



Entergy Nuclear South
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-3093
Tel 504 739 6660
Fax 504 739 6678
jkowale@entergy.com

Joseph A. Kowalewski
Vice President, Operations
Waterford 3

W3F1-2010-0009

April 13, 2011

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: License Amendment Request to Revise the Technical Specifications
Based Upon Revised Fuel Handling Accident Analysis
Waterford Steam Electric Station Unit 3
Docket No. 50-382
License No. NPF-38

REFERENCES: 1. NRC ADMINISTRATIVE LETTER 98-10, "Dispositioning of
Technical Specifications That Are Insufficient to Assure Plant
Safety", December 29, 1998.

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Operations, Inc. (Entergy) hereby requests the following amendment for Waterford Steam Electric Station, Unit 3 (Waterford 3). The proposed change will modify the following Technical Specifications (TS):
TS 3.3.3.1 (Radiation Monitoring Instrumentation)
TS 3.7.6.1 (Control Room Emergency Air Filtration System)
TS 3.7.6.3 (Control Room Air Temperature)
TS 3.7.6.4 (Control Room Air Temperature)
TS 3.8.1.2 (AC Sources)
TS 3.8.2.2 (DC Sources)
TS 3.8.3.2 (On Site Power Distribution)
TS 3.9.3 (Decay Time)
TS 3.9.4 (Containment Building Penetrations)
TS 3.9.7 (Fuel Handling Building Crane Travel)

The Technical Specification change is a result of a revised Fuel Handling Accident analysis. The new analysis determined that the current Technical Specifications may not be conservative for all scenarios. This proposed license amendment

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request provides new applicability and/or action language that includes load movements over irradiated fuel assemblies. Waterford 3 has implemented administrative controls, in accordance with NRC Administrative letter 98-10 (Referenced), to apply revised applicability until such time that the NRC completes its review and issues the revised Technical Specifications.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using the criteria in 10 CFR 50.92(c), and it has been determined that the changes involve no significant hazards consideration. The bases for these determinations are included in Attachment 1.

The proposed change does not include any new commitments.

Entergy requests approval of the proposed amendment by April 13, 2012. Once approved, the amendment shall be implemented within 90 days.

If you have any questions or require additional information, please contact William Steelman at 504-739-6685.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 13, 2011.

Sincerely,

A handwritten signature in black ink, appearing to be 'JAK/WJS/ssf', written in a cursive style.

JAK/WJS/ssf

Attachments:

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Proposed Technical Specification Changes (clean copy)

cc: Mr. Elmo E. Collins, Jr.
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

NRC Senior Resident Inspector
Waterford Steam Electric Station Unit 3
P.O. Box 822
Killona, LA 70066-0751

U. S. Nuclear Regulatory Commission
Attn: Mr. N. Kalyanam
Mail Stop O-07D1
Washington, DC 20555-0001

Attachment 1

W3F1-2010-0009

Analysis of Proposed Technical Specification Change

1.0 DESCRIPTION

This letter is a request to amend Operating License No. NPF-38 for Waterford Steam Electric Station, Unit 3 (Waterford 3).

The Technical Specification change is a result of a revised Fuel Handling Accident analysis. The new analysis determined that the current Technical Specifications may not be conservative for all scenarios. This proposed license amendment request provides new applicability and/or action language that includes load movements over irradiated fuel assemblies.

2.0 PROPOSED CHANGE

The proposed change will modify the following Technical Specifications (TS):

TS 3.3.3.1 (Radiation Monitoring Instrumentation)
TS 3.7.6.1 (Control Room Emergency Air Filtration System)
TS 3.7.6.3 (Control Room Air Temperature)
TS 3.7.6.4 (Control Room Air Temperature)
TS 3.8.1.2 (AC Sources)
TS 3.8.2.2 (DC Sources)
TS 3.8.3.2 (On Site Power Distribution)
TS 3.9.3 (Decay Time)
TS 3.9.4 (Containment Building Penetrations)
TS 3.9.7 (Fuel Handling Building Crane Travel)

This proposed change revises applicability and/or action wording regarding load movements over irradiated fuel assemblies in containment and in the fuel storage pool. Two examples are given for illustration purposes.

Control Room Filtration System Example:

LCO 3.7.6.1, Control Room Emergency Air Filtration System:

[Existing] MODES 1, 2, 3, 4, 5, and 6; During movement of irradiated fuel assemblies.

[New] MODES 1, 2, 3, 4, 5, and 6; During load movements with or over irradiated fuel assemblies.

Containment Example:

LCO 3.9.4, Containment Building Penetrations:

[Existing] During CORE ALTERATIONS or movement of irradiated fuel assemblies within the containment.

[New] During CORE ALTERATIONS or load movements with or over irradiated fuel assemblies within the containment.

Examples of load movements include movement of new fuel assemblies, irradiated fuel assemblies, and the dummy fuel assembly. The load movements do not include the movement of the spent fuel machine or refuel machine without loads attached. It also does not include load movements in containment when the reactor vessel head is still installed. Load movements also exclude suspended loads weighing less than the amount that would cause fuel pin failures (e.g. Section 4.0 Technical Analysis describes no fuel failure for loads weighing less than 1000 lbm based upon the 2000 lbm analysis for drops distributed over two assemblies).

3.0 BACKGROUND

The Waterford 3 Fuel Handling Accident (FHA) Analysis of Record (AOR) was performed by Combustion Engineering. The AOR documented fuel rod damage predicted to result from horizontal and vertical drop scenarios in the fuel storage pool and the reactor buildings. The AOR concluded that the failure of 60 fuel rods is the largest number of fuel rods that could fail from the worst postulated assembly drop.

It was identified that the FHA AOR did not include the weights of components such as Control Element Assemblies (CEA), neutron source, or handling grapples.

NUREG-0800 (Standard Review Plan) Section 15.7.4 Revision 1 (July 1981) states that fuel handling accidents include the dropping of a single fuel assembly and handling tool or of a heavy object onto other spent fuel assemblies. Updated Final Safety Analysis Report (UFSAR) Section 15.7.3.4.2.1 states that the failure of 60 fuel rods is the largest number of fuel rods that could fail from the worst postulated assembly drop. Regulatory Guide 1.183 (Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors) Appendix B states the number of fuel rods damaged during the accident should be based on a conservative analysis that considers the most limiting case. This analysis should consider parameters such as the weight of the dropped heavy load or the weight of a dropped fuel assembly (plus any attached handling grapples), the height of the drop, and the compression, torsion, and shear stresses on the irradiated fuel rods. Damage to adjacent fuel assemblies, if applicable (e.g., events over the reactor vessel), should be considered.

Since the regulatory information requires a conservative and complete dropped assembly analysis including any additional components that could add to the assembly weight, a new analysis was required to update the Waterford 3 FHA AOR.

4.0 TECHNICAL ANALYSIS

A new analysis was performed to update the Waterford 3 FHA AOR by Westinghouse. The new analysis used the same methodology as that contained in the original FHA analysis. This methodology was reviewed and approved by the NRC in NUREG-0787 Section 15.4.2 [Reference 7.6]. The Westinghouse calculation updated the predicted number of fuel pin failures for various fuel designs (Standard and High Density Fuel with OPTIN and/or ZIRLO cladding) and for various fuel bundle weight combinations (bundle / discretionary weight / grapple weight). The new analysis also analyzed cylindrical and cube object drops both weighing 2000 lbm. The 2000 lbm was selected based upon the Technical Specification 3.9.7 (Crane Travel) maximum load that is allowed to travel over irradiated fuel assemblies.

For the fuel bundle drop scenarios in the fuel storage pool and core locations, the results of the updated analysis predict that all the fuel pins in the dropped and impacted fuel assemblies are predicted to fail (472 pins or 236 per assembly). For the object drop scenarios, the maximum number of fuel pins predicted to fail is 236 (one assembly). For the 2000 lbm object drop scenarios where the load is distributed over two assemblies, no fuel pin failures are predicted to occur. This information was used to provide the lower weight limit applicability for the suspended loads over irradiated fuel assemblies. Based upon the analysis inputs and results, the current Technical Specifications do not contain all the necessary applicability requirements because they are not applicable when moving non-irradiated fuel or other loads. Revising the applicability and/or actions will ensure plant safety during all required load movements over irradiated fuel.

The new analysis results mean that a dropped irradiated fuel assembly could result in 472 irradiated fuel pins failing and a new assembly drop could result in 236 irradiated fuel pins failing. Both of these failure rates are above the current AOR value of 60 pins. The dose results demonstrate that the doses will increase by more than 10% of the difference between the current AOR results and the regulatory limit. Per plant procedure [Reference 7.7] and NEI 96-07 guidance [7.8], this radiological dose increase requires NRC approval.

The revised dose calculation was performed using the same methodology that was approved in the NRC Waterford 3 Alternate Source Term (AST) Safety Evaluation Report (SER) [Reference 7.9]. The dose consequences due to failure of two assemblies will be the new licensing basis and will replace the dose consequences due to 60 rods failure. These dose consequences due to failure of two assemblies remain within the Regulatory Guide 1.183 [Reference 7.4] and 10CFR50.67 acceptance criteria limits. The Exclusion Area Boundary (EAB), Low Population Zone (LPZ), and Main Control Room (MCR) dose results are presented below.

	AOR	New Analysis	Regulatory Guide 1.183 Limit	10CFR50.67 Limit
EAB	0.58 rem TEDE	4.56 rem TEDE	<6.3 rem TEDE	<25 rem TEDE
LPZ	0.089 rem TEDE	0.70 rem TEDE	<6.3 rem TEDE	<25 rem TEDE
MCR	0.105 rem TEDE	0.824 rem TEDE	<5 rem TEDE	<5 rem TEDE

5.0 REGULATORY ANALYSIS

5.1 Applicable Regulatory Requirements/Criteria

In general, Technical Specifications are based upon the accident analyses. The accident analyses assumptions and initial conditions must be protected by the Technical Specifications. This is a requirement as outlined in 10CFR50.36.

10CFR50.36(b) states the technical specifications will be derived from the analyses and evaluation included in the safety analysis report.

10CFR50.36(2)(ii) states a technical specification limiting conditions for operation of a nuclear reactor must be established for each item meeting one or more of the following criteria:

(B) Criterion 2. A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumed the failure of or presents a challenge to the integrity of a fission product barrier.

Regulatory Issue Summary 01-019 (Deficiencies in the Documentation of Design Basis Radiological Analyses Submitted in Conjunction with License Amendment Requests) [Reference 7.10] states that the NRC staff generally does not accept analyses that credit plant features that (a) are not safety-related, (b) are not covered by technical specifications, (c) do not meet single-failure criteria, or (d) rely on the availability of offsite power unless the assumptions were previously accepted by the NRC in a site-specific licensing action and are therefore part of the facility design basis.

The Waterford 3 licensing basis states that the FHA included dropping of a single fuel assembly and handling tool or a heavy object onto other spent fuel assemblies. This is listed in the NRC SER for AST, Regulatory Guide 1.183, and NUREG-0800.

NRC Waterford 3 AST SER explicitly stated that the Waterford 3 FHA was performed using the guidance of Regulatory Guide 1.183. The SER stated the FHA includes dropping of a single fuel assembly and handling tool or a heavy object onto other spent fuel assemblies.

Regulatory Guide 1.183 (Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors) Appendix B

states the number of fuel rods damaged during the accident should be based on a conservative analysis that considers the most limiting case. This analysis should consider parameters such as the weight of the dropped heavy load or the weight of a dropped fuel assembly (plus any attached handling grapples), the height of the drop, and the compression, torsion, and shear stresses on the irradiated fuel rods. Damage to adjacent fuel assemblies, if applicable (e.g., events over the reactor vessel), should be considered.

NUREG-0800 (Standard Review Plan) Section 15.7.4 Revision 1 (July 1981) states that fuel handling accidents include the dropping of a single fuel assembly and handling tool or of a heavy object onto to other spent fuel assemblies.

Updated Final Safety Analysis Report (UFSAR) Section 15.7.3.4.2.1 states that the failure of 60 fuel rods is the largest number of fuel rods that could fail from the worst postulated assembly drop.

The regulatory requirements do not differentiate whether the dropped fuel assembly is irradiated or new. It also lists a dropped heavy load which a new fuel assembly could be considered. The AOR did not include the fuel handling tool, control element assembly, or other heavy loads. The revised FHA analysis following the Regulatory Guide 1.183 requirements results in both the dropped and impacted fuel assemblies failing. The current Technical Specifications only require Limiting Conditions for Operations (LCO) applicability during the movement of irradiated assemblies. Since, dropping of a new fuel assembly, dummy assembly, or other load onto an irradiated fuel assembly can cause a similar radiological release, the current Technical Specifications do not cover all applicability requirements.

In conclusion, Waterford 3 has determined that the proposed change does not require any exemptions or relief from regulatory requirements and does not affect conformance with any GDC differently than described in the Updated Final Safety Analysis Report (UFSAR).

5.2 No Significant Hazards Consideration

Waterford 3 has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

This proposed change revises Technical Specifications applicability wording regarding the movement of fuel assemblies in containment and the fuel storage pool to include load movements over irradiated fuel assemblies. The proposed applicability is more comprehensive than the current Applicability. This change was driven by an analysis change and was not due to fuel handling equipment or fuel movement methods.

Expanding the applicability of the relevant Technical Specifications is necessary to account for updated fuel drop analyses which demonstrate that the impacted spent fuel assemblies may be damaged. Consequently, dropping of a non-irradiated fuel assembly, dummy fuel assembly, or other load could result in a Fuel Handling Accident that has radiological consequences. Changing the applicability of the relevant Technical Specifications does not affect the probability of a Fuel Handling Accident. The expanded applicability provides assurance that equipment designed to mitigate a Fuel Handling Accident is capable of performing its specified safety function.

The dose consequences due to failure of two assemblies remain within the Regulatory Guide 1.183 and 10CFR50.67 acceptance criteria limits. The Exclusion Area Boundary (EAB), Low Population Zone (LPZ), and Main Control Room (MCR) dose results and associated regulatory limits are presented below.

	New Analysis	Regulatory Guide 1.183 Limit	10CFR50.67 Limit
EAB	4.56 rem TEDE	<6.3 rem TEDE	<25 rem TEDE
LPZ	0.70 rem TEDE	<6.3 rem TEDE	<25 rem TEDE
MCR	0.824 rem TEDE	<5 rem TEDE	<5 rem TEDE

Consequently, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The revised spent fuel handling analyses demonstrate that the impacted fuel assemblies may be damaged as the result of a dropped fuel assembly, dummy assembly, or load. The existing Technical Specifications regarding movement of fuel assemblies are not applicable for movement of non-irradiated fuel assemblies or other loads. A drop of these loads could cause radiological consequences during periods when the equipment required to mitigate those consequences is not required to be OPERABLE in accordance with the existing Technical Specifications.

The proposed changes to the Technical Specifications applicability language regarding the movement of these loads in containment and the fuel storage pool ensure that Limiting Conditions of Operation and appropriate Required Actions for required equipment are in effect during fuel movement. This provides assurance that the Fuel Handling Accident will remain within the initial assumptions of accident analyses.

Consequently, there is no possibility of a new or different kind of accident due to this change.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed Technical Specifications change will not affect protection criterion for plant equipment and will not reduce the margin of safety. By extending the Applicability to the movement of non-irradiated fuel assemblies, the current margin of safety is maintained.

Consequently, there is no significant reduction in a margin of safety due to this change.

5.3 Environmental Considerations

The proposed amendment does not change any requirements with respect to the installation of or use of a facility component located within the restricted area, as defined in 10 CFR 20, or change any inspection or surveillance requirement. The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amount of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22 (c) (9). Therefore, pursuant to 10 CFR 51.22 (b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 PRECEDENCE

San Onofre Nuclear Generating Station (SONGS) submittal [ADAMS ML100210200] identified a similar condition and associated Technical Specification changes.

7.0 REFERENCES

- 7.1 Technical Specifications.
- 7.2 Updated Final Safety Analysis Report (UFSAR).
- 7.3 NUREG-0800 (Standard Review Plan).
- 7.4 Regulatory Guide 1.183, Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors.
- 7.5 San Onofre Nuclear Generating Station, Amendment Applications 258 and 244 Technical Specifications Applicable to Movement of Fuel Assemblies, January 14, 2010 [ADAMS ML100210200].
- 7.6 NUREG-0787, Waterford 3 Safety Evaluation Report, July 1981.
- 7.7 EN-LI-101 Revision 7, 10CFR50.59 Evaluations.
- 7.8 NEI 96-07 Revision 1, Guidelines for 10CFR50.59 Implementation, November 2000.
- 7.9 NRC Safety Evaluation Report, Waterford 3 FULL-SCOPE IMPLEMENTATION OF AN ALTERNATIVE ACCIDENT SOURCE TERM, March 29, 2005 [ADAMS Number ML050890248].
- 7.10 Regulatory Issue Summary 01-019, Deficiencies in the Documentation of Design Basis Radiological Analyses Submitted in Conjunction with License Amendment Requests.
- 7.11 NRC ISSUANCE OF AMENDMENT RE: EXTENDED POWER UPRATE, April 15, 2005.

Attachment 2

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Proposed Technical Specification Changes (mark-up)

TABLE 3.3-6
RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>MEASUREMENT RANGE</u>	<u>ACTION</u>
1. AREA MONITORS					
a. Deleted					
b. Containment - Purge & Exhaust Isolation	1/train	1, 2, 3, 4 & **	40 mR/h or ≤ 2x background whichever is Higher	20 - 5x10 ⁵ mR/h	25
2. PROCESS MONITORS					
a. DELETED					
b. Control Room Intake Monitors	1/intake	ALL MODES & ***	≤ 5.45x10 ⁻⁶ μCi/cc	10 ⁻⁸ - 10 ⁻² μCi/cc	28
c. Steam Generator Blowdown Monitor	1	1, 2, 3, & 4	≤ 10 ⁻³ μCi/cc	10 ⁻⁶ - 10 ⁻¹ μCi/cc	28
d. Component Cooling Water Monitors A&B	1/line	ALL MODES	≤ 10 ⁻⁴ μCi/cc	10 ⁻⁷ - 10 ⁻² μCi/cc	28
e. Component Cooling Water Monitor A/B	1	1, 2, 3, & 4	≤ 10 ⁻⁴ μCi/cc	10 ⁻⁷ - 10 ⁻² μCi/cc	28

*Deleted

**During CORE ALTERATIONS or load movements with or overf irradiated fuel within the containment.

***During load movements with or overf irradiated fuel.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. AREA MONITORS				
a. Deleted				
b. Containment - Purge & Exhaust Isolation	S	R	Q	1, 2, 3, 4 & ""
2. PROCESS MONITORS				
a. DELETED				
b. Control Room Intake Monitors	S	R	Q	ALL MODES & ""
c. Steam Generator Blowdown	S	R	Q	1, 2, 3, & 4
d. Component Cooling Water Monitors A&B	S	R	Q	ALL MODES
e. Component Cooling Water Monitor A/B	S	R	Q	1, 2, 3, & 4

*Deleted

**During CORE ALTERATIONS or load movements with or overf irradiated fuel within the containment.

***During load movements with or overf irradiated fuel.

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM AIR CONDITIONING SYSTEM

CONTROL ROOM EMERGENCY AIR FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 Two control room emergency air filtration trains (S-8) shall be OPERABLE. (Note 1)

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6
During load movements with or over irradiated fuel assemblies.

ACTION:

- a. With one control room emergency air filtration train inoperable for reasons other than ACTION b, restore the inoperable train to OPERABLE status within 7 days.
- b. With one or more control room emergency air filtration trains inoperable due to inoperable control room envelope boundary in MODES 1, 2, 3, or 4, then perform the following:
 1. Immediately initiate action to implement mitigating actions; and
 2. Within 24 hours, verify mitigating actions ensure control room envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits; and
 3. Within 90 days, restore the control room envelope boundary to OPERABLE status.
- c. If the required ACTION and associated allowable outage times of ACTION a or b are not met in MODES 1, 2, 3, or 4, then be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. If the required ACTION and the associated allowable outage time of ACTION a is not met in MODES 5 or 6, or during load movements with or over irradiated fuel assemblies, then perform the following:
 1. Immediately place OPERABLE control room emergency air filtration train in emergency radiation protection mode (or toxic gas protection mode if automatic transfer to toxic gas protection mode is inoperable); or
 2. Immediately suspend load movements with or over irradiated fuel assemblies and operations involving CORE ALTERATIONS.

PLANT SYSTEMS

ACTION (Continued):

- e. With one or more control room emergency air filtration trains inoperable due to an inoperable control room envelope boundary in MODES 5 or 6, or during load movements with or overf irradiated fuel assemblies, immediately suspend load movements with or overf irradiated fuel assemblies and operations involving CORE ALTERATIONS.
- f. With two control room emergency air filtration trains inoperable in MODES 1, 2, 3, or 4 for reasons other than ACTION b, immediately enter LCO 3.0.3.
- g. With two control room emergency air filtration trains inoperable in MODES 5 and 6 or during load movements with or overf irradiated fuel assemblies, immediately suspend load movements with or overf irradiated fuel assemblies and operations involving CORE ALTERATIONS.

SURVEILLANCE REQUIREMENTS

- 4.7.6.1 Each control room air filtration train (S-8) shall be demonstrated OPERABLE:
- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heaters on.
 - b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 - 1. Verifying that the filtration train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4225 cfm \pm 10%.

Note 1: The control room envelope (CRE) boundary may be opened intermittently under administrative control.

PLANT SYSTEMS

CONTROL ROOM AIR TEMPERATURE - OPERATING

LIMITING CONDITION FOR OPERATION

3.7.6.3 Two independent control room air conditioning units shall be OPERABLE.

APPLICABILITY^{*}: MODES 1, 2, 3, and 4.

ACTION:

- a. With one control room air conditioning unit inoperable, restore the inoperable unit to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With two control room air conditioning units inoperable, return one unit to an OPERABLE status within 1 hour or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.6.3 Each control room air conditioning unit shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the operating control room air conditioning unit is maintaining average control room air temperature less than or equal to 80°F.
- b. At least quarterly, if not performed within the last quarter, by verifying that each control room air conditioning unit starts and operates for at least 15 minutes.

^{*}During load movements with or over irradiated fuel assemblies, TS 3.7.6.4 is also applicable. |

PLANT SYSTEMS

CONTROL ROOM AIR TEMPERATURE - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.7.6.4 Two independent control room air conditioning units shall be OPERABLE.

APPLICABILITY: MODES 5 and 6, and during load movements with or over irradiated fuel assemblies.

ACTION:

- a. With one control room air conditioning unit inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE control room air conditioning unit.
- b. With both control room air conditioning units inoperable, or with the OPERABLE control room air conditioning unit, required to be in operation by ACTION a, not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS and load movements with or over irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.6.4 The control room air conditioning units shall be demonstrated OPERABLE per the Surveillance Requirements of 4.7.6.3.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. One diesel generator with:
 1. A diesel oil feed tank containing a minimum volume of 339 gallons of fuel, and
 2. The diesel fuel oil storage tanks, and
 3. A fuel transfer pump.

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration, or load movements with or overf irradiated fuel, or crane operation with loads over the fuel storage pool. In addition, when in MODE 5 with the reactor coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the top of the fuel seated in the reactor pressure vessel, immediately initiate corrective action to restore the required sources to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the Surveillance Requirements of 4.8.1.1.1 and 4.8.1.1.2 (except for Surveillance Requirement 4.8.1.1.2a.5.)

ELECTRICAL POWER SYSTEMS

D.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, one 125-volt battery bank (3A-S or 3B-S) and one associated full capacity charger shall be OPERABLE.

APPLICABILITY: MODES 5 and 6.

ACTION:

- a. With the required battery bank inoperable, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration or load movements with or over irradiated fuel; initiate corrective action to restore the required battery bank to OPERABLE status as soon as possible.
- b. With the required full capacity charger inoperable, demonstrate the OPERABILITY of its associated battery bank by performing Surveillance Requirement 4.8.2.1a.1. within 1 hour, and at least once per 8 hours thereafter. If any Category A limit in Table 4.8-2 is not met, declare the battery inoperable.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The above required 125-volt battery bank and charger shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.1.

ELECTRICAL POWER SYSTEMS

ONSITE POWER DISTRIBUTION

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following electrical busses shall be energized in the specified manner:

- a. One division of A.C. ESF busses consisting of one 4160 volt and one 480-volt A.C. ESF bus (3A3-S and 3A31-S or 3B3-S and 3B31-S).
- b. Two 120-volt A.C. SUPS busses energized from their associated inverters connected to their respective D.C. busses (3MA-S, 3MB-S, 3MC-S, or 3MD-S).
- c. One 120-volt A.C. SUPS Bus (3A-S or 3B-S) energized from its associated inverter connected to its respective D.C. bus.
- d. One 125-volt D.C. bus (3A-DC-S or 3B-DC-S) connected to its associated battery bank.

APPLICABILITY: MODES 5 and 6.

ACTION:

With any of the above required electrical busses not energized in the required manner, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration, or load movements with or over irradiated fuel, initiate corrective action to energize the required electrical busses in the specified manner as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.3.2 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

REFUELING OPERATIONS

3/4 9.3 DECAY TIME

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for at least 72 hours.

APPLICABILITY: During load movements with or over irradiated fuel in the reactor pressure vessel.

ACTION:

With the reactor subcritical for less than 72 hours, suspend all operations involving load movements with or over irradiated fuel in the reactor pressure vessel.

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least 72 hours by verification of the date and time of subcriticality prior to load movements with or over irradiated fuel in the reactor pressure vessel.

REFUELING OPERATIONS

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.9.4 The containment building penetrations shall be in the following status:

- a. The equipment door is closed,
- b. A minimum of one door in each airlock is capable of being closed, and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
 1. Closed by a manual or automatic isolation valve, blind flange, or equivalent, or
 2. Capable of being closed by an OPERABLE containment purge and exhaust isolation system.

Note: Penetration flow path(s) described in a, b, and c above, that provides direct access from the containment atmosphere to the outside atmosphere may be unisolated under administrative controls.

APPLICABILITY: During CORE ALTERATIONS or load movements with or over irradiated fuel within the containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or load movements with or over irradiated fuel in the containment building.

SURVEILLANCE REQUIREMENTS

4.9.4.1 Verify each required containment penetration is in the required status prior to the start of and once per 7 days during CORE ALTERATIONS or load movements with or over irradiated fuel within containment.

4.9.4.2 Verify each required containment purge and exhaust valve actuates to the isolation position on an actual or simulated actuation signal 72 hours prior to performing initial CORE ALTERATIONS or load movements with or over irradiated fuel within containment.

NOTE - SR 4.9.4.2 is not required to be met for containment purge and exhaust valve(s) in penetrations closed to comply with LCO 3.9.4.c.1.

REFUELING OPERATIONS

3.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING

LIMITING CONDITION FOR OPERATION

3.9.7 Cranes in the fuel handling building shall be restricted as follows:

- a. The spent fuel handling machine shall be used* for the movement of fuel assemblies (with or without CEAs) and shall be OPERABLE with:
 - 1. A minimum hoist capacity of 1800 pounds, and
 - 2. An overload cutoff limit of less than or equal to 1900 pounds, and,
- b. Loads in excess of 2000 pounds shall be prohibited from travel over irradiated fuel assemblies in the Fuel Handling Building, except over assemblies in a transfer cask using a single-failure-proof handling system.

APPLICABILITY: ~~During movement of irradiated fuel assemblies in the fuel handling building, or~~
With irradiated fuel assemblies in the Fuel Handling Building.

ACTION:

- a. With the spent fuel handling machine inoperable, suspend the use of the spent fuel handling machine for movement of fuel assemblies and place the crane load in a safe position.
- b. With loads in excess of 2000 pounds over irradiated fuel assemblies in the Fuel Handling Building, except over assemblies in a transfer cask using a single-failure-proof handling system, place the crane load in a safe position.
- c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.7.1 The spent fuel handling machine shall be demonstrated OPERABLE within 72 hours prior to the start of fuel assembly movement and at least once per 7 days thereafter by performing a load test of at least 1800 pounds and demonstrating the automatic load cutoff when the hoist load exceeds 1900 pounds.

4.9.7.2 The electrical interlock system which prevents crane main hook travel over irradiated fuel assemblies in the Fuel Handling Building, except over assemblies in a transfer cask using a single-failure-proof handling system, shall be demonstrated OPERABLE within 7 days prior to crane use and at least once per 7 days thereafter during crane operation.

4.9.7.3 Administrative controls which prevent crane auxiliary hook travel with loads in excess of 2000 pounds over the irradiated fuel assemblies in the Fuel Handling Building, including over assemblies in a transfer cask, shall be enforced during crane operations.

*Not required for movement of new fuel assemblies outside the spent fuel pool and Cask Storage Pit.

Attachment 3

W3F1-2010-0009

Proposed Technical Specification Changes (clean copy)

Note: Letter and page numbers are not included on the clean pages. This attachment contains 12 pages.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>MEASUREMENT RANGE</u>	<u>ACTION</u>
1. AREA MONITORS					
a. Deleted					
b. Containment - Purge & Exhaust Isolation	1/train	1, 2, 3, 4 & **	40 mR/h or ≤ 2x background whichever is Higher	20 - 5x10 ⁵ mR/h	25
2. PROCESS MONITORS					
a. DELETED					
b. Control Room Intake Monitors	1/intake	ALL MODES & ***	≤ 5.45x10 ⁻⁶ μCi/cc	10 ⁻⁸ - 10 ⁻² μCi/cc	26
c. Steam Generator Blowdown Monitor	1	1, 2, 3, & 4	≤ 10 ⁻³ μCi/cc	10 ⁻⁶ - 10 ⁻¹ μCi/cc	28
d. Component Cooling Water Monitors A&B	1/line	ALL MODES	≤ 10 ⁻⁴ μCi/cc	10 ⁻⁷ - 10 ⁻² μCi/cc	28
e. Component Cooling Water Monitor A/B	1	1, 2, 3, & 4	≤ 10 ⁻⁴ μCi/cc	10 ⁻⁷ - 10 ⁻² μCi/cc	28

*Deleted

**During CORE ALTERATIONS or load movements with or over irradiated fuel within the containment.

***During load movements with or over irradiated fuel.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. AREA MONITORS				
a. Deleted				
b. Containment - Purge & Exhaust Isolation	S	R	Q	1, 2, 3, 4 & **
2. PROCESS MONITORS				
a. DELETED				
b. Control Room Intake Monitors	S	R	Q	ALL MODES & ***
c. Steam Generator Blowdown	S	R	Q	1, 2, 3, & 4
d. Component Cooling Water Monitors A&B	S	R	Q	ALL MODES
e. Component Cooling Water Monitor A/B	S	R	Q	1, 2, 3, & 4

*Deleted

**During CORE ALTERATIONS or load movements with or over irradiated fuel within the containment.

***During load movements with or over irradiated fuel.

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM AIR CONDITIONING SYSTEM

CONTROL ROOM EMERGENCY AIR FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 Two control room emergency air filtration trains (S-8) shall be OPERABLE. (Note 1)

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6
During load movements with or over irradiated fuel assemblies. |

ACTION:

- a. With one control room emergency air filtration train inoperable for reasons other than ACTION b, restore the inoperable train to OPERABLE status within 7 days.
- b. With one or more control room emergency air filtration trains inoperable due to inoperable control room envelope boundary in MODES 1, 2, 3, or 4, then perform the following:
 - 1. Immediately initiate action to implement mitigating actions; and
 - 2. Within 24 hours, verify mitigating actions ensure control room envelope occupant exposures to radiological, chemical, and smoke hazards will not exceed limits; and
 - 3. Within 90 days, restore the control room envelope boundary to OPERABLE status.
- c. If the required ACTION and associated allowable outage times of ACTION a or b are not met in MODES 1, 2, 3, or 4, then be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. If the required ACTION and the associated allowable outage time of ACTION a is not met in MODES 5 or 6, or during load movements with or over irradiated fuel assemblies, then perform the following: |
 - 1. Immediately place OPERABLE control room emergency air filtration train in emergency radiation protection mode (or toxic gas protection mode if automatic transfer to toxic gas protection mode is inoperable); or
 - 2. Immediately suspend load movements with or over irradiated fuel assemblies and operations involving CORE ALTERATIONS. |

PLANT SYSTEMS

ACTION (Continued):

- e. With one or more control room emergency air filtration trains inoperable due to an inoperable control room envelope boundary in MODES 5 or 6, or during load movements with or over irradiated fuel assemblies, immediately suspend load movements with or over irradiated fuel assemblies and operations involving CORE ALTERATIONS.
- f. With two control room emergency air filtration trains inoperable in MODES 1, 2, 3, or 4 for reasons other than ACTION b, immediately enter LCO 3.0.3.
- g. With two control room emergency air filtration trains inoperable in MODES 5 and 6 or during load movements with or over irradiated fuel assemblies, immediately suspend load movements with or over irradiated fuel assemblies and operations involving CORE ALTERATIONS.

SURVEILLANCE REQUIREMENTS

4.7.6.1 Each control room air filtration train (S-8) shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heaters on.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 - 1. Verifying that the filtration train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4225 cfm \pm 10%.

Note 1: The control room envelope (CRE) boundary may be opened intermittently under administrative control.

PLANT SYSTEMS

CONTROL ROOM AIR TEMPERATURE - OPERATING

LIMITING CONDITION FOR OPERATION

3.7.6.3 Two independent control room air conditioning units shall be OPERABLE.

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

ACTION:

- a. With one control room air conditioning unit inoperable, restore the inoperable unit to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With two control room air conditioning units inoperable, return one unit to an OPERABLE status within 1 hour or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.6.3 Each control room air conditioning unit shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the operating control room air conditioning unit is maintaining average control room air temperature less than or equal to 80°F.
- b. At least quarterly, if not performed within the last quarter, by verifying that each control room air conditioning unit starts and operates for at least 15 minutes.

*During load movements with or over irradiated fuel assemblies, TS 3.7.6.4 is also applicable. |

PLANT SYSTEMS

CONTROL ROOM AIR TEMPERATURE - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.7.6.4 Two independent control room air conditioning units shall be OPERABLE.

APPLICABILITY: MODES 5 and 6, and during load movements with or over irradiated fuel assemblies. |

ACTION:

- a. With one control room air conditioning unit inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE control room air conditioning unit.
- b. With both control room air conditioning units inoperable, or with the OPERABLE control room air conditioning unit, required to be in operation by ACTION a, not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS and load movements with or over irradiated fuel assemblies. |

SURVEILLANCE REQUIREMENTS

4.7.6.4 The control room air conditioning units shall be demonstrated OPERABLE per the Surveillance Requirements of 4.7.6.3.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. One diesel generator with:
 1. A diesel oil feed tank containing a minimum volume of 339 gallons of fuel, and
 2. The diesel fuel oil storage tanks, and
 3. A fuel transfer pump.

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration, or load movements with or over irradiated fuel. In addition, when in MODE 5 with the reactor coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the top of the fuel seated in the reactor pressure vessel, immediately initiate corrective action to restore the required sources to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the Surveillance Requirements of 4.8.1.1.1 and 4.8.1.1.2 (except for Surveillance Requirement 4.8.1.1.2a.5.)

ELECTRICAL POWER SYSTEMS

D.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, one 125-volt battery bank (3A-S or 3B-S) and one associated full capacity charger shall be OPERABLE.

APPLICABILITY: MODES 5 and 6.

ACTION:

- a. With the required battery bank inoperable, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration or load movements with or over irradiated fuel; initiate corrective action to restore the required battery bank to OPERABLE status as soon as possible.
- b. With the required full capacity charger inoperable, demonstrate the OPERABILITY of its associated battery bank by performing Surveillance Requirement 4.8.2.1a.1. within 1 hour, and at least once per 8 hours thereafter. If any Category A limit in Table 4.8-2 is not met, declare the battery inoperable.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The above required 125-volt battery bank and charger shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.1.

ELECTRICAL POWER SYSTEMS

ONSITE POWER DISTRIBUTION

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following electrical busses shall be energized in the specified manner:

- a. One division of A.C. ESF busses consisting of one 4160 volt and one 480-volt A.C. ESF bus (3A3-S and 3A31-S or 3B3-S and 3B31-S).
- b. Two 120-volt A.C. SUPS busses energized from their associated inverters connected to their respective D.C. busses (3MA-S, 3MB-S, 3MC-S, or 3MD-S).
- c. One 120-volt A.C. SUPS Bus (3A-S or 3B-S) energized from its associated inverter connected to its respective D.C. bus.
- d. One 125-volt D.C. bus (3A-DC-S or 3B-DC-S) connected to its associated battery bank.

APPLICABILITY: MODES 5 and 6.

ACTION:

With any of the above required electrical busses not energized in the required manner, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration, or load movements with or over irradiated fuel, initiate corrective action to energize the required electrical busses in the specified manner as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.3.2 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

REFUELING OPERATIONS

3/4.9.3 DECAF TIME

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for at least 72 hours.

APPLICABILITY: During load movements with or over irradiated fuel in the reactor pressure vessel. |

ACTION:

With the reactor subcritical for less than 72 hours, suspend all operations involving load movements with or over irradiated fuel in the reactor pressure vessel. |

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least 72 hours by verification of the date and time of subcriticality prior to load movements with or over irradiated fuel in the reactor pressure vessel. |

REFUELING OPERATIONS

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.9.4 The containment building penetrations shall be in the following status:

- a. The equipment door is closed,
- b. A minimum of one door in each airlock is capable of being closed, and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
 1. Closed by a manual or automatic isolation valve, blind flange, or equivalent, or
 2. Capable of being closed by an OPERABLE containment purge and exhaust isolation system.

Note: Penetration flow path(s) described in a, b, and c above, that provides direct access from the containment atmosphere to the outside atmosphere may be unisolated under administrative controls.

APPLICABILITY: During CORE ALTERATIONS or load movements with or over irradiated fuel within the containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or load movements with or over irradiated fuel in the containment building.

SURVEILLANCE REQUIREMENTS

4.9.4.1 Verify each required containment penetration is in the required status prior to the start of and once per 7 days during CORE ALTERATIONS or load movements with or over irradiated fuel within containment.

4.9.4.2 Verify each required containment purge and exhaust valve actuates to the isolation position on an actual or simulated actuation signal 72 hours prior to performing initial CORE ALTERATIONS or load movements with or over irradiated fuel within containment.

NOTE - SR 4.9.4.2 is not required to be met for containment purge and exhaust valve(s) in penetrations closed to comply with LCO 3.9.4.c.1.

REFUELING OPERATIONS

3/4.9.7 CRANE TRAVEL - FUEL HANDLING BUILDING

LIMITING CONDITION FOR OPERATION

3.9.7 Cranes in the fuel handling building shall be restricted as follows:

- a. The spent fuel handling machine shall be used* for the movement of fuel assemblies (with or without CEAs) and shall be OPERABLE with:
 - 1. A minimum hoist capacity of 1800 pounds, and
 - 2. An overload cutoff limit of less than or equal to 1900 pounds, and,
- b. Loads in excess of 2000 pounds shall be prohibited from travel over irradiated fuel assemblies in the Fuel Handling Building, except over assemblies in a transfer cask using a single-failure-proof handling system.

APPLICABILITY: With irradiated fuel assemblies in the Fuel Handling Building. |

ACTION:

- a. With the spent fuel handling machine inoperable, suspend the use of the spent fuel handling machine for movement of fuel assemblies and place the crane load in a safe position.
- b. With loads in excess of 2000 pounds over irradiated fuel assemblies in the Fuel Handling Building, except over assemblies in a transfer cask using a single-failure-proof handling system, place the crane load in a safe position.
- c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.7.1 The spent fuel handling machine shall be demonstrated OPERABLE within 72 hours prior to the start of fuel assembly movement and at least once per 7 days thereafter by performing a load test of at least 1800 pounds and demonstrating the automatic load cutoff when the hoist load exceeds 1900 pounds.

4.9.7.2 The electrical interlock system which prevents crane main hook travel over irradiated fuel assemblies in the Fuel Handling Building, except over assemblies in a transfer cask using a single-failure-proof handling system, shall be demonstrated OPERABLE within 7 days prior to crane use and at least once per 7 days thereafter during crane operation.

4.9.7.3 Administrative controls which prevent crane auxiliary hook travel with loads in excess of 2000 pounds over the irradiated fuel assemblies in the Fuel Handling Building, including over assemblies in a transfer cask, shall be enforced during crane operations.

*Not required for movement of new fuel assemblies outside the spent fuel pool and Cask Storage Pit.