fuel pool surface). The air flow created by the purge exhaust action, by itself, does not establish a good mixture within the upper containment region (38' elevation & up), since by its location it promotes an air movement toward the East side, with a funnel shape air stream about 8' above the pool surface.
- o Auxiliary recirculation fans, F-24B located on the West wall & F-24A located on the East wall, take their suction from the upper containment region $\approx 88'$ elevation through a ductwork system mounted in a semi circle against their respective wall, and ductwork branches extending to the dome. Each fan draws air from the upper region and discharge in the lower region of containment at the rate of $\approx 75,000$ cfm, for fan F-24B (Ref. g), and $\approx 63,000$ cfm, for fan F-24A (Ref. g). Since the 38' floor elevation is opened through gratings in its outer edges to the lower elevations, these fans create an air stream traveling up and down the entire containment region. The combination of the air steam coming up from the lower region through the opened gratings on the outer edges of the upper region, and the drawing action at the 88' elevation, creates an air stream reaching half way across the containment in a North/South direction while directing the air flow in the eastward or westward depending on the respective fan. | 1

The containment atmosphere is greatly enhanced due to the dynamic action of the air stream from fan F-24A as it perpendicularly crosses the exhaust purge air stream at a 2.33/1 ratio. Fan F-24A air stream rated at $\approx 63,000$ cfm crosses the exhaust purge air stream rated at $\approx 27,000$ cfm.

In addition to the recirculation induced by the recirculation fans, there is the natural induced recirculation created by the warmer air rising to the dome while the cooler air migrates to the lower elevation, (-) 22'6".

Furthermore, the containment atmosphere mixing is also greatly enhanced when the containment air recirculation (CAR) fans F-14A & F-14B, which are located on the North side of the fuel pool at the 38' elevation are used as an additional mean of cooling. These fans are not required to be in used during the purge mode, however, when available they may be used during outage at their lower speed. These fans which are rated at 75,000 cfm each at high speed and 37,500 cfm at half speed (Ref. f), draw air from the 38' elevation and discharge through a plenum at the lower elevations.

Even without considering the assistance of the CAR fans, the containment atmosphere is uniformly mixed by the combined action of:

- o The purge supply fan F-23 rated at $\approx 26,000$ & purge exhaust air flow distribution rated at $\approx 27,000$ cfm;
- o The auxiliary recirculation fans F-24B rated at $\approx 75,000$ cfm & fan F-24A rated at $\approx 63,000$ cfm.

The containment net free volume is considered to be 1,899,000 cu.ft. (Ref. n, Table 14.8.4-1). The volume above the fuel pool, 38' elevation and up, is about 2/3 of the total volume, considering the total height from (-) 22'6" elevation to the dome, inside elevation 151'5" (Ref. o & p). Although, during the purge mode all the air mixing will effectively occur in the containment atmosphere above the 38' elevation, approximately 2/3 of the total volume, the entire containment free area will also be conservatively considered in the evaluation which follows:

- o Total free area 1,899,000 cu.ft. / [(purge supply air 26,000 cfm + purge exhaust air 27,000 cfm) + (recir. air (F-24A & B) 138,000 cfm) = 1 air change per 9.9 minutes.
- o Considering only the volume above elevation 38'; 2/3 (1,899,000) = 1 air change per 6.6 minutes.

The above results indicate that good mixing is occurring with such a rate of air changes/ movement.

B) RAD MONITORS RM 8262A/B & RM 8123A/B SENSORS LOCATION

RAD monitors RM 8262A/B have one common sensor port mounted on the East wall, in the vicinity of fan F-24A, approximately 10' of the floor and 10' away from the purge exhaust ductwork inlet. Rad monitors 8123A/B have one common sensor port mounted on the South wall, approximately 4' of the floor, in the vicinity of the personnel access hatch and under a purge supply diffuser.

The sensor ports as mounted can collect a representing sample of the containment atmosphere, since there is a good containment atmosphere mixture as described above when both auxiliary recirculation fans F-24A & F-24B are in service, and the fact that at their present location, there is sufficient air changes/movement. RAD monitors RM 8262A/B sensor port is located in the proximity of the purge exhaust intake and in the air stream path of fan F-24A. RAD monitors RM 8123A/B sensor port is located below a purge fresh air supply diffuser which contributes in mixing the air in its vicinity.

C) LIST and FSAR SEARCH

The key words used in the LIST search were "Containment Purge" "Containment Refueling Purge" as related to NRC correspondences (384 hits), LER (36 hits), FSAR through change 51 (27 hits) and Technical Specification through change 231 (8 hits).

The FSAR Sections reviewed are: 1.2, 5.2, 5.3, 6.5, 6.6, 6.7, 9.9, 14.7, 14.8.3A, Appendix 11E & D, and Tables 6.6-3, 9.9-2, 14.7.4-2, 14.8.4-1

The Technical Specifications reviewed are: Section 1.0 Definitions, 3/4.6 Containment Systems & b3/4.6 Bases, 3/4.9 Refueling Operations & b3/4.9 Bases, 3/4.3 Instrumentation & b3/4.3 Bases.

The results of the LIST search indicate the SER received March 21, 1977, along with FSAR Chapter 9, and Table 14.7.4-2.1 provide the associated License Bases for this Technical Evaluation.

SUMMARY

This Technical Evaluation concludes good mixing is assured if the original fan F-24A configuration is restored. This conclusion is based on: 1) The dynamic of the air distribution components (ductwork, diffusers, fans); 2) The principle of cool air dropping while warmer air rises; 3) The quantity of air flow movement in relation to the volume considered above; 4) The returning fan F-24A to service; and 5) The rate of air changes per minutes. This validates the original Design/License Bases assumption that the activity is uniformly mixed in containment at the time of release as documented in FSAR Table 14.7.4-2 (Ref. n).

Since there is an uniform atmosphere mixture when the purge ventilation system is line-up to its original configuration, the rad monitor sensors in their present location, are capable to perform their intended function.

RECOMMENDATION

Revise OP 2314B (Ref. d) to ensure that both fans F-24A & F-24B are in service whenever the purge system is used during refueling activities, and to add a precaution "Should any of the ventilation system cease to function, discontinue purge mode or stop fuel movement activities".

4.0 SAFETY SIGNIFICANCE

There is no safety significance associated with this evaluation, since the results will be evaluated as part of the dose calculations. In accordance with NGP 5.31 a safety screening is not required for this Technical Evaluation. This Technical Evaluation is an input to the Radiological Calculation (Ref. r), which requires a safety screening upon completion.

5.0 CONCLUSION

Once procedure OP2314B (Ref. d) is revised per AR 98017440-01(Ref. s) to include the operation of fan F-24A, the original conditions that ensure a good air mixture within containment during fuel activities coincident to a purge mode, will be met. The uniform air mix is the result of the quantity of air being mixed (191,000 cfm), the air distribution pattern (ductwork layout), the natural recirculation phenomenon created by cooler air dropping while warmer air rising, and the resultant (1) complete containment volume mixing in less than 10 minutes, while the fuel pool floor area (38' elevation & up) volume mixes in less than 7 minutes.

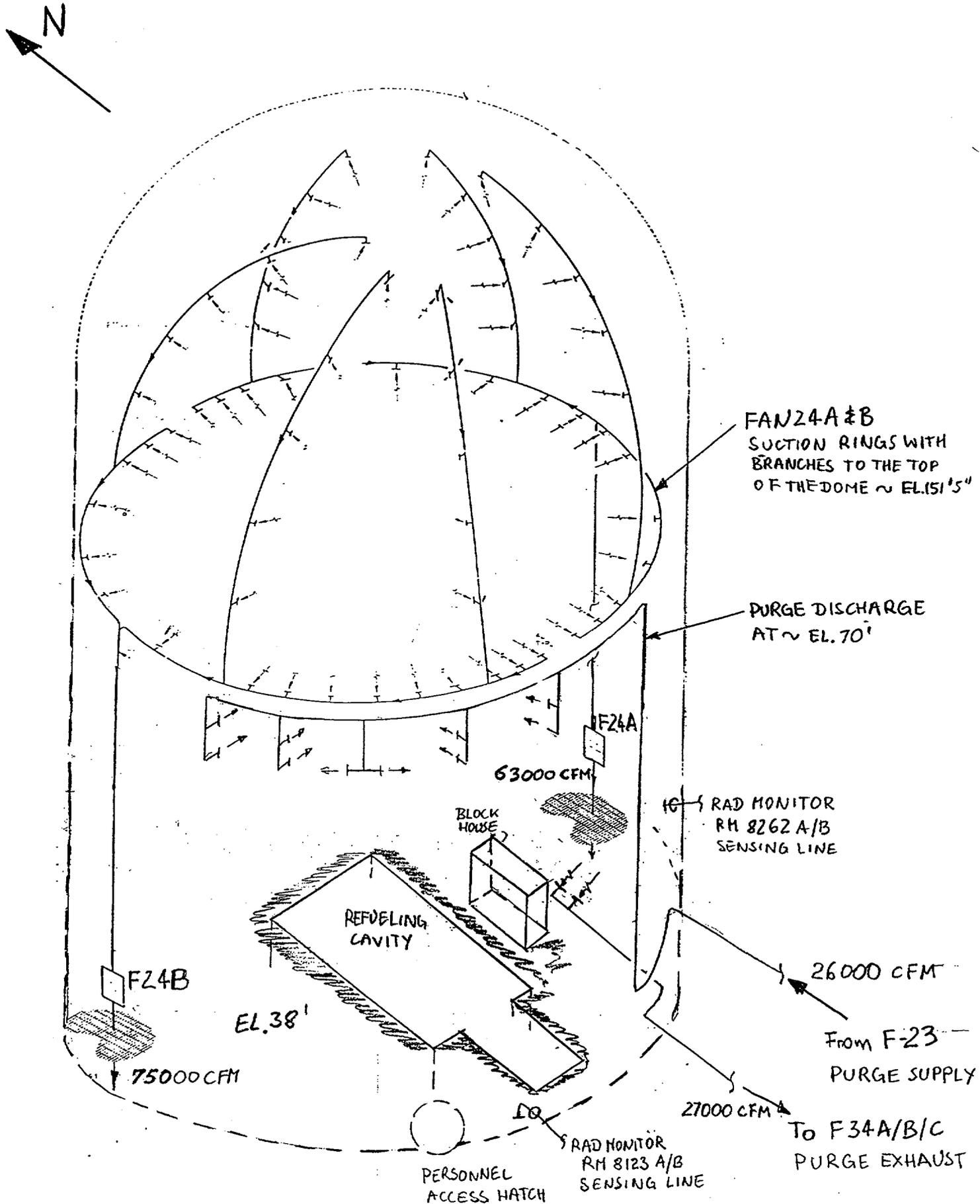
ATTACHMENTS:

- 1- SKETCHES Containment Fuel Pool area ventilation ductwork layout & air flow pattern.
- 2- CR M2-98-2494 Purge Rad Monitor Sensors cannot performed their intended function.
- 3- CR M2-M2-98-2814 Inadequate Air Mixture During Containment Purge.
4. Docket No. 50-336, March 21, 1977 "MP2 Evaluation of Postulated FH Accident Inside Ctmt."
5. FSAR Table 14.7.4-2 Assumption for Fuel Handling Accident in Containment.
6. FSAR Table 14.8.4-1 Loss of Coolant Accident.

REFERENCES:

- a) CR M2-98-2494 Purge Rad Monitor Sensors cannot performed their intended function.
- b) CR M2-M2-98-2814 Inadequate Air Mixture During Containment Purge.
- c) Calculation 78-772-19RA Rev 1 "MP2 Stretch Power Application Rad. Analysis of FH Accident.
- d) OP 2314B, Rev. 17, Containment and Enclosure Building Purge.
- e) Docket No. 50-336, March 21, 1977 "MP2 Evaluation of Postulated FH Accident Inside Ctmt."
- f) Dwg. 25203-29641 Rev.1, Ctmt. Bldg. HVAC Isometrical Air Flow CAR Fans F-14A/B/C/D.
- g) Dwg. 25203-29643 Rev.1, Ctmt. Bldg. HVAC Isom. Air Flow Ctmt. Rec.Aux. Fans F-24A/B.
- h) Dwg. 25203-29644 Rev.2, Ctmt., Encl., & Aux. Bldg. HVAC Isom. Air Flow F.H. Supply Fan F-20, Purge Fan F-23.
- i) Dwg. 25203-29645 Rev.2, Ctmt. & Encl. Bldg. HVAC Isom. Air Flow Ctmt. & Encl. Bldg. Purge Exhaust.
- j) Dwg. 25203-26028 Sh.1, Rev. 34, Ctmt. & Encl. Bldg. Ventilation.
- k) Dwg. 25203-26028 Sh.2, Rev. 39, Ctmt. & Encl. Bldg. Ventilation.
- l) Dwg. 25203-26028 Sh.3, Rev. 13, Ctmt. & Encl. Bldg. Ventilation.

- m) Dwg. 25203-26028 Sh.5, Rev. 20, Ctmt. & Encl. Bldg. Ventilation.
- n) FSAR Table 14.8.2-1 Through change 51, "Containment Design Parameter".
- o) Dwg. 25203-24017 Rev. 0, Containment Auxiliary Air Recirculation System.
- p) Dwg. 25203-17009 Rev. 0, Radiation Zones & Access Control, Ctmt. & Aux. Bldg. Section "B-B"
- r) Calculation FHAIC-02701R2 "MP2 Fuel Handling Accident in Containment Rad. Dose".
- s) AR 98017440-01 Revise OP 2314B Rev. 17, Containment and Enclosure Building Purge.



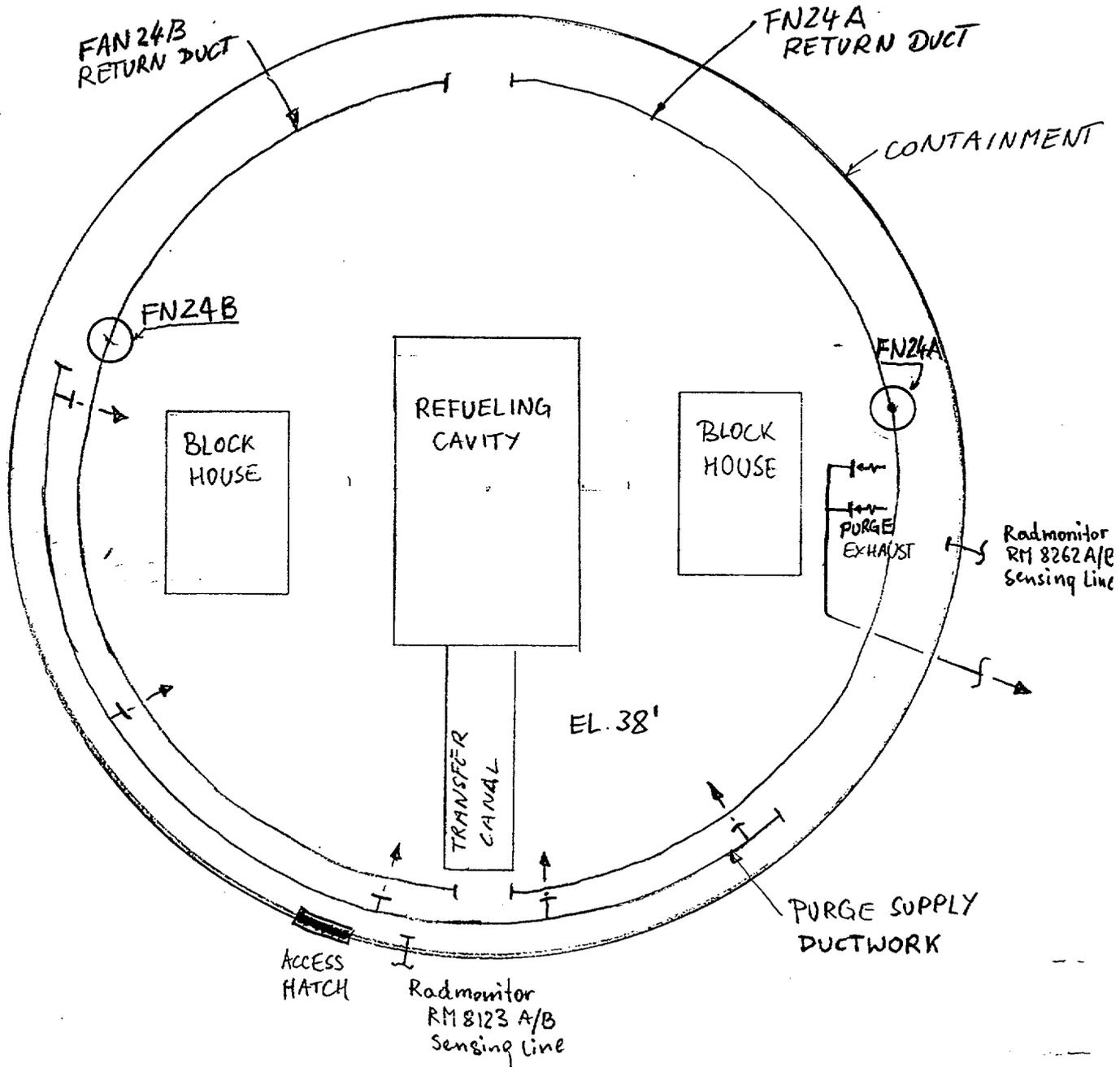
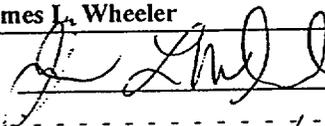
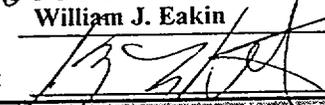
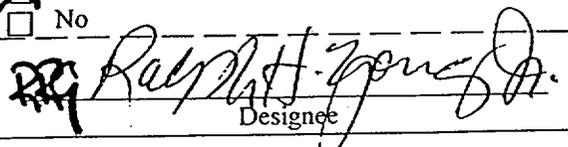


FIG. 2

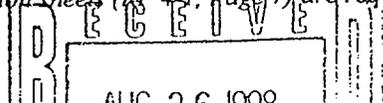
EV-98-0186

ATTACHMENT-2

Page 1 of 2

Form Approved by	4/1/98 Approval Date	4/6/98 Effective Date	98-22 SORC Mtg. No.
AR No. <u>98015974</u>	CR Form Initiation	CR N	CR M2-98-2494
Section 1: To be completed by initiator (please type or print)			
Organization identifying condition: Radiological Engineering	Discovery date: 8/25/98 Discovery time: 1100	Affected Unit(s): 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> C <input type="checkbox"/>	System #: CEB 2314B Qr 8/26/98
<p>1. Condition description (including how condition was discovered, organization creating condition, what activity was in progress when event was discovered):</p> <p>The basis for Tech Spec 3.9.9 (Containment Gaseous and Particulate Airborne Radioactivity Monitors) and 3.9.10 (Containment Purge Valve Isolation) cannot be met. The basis for the monitors and purge valves being operable is to limit a release of fission product radioactivity from containment after a postulated fuel handling accident by closing the purge valves. This was supported in calculation 78-772-19RA, Rev. 1 (MP2 Stretch Power Application Radiological Analysis of Fuel Handling Accident in Containment). This calculation assumed that there was mixing of the containment atmosphere by the containment aux recirc system. Section 7.5.6.3.2.1.2 of the FSAR (Containment Gaseous and Particulate Monitoring) states that these monitors extract representative samples continuously from the containment auxiliary recirculation system. During a walkdown of the system, I found</p>			Continuation Sheet <input checked="" type="checkbox"/>
Component ID.: N/A Method of Discovery: Self		Source Document:	
<p>2. Immediate corrective action taken</p> <p>None. These 2 tech spec items are applicable during mode 6 and if the valves and the monitors are not operable then core alterations and movement of fuel within containment must be suspended. Neither are in progress at this point in time.</p>			Continuation Sheet <input type="checkbox"/>
TR#	AWO#		
<p>3. Recommended corrective action</p> <p>Restore system to its original design basis or change the Tech Specs and FSAR so that it does not allow containment purge during fuel movement or core alterations.</p>			Continuation Sheet <input type="checkbox"/>
<p>4. Initiator Requests Follow-up: YES</p> <p>Initiator Name: <u>James L. Wheeler</u></p> <p>Initiator's Signature: </p> <p>Supervisor Name: <u>William J. Eakin</u></p> <p>Supervisor Signature: </p>		<p>Time: <u>1410</u> Phone No.: <u>MP 2168</u></p> <p>Date: <u>8/25/98</u> Cost Control Center: <u>091</u></p> <p>Time: <u>1411</u></p> <p>Date: <u>8-25-98</u> Phone No: <u>MP 5157</u></p>	
Section 2: To be completed by Operability/Reportability Screening/Designee			
<p>1. Does CR have an actual or potential effect on plant or personnel safety, operability, reportability, reactivity management or plant operation?</p> <p><input checked="" type="checkbox"/> Yes or Don't Know (Section 3 required to be completed.) <input type="checkbox"/> No</p>			Notes:
<p> Designee</p>		<p><u>8/25/98</u> Date</p>	<p><u>173Z</u> Time</p>

If continuation sheets (RP 4-1, Page 1) are required, identify the section being continued by section number.



Condition Report

Continuation Form

CR No: MZ-98-2494

Continuation Form:

- Section 1.1 Condition Description
- Section 1.2 Immediate Corrective Action Taken
- Section 1.3 Recommended Corrective Action
- Section 5.1 Cause of Event
- Section 5.2 Similar Situations or Generic Implications
- Personal Statement
- Other:

that the containment gaseous and particulate monitors no longer extract air from the aux recirc ducts. The sample connections for the monitors have either been removed or cut from the duct. The side of the containment aux recirc duct that runs in front of the equipment hatch on the 14'-6" is removed and blanked off. This has been a normal evolution during a refueling for a number of years. Removing this section of aux recirc ductwork leaves this system unable to equally mix the air in containment (an important assumption used in the fuel handling accident calculation) and the monitors (if they were still installed in the ductwork) unable to extract a representative sample from the aux recirc system.

The purge system removes air from containment at a rated flow rate of 30,000 cfm. The purge exhaust is located near the cavity. Without the benefit of equal mixing of containment air or the ability of the monitors to quickly detect the release of iodines and noble gasses from the cavity immediately following a fuel handling accident, the plume will escape the containment prior to shutting of the purge valves. Preliminary calculations show the off-site and control room dose guidelines will be exceeded. Therefore, because the basis of the tech spec to limit the release of fission product activity cannot be met, I believe the Containment Gaseous and Particulate Monitors and the Containment Purge Valves should be declared inoperable until this situation can be rectified.

Signature on file
Form Approved by

08/19/98
Approval Date

09/15/98
Effective Date

98-50
SORC Mtg. No.

AR No.

CR Form
Initiation

CR No: M2-98-2814

Section 1: To be completed by initiator (please type or print)

Organization identifying condition: Tech Support Eng	Discovery date: 9/17/98 Discovery time: 0700	Affected Unit(s): 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> C <input type="checkbox"/>	System #: 2314 A&B
--	---	---	--------------------

1. Condition description (including how condition was discovered, organization creating condition, what activity was in progress when event was discovered):
 During fuel movement, Containment Purge flow is to high to allow mixing and proper sampling of Containment Atmosphere to mitigate a Fuel Handling Accident when utilizing only Aux Recirculation Ventilation F24A. This was determined during the investigation of CR# M2-98-2494.

Continuation Sheet

Component ID.: F-24 A & B Source Document: DBS-2314B
 Method of Discovery: Self Management Nuc. Oversight Ext. Oversight Event
 (RP 4, Att. 1)

2. Immediate corrective action taken
 Informed Supervisor and engineering of problem.

TR# AWO#

Continuation Sheet

3. Recommended corrective action
 During Refueling operation and Containment Purge is needed operate F-24 A&B to get proper mixing.

Continuation Sheet

4. Initiator Requests Follow-up: Y N
 Initiator Name: Douglas Vining Time: 1500 Phone No.: 5450

Initiator's Signature: _____ Date: 9/17/98 Cost Control Center 825

Engineering Disposition: Y N Engineer Notified: Andre Lessonde (1)

Supervisor Name: Keith Deslandes Time: _____

Supervisor Signature: _____ Date: 9/17/98 Phone No: 5521

Section 2: To be completed by Operability/Reportability Screening Designee

1. Does CR have an actual or potential effect on plant or personnel safety, operability, reportability, reactivity management or plant operation?

Yes or Don't Know
 No

If yes, describe reason:

(1)

Designee

Date

Time

If continuation sheets (RP 4-1, Page 7) are required, identify the section being continued by section number.

EV-98-0186

ATTACHMENT-4

Page 1 of 6

Docket No. 50-336

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE UNIT NO. 2

RE-EVALUATION OF FUEL HANDLING ACCIDENT

INSIDE CONTAINMENT

March, 1977

NNECO

NORTHEAST NUCLEAR ENERGY COMPANY
A NORTHEAST UTILITIES COMPANY

P. O. BOX 270
HARTFORD, CONNECTICUT 06101
203-668-6911

March 21, 1977

Docket No. 50-336

Director of Nuclear Reactor Regulation
Attn: Mr. George Lear, Chief
Operating Reactors Branch #3
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) G. Lear letter to D. C. Switzer dated January 18, 1977.

Dear Sir:

Millstone Nuclear Power Station, Unit No. 2
Evaluation of Postulated Fuel Handling Accident Inside Containment

In Reference (1), Northeast Nuclear Energy Company was requested to confirm and document results of a preliminary NRC Staff evaluation of a postulated Fuel Handling Accident (FHA) inside containment. The Staff's preliminary evaluation concluded that the consequences of the postulated FHA at Millstone Unit No. 2 would be within regulatory guidelines, even assuming no isolation of containment or effluent filtration.

Reference (1) also transmitted a copy of a letter which states that the postulated FHA inside containment may not have been adequately considered during the licensing review of Millstone Unit No. 2.

In response to the NRC Staff request, NNECO hereby provides the following information.

During the licensing review of Millstone Unit No. 2, which culminated with the issuance of the Full Term Operating License (FTOL) in August of 1975, the FHA inside containment was evaluated in June, 1972 by NNECO in accordance with guidance issued by the then-AEC in December, 1971. The evaluation of the postulated FHA was based on "realistic" assumptions and concluded that the radiological consequences of the postulated FHA do not result in significant adverse environmental effects.

The NNECO evaluation was reviewed by the NRC Staff, as documented in its Final Environmental Statement (FES) dated June, 1973. The FES states:

"Table 7.4 indicates that the realistically estimated radiological consequences of the postulated accidents would result in exposures

-2-

of an assumed individual at the site boundary to concentrations of radioactive materials within the Maximum Permissible Concentrations (MPC) of Appendix B, Table II, 10 CFR Part 20 . . . It is concluded from the results of the realistic analysis that the environmental risks due to radiological accidents are exceedingly small."

The FES provided part of the bases for issuance of the FTOL. Although it is the opinion of NNECO that the FHA inside containment has been adequately addressed during the licensing review of Millstone Unit No. 2, a re-evaluation, in direct response to the NRC request, has been conducted.

In the attached evaluation, only one conservative scenario is hypothesized and analyzed because the two part evaluation requested in Reference (1) does not apply to Millstone Unit No. 2.

The analysis confirms the preliminary conclusion reached by the NRC Staff in Reference (1), and the previous conclusion reached by both NNECO and the NRC Staff in the Environmental Report and FES, respectively, that the dose consequences at the site boundary from a postulated FHA are within the guidelines of 10CFR100. Since this re-evaluation was based on the performance of existing plant equipment, current Technical Specifications, and current or proposed procedures, it is concluded that no changes to Technical Specifications or facility equipment are required to ensure that potential offsite doses are well within exposure guidelines.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY


D. C. Switzer
President

Attachment

BACKGROUND

During a normal refueling, fuel handling operations and maintenance work would be in progress. The refueling cavity would be filled to a minimum depth of 23.0 feet as required by Technical Specification 3.9.11. The containment auxiliary circulation system (FSAR Section 9.9.3) would be operating to provide a thoroughly mixed containment atmosphere and uniform air temperatures. This system is not seismic although redundant fans are provided. The containment purge system (FSAR Section 9.9.2), may or may not be in operation depending upon the environment within the containment. However, in this analysis, it is conservatively assumed that the containment purge system is in operation. The components of both systems are designed to operate in the environment to which they are exposed. Technical Specifications (Section 3.9.4) require that containment integrity be maintained during core alterations or movement of irradiated fuel within the containment.

ACCIDENT SCENARIO

The fuel handling accident is assumed to occur in accordance with Regulatory Guide 1.25 assumptions. The FHA is postulated to occur 72 hours after shutdown in accordance with the Regulatory Guide and Technical Specification 3.9.3. One entire row of fuel rods (14) of an assembly are assumed to fail as a result of the accident. This assumption is consistent with those used in the Environmental Report (Section 6.6) and the FSAR (Section 14.5).

The control room operators are notified of the accident by at least one of the following methods:

- (1) Direct communication from personnel at the refueling station in accordance with Technical Specification 3.9.5, identifies the accident to the control room. This communication system is neither seismic nor redundant.
- (2) Area radiation monitor RM-7891 located on the refueling machine service platform alarms both in the control room and at the detector location. This monitor is neither seismic nor redundant.

In order to completely isolate the containment, it is required only to close the containment purge isolation valves, which is accomplished from within the control room. Prior to moving irradiated fuel within the containment for the first time, a PORC-approved procedure will be written to require immediate evacuation of the containment and manual closure of the containment purge isolation valves in the event of an PHA. This procedure will ensure that containment isolation will be achieved within ten minutes following the PHA.

In addition to manual isolation, the containment purge isolation valves are automatically closed on receipt of high radiation signal. The operability of the containment area radiation and airborne radioactivity monitors is required by Technical Specification 3.9.9. The operability of the containment purge valve isolation system is required by Technical Specification 3.9.10. The following conservative calculation identifies the time for the radioactive puff from the accident to reach the top of the containment where it is drawn to the intake of the auxiliary circulation system and the airborne radioactivity monitors:

- Elevation of surface of refueling cavity water -- 35'5-1/2"

Accident Scenario (Continued)

- Elevation of highest ductwork of auxiliary circulation system -- 151' 5"
- Distance puff must rise -- 115.96'
- Containment radius -- 65' 7-9/16"
- Containment area -- 13,532 ft²
- Time for puff to rise with both auxiliary circulation fans operating:

$$\frac{13,532 \text{ ft}^2 \times 115.96 \text{ ft.}}{2 \times 75,000 \text{ ft}^3/\text{min}} = 10.5 \text{ minutes}$$

based on average velocity

The containment purge isolation valves and the airborne radioactivity monitors are both seismic and redundant; the containment auxiliary circulation system is redundant but not seismic. The slowest average air velocity in the ductwork is 40 ft/sec and maximum isolation valve closure time is five seconds per Technical Specification 3.6.3.1; therefore, automatic isolation would occur approximately 11 minutes following the incident, if required.

Upon completion of containment evacuation and isolation at 10 minutes, no containment leakage is expected since there is no differential pressure. The containment atmosphere would then be cleaned by aligning the enclosure building filtration system to the containment purge such that the exhaust air is processed and released through the EBPS charcoal filters to the 375 foot high Millstone Unit No. 1 stack.

ASSUMPTIONS

1. Containment auxiliary circulation system and containment purge system operating.
2. Containment isolation occurs ten minutes post-FHA.
3. Activity released is instantaneously and uniformly mixed with the containment free volume (1.92 x 10⁶ ft³).
4. Regulatory Guide 1.25 assumptions for radioactive source term from one row of rods (14) of a fuel assembly, 10% of the total activity in the rods is released, .25% of iodine is organic, fuel assembly radial peaking factor is 1.65, pool water decontamination factor for iodine is 100, and decay time from shutdown is 72 hours.

EV-98-0186

ATT.-4

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Assumptions (Continued)

5. 0 - 2 hour atmospheric diffusion factor = $2.78 \times 10^{-4} \text{ sec/m}^3$.
6. Iodine plate-out inside containment = 0.
7. Dose models from Regulatory Guide 1.25.

RESULTS

Site Boundary Dose

	<u>Dose (Rem)</u>
Thyroid	0.9
Whole Body	0.0043

TABLE 14.7.4-2

Assumption for Fuel Handling Accident in Containment

<u>Assumption</u>	<u>Basis</u>
(1) a) One Assembly Assumed to Rupture b) 14 Rods Assumed to Rupture	a) Reg. Guide 1.25 b) FSAR
(2) Reactor Core Power Level = 2700 MWt	Stretch Power
(3) Iodine Decontamination Factor = 100	Reg. Guide 1.25
(4) Iodine Species Above the Pool: 25% in Organic Form 75% in Inorganic Form	Reg. Guide 1.25
(5) Activity Released from Rods: Iodines = 10% Noble Gas (Except KR-85) = 10% KR-85 = 30%	Reg. Guide 1.25
(6) X/Qs for MP2 Vent Release: (0-1) hr. SB = 5.41 E-4 (0-1) hr. LPZ = 5.55 E-5	95% Maximum X/Qs for the years 1974-1976
(7) Decay Time = 72 Hours	Reg. Guide 1.25
(8) Thyroid DCFs from Reg. Guide 1.109	See Justification Provided in Section V, LOCA
(9) Activity Uniformly Mixed in Con- tainment at the time of Release	Reference (1)
(10) 217 Assemblies in Core	FSAR
(11) Semi-Infinite Cloud Dose Model	Reg. Guide 1.25
(12) Purge Flow Rate = 32,000 cfm	FSAR
(13) Duration of Purge Before Containment Isolation = 10 min.	Reference (1)
(14) Breathing Rate = 3.47 E-4 m ³ /sec	Reg. Guide 1.25
(15) Peaking Factor = 1.80	Bounding Value Compared to Technical Specification 3/4.2.3

93-18
4/93

TABLE 14.8.4.-1

5/90

LOSS OF COOLANT ACCIDENT

Assumption

- (1) Core power level = 2700 MWt
- (2) Operating time = 3 yr.
- (3) Core released fractions: Noble gases = 100%, Iodines = 25%
- (4) Halogens composition:
 - 91% elemental
 - 4% organic
 - 5% particulate
- (5) Reactor building leak rate:
 - .5%/day \leq 24 hrs.
 - .25%/day $>$ 24 hrs.
- (6) Enclosure Building Filtration System charcoal filter efficiencies:
 - 90% for elemental
 - 70% for organic
 - 90% for particulate
- (7) Bypass leakage fraction = 1.69%
- (8) EBFS negative pressure initiation = 110 seconds
- (9) X/Qs:

<u>Location</u>	<u>Time Period</u>	<u>Elevated</u>	<u>Ground Release</u>
SB	(0-2) hrs.	1.03×10^{-4}	5.39×10^{-4}
LPZ	(0-4) hrs.	3.41×10^{-5}	2.12×10^{-5}
	(4-8) hrs.	1.77×10^{-6}	2.12×10^{-5}
	(8-24) hrs.	2.62×10^{-7}	4.76×10^{-6}
	(24-96) hrs.	1.57×10^{-7}	3.04×10^{-6}
	(96-720) hrs.	6.97×10^{-8}	1.3×10^{-6}

- (10) Thyroid Inhalation DCFs from Reg. Guide 1.109
- (11) Containment Free Air Volume = $1.899 \times 10^6 \text{ ft}^3$
- (12) Breathing Rates
 - (0-8) hr. = $3.47 \times 10^{-4} \text{ m}^3/\text{sec}$
 - (8-24) hr. = $1.75 \times 10^{-4} \text{ m}^3/\text{sec}$
 - (24-720) hr. = $2.32 \times 10^{-4} \text{ m}^3/\text{sec}$

**MILLSTONE NUCLEAR POWER STATION
STATION PROCEDURE**



**Technical Specification Change Requests and
Implementation of License Amendments**

RAC 02

Rev. 1

The purpose of this procedure is to provide instructions for initiation, review, approval, and disposition of Technical Specification Change Requests, Emergency and Exigent Technical Specification Change Requests, and proposed changes to Bases of Technical Specifications. [Comm 3.1]

This procedure also provides instructions for the implementation of Technical Specification changes or license amendments, and provides guidance for the preparation of Significant Hazards Consideration (SHC) determinations.

This is a Quality procedure and requires a QA review.

For unit specific issues, Unit No. 1 will follow the guidance provided in U1 RAC 02, "Technical Specification Change Requests and Implementation of License Amendments." For common or multi-unit programs/processes, RAC 02 will be used.

1
P

Approval: ON FILE

SORC Mtg. No: 98 60 Date: 10/21/98

Effective Date: 11/1/98

Level of Use
Information

Responsible Individual: P. A. Loftus
SME: G. Papanic, Jr.

**Millstone All Units
Station Procedure**

**Technical Specification Change Requests and Implementation of License
Amendments**

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1. INSTRUCTIONS

1.1 General (Initiation, Review and Approval)

RAC 01, "Licensing Basis Management," establishes the programmatic controls for modifying the Licensing Basis (LB) consistent with the expectations specified in Nuclear Group Policy 4, "Regulatory Compliance and Communications."

Nuclear Group Policy 4 states as follows:

"As appropriate, changes to the licensing bases will be made after seeking prior NRC review and approval, as required by regulations, in order to enhance safety, reliability, or cost effectiveness. These changes shall be rigorously evaluated as specified in established programs, processes and procedures, with the highest regard to satisfying regulatory requirements and commitments to provide reasonable assurance of adequate protection to public health and safety."

This procedure is *not* used to process Technical Specifications Change Requests associated with the conversion to the Improved Standard Technical Specification format. Project instructions will be used to process those changes.

The purpose of this procedure is to define the process for the initiation, review, approval, and disposition of Technical Specification Change Requests, Emergency or Exigent Technical Specification Change Requests, and proposed changes to Bases of Technical Specifications.
[♣Comm 3.1]

This procedure also describes the process for the implementation of Technical Specification changes or license amendments, and provides guidance for the preparation of Significant Hazards Consideration (SHC) determinations.

Definitions and responsibilities are shown in Attachments 1 and 2 respectively. The sequence of actions and the personnel responsible for Technical Specification Change Request (TSCR) development are shown in Attachment 3. Attachment 4 is the TSCR form used to document review comments, approvals and disapprovals. Templates and forms associated with license amendment implementation are provided in Attachments 5 through 8. Controlled electronic forms may be used in lieu of some of the Attachments in this procedure. Guidance for performing a Significant Hazards Consideration (SHC) Determination is provided in Attachment 9. Guidance on the format and content of SHC Determinations and Safety Summaries is provided in Attachment 10. A List of Technical Reviewers for Technical Specification Section 6, "Administrative Controls," is provided in Form RAC 02-1.

The required test for a TSCR is whether the proposed change is safe. An SHC determination is an evaluation of the hazards of the change provided by NU, as required by 10CFR50.91, using the standards specified in 10CFR50.92. A TSCR may, in unusual situations, be submitted to the NRC if the change involves an SHC, provided it has been determined to be safe.

A TSCR is normally initiated through a Condition Report (CR) in response to an adverse condition or a condition in need of improvement. A TSCR may also result from a proposed plant modification which may have resulted from corrective actions associated with a CR.

Unless otherwise specified, the responsibilities described in this procedure may be carried out by designees. In addition, the responsibilities assigned to the Lead Functional Manager may be carried out by RA Management.

Initiator →

1.1.1 Refer To Attachment 4, "Technical Specifications Change Request (TSCR) Form," and INITIATE TSCR as follows:

NOTE

New specifications being proposed should be provided with proposed number, title, and page numbers. The revised Technical Specification pages should not be retyped. Black ink should be used for all handwriting on the proposed change documents. "White-Out" should not be used.

- a. PREPARE marked-up copies of the applicable Technical Specifications pages clearly marked with the proposed changes.

NOTE

10CFR50.36 states, "A summary statement of the bases or reasons for such specifications, other than those covering administrative controls, shall be included in the application, but shall not become part of the Technical Specifications." The regulations are silent as to the content of Bases once the operating license is issued. However, common practice has been that changes to Technical Specifications include the appropriate Bases changes and the Bases change is forwarded to the NRC for information along with the license amendment request. In situations where only a Bases change is proposed, the guidance (including the use of TSCR form) contained in this procedure should be used to review and approve that proposed change.

- b. PREPARE changes to the applicable Bases of Technical Specification sections.

NOTE

Documents affected by the proposed TSCR should be identified and change requests (e.g., FSARCR) prepared. However, the implementation of these changes should not be completed until the TSCR has been approved by NNECO (Non-USQ Bases only changes) or the NRC.

- c. REVIEW and DETERMINE if proposed Technical Specification (TS) change affects any of the following documents:
- FSAR
 - Licensing and Design Basis Documents
 - Technical Requirements Manual (TRM)

NOTE

In accordance with RAC 03, "Changes and Revisions to Final Safety Analysis Reports," one of the following apply:

- Upfront FSAR change request (FSARCR) may be initiated to enable the FSARCR to be reviewed and processed along with the parent document (TSCR) and the FSARCR is retained with the TSCR until the license amendment is implemented.
- Updating FSARCR may be initiated subsequent to TSCR initiation/approval or NRC approval of a license amendment.

- d. IF the proposed TS change affects the FSAR, Refer To RAC 03, "Changes and Revisions to Final Safety Analysis Reports," (Att) , "Upfront FSAR Change Request (FSARCR)," and PREPARE an upfront FSARCR and ATTACH to TSCR.
- e. IF the proposed TS change affects the TRM, PREPARE a TRM change request (TRMCR).
- f. IDENTIFY other documents affected by proposed TS change and PREPARE any change request forms as necessary.
- g. IF known, ATTACH documentation fully describing proposed changes, reason for the changes and possible effects on plant operations and safety.
- h. IF appropriate, Refer To RP-4, "Corrective Action Program," and INITIATE a Condition Report to document issue associated with the TSCR.
- i. IDENTIFY references to TSCR such as the following:
- Originating process document, such as a design change record and condition report
 - Safety evaluation
 - Technical evaluation performed as specified in NGP 5.31.
 - Other supporting documents
- j. REQUEST immediate supervisor to approve TSCR or document reason for disapproval on Attachment 4.

NOTE

There are no retention requirements for disapproved TSCRs. Disapproved Attachment 4, however, may be retained as part of CR Package.

- k. IF TSCR is *not* supervisor approved, EXIT this procedure.
- l. FORWARD TSCR and IF applicable, the associated FSARCR to RA Management.

NOTE

RA Management should review the TSCR for any potential impact on other Millstone Units and, if applicable, advise the other unit personnel.

RA
Management

1.1.2 REVIEW TSCR for consistency against the following:

- TSCRs submitted to the NRC which are awaiting NRC approval
- TSCRs currently in preparation, review, or awaiting submittal to the NRC
- Current regulatory commitments

1.1.3 IF conflicts between new and existing TSCRs are identified, PERFORM the following:

- a. EVALUATE impact of new TSCR on other TSCRs and CONSULT with affected department managers, including Manager, Operations and Director Plant Engineering.
- b. To eliminate conflicts, MODIFY some or all of the TSCRs as necessary.

1.1.4 IF conflicts with current regulatory commitments are identified, EVALUATE conflicts and INITIATE appropriate actions including change of commitments consistent with RAC 06, "Regulatory Commitment Management Program."

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1.1.5 Refer To Attachment 4 and PERFORM applicable action:

- DOCUMENT approval and RECORD TSCR number on Attachment 4.
- PROVIDE initiator basis for disapproval and EXIT this procedure.

1.1.6 IF applicable, Refer To RAC 03, "Changes and Revisions to Final Safety Analysis Reports," and RECORD associated FSARCR number on Attachment 4 and ENSURE FSARCR is part of the TSCR package.

1.1.7 FORWARD copies of TSCR package to Director Plant Engineering, Manager Operations for review.

3

NOTE

1. Reviews may be performed in parallel, series, or in stages.
2. If, during review by managers and technical reviewers, issues not associated with their specific disciplines are identified, these issues should be noted in the comments section on Attachment 4.

Director Plant
Engineering

1.1.8 REVIEW technical feasibility of TSCR and ENSURE changes are compatible with Unit Licensing and Design Bases.

3

1.1.9 Refer To Attachment 4 and DOCUMENT approval or disapproval of TSCR including results of the review and FORWARD to the next reviewer.

1.1.10 INFORM RA Management of completion of review.

Manager,
Operations

1.1.11 REVIEW operational feasibility of TSCR and ENSURE changes are consistent with related documents (e.g., Operations Procedures).

1.1.12 CONSULT other Department Managers (e.g., Procedures Group, Maintenance, I&C, Electrical, Mechanical, and Radiation Protection), as appropriate, and EVALUATE impact of the TSCR.

1.1.13 Refer To Attachment 4 and DOCUMENT approval or disapproval of TSCR including results of the review and RETURN TSCR package to RA Management.

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RA
Management

- 1.1.14 IF TSCR is returned disapproved, RETURN a copy of the TSCR package to the Initiator with basis for disapproval and EXIT this procedure.

NOTE [♣Comm 3.3]

Form RAC 02-1 tabulates those responsible for procedures or programs that implement Technical Specification Section 6, "Administrative Controls," requirements.

- 1.1.15 Based on the scope of the proposed change, DESIGNATE Lead Functional Manager and Technical Reviewers by technical disciplines .

- 1.1.16 IF desired, ESTABLISH review schedule and tracking method (e.g., AITTS).

- 1.1.17 FORWARD copies of TSCR package for review to Technical Reviewers and Supervisor, Radiological Engineering.

Technical
Reviewers

- 1.1.18 IF specific discipline is *not* applicable to proposed change, Refer to Attachment 4 and PERFORM the following:
- a. DOCUMENT reason why specific discipline is not applicable to proposed TSCR and SIGN.
 - b. Go To step 1.1.27.

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NOTE

A 10CFR50.59 safety evaluation (SE) is required for all Bases only changes. Safety evaluation screens are not required. The safety evaluation (as specified in RAC 12, "Safety Evaluation Screens and Safety Evaluations") becomes part of the TSCR package as it goes through the internal review process, but is *not* submitted to the NRC. A Safety Summary, summarizing the important technical aspects of the TSCR as specified in Attachment 10, is prepared and included with TSCR package for submittal to the NRC.

3

1.1.19 PERFORM applicable action:

- IF Bases only changes, Refer To RAC 12, "Safety Evaluation Screens and Safety Evaluations," and COMPLETE a written safety evaluation.
- IF TSCR is the result of a plant change evaluated under RAC 12, "Safety Evaluation Screens and Safety Evaluations," ATTACH copy of safety evaluation performed for that change.

3

1.1.20 Refer To Attachment 10 for guidance and PREPARE a Safety Summary.

NOTE

If Bases only change is being processed *and* the change does *not* involve an Unreviewed Safety Question, Safety Hazards Consideration (SHC) determination is *not* required.

- 1.1.21 IF processing a Tech Spec change OR a Bases Only change involving an Unreviewed Safety Question, Refer To Attachments 9 and 10 for guidance and PERFORM a written SHC determination.
- 1.1.22 VERIFY information regarding potential effect of the TSCR on the FSAR.
- 1.1.23 Refer To Attachment 4 and INCLUDE a list of documents affected by the TSCR.

- 1.1.24 IF applicable, Refer To RAC 03, "Changes and Revisions to Final Safety Analysis Reports," and REVIEW attached FSARCR to ensure FSARCR accurately reflects changes to the FSAR that will be required when the TSCR is approved. (3)

NOTE

The SE and SHC determination may either be written by each discipline, or multiple disciplines may sign on the same SE or SHC determination.

- 1.1.25 Refer To Attachment 4 and DOCUMENT results of the review and ATTACH SE and SHC determination, as required. (3)
- 1.1.26 IF multi-discipline SE or SHC determination is being processed, DOCUMENT on Attachment 4 or directly on SE or SHC determination the particular aspects reviewed for that discipline.
- 1.1.27 NOTIFY RA Management that review is complete and PERFORM one of the following applicable actions: (1)
- RETURN TSCR package to RA Management.
 - FORWARD TSCR package to the next reviewer.
- 1.1.28 REVIEW TSCR and PERFORM a determination on the following:
- Any significant increases in individual or cumulative occupational radiation exposure
 - Any significant change in type or level of radioactive effluents during normal or accident conditions
- 1.1.29 IF significant effects are determined, Refer To RAB B-19, "Determination of Significant Radiological Impact for 10CFR51.22 Compliance," and PROVIDE a written evaluation addressing overall net radiological effect of the change (i.e., public dose benefit or cost vs. occupational dose benefit or cost).
- 1.1.30 Refer To Attachment 4 and DOCUMENT results of the review.

Supervisor,
Radiological
Engineering

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1.1.31 NOTIFY RA Management that review is complete and PERFORM one of the following applicable actions:

1

- RETURN TSCR package to RA Management
- FORWARD TSCR package to the next reviewer.

Manager,
Safety
Analysis

1.1.32 REVIEW safety evaluations, if required, safety summary and SHC determination, and PROVIDE comments.

3

1.1.33 Refer To RAC 12, "Safety Evaluation Screens and Safety Evaluations," and EXPAND on evaluations and determinations, as appropriate.

1.1.34 DETERMINE whether the proposed change is safe.

1.1.35 Refer To Attachment 4 and DOCUMENT results of the review.

1.1.36 FORWARD TSCR package to RA Management.

RA
Management

1.1.37 Refer To 10CFR51.22(c)(a) and DETERMINE if proposed change requires an Environmental Assessment.

1.1.38 IF Environmental Assessment is required, Refer To NGP 5.14, "Non-radiological Environmental Reviews for Design Change Records, Minor Modifications, Temporary Modifications, or Procedure Changes," and REQUEST assistance from Manager, Environmental Services – Nuclear.

1.1.39 REVIEW TSCR review package for quality and completeness.

1

1.1.40 IF unacceptable, RETURN package to individual reviewer(s) and OBTAIN further review or information.

1.1.41 Refer To Attachment 4 and DOCUMENT completion.

Lead
Functional
Manager

1.1.42 CONSULT other Managers, Technical Reviewers, and the Initiator and RESOLVE comments resulting from the review process with assistance from RA Management.

1.1.43 IF conflicts are identified between the TSCR and TSCRs which have been submitted to the NRC, EVALUATE the impact of the new TSCR on the pending TSCRs and DETERMINE appropriate action.

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Information

1.1.44 PREPARE final TSCR package including a safety evaluation, as required, single safety summary and final SHC determination.

RA Management →

1.1.45 With assistance from Lead Functional Manager, Refer To RAC 08, "Regulatory Communications and Docketed Correspondence," and PREPARE draft letter to NRC for TSCR transmittal.

NOTE

If desirable and a unit is threatened by a derate, shutdown, or delay in startup because of Technical Specification requirements, a TSCR may be initiated on an emergency or exigent basis using Attachment 4 for guidance.

1.1.46 IF processing emergency or exigent TSCR, ENSURE TSCR cover letter to the NRC contains a defense of emergency or exigent TSCR designation showing conditions requiring ETSCR were beyond the control of NU. So the NRC can justify, in the case of "No SHC," issuance of amendment prior to the 30-day prenotice period, as specified in 10CFR50.91, "Notice for Public Comment; State Consultation."

NOTE

Managers and technical reviewers document their review and approval by signing the TSCR Form (Attachment 4) again. Technical reviewers who originally determined that their discipline reviews were not required for the proposed TSCR are not required to review and approve the final TSCR package.

Lead Functional Manager →

1.1.47 ENSURE TSCR package being sent to PORC, SORC, or NSAB contains the following:

- Completed Attachment 4 with signatures
- 10CFR50.59 Safety Evaluation (if required)
- Draft transmittal letter to the NRC, including the following:
 - Summary of changes, including a statement explaining the reason for the change
 - Marked-up Technical Specification pages

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- Retyped Technical Specification pages (optional)
- Final Significant Hazards Consideration (SHC) Determination
- Safety Summary
- Upfront FSARCR, if applicable, for which the TSCR is the parent document

1.1.48 REVIEW the final TSCR package (for completeness and technical accuracy).

1.1.49 OBTAIN review of final package by managers and technical reviewers.

1.1.50 FORWARD final TSCR package to PORC or SORC.

PORC or SORC →

1.1.51 REVIEW final TSCR and RECOMMEND approval or disapproval to the Station Director.

1.1.52 Refer To Attachment 4 and DOCUMENT the results.

1.1.53 FORWARD the TSCR package to the Unit Director.

Unit Director →

1.1.54 REVIEW TSCR and DOCUMENT results of review on Attachment 4.

1.1.55 FORWARD the TSCR package to RA Management.

NOTE

TSCRs which address *only* a Bases change do not require NSAB approval provided the change does not involve an unreviewed safety question.

RA Management →

1.1.56 IF TSCR is approved, FORWARD to NSAB Staff for processing.

NSAB →

1.1.57 Refer To NGP 2.02, "Nuclear Safety Assessment Board," and REVIEW final TSCR package.

NSAB Chairman →

1.1.58 PROVIDE approval or disapproval for the TSCR.

1.1.59 FORWARD the TSCR package to RA Management.

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RA
Management
and Lead
Functional
Manager

1.1.60 IF NSAB has comments on the TSCR, RESOLVE comments with reviewers and OBTAIN PORC approval, as directed by NSAB.

Unit Director,
RA
Management,
Lead
Functional
Manager, and
NSAB

1.1.61 IF NSAB recommends disapproval of TSCR and Unit Director disagrees, RESOLVE disagreement, with Unit Recovery Officer, Unit Vice President, or Senior Vice President – Chief Nuclear Officer, as final authority.

RA
Management

1.1.62 Refer To RAC 08, "Regulatory Communications and Docketed Correspondence," OBTAIN any additional required reviews and approvals, and SUBMIT the TSCR to the NRC.

1.1.63 IF TSCR is disapproved, RETURN a copy of the TSCR package to the Initiator.

– End of Section 1.1 –

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1.2 Disposition of TSCR

RA
Management

1.2.1 IF TS Bases only change, **PERFORM** the following after approval:

NOTE

Non-USQ TS Bases only changes are approved for implementation by NNECO. All required supporting changes (i.e., procedure changes) should be approved for implementation at the same PORC meeting.

The expectation is that Bases changes will be distributed within 30 days of approval.

- **DISTRIBUTE** Bases changes to all Technical Specification controlled copy holders.
- **SUBMIT** updated Bases pages to the NRC with the next proposed license amendment request or earlier under separate letter. [•Comm 3.1]

1.2.2 IF desired at this time, Refer To NDM 1, "Turnover and Receipt of Nuclear Plant Records," and **SUBMIT** original TSCR package.

– End of Section 1.2 –

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1.3 Actions Required in Advance of Receipt of License Amendment

NOTE

Changes to the Technical Specifications constitute amendments to the Operating License. Therefore, the terms, "Technical Specification Change Request (TSCR)" and "License Amendment Request" are used interchangeably.

RA
Management

1.3.1 WHEN a license amendment request is submitted to the NRC, PERFORM the following:

- a. Using the AITTS template provided in Attachment 5 as guidance, INITIATE assignments in AITTS to the appropriate Managers requesting them to complete the following:
 - Identify affected procedures.
 - Determine training needs, including briefing prior to license amendment implementation and formal training, as appropriate. [♣Comm 3.2]
 - Develop mark-ups of affected procedures and training plans to facilitate implementation upon NRC approval of the license amendment.
 - Prepare changes to documents (e.g., FSAR, Design Basis Documentation Packages, calculations, drawings, etc.) affected by the license amendment request using the information developed in step 1.1.1.
- b. IF complexity of license amendment subject matter warrants, NOTIFY Manager, Outage Management to develop implementation plan.
- c. ENSURE copy of license amendment request is distributed to affected Department Managers.

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Department
Manager

1.3.2 **WHEN** a copy of the license amendment request is received, **PERFORM** the following to facilitate implementation of the license amendment:

- Refer To AITTS assignments initiated by RA Management and **COMPLETE** assignments.
- **NOTIFY** RA Management of the completion of the assignment.

– End of Section 1.3 –

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1.4 Actions Required Upon Receipt of License Amendment

NOTE

When a license amendment is to be implemented immediately upon receipt, the AITTS assignments may be developed subsequent to the implementation of the license amendment. Additionally, affected procedures should be revised within the time frame specified by the NRC in the license amendment.

RA
Management

1.4.1 WHEN an approved license amendment is received from the NRC, PERFORM the following:

- a. REVIEW approved changes to the Operations License or Technical Specifications and ENSURE consistency with the license amendment request and the appropriateness of changes made during NRC approval process.
- b. RESOLVE any errors or inconsistencies with the NRC and DOCUMENT the review on Attachment 6.

NOTE

The AITTS assignments of Section 1.3 should be used in determining the appropriate Managers.

- c. Using the AITTS template provided in Attachment 7 as guidance and INITIATE assignments in AITTS to the appropriate Managers to request the following:
 - Complete procedure modifications and briefing of appropriate personnel consistent with the time frame specified by the NRC within the license amendment as required.
 - Verify accuracy of the NRC Safety Evaluation Report issued with the license amendment, and provide any comments to RA Management.
 - Complete briefing prior to license amendment implementation and formal training, if appropriate, within a reasonable time frame following issuance of the license amendment (e.g., within 120 days of the date of issuance). [♣Comm 3.2]
 - Initiate documentation changes to incorporate license amendment into other documents (e.g., FSAR, Design Bases Summaries, calculations, drawings, etc.).

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- d. ENSURE copy of license amendment is distributed to affected Department Managers.

NOTE

The affected procedures and other documents that need to be revised as a result of the license amendment should have been identified in steps 1.1.1 and 1.3.2.

Department
Manager

- 1.4.2 WHEN an approved license amendment is received, PERFORM the following:

- Refer To AITTS assignment and OBTAIN effective date.
- INCORPORATE changes necessitated by the license amendment into affected procedures.
- BRIEF appropriate personnel on the provisions of the approved license amendment.
- COMPLETE briefing prior to license amendment implementation and formal training, as appropriate, within a reasonable time frame following issuance of the license amendment. [♣Comm 3.2]
- VERIFY accuracy of the NRC Safety Evaluation Report issued with the approved license amendment and PROVIDE any comments to RA Management via closure notes to AITTS assignment.
- INITIATE documentation changes to incorporate license amendment into other documents (e.g., FSAR, Design Bases Summaries, calculations, drawings, etc.) impacted by the approved license amendment.
- NOTIFY RA Management of the completion of document changes by closing AITTS assignment.
- IF applicable, NOTIFY Manager, Outage Management to execute implementation plan.

1

– End of Section 1.4 –

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1.5 Actions Required to Implement License Amendment

NOTE

1. Typically, all AITTS assignments regarding procedures and personnel briefing are completed prior to implementation of a license amendment. In special circumstances (e.g., license amendment applies to a refueling mode that will not be entered for some time beyond the time frame specified by the NRC for implementation of the License Amendment), the Unit Director may approve implementation of the License Amendment with open AITTS assignments. When this occurs text is entered into the open AITTS assignment to explain the special circumstances.
2. Attachment 8 contains the format for the written notification to the Operations Manager.

RA
Management

- 1.5.1 WHEN AITTS assignments regarding procedures and personnel briefings are completed OR with Unit Director approval, NOTIFY Operations Manager that the license amendment may be implemented.
- 1.5.2 IF any AITTS assignments are *not* complete, ENTER applicable MODE requirement or plant condition or NRC implementation date in AITTS and NOTIFY Operations Manager via Attachment 8.
- 1.5.3 Using Attachment 7, INITIATE assignment to Operations Manager (via AITTS) to implement approved license amendment into copies of the Technical Specifications assigned to the Control Room.

NOTE

Forwarding copies of the approved license amendment to the Control Room before distribution by Nuclear Document Services is permissible to hasten implementation in accordance with step 1.5.6.

- 1.5.4 IF desired, FORWARD copies of the approved license amendment to the Control Room.
- 1.5.5 FORWARD copies of the approved license amendment to Nuclear Document Services for distribution to controlled copyholders.

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- 1.5.6 Forwarding copies of the approved license amendment to the Control Room before distribution by Nuclear Document Services is permissible to hasten implementation in accordance with step 1.5.9.
- 1.5.7 IF an Upfront FSARCR is part of the TSCR package, ENSURE appropriate portions of the FSARCR are completed to enable revision and release of the affected FSAR pages per RAC 03.
- 1.5.8 IF the TSCR indicated an Updating FSARCR will be initiated subsequent to license amendment approval by the NRC, ENSURE the FSARCR number is indicated on the first page of the TSCR.

1

NOTE

A license amendment is effective as of the date of its issuance and is to be implemented within the time frame specified by the NRC. A license amendment is considered implemented upon completion of step 1.5.9. Implementation of a license amendment after the time frame specified by the NRC is non-compliance with the license.

Operations
Manager

- 1.5.9 UPDATE Control Room copies of the Technical Specifications to implement the approved license amendment.
- 1.5.10 IF implementing an approved license amendment immediately upon receipt, BRIEF affected personnel on approved license amendment and EVALUATE need to revise procedures prior to immediate implementation.

- End of Section 1.5 -

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1.6 Actions Required Following Implementation of a License Amendment

RA
Management

- 1.6.1 Refer To RAC 03, "Changes and Revisions to Final Safety Analysis Reports," and COMPLETE processing of FSARCR and revision of FSAR.
- 1.6.2 Refer To NDM 1, "Turnover and Receipt of Nuclear Plant Records," and ENSURE original TSCR is submitted to Nuclear Document Services.

– End of Section 1.6 –

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1.7 Regulatory Performance Monitoring

NOTE

The purpose of regulatory performance monitoring is to obtain a comprehensive understanding of the strengths and weaknesses in Regulatory Affairs processes and implementation and to identify improvement opportunities.

RA
Management

1.7.1 PERFORM annual self–assessment to evaluate the following:

- Effectiveness and compliance with TSCR development and license amendment process
- Unit specific aspects of implementation of License Amendments
- Withdrawal of TSCR and License Amendment Requests
- Notifications

– End of Section 1.7 –

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2. REFERENCES

2.1 Source Documents

- 2.1.1 10CFR50.9, "Completeness and Accuracy of Information"
- 2.1.2 10CFR50.30, "Filing of Applications for Licenses; Oath of Affirmation"
- 2.1.3 10CFR 50.36, "Licenses and Radiation Safety Requirements For Irradiators"
- 2.1.4 10CFR50.59, "Changes, Tests and Experiments"
- 2.1.5 10CFR50.90, "Application for Amendment of License or Construction Permit"
- 2.1.6 10CFR50.91, "Notice for Public Comment; State Consultation"
- 2.1.7 10CFR50.92, "Issuance of Amendment"
- 2.1.8 NRC Generic Letter 86-03, "Application for License Amendments," February 10, 1986

2.2 Supporting Documents

- 2.2.1 RAC 10, "Control of Technical Requirements Manual"
- 2.2.2 NDM 1, "Turnover and Receipt of Nuclear Plant Records"
- 2.2.3 NGP 2.02, "Nuclear Safety Assessment Board"
- 2.2.4 NGP 2.13, "Nuclear Plant Records Program"
- 2.2.5 NGP 4.07, "Request for Enforcement Discretion"
- 2.2.6 NGP 4.04, "Review and Approval of Proposed Changes to Selected License Requirements"
- 2.2.7 NGP 5.14, "Non-Radiological Environmental Reviews of Plant Design Change Records and Procedure Changes"
- 2.2.8 NGP 5.16, "Radiological Environmental Reviews"
- 2.2.9 NGP 5.31, "Engineering Record Correspondence and Technical Evaluations"

- 2.2.10 OP 273, "Control of Technical Requirements Manual" – Millstone Unit No. 1
- 2.2.11 OP 3273, "Control of Technical Requirements—Supplementary Technical Specifications" – Millstone Unit No. 3
- 2.2.12 RAB B-19, "Determination of Significant Radiological Impact for 10CFR51.22 Compliance"
- 2.2.13 RAC 01, "Licensing Basis Management"
- 2.2.14 RAC 03, "Changes and Revisions to Final Safety Analysis Reports"
- 2.2.15 RAC 06, "Regulatory Commitment Management Program"
- 2.2.16 RAC 08, "NRC Communications and Docketed Correspondence"
- 2.2.17 RAC 12, "Safety Evaluation Screens and Safety Evaluations"
- 2.2.18 10CFR51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review"
- 2.2.19 RP 4, "Corrective Action Program"
- 2.2.20 NRC Letter, "Revisions to Technical Specifications Bases, Millstone Nuclear Power Station, Unit 1 (TAC No. M98916)," April 30, 1998.

3. COMMITMENTS

- 3.1 NRC Letter A09633 dated, June 13, 1991 [RCR 11668]
- 3.2 NU Letter B14681 dated, November 30, 1993 [RCR 9101]
- 3.3 NU Letter B17180 dated May 6, 1998 [RCR 42069]

4. SUMMARY OF CHANGES

4.1 Rev 1

- 4.1.1 Incorporated previously SORC—approved Change 1 to Revision 0 regarding note and reference to NGP 5.31.

- 4.1.2 Incorporated previously SORC-approved Change 3 to Revision 0. This is a corrective action related to CR M3-97-4644.
- 4.1.3 Explicit wording in Attachment 7 was added for Unit Operations Manager and Operating Training Branch to have objective evidence that briefing of affected personnel is accomplished prior to setting assignment to complete in AITTS. This is a corrective action related to CR M3-98-0927 and resolution of Nuclear Oversight assessment recommendations as documented in memo RAC 98 dated April 17, 1998.
- 4.1.4 Expanded NOTE regarding the difference between a license amendment being "effective" and "implemented."
- 4.1.5 Permit license amendments to be considered "implemented" with pending actions (i.e., open AITTS assignments) required to fully implement the license amendment under special circumstances with the approval of the Unit Director. Any such open items would be "flagged" to Operations for Mode or other specified applicability. This is a corrective action related to CR M3-98-1139.
- 4.1.6 Added optional initial review in Technical Specifications Change Request Form for impact on procedures. This is a corrective action related to CR M3-98-2224.
- 4.1.7 *Corrected* Attachment 2 in that the Manager, Technical Support does not perform 10CFR50.59 evaluations.
- 4.1.8 Denoted in cover page that this is a Nuclear Group Quality Procedure.
- 4.1.9 Clarified assessment requirements for RA Management.
- 4.1.10 Clarified step regarding informing Operations Manager to implement approved license amendment. This is a corrective action related to CR M3-97-4711.
- 4.1.11 Allowed for advance distribution of license amendment to Control Room copies of Technical Specifications. This is a corrective action related to CR M3-97-4710.
- 4.1.12 Added steps and assignments to advise Manager, Outage Management to develop and execute license amendment implementation plan when complexity of amendment warrants such action. This is a corrective action related to CR M3-98-1037.

- 4.1.13 Removed reference to Technical Requirements Manual, since it is outside the scope of this procedure.
 - 4.1.14 Miscellaneous corrections, editorial and clarifying changes. Various Writer's Guide review comments.
 - 4.1.15 Added separate definitions for Emergency and Exigent TSCR.
 - 4.1.16 Add Note to clarify that this procedure is *not* used to process TSCR associated with conversion to the Improved Standard Technical Specification format in Section 1.1.
 - 4.1.17 Clarified closure note expectation for review of NRC SER.
 - 4.1.18 Added optional sign-off by Procedures Manager after Operations Manager for determination of TSCR affect on procedures.
 - 4.1.19 Added clover-leafs to steps implementing regulatory commitments source noting RCR 42069 and 41751.
 - 4.1.20 Made substitutions for management titles due to organizational changes. Added definition of RA Management to Attachment 1.
 - 4.1.21 Added assignments template to Attachments to determine impact to engineering programs and Attachment 7 to revise affected engineering programs based on license amendment. This is a corrective action related to CR M2-98-2431.
- 4.2 **Rev 1 change 2**
- 4.2.1 Changed applicability to Unit 2 and 3 only.
- 4.3 **Rev 1 change 3**
- 4.3.1 Removed requirement to perform safety evaluation for all TSCRs, with the exception of technical specification bases changes.
 - 4.3.2 Removed references to NU Letter B16996 dated, March 2, 1998 [RCR 41751]. The commitment pertains to ERCs and TEs and does not pertain to TSCRs.

Attachment 1

Definitions

(Sheet 1 of 2)

Acronyms

AITTS	—	Action Item Tracking and Trending System
CMP	—	Configuration Management Program
CR	—	Condition Report
EPP	—	Environmental Protection Plan
ETSCR	—	Emergency or Exigent Technical Specification Change Request
FSARCR	—	Final Safety Analysis Report Change Request
IST	—	In-Service Test
LAR	—	License Amendment Request
LB	—	Licensing Basis
NGP	—	Nuclear Group Procedure
NSAB	—	Nuclear Safety Assessment Board
NSAB-SE	—	Nuclear Safety Assessment Board-Safety Evaluation Subcommittee
PLAAR	—	Proposed License Action Approval Requests
PLAR	—	Proposed License Amendment Requests
PRD	—	Primary Responsible Discipline
RA	—	Regulatory Affairs Department
RAC	—	Regulatory Affairs and Compliance
RCR	—	Regulatory Commitment Record
SHC	—	Significant Hazards Consideration
TRM	—	Technical Requirements Manual
TRMCR	—	Technical Requirements Manual Change Request
TSCR	—	Technical Specification Change Request
USQ	—	Unreviewed Safety Question

Attachment 1

Definitions

(Sheet 2 of 2)

Emergency TSCR – is processed when failure to act in a timely manner would result in the derating or shutdown of a nuclear power plant, or in the prevention of either resumption of operation or of increase in power output up to the plant's licensed power level. In such cases, the NRC will publish a notice of issuance for an opportunity for a hearing and public comment in the Federal Register after issuance of the license amendment.

Exigent TSCR is processed when there is not enough time to allow for a full 30 day comment period following notice of the proposed license amendment in the Federal Register.

Environmental Assessment – An evaluation done by Environmental Services–Nuclear to determine if the proposed change has any impact on environmental permits held by the plant.

License Amendment Request (LAR) – A request to the NRC for an amendment to the Operating License for the following:

- Changes in a security plan if it has been determined that such changes decrease the effectiveness of the plan, but the consequences are acceptable
- Changes to a fire protection program (for those units with the program contained in the Operating License) when those changes adversely affect the ability to achieve and maintain safe shutdown in the event of a fire
- Changes to the Operating License Conditions
- A change that could result in an increase in environmental effects significant enough to exceed the effects previously reviewed and evaluated by the NRC for the particular system or type of operation involved
- Changes to the procedures described in the FSAR if such changes involve USQs
- Conduct of tests and experiments not described in the FSAR which involve USQs
- Changes to the Millstone 3 Environmental Protection Plan (EPP)
- Any other changes to license requirements that require a license amendment
- Any change to the Technical Specifications
- Changes to the facility (i.e., DCRs) that involve a USQ

RA Management – Regulatory Affairs Directors, Managers, Supervisors, or their designee.

Attachment 1

Definitions

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Safety Evaluation (SE) – A documented evaluation of the impact of a proposed TSCR on public health and safety. The SE determines whether or not the proposed change is a USQ and whether or not the proposed change is safe.

SHC Determination – A finding as to whether or not a proposed amendment to an Operating License involves an SHC according to the standards provided in Section (c) of 10CFR50.92.

Technical Specification Change Request (TSCR) – A written request to the NRC for a license amendment that would add, delete, or change a Technical Specification.

Attachment 2 Responsibilities

(Sheet 1 of 3)

All Personnel

- Initiate CRs or TSCRs.
- Identify FSAR Sections which may be affected if TSCR or TS Amendment is approved and attach annotated pages and FSARCR as specified in RAC 03, "Changes and Revisions to Final Safety Analysis Reports."

Initiator's Supervisor

Approve or disapprove initiation of TSCRs submitted by individuals under their supervision. Verify information is complete and accurate.

Director Plant Engineering

- Review the technical and operational feasibility.
- Approve or disapprove TSCRs.

Unit Operations Manager

- Review the operational feasibility of the TSCR.
- Approve or disapprove TSCR.

RA Management

- Maintain this procedure current.
- Perform annual self-assessment of TSCR development and license amendment implementation process.
- Owner of the TSCR review process with responsibility for implementing the requirements of this procedure.
- Designate Lead Functional Manager and Technical Reviewers.
- Administratively control the TSCR review process by specifying technical reviews and assign relative priorities for review.
- Confirm compatibility with Technical Specifications and any other TSCRs being reviewed by the NRC and TSCRs in the review process.
- Determine need for an Environmental Assessment to be performed by Manager, Environmental Services – Nuclear.
- Prepare final TSCR package including TSCR transmittal letter, safety evaluation as required, safety summary, and SHC determinations.
- Submit TSCR to the NRC.
- Perform annual self-assessment to evaluate unit-specific aspects of the implementation of license amendments.

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Attachment 2 Responsibilities

(Sheet 2 of 3)

Lead Functional Manager

- Designated Owner of the TSCR package.
- Ensure the technical accuracy and completeness of the TSCR and supporting documents (e.g., safety evaluation, safety summary, and SHC determination).
- Assist RA Management in resolving comments resulting from the TSCR review process.
- Present or participate in the presentation of the TSCR to PORC, SORC, or NSAB, as appropriate.

Technical Reviewers

- Review the TSCR to determine if the proposed change is safe.
- Prepare safety evaluations as specified in RAC 12, "Safety Evaluation Screens and Safety Evaluations," safety summaries, and SHC determination, as required.
- Verify FSAR Sections which will be affected if TSCR is approved, and if applicable, review attached FSARCR.
- Section 6.0 Technical Reviewers assess affect of TSCR on implementing procedure or program.

Supervisor, Radiological Engineering

Review the TSCR to determine any increase in occupational radiological exposure and provide comments as appropriate on the net radiation exposure consequences of the TSCR.

Manager, Safety Analysis

Review the safety evaluations or SHC determinations, and provide comments as appropriate.

PORC or SORC

Review and recommend approval or disapproval of the TSCR to the Unit Director

Station Director

Approve or disapprove TSCRs, as necessary.

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Attachment 2 Responsibilities

(Sheet 3 of 3)

NSAB-SE

Review and recommend approval or disapproval of TSCRs.

NSAB

Approve or disapprove TSCRs

Manager, Environmental Services – Nuclear

Assist in performing an Environmental Assessment, if required.

Manager, Outage Management (Optional)

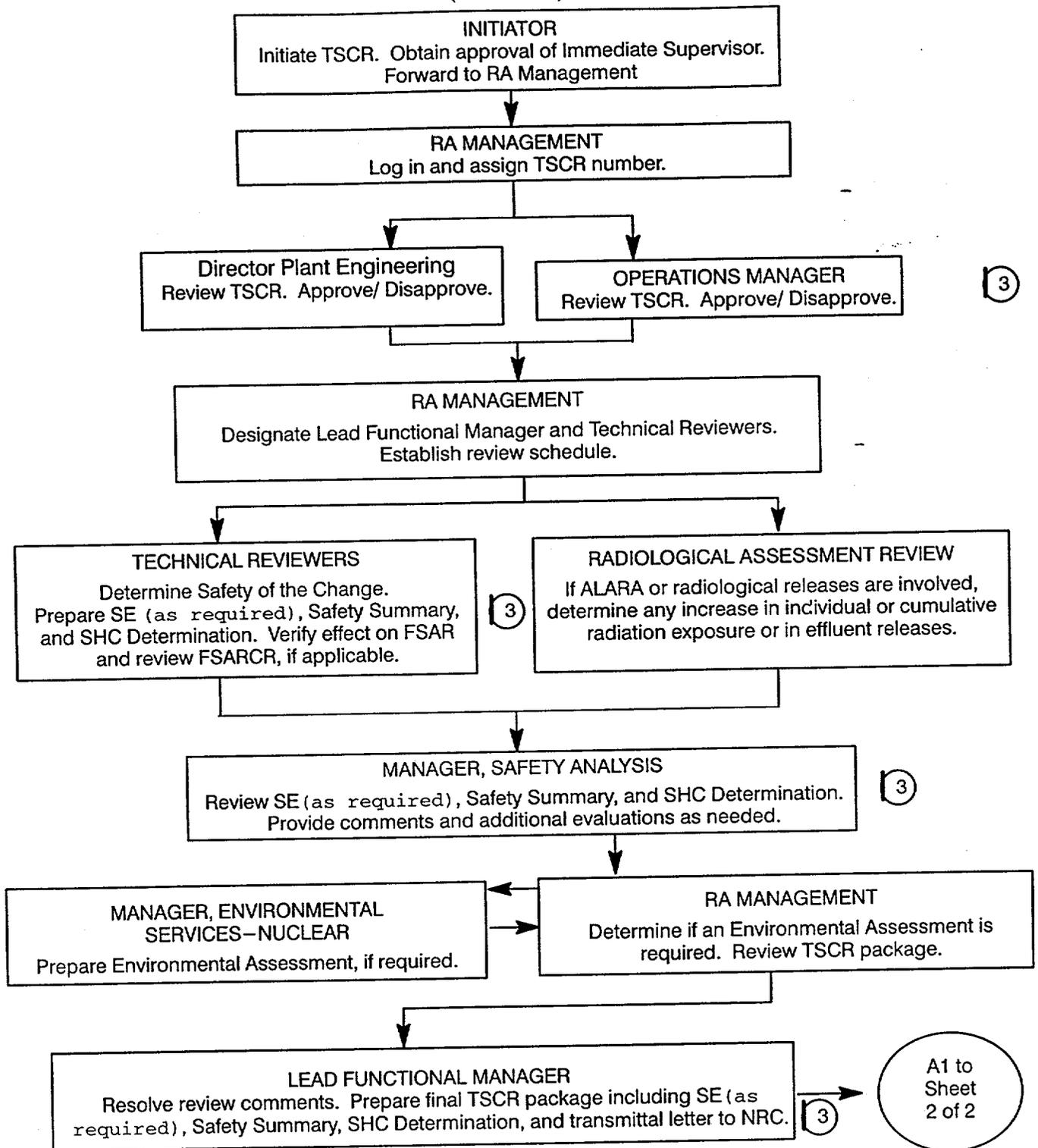
Develop and execute implementation plan for complex License amendments.

Manager, Procedures (Optional)

Initial review for impact on procedures.

Attachment 3 Technical Specifications Change Request Flowchart

(Sheet 1 of 2)



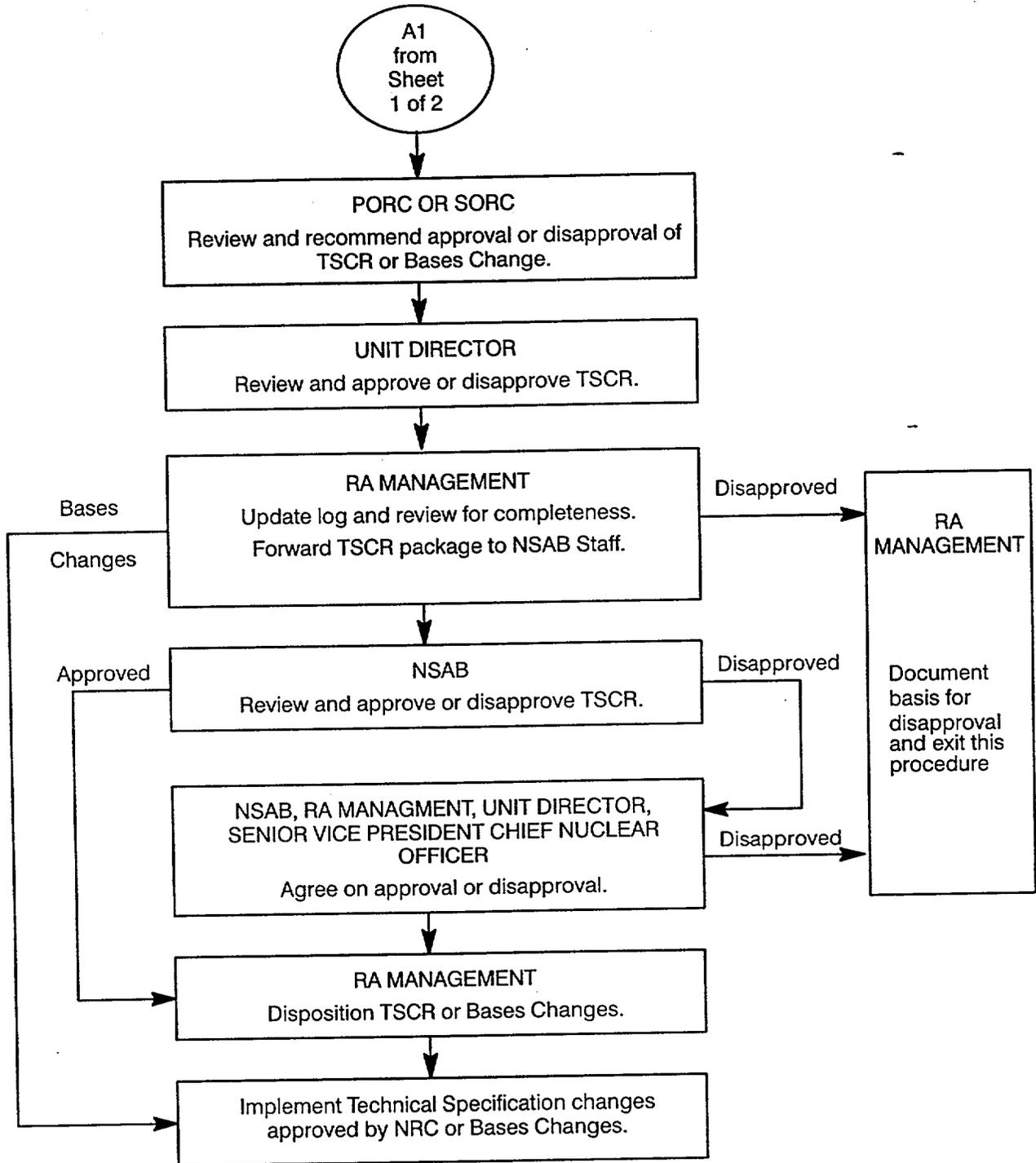
*The flow diagram shows typical flow and sequence of reviews. However, the actual flow and sequence of reviews may differ depending on whether reviews are conducted in parallel or in series.

Level of Use
Information

Attachment 3

Technical Specifications Change Request Flowchart

(Sheet 2 of 2)



Level of Use
Information

Attachment 4
Technical Specifications Change Request Form

(Sheet 1 of 6)

Millstone Unit _____

TSCR No. _____

Associated FSARCR No. _____

1. INITIATOR

Description of proposed change including reason for change: _____

_____ Check if detailed information attached

Technical Specification Section Numbers	Title(s) of Section(s)	Page and Amendment Numbers

Check all that apply

- TS Change – attach marked–up copy of TS page(s)
- TS Bases Change – attach marked–up copy of TS Bases page(s)
- Emergency or Exigent TS Change
- TSCR or Amendment approval will affect FSAR – Complete one of the following:
 - A RAC 03, Upfront FSARCR is attached
 - Updating FSARCR will be initiated.

Sections affected _____

Design basis documentation or TRM changes required – list documents affected: _____

References (originating process document such as DCR and CR, related technical evaluation as specified in NGP 5.31, related SE and other supporting documents): _____

Initiator Name (print) _____

Signature _____

Date _____

2. SUPERVISOR

Approve Disapprove

Comments _____

Supervisor Name (print) _____

Signature _____

Date _____

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Attachment 4
Technical Specifications Change Request Form
(Sheet 5 of 6)

10. RA MANAGEMENT

Environmental assessment required?

Yes, Attach assessment by Manager,
Environmental Services — Nuclear

No

Mgr. Name (print)	Signature	Date
-------------------	-----------	------

11. LEAD FUNCTIONAL MANAGER

Prepare final TSCR package and obtain review of final package by managers and technical reviewers.

TSCR package is complete and technically accurate?

Yes No

Name (print)	Signature	Date
--------------	-----------	------

12. PORC or SORC

Recommend Approval

Recommend Disapproval

PORC or SORC Chairperson	Date	Meeting No.
--------------------------	------	-------------

13. UNIT DIRECTOR

Approve

Disapprove

Name (print)	Signature	Date
--------------	-----------	------

14. NSAB CHAIR

Approve

Disapprove

Not Required Bases change only

Name (print)	Signature	Date
--------------	-----------	------

Level of Use Information

Attachment 4
Technical Specifications Change Request Form
(Sheet 6 of 6)

15. RA MANAGEMENT

Submit TSCR to NRC.

Letter to NRC: B _____ dated _____

 B _____ dated _____

 B _____ dated _____

Final Disposition (Optional)

Approved in Amendment _____ by NRC Letter A _____ dated _____

Disapproved: TSCR to be reinitiated under TSCR No. _____

Disapproved: No further action required.

Withdrawn. Reason: _____

Level of Use
Information

Attachment 5
AITTS Template for License Amendment Request
(Sheet 1 of 2)

AITTS Assignments for NU Submittal (B _____) Dated _____
License Amendment Request TSCR/PLAAR/PLAR _____

A/R #: _____ Due Date: _____

SUBJECT: LICENSE AMENDMENT REQUEST DATED _____

OWED TO: _____

ACTION REQUEST DESCRIPTION:

Refer to TSCR/PLAAR/PLAR _____ Identify procedures impacted by proposal, prepare mark-ups of procedures, and develop appropriate training plans.

ASSIGNMENT:

SUBJECT: DETERMINE IMPACT ON PROCEDURES FOR LICENSE AMEND REQUEST

RESPONSIBLE GROUP(S):

Manager, Unit No. _____ Department _____ Manager, Unit No. _____ Department _____

Manager, Unit No. _____ Department _____ Manager, Unit No. _____ Department _____

DUE DATE: _____

TEXT: On _____, B _____ was submitted to the NRC. This submittal is the license amendment request for TSCR/PLAAR/PLAR _____. To ensure the license amendment can be implemented within the time frame specified by the NRC upon approval, it is advisable to review the submittal to determine if any procedures under your department's control need to be revised. For the affected procedures, you may wish to prepare the applicable mark-ups. In the closure notes, please identify the procedures which will need to be revised or if this work can be delayed without significant risk until the license amendment is approved by the NRC. Note: The procedure cannot be revised until the License Amendment is received.

ASSIGNMENT:

SUBJECT: TRAINING NEEDS FOR LICENSE AMENDMENT REQUEST

RESPONSIBLE GROUP(S):

Supervisor, Unit No. ____ Op Training

DUE DATE: _____

TEXT: Determine if training will need to be conducted regarding the license amendment request. In the closure notes, denote whether training will be required to be conducted.

Level of Use
Information

Attachment 5
AITTS Template for License Amendment Request
(Sheet 2 of 2)

ASSIGNMENT:

SUBJECT: DETERMINE IMPACT OF LICENSE AMEND. REQUEST ON DESIGN DOCS

RESPONSIBLE GROUP (S): _____

DUE DATE: _____

TEXT: Review the License Amendment request to determine if design documents (e.g., FSAR, DBDs, calculations, drawings) are impacted. If a design document is impacted, prepare the appropriate mark-ups. However, these changes cannot be implemented until the applicable license amendment is received. In the closure notes, identify the design documents impacted by the license amendment request.

ASSIGNMENT: (Optional)

SUBJECT: DEVELOP LICENSE AMENDMENT IMPLEMENTATION PLAN

RESPONSIBLE GROUP: Manager, Outage Management

DUE DATE: _____

TEXT: On _____, B _____ was submitted to the NRC. This submittal is the license amendment request for TSCR/PLAAR/PLAR _____. The subject of this license amendment is deemed to be sufficiently complex that the development of an implementation plan is warranted. You are requested to develop this plan.

ASSIGNMENT:

SUBJECT: DETERMINE THE IMPACT ON ENGINEERING PROGRAMS FOR THE LICENSE AMENDMENT REQUEST

RESPONSIBLE GROUP (S):

MANAGER: _____
Department

MANAGER: _____
Department

MANAGER: _____
Department

MANAGER: _____
Department

DUE DATE: _____

TEXT: Review the License Amendment request to determine if any programs under your cognizance need to be revised (e.g. Maintenance Rule, IST, etc.)

Level of Use
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Attachment 6
Regulatory Compliance Amendment Verification Form
(Sheet 1 of 1)

MP2

MP3

LICENSE AMENDMENT NO: _____

NRC LETTER NO: _____

TITLE/SUBJECT:

TSCR/PLAAR/PLAR NUMBER: _____

SUBMITTAL DATE: _____

LETTER NUMBER: _____

DIFFERENCE BETWEEN TSCR/PLAAR/PLAR AND AMENDMENT? YES NO

PAGE

SECTION

EXPLANATION OF DIFFERENCE

Name (print)

Signature

Date

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Attachment 7
AITTS Template for Approved License Amendment

(Sheet 1 of 3)

AITTS ASSIGNMENTS FOR LICENSE AMENDMENT NO. _____

A/R #: _____ Due Date: _____

OWED TO: _____

SUBJECT: _____

ACTION REQUEST DESCRIPTION:

Revise affected procedures, conduct appropriate training, review the NRC's Safety Evaluation Report for accuracy, revise affected design documents, and implement license amendment.

ASSIGNMENT:

SUBJECT: VERIFY ACCURACY OF SER FOR LICENSE AMENDMENT

RESPONSIBLE GROUP (S): _____

DUE DATE: _____

SCH Ref: _____ Unit: _____ Mode: _____ System: _____

TEXT: Review License Amendment to determine if the NRC's SER issued with the license amendment is accurate. It should be reviewed against our submittal (B _____) dated _____. In the closure notes, state your conclusion regarding the accuracy of the SER; either "SER is accurate" or "SER is inaccurate because....."

ASSIGNMENT:

SUBJECT: PROCEDURE REVISIONS FOR AMENDMENT

RESPONSIBLE GROUP (S):

Manager, Unit No. _____ Department _____ Manager, Unit No. _____ Department _____

Manager, Unit No. _____ Department _____ Manager, Unit No. _____ Department _____

DUE DATE: _____

SCH Ref: _____ Unit: _____ Mode: _____ System: _____

TEXT: Review License Amendment to determine if any procedures under your department's control need to be revised. In the closure notes, please identify the procedures revised and the date issued. The affected procedures should have been identified in the applicable assignments for A/R _____. The A/R for the supporting license amendment request with an effective date of _____

**Level of Use
Information**

Attachment 7
AITTS Template for Approved License Amendment
(Sheet 2 of 3)

ASSIGNMENT:

SUBJECT: PERSONNEL BRIEFINGS FOR LICENSE AMENDMENT

RESPONSIBLE GROUP (S):

Manager, Unit No. _____ Operations

Supervisor, Unit No. _____ Op Training

DUE DATE: _____

SCH Ref: _____ **Unit:** _____ **Mode:** _____ **System:** _____

TEXT: Brief affected personnel in your department on the provisions within the license amendment. Objective evidence that briefing of personnel is accomplished must be obtained prior to setting this assignment to "COMPLETE."

ASSIGNMENT:

SUBJECT: FORMAL TRAINING FOR LICENSE AMENDMENT (IF APPROPRIATE)

RESPONSIBLE GROUP (S):

Supervisor, Unit No. _____ Op Training

DUE DATE: _____

SCH Ref: _____ **Unit:** _____ **Mode:** _____ **System:** _____

TEXT: Conduct formal training for License Amendment, if appropriate. In the closure notes, provide the date the training was conducted. Objective evidence that training is accomplished must be obtained prior to setting this assignment to "COMPLETE."

ASSIGNMENT:

SUBJECT: REVISE DESIGN DOCUMENTS FOR LICENSE AMENDMENT

RESPONSIBLE GROUP(S):

Manager, Unit No. _____ Design Eng.

DUE DATE: _____

SCH Ref: _____ **Unit:** _____ **Mode:** _____ **System:** _____

TEXT: Revise the design documents affected by License Amendment. In the closure notes, identify the design documents impacted and the date the documents were revised. The affected design documents would have been identified in the applicable assignments for A/R _____, the A/R for the supporting license amendment request.

**Level of Use
Information**

Attachment 7
AITTS Template for Approved License Amendment
(Sheet 3 of 3)

ASSIGNMENT:

SUBJECT: IMPLEMENT LICENSE AMENDMENT

RESPONSIBLE GROUP: Manager, Operations Unit

DUE DATE: _____

SCH Ref: _____ Unit: _____ Mode: _____ System: _____

TEXT: Implement License Amendment into the controlled copies of the Technical Specifications in the Control Room. Note: The license amendment may not be implemented until the applicable procedures have been issued and the appropriate personnel briefings conducted (see assignments through _____). RA Management will inform you when those assignments have been completed.

ASSIGNMENT: (Optional)

SUBJECT: EXECUTE LICENSE AMENDMENT IMPLEMENTATION PLAN

RESPONSIBLE GROUP: Manager, Outage Management

DUE DATE: _____

SCH Ref: _____ Unit: _____ Mode: _____ System: _____

TEXT: Execute implementation plan for License Amendment. The plan would have been developed in the applicable assignments for A/R _____, the A/R for the supporting license amendment request.

ASSIGNMENT:

SUBJECT: REVISE ENGINEERING PROGRAMS IMPACTED BY THE LICENSE AMENDMENT REQUEST

RESPONSIBLE GROUP (S):

MANAGER: _____
Department

MANAGER: _____
Department

MANAGER: _____
Department

MANAGER: _____
Department

DUE DATE: _____

TEXT: Revise Engineering Programs affected by the subject License Amendment. In the closure notes identify Engineering Programs impacted and the dates program (e.g. Maintenance Rule scoping, IST requirements, etc.) changes were implemented.

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Attachment 8

**Example of Notification Memo From Regulatory Affairs Regarding
Implementation of License Amendment**

(Sheet 1 of 1)

RA Memo No. _____

TO: Manager, Unit No. _____ Operations

FROM: RA Management
 Ext. _____

SUBJECT: License Amendment No. _____

License Amendment No. _____ should be implemented by _____. The appropriate departments have reviewed their procedures and have stated that their procedures have been implemented. Also, the appropriate personnel briefings have been completed OR the Unit Director has approved the implementation of this license amendment with the following open AITTS assignments which are required to be complete prior to entry into mode _____ or plant condition _____ or NRC implementation date of _____ and should be "flagged" as such by Operations, as appropriate.

(List applicable open AITTS assignments, if any.)

When the License Amendment has been implemented, please complete the applicable assignment in A/R No. _____.

cc: Unit Director
 Director, Engineering Programs
 Operations Training Supervisor
 TSCR Coordinator for MP _____

Director, Nuclear Engineering
Unit 3 Engineering Director
Unit 2 Engineering Director

Nuclear Records
RAC Memo File

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Attachment 9

Guidance for Performing Significant Hazards Consideration Determinations

(Sheet 1 of 3)

Initiation of an SHC Determination

An SHC determination is required whenever a proposed license amendment request is initiated in accordance with this procedure or certain requirements of NGP 4.04, "Review and Approval of Proposed Changes to Selected License Requirements," and in conformance with 10CFR50.90. The RA Management designates the reviewers responsible for SHC determinations in accordance with the instructions and the Routing and cover sheets provided in this procedure and NGP 4.04, "Review and Approval of Proposed Changes to Selected License Requirements."

The Designated Reviewer must answer the question: "Are there any potential significant hazards involved in the proposed amendment that must be considered?"

According to the standards provided in Section (c) of 10CFR50.92, no Significant Hazards Considerations exist if the proposed amendment would not:

- Involve a significant increase in the probability or consequences of an accident previously evaluated.
- Create the possibility of a new or different kind of accident from any accident previously evaluated.
- Involve a significant reduction in a margin of safety.

Conversely, if it is determined that one or more of the three considerations above is positive, then an SHC exists.

A written determination must be performed in conformance with 10CFR50.91 and 10CFR50.92, addressing each of the three criteria above. NRC Generic Letter 86-03 provides guidance on what constitutes an acceptable SHC determination.

The SHC written determination(s) from above are used by the RA Management and the Lead Functional Manager to develop a final SHC determination prior to PORC and Nuclear Safety Assessment Board review and approval. This final SHC determination is incorporated into the license amendment request package submitted to the NRC, and is reviewed and approved by appropriate individuals during the letter review and sign-off process in accordance with the requirements of this procedure and NGP 4.04, "Review and Approval of Proposed Changes to Selected License Requirements."

Upon receipt of the license amendment request, the NRC will publish notice of the request in the Federal register, providing the opportunity for parties to file comments or request hearings on the proposed amendment.

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Attachment 9

Guidance for Performing Significant Hazards Consideration Determinations

(Sheet 2 of 3)

The NRC may or may not concur with the licensee's SHC determination. The NRC may accept and publish the licensee's determination, or they may make their own SHC determination.

The SHC determination does not determine whether or not the NRC will issue the amendment. It merely establishes whether or not there are significant hazards to be considered in the NRC safety evaluation of the proposed amendment, and therefore, whether the amendment may be issued prior to a hearing (if one is requested). The NRC will issue the amendment based only on NRC safety evaluations. Therefore, there is no intrinsic safety significance to the SHC determination.

If there is no SHC, the NRC may issue the amendment following the 30-day prenotice period, even if a request for hearing has been received but a hearing has not yet commenced.

If there is an SHC, the NRC may not issue the amendment following the 30-day prenotice period unless a hearing, if requested, has been concluded.

Emergency Amendment Applications

If in the review of the TSCR submittal the NRC finds that an emergency situation exists, in that failure to act in a timely fashion would result in derating, or shutdown, or delayed startup of a nuclear power plant, it may issue (immediately) an amendment, if it involves No SHC, prior to public notice and prior to opportunity for a hearing or public comment. In such cases, the NRC will publish a notice of issuance providing for an opportunity for a hearing and public comment after issuance.

In the event there is an SHC, the NRC will not issue an amendment prior to conclusion of pre-notice period and any requested hearing or public comment.

The need for an amendment on an emergency basis shall be communicated by RAC to appropriate NRC staff as soon as possible. The amendment request cover letter to the NRC shall discuss efforts that were made to prevent and mitigate emergency situation and why emergency issuance of amendment is justified.

Attachment 9
Guidance for Performing Significant Hazards Consideration Determinations
(Sheet 3 of 3)

Exigent Amendment Applications

If in the review of the TSCR submittal the NRC finds that an exigent situation exists, in that an amendment is required sooner than 30-day pre-notice period would permit, and if the requested amendment involves no SHC, the NRC may reduce pre-notice period to two weeks, or they may use local media, telecommunications, etc., to notify the public and state officials of their intent to issue the amendment. The NRC may then issue the amendment prior to commencement of any requested hearings.

In the event there is an SHC, the NRC will not issue an amendment prior to conclusion of pre-notice period and any requested hearing or public comment.

The need for an amendment on an exigent basis shall be communicated to appropriate NRC staff as soon as possible. The amendment request cover letter to the NRC shall discuss efforts that were made to prevent and mitigate exigency and why exigent issuance of amendment is justified.

Submittal of License Amendment Request to the NRC

The letter submitting the license amendment request to the NRC shall be prepared and forwarded by RA Management and must include the written statement of SHC determination, including the bases and analyses for the SHC determination and any other supporting documentation as developed.

A copy of the complete license amendment application shall be forwarded to the State of Connecticut in conformance with Section (b) of 10CFR50.91.

Documentation

A separate file is not required for SHC determinations. Rather, such determinations and supporting documentation shall be part of the appropriate Technical Specification Change Requests developed per this procedure or Proposed License Amendment Requests/Proposed Licensed Action Approval Requests of NGP 4.04, "Review and Approval of Proposed Changes to Selected License Requirements."

Attachment 10

Guidance on the Format and Content of SHC Determinations and Safety Summaries

(Sheet 1 of 2)

SHC Determination

The SHC determination is similar to the evaluation performed to determine if a 10CFR50.59 USQ is associated with this proposed change. (3)

The SHC determination differs from a 10CFR50.59 USQ determination in the following ways:

- The SHC determination Questions 1 and 3 differ from the 10CFR50.59 USQ questions in that they use the qualifier “significant.”
- The SHC determination Question 2 differs from the 10CFR50.59 USQ Question 2 in that the SHC question does not require an evaluation of new malfunctions.
- The format and writing style in answering the SHC determination is closer to that used in letter correspondence than the format and writing style used in the RAC 12 10CFR50.59 USQ evaluation. (3)
- The level of technical detail contained in the SHC determination can be slightly less than that used in answering the RAC 12 questions, however, sufficient technical detail must be provided to justify the answers to the SHC determination questions.

Attachment 10

Guidance on the Format and Content of SHC Determinations and Safety Summaries

(Sheet 2 of 2)

Safety Summary

The Safety Summary should be written in such a way that it can be readily inserted into the body of the letter to the NRC and contains:

- A background of the history of the issue including a description of any recent correspondence with the NRC on this issue (e.g., Licensee Event Reports, Generic Letters, and Information Notices)
- A detailed description of the technical issues associated with this change sufficient for an NRC reviewer to understand the safety significance of the issues, independently evaluate the safety significance of the issue, and to approve the proposed change to the Technical Specifications.
- The format and writing style used in the Safety Summary is that used in letter correspondence.