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Plant Licensing

GNRO-2005/00023

April 27, 2005

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

Subject: Report of 10CFR50.59 Safety Evaluations and  
Commitment Changes – April 01, 2004 through March 31, 2005  
Grand Gulf Nuclear Station  
Docket No. 50-416  
License No. NPF-29

Ladies and Gentlemen:

Pursuant to 10CFR50.59(d)(2), Entergy Operations, Inc. hereby submits the summary of 10CFR50.59 evaluations for the April 01, 2004 through March 31, 2005 period. Also attached is the summary of commitment changes for the same period made in accordance with NEI 95-07 Guidelines.

If you have any questions or require additional information, please contact Chuck Holifield at 601-437-6439.

This letter contains no commitments.

Yours truly,

A handwritten signature in black ink, appearing to be "CAB", written over a horizontal line.

CAB/CDH;cdh

attachments: 1. Table of Contents  
2. 10CFR50.59 Evaluations and Commitment Change  
Evaluations  
cc: (See Next Page)

April 27, 2005  
GNRO-2005/00023  
Page 2 of 3

cc:	Miller	G. B.	(GGNS Senior Resident)	(w/a)
	Levanway	D. E.	(Wise Carter)	(w/a)
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U.S. Nuclear Regulatory Commission  
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Washington, D. C. 20555-0001

**ATTACHMENT 1**  
**TABLE OF CONTENTS**  
**GRAND GULF NUCLEAR STATION**  
**10CFR50.59 SUMMARY REPORT FOR THE PERIOD**  
**STARTING APRIL 01, 2004 AND ENDING MARCH 31, 2005**

Page 1 of 3

<b>MEANING OF ACRONYMS</b>			
ARI	Alarm Response Instruction	LOP	Loss of Power
ASTM	American Society for Testing and Materials	MAPLHGR	Maximum Average Planar Linear Heat Generation Rate
CCE	Commitment Change Evaluation	MCPR	Minimum Critical Power Ratio
CMWT	Core Megawatts Thermal	MNCR	Material Nonconformance Report
CR	Condition Report	MOV	Motor Operated Valve
DCP	Design Change Package	MS	Mechanical Standard
EP	Emergency Procedure	MSIV-LCS	Main Steam Isolation Valve Leakage Control System
EPI	Equipment Performance Instruction	NPE	Nuclear Plant Engineering
EPRI	Electric Power Research Institute	NSSS	Nuclear Steam Supply System
ER	Engineering Request	PDMS	Plant Data Management System
ES	Electrical Standard	PPM	Parts Per Million
ESF	Engineered Safety Feature	PRA	Probabilistic Risk Assessment
GE	General Electric	PSW	Plant Service Water
GG	Grand Gulf	RCIC	Reactor Core Isolation Cooling
GGN	Grand Gulf Nuclear	RFO	Refueling Outage
GPM	Gallons Per Minute	RHR	Residual Heat Removal
IOI	Integrated Operating Instruction	RPV	Reactor Pressure Vessel
ISI	In Service Inspection	SCN	Standard Change Notice
IST	In Service Testing	SERI	System Energy Resources, Inc.
LBDC	License Basis Document Change	SGTS	Standby Gas Treatment System
LDC	License Document Change	SOER	Significant Operating Experience Report
LHGR	Linear Heat Generation Rate	SSW	Standby Service Water
LLRT	Local Leak Rate Test	TRM	Technical Requirements Manual
LOCA	Loss of Coolant Accident	UHS	Ultimate Heat Sink

**ATTACHMENT 1**  
TABLE OF CONTENTS  
GRAND GULF NUCLEAR STATION  
10CFR50.59 SUMMARY REPORT FOR THE PERIOD  
STARTING APRIL 01, 2004 AND ENDING MARCH 31, 2005

Page 2 of 3

**SAFETY EVALUATIONS**

<b>Evaluation No.</b>	<b>Initiating Document</b>	<b>Summary</b>
SE 2004-0003-R00	LBDC 2003-025	GGNS ODCM Rev. 27 – modification of required actions of condition F under TRM/ODCM LCO 6.3.10 and revises the TS bases for SR 3.7.5.1
SE 2004-0004-R00	ER-GG-2003-0234	One time extension of the 10 year inspection of the EDG fuel oil storage tank to (SR TR 3.8.3.6)
SE 2004-0005-R00	ER-2004-0138-000	Reclassification of the containment isolation provisions for the RCIC steam turbine exhaust containment penetration (penetration 29)
SE 2004-0006-R00	ER-2003-0261-000	Evaluation of removing requirements for the automatic isolation function of specific secondary containment isolation valves
SE 2005-0001-R00	STI-GG-2005-0001-00	STI for determining the Control Room in-leakage to support NRC Generic Letter 2003-001 and quantify in-leakage in normal and isolate modes

**GGNS Commitment Change Evaluation  
Number**

**CCE 2004-001**

**ATTACHMENT 1**  
TABLE OF CONTENTS  
GRAND GULF NUCLEAR STATION  
10CFR50.59 SUMMARY REPORT FOR THE PERIOD  
STARTING APRIL 01, 2004 AND ENDING MARCH 31, 2005

Page 3 of 3

**COMMITMENT CHANGE EVALUATIONS**

<b>Commitment No.</b>	<b>Source Document</b>	<b>Summary</b>
CCE 2004-0001	AECM-90/0156	NSSS key vendor list and contact process change
CCE 2004-0002	AECM-90/0007	Change to thermal performance testing of selected Air to Water Heat Exchangers
CCE 2004-0003	GNRO-2001/0020	Change to the plan to replace Appendix R fire barriers
CCE 2004-0004	SIL-108	Delete requirement to calibrate X-Y recorder because it is obsolete
CCE 2004-0005	AECM-87/0095; AECM-87/0169 Att.1, PG 22, 5.S4	Designate operator to insure closure of SSW blowdown line isolation valves when blowdown is in progress
CCE 2005-0001	Correspondence Letter MAEC-89/0021	Delete P-23866, P-23867, P-23868 P-23869 P-23870, 23871 and P-23872


**ATTACHMENT 2**

**10CFR50.59 Evaluations  
and  
Commitment Change Evaluations**

**GGNS 50.59 Safety Evaluation Number**

**SE 2004-0003-R00**



	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
<b>ATTACHMENT 9.1</b>		<b>50.59 REVIEW FORM</b>	Page	1	of	10

# **I. OVERVIEW / SIGNATURES**

**Facility:** Grand Gulf Nuclear Station

**Document Reviewed:** GGNS ODCM Rev. 27, LBDC 2003-025 **Change/Rev.** \_\_\_\_\_

**System Designator(s)/Description:** N64/Offgas

## **Description of Proposed Change**

The proposed change modifies the required actions under condition F under TRM/ODCM LCO 6.3.10 and revises the TS bases for SR 3.7.5.1. TRM/ODCM LCO 6.3.10, condition I is modified to require entry into LCO 6.0.1 when the condition F actions or completion times are not met. The TS bases are revised to be consistent with the BWR/6 standard technical specifications by clarifying that the exclusive use of the offgas pretreatment monitor is not needed to satisfy the surveillance requirement. In addition, this LBDC includes administrative changes to add TRM LCO 6.0.1 to the ODCM and to update approval signoff page and the list of effective pages to reflect these changes. The revised actions for condition F provide compensatory actions when no channels of the Offgas Pretreatment Monitor are operable and increase the period these instruments are allowed to be inoperable from 72 hours to 30 days.

If the proposed activity, in its entirety, involves any one of the criteria below, check the appropriate box, provide a justification/basis in the Description above, and forward to a Reviewer. No further 50.59 Review is required. If none of the criteria is applicable, continue with the 50.59 Review.

- ☐ The proposed activity is editorial/typographical as defined in Section 5.2.2.1.
- ☐ The proposed activity represents an "FSAR-only" change as allowed in Section 5.2.2.2 \_\_\_\_\_  
(Insert item # from Section 5.2.2.2).

If further 50.59 Review is required, check the applicable review(s): (Only the sections indicated must be included in the Review.)

<input type="checkbox"/>	<b>SCREENING</b>	Sections I, II, III, and IV required
<input type="checkbox"/>	<b>50.59 EVALUATION EXEMPTION</b>	Sections I, II, III, IV, and V required
<input checked="" type="checkbox"/>	<b>50.59 EVALUATION (#:</b> 2004-0003-000 <b>)</b>	Sections I, II, III, IV, and VI required

**Preparer:** William E. Long Jr. / *William E. Long Jr.* / EOI / NE-SA / 5-12-04  
Name (print) / Signature / Company / Department / Date

**Reviewer:** G.E. Broadbent / *G.E. Broadbent* / EOI / NE-SA / 5/12/04  
Name (print) / Signature / Company / Department / Date

**OSRC:** Krupa / *M.A. Krupa* / 5-12-04  
Chairman's Name (print) / Signature / Date  
(Required only for Programmatic Exclusion Screenings (see Section 5.8) and 50.59 Evaluations.)

## **List of Assisting/Contributing Personnel:**

**Name:**

Mike Larson


John Lassetter

## **Scope of Assistance:**

Wording of proposed changes

ODCM Impact review

QA RECORD	
RT- 514-37	
NON-QA RECORD	
INITIALS	
NUMBER OF PAGES	14
DATE	10/10/04
RELATED DOCUMENT NUMBER	

	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 9.1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>2</b>	<b>of</b>	<b>10</b>

## II. SCREENING

### A. Licensing Basis Document Review

1. Does the proposed activity impact the facility or a procedure as described in any of the following Licensing Basis Documents?

Operating License	YES	NO	CHANGE # and/or SECTIONS IMPACTED
Operating License	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Orders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If "YES", obtain NRC approval prior to implementing the change by initiating an LBD change in accordance with NMM LI-113 (Reference 2.2.13). (See Section 5.1.13 for exceptions.)

LBDs controlled under 50.59	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
FSAR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS Bases	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LBDC-2003-0025
Technical Requirements Manual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LBDC-2003-0025
Core Operating Limits Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluation Reports <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If "YES", perform an Exemption Review per Section V OR perform a 50.59 Evaluation per Section VI AND initiate an LBD change in accordance with NMM LI-113 (Reference 2.2.13).

LBDs controlled under other regulations	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
Quality Assurance Program Manual <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Emergency Plan <sup>2</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Evaluation attached – no e-plan changes required
Fire Protection Program <sup>3</sup> (includes the Fire Hazards Analysis)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Offsite Dose Calculations Manual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LBDC-2003-0025


If "YES", evaluate any changes in accordance with the appropriate regulation AND initiate an LBD change in accordance with NMM LI-113 (Reference 2.2.13).

2. Does the proposed activity involve a test or experiment not described in the FSAR? ☐ Yes  
☒ No  
 If "yes," perform an Exemption Review per Section V OR perform a 50.59 Evaluation per Section VI.
3. Does the proposed activity potentially impact equipment, procedures, or facilities utilized for storing spent fuel at an Independent Spent Fuel Storage Installation? ☐ Yes  
☐ No  
☒ N/A  
 (Check "N/A" if dry fuel storage is not applicable to the facility.)  
 If "yes," perform a 72.48 Review in accordance with NMM Procedure LI-112.  
 (See Sections 1.5 and 5.3.1.5 of the EOI 10CFR50.59 Review Program Guidelines.)

<sup>1</sup> If "YES," see Section 5.1.4.

<sup>2</sup> If "YES," notify the responsible department and ensure a 50.54 Evaluation is performed. Attach the 50.54 Evaluation.

<sup>3</sup> If "YES," evaluate the change in accordance with the requirements of the facility's Operating License Condition.

 <b>Entergy</b>	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 9.1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>3</b>	<b>of</b>	<b>10</b>

## B. Basis

Provide a clear, concise basis for the answers given in the applicable sections above. Explain why the proposed activity does or does not impact the Operating License/Technical Specifications and/or the FSAR and why the proposed activity does or does not involve a new test or experiment not previously described in the FSAR. Adequate basis must be provided within the Screening such that a third-party reviewer can reach the same conclusions. Simply stating that the change does not affect TS or the FSAR is not an acceptable basis. See EOI 50.59 Guidelines Section 5.6.6 for guidance.)

The proposed changes modify the TRM and ODCM directly to modify the required actions when the Offgas pretreatment radiation monitor is inoperable. The TS bases for SR 3.7.5.1 are revised to clarify that the exclusive use of the offgas pretreatment monitor is not needed to satisfy the surveillance requirement consistent with the revised TRM requirements. Supporting documents such as the UFSAR are not affected by the proposed changes since the changes do not modify or change the function of the pretreatment monitor. The monitor is described in UFSAR 11.5.2.2.1. Although the Emergency Plan (E-Plan) emergency action levels utilize the offgas pretreatment monitor for indications of fuel damage, other indicators (i.e., MSL monitor, coolant samples) continue to be available and E-plan changes are not considered necessary based on the attached evaluation. The remaining documents reviewed do not require changes as a result of the proposed changes.


Changes to the Offsite Dose Calculation Manual are controlled by Grand Gulf Nuclear Station Technical Specification (TS), Administrative Controls, Section 5.5.1. In accordance with TS Section 5.5.1 the requirements for an ODCM change are:

1. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change, and
2. a determination that the change(s) maintain the levels of radioactive effluent control required by 10CFR20.1302, 40CFR190, 10CFR50.36a, and 10CFR50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.

Regulation 40CFR190, 10CFR50.36a and 10CFR50, Appendix I deal with dose calculations. This change does not affect any dose or dose rate calculations in the ODCM, therefore these regulations are not affected.

Regulation 10CFR20.1302 deals with radioactive releases to unrestricted areas. TRM LCO 6.11.1 is the technical requirement for 10CFR20.1302. The proposed changes only affect the offgas pretreatment monitor. Offgas system releases from the plant are not affected. Therefore, the requirements 10CFR20.1302 (TRM LCO 6.11.1) are met.

Although some of the changes proposed are administrative or essentially provide an equivalent monitoring function of the offgas pretreatment, the aggregate changes are evaluated in section VI of this form.

	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 9.1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>4</b>	<b>of</b>	<b>10</b>

**C. References**

Discuss the methodology for performing the LBD search. State the location of relevant licensing document information and explain the scope of the review such as electronic search criteria used (e.g., key words) or the general extent of manual searches per Section 5.3.6.4 of LI-101. **NOTE: Ensure that electronic and manual searches are performed using controlled copies of documents. If you have any questions, contact your site Licensing department.**

LBDs/Documents reviewed via keyword search:

Keywords:

Documents in section II.A.1

pretreatment, post treatment, pre-treatment  
offgas

LBDs/Documents reviewed manually:

None

**D. Is the validity of this Review dependent on any other change?** (See Section 5.3.4 of the EOI 10CFR50.59 Program Review Guidelines.)

☐ **Yes**  
☒ **No**

**If "Yes," list the required changes.**


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 <i>Entergy</i>	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 9.1		50.59 REVIEW FORM	Page	5	of	10

### III. ENVIRONMENTAL SCREENING

If any of the following questions is answered "yes," an Environmental Review must be performed in accordance with NMM Procedure EV-115, "Environmental Evaluations," and attached to this 50.59 Review. Consider both routine and non-routine (emergency) discharges when answering these questions.


Will the proposed Change being evaluated:

Yes   No

1.   ☐   ☒   Involve a land disturbance of previously disturbed land areas in excess of one acre (i.e., grading activities, construction of buildings, excavations, reforestation, creation or removal of ponds)?
2.   ☐   ☒   Involve a land disturbance of undisturbed land areas (i.e., grading activities, construction, excavations, reforestation, creating, or removing ponds)?
3.   ☐   ☒   Involve dredging activities in a lake, river, pond, or stream?
4.   ☐   ☒   Increase the amount of thermal heat being discharged to the river or lake?
5.   ☐   ☒   Increase the concentration or quantity of chemicals being discharged to the river, lake, or air?
6.   ☐   ☒   Discharge any chemicals new or different from that previously discharged?
7.   ☐   ☒   Change the design or operation of the intake or discharge structures?
8.   ☐   ☒   Modify the design or operation of the cooling tower that will change water or air flow characteristics?
9.   ☐   ☒   Modify the design or operation of the plant that will change the path of an existing water discharge or that will result in a new water discharge?
10.   ☐   ☒   Modify existing stationary fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)?<sup>1</sup>
11.   ☐   ☒   Involve the installation of stationary fuel burning equipment or use of portable fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)?<sup>1</sup>
12.   ☐   ☒   Involve the installation or use of equipment that will result in an air emission discharge?
13.   ☐   ☒   Involve the installation or modification of a stationary or mobile tank?
14.   ☐   ☒   Involve the use or storage of oils or chemicals that could be directly released into the environment?
15.   ☐   ☒   Involve burial or placement of any solid wastes in the site area that may affect runoff, surface water, or groundwater?

<sup>1</sup> See NMM Procedure EV-117, "Air Emissions Management Program," for guidance in answering this question.



	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 9.1		50.59 REVIEW FORM	Page	7	of	10

## VI. 50.59 EVALUATION

- A. **Executive Summary** (Serves as input to NRC summary report. Limit to one page or less. Send an electronic copy to the site licensing department after OSRC approval, if available.)

### Brief description of change, test, or experiment:


The proposed change modifies the required actions under condition F under TRM 6.3.10 and ODCM 6.3.10 and adds LCO 6.0.1 to the TRM. The revised actions for condition F provide compensatory actions for up to 30 days when no channels of the Offgas Pretreatment Monitor are operable. Specifically these actions require verification that the offgas system is not bypassed, that redundant process radiation monitors are operable and that grab samples are taken and analyzed at a frequency sufficient to ensure that changes in process radiation levels are quickly identified (every 24 hours) or that temporary instrumentation is installed to provide radiation monitoring of the fission gases. The TS bases for SR 3.7.5.1 are revised to clarify that the exclusive use of the offgas pretreatment monitor is not needed to satisfy the surveillance requirement consistent with the revised TRM requirements and matches the NRC approved wording in NUREG 1434, Revision 2 (Standard Technical Specifications General Electric Plants, BWR/6). The requirement for operability of the post treatment radiation monitor is removed as part of ACTION F (pretreatment monitor) since operability of the post treatment monitor is governed elsewhere in TRM/ODCM 6.3.10 (i.e., ACTION E). In addition, condition I is modified to require entry into TRM 6.0.1 when condition F is not met and action I is revised to require entry into TRM/ODCM LCO 6.0.1.

### Reason for proposed Change:

The proposed changes are necessary to avoid unnecessary plant shutdowns when both offgas pretreatment monitors are inoperable.

### 50.59 Evaluation summary and conclusions

The offgas pretreatment monitor is non-safety related and monitors radioactivity in the condenser offgas at the entrance to the holdup piping. The offgas pretreatment radiation monitor provides a monitoring and alarm function and does not affect system operation when not in service or inoperable. The proposed changes only affect actions when the offgas pretreatment is inoperable and do not physically change the plant or plant systems. Inoperability of the offgas pre-treatment monitor or taking grab samples has no effect on system operation. Although the pretreatment monitor is used to trigger the performance of grab samples per SR 3.7.5.1, other methods of monitoring the discharge of fission gases into the offgas system are acceptable. The proposed portable radiation instruments or the 24 hour grab samples ensure that significant increases are promptly identified and that actions are taken when required by plant procedures. As a result, a significant buildup of radioactive material in the offgas system is avoided thereby preserving the bounding assumptions in the offgas system failure analysis. The TS bases for SR 3.7.5.1 are revised to clarify that the exclusive use of the offgas pretreatment monitor is not needed to satisfy the surveillance requirement consistent with the revised TRM requirements and matches the wording in NUREG 1434, Revision 2. Inoperability of this monitor and the proposed actions do not affect the likelihood that the offgas system will fail in a way that leads to a system rupture or component failure and the release of the system's contents. Based on these considerations, the evaluation determined that the proposed changes are acceptable and do not represent more than a minimal increase in the frequency or consequences of an accident or malfunction of the offgas system. The evaluation also concluded that the a possibility for an accident or malfunction of a different type is not created, that a design basis limit for a fission product barrier will not be exceeded or altered, and the proposed changes do not depart from a method of evaluation described in the FSAR.

	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 9.1		50.59 REVIEW FORM	Page	8	of	10

**B. License Amendment Determination**

Does the proposed Change being evaluated represent a change to a method of evaluation ONLY? If "Yes," Questions 1 – 7 are not applicable; answer only Question 8. If "No," answer all questions below.

☐ Yes  
☒ No

**Does the proposed Change:**

1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the FSAR? 
☐ Yes  
☒ No

**BASIS:**


The release of fission gases to the offgas system is governed by Technical Specification 3.7.5. Compliance with this specification is ensured by performing a grab sample and isotopic analysis as required by either SR 3.7.5.1 or SR 3.7.5.2. SR 3.7.5.2 is performed on a 31 day frequency and SR 3.7.5.1 is only required to be performed when the nominal steady state fission gas release rate has increased by  $\geq 50\%$ . The offgas pretreatment monitor is non-safety related and monitors radioactivity in the condenser offgas at the entrance to the holdup piping. This monitor provides a continuous monitor for the release of fission gases prior to treatment by the offgas system and is utilized to alert operators when the release rate has increased significantly ( $\geq 50\%$ ) between performances of SR 3.7.5.1.

As discussed in the basis for Technical Specification 3.7.5, the fission gas release rate is an initial condition of the main condenser offgas system failure event discussed in UFSAR 15.7.1. This offgas system failure analysis assumes a gross failure of the offgas system that results in the rupture of the system pressure boundary with the entire radioactive contents released to the environment over a two hour period. The content of the system is based on the steam jet air ejector discharge into the offgas system at the release limit specified by TS 3.7.5 (380 mCi/sec). This release rate is also applied in other analyses, which involve the release of reactor steam, such as the main steamline break; however, the radiological impact of the noble gas release in these events is very small relative to that of the iodine release.

The GGNS offgas system is designed to be detonation resistant (*i.e.*, designed to withstand a pressure of 350 psig static pressure) (UFSAR 11.3.2.2.1.9). The GGNS offgas system is also designed as non-seismic, Quality Group D, and complies with the NRC staff position (UFSAR Table 3.2-1). The proposed changes do not physically change the plant or plant systems. The requirement to verify the post-treatment monitoring system is operable is deleted from Action F since this instrumentation is controlled elsewhere in TRM/ODCM 6.3.10 (condition E) and the associated actions ensure that this function is preserved. The revised TS bases for SR 3.7.5.1 are consistent with the proposed changes and matches the wording in NUREG 1434, rev. 2 (BWR/6 STS). Effluents from the offgas system are not affected by the proposed changes and the offgas effluent continues to be monitored. No system or system parameters are affected that affect the frequency of an offgas system failure event. As a result, the proposed changes do not result in more than a minimal increase in the frequency of occurrence of an accident evaluated in the UFSAR.

- 2 Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? 
☐ Yes  
☒ No



	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 9.1		50.59 REVIEW FORM	Page	9	of	10

**BASIS:**


As discussed above, the proposed changes do not physically change the plant or plant systems. Although the pretreatment monitor is used to trigger the performance of grab samples per SR 3.7.5.1, other methods of monitoring the discharge of fission gases into the offgas system are acceptable. The proposed compensatory actions require frequent grab samples or portable radiation monitoring such that changes in the fission gas release rates are promptly identified. The revised TS bases for SR 3.7.5.1 are consistent with the proposed changes. Inoperability of this monitor and the proposed actions do not affect the likelihood that the offgas system will fail in a way that leads to a system rupture or component failure and the release of the system's contents. The requirement to verify the post-treatment monitoring system is operable is deleted from Action F since this instrumentation is controlled elsewhere in TRM/ODCM 6.3.10 (condition E) and the associated actions ensure that this function is preserved. Therefore the proposed changes do not result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

- 3 Result in more than a minimal increase in the consequences of an accident previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS:**

Under condition F, the offgas pretreatment monitoring function is replaced with either frequent grab samples and isotopic analyses (every 24 hours) or the use of portable radiation monitors. Enhanced monitoring of other parameters indicative of increases in the fission gas release rate continues to be required under condition F. These proposed actions and frequency are consistent with the bases of GGNS Technical Specification 3.7.5 and the associated allowed outage times by ensuring frequent monitoring of the offgas via gross gamma activity or isotopic analysis. The revised TS bases for SR 3.7.5.1 clarify that the exclusive use of the offgas pretreatment monitor is not required to satisfy the surveillance requirement and are consistent with the proposed TRM/ODCM changes. The 30 day allowed outage time was selected to ensure that sufficient time was available to restore the pretreatment monitor without impacting plant operation and the fact that the proposed actions provide effective monitoring of the fission gases entering the offgas system. Continued operation under TRM 6.0.1 is acceptable since the TS 3.7.5 requirements ensure the radionuclide inventory is within the assumptions of the UFSAR analysis and that the administrative requirements of 6.0.1 require additional review and evaluation of the circumstances. Specification 3.7.5 allows the offgas activity to exceed the 380 mCi/sec for 72 hours based on the large margins in the dose analysis and the low probability of a offgas system rupture occurring. Operating history indicates that significant or multiple fuel failures occur at best over a period of several days or weeks. The proposed 24 hour grab samples or the use of portable monitors ensure that significant increases are promptly identified and that actions are taken when required by plant procedures. As a result, a significant buildup of radioactive material in the offgas system is avoided thereby preserving the bounding assumptions in the offgas system failure analysis. The requirement to verify the post-treatment monitoring system is operable is deleted from Action F since this instrumentation is controlled elsewhere in TRM/ODCM 6.3.10 (condition E) and the associated actions ensure that this function is preserved. Therefore, the proposed changes do not result in more than a minimal increase in the consequences of an accident

- 4 Result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes ☒ No

	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 9.1		50.59 REVIEW FORM	Page	10	of	10

**BASIS:**

As described in item 3 above, the proposed 24 hour grab samples or the use of portable monitors ensure that significant increases are promptly identified and that actions are taken when required by plant procedures. As a result, a significant increase in the release rate or the buildup of radioactive material in the offgas system is avoided. The consequences of individual component failures or other malfunctions in the offgas system other than the system rupture are not evaluated in the FSAR since they are bounded by the complete failure of the offgas system evaluated in FSAR 15.7.1. Nevertheless, the proposed changes do not result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

- 5 Create a possibility for an accident of a different type than any previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS:**

The proposed changes make no physical changes to the plant or plant system and operating procedures are not affected. Inoperability of the offgas pre-treatment monitor or taking grab samples has no effect on system operation. The requirement to verify the post-treatment monitoring system is operable is deleted from Action F since this instrumentation is controlled elsewhere in TRM/ODCM 6.3.10 (condition E) and the associated actions ensure that this function is preserved. Therefore, these changes do not create a possibility for an accident of a different type than any previously evaluated in the FSAR.

- 6 Create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS:**

The proposed changes make no physical changes to the plant or plant system and operating procedures are not affected. Inoperability of the offgas pre-treatment monitor, taking grab samples or the use of a portable monitor has no effect on system operation. This pretreatment monitor provides a monitoring and alarm function only and does not otherwise affect system operation. The requirement to verify the post-treatment monitoring system is operable is deleted from Action F since this instrumentation is controlled elsewhere in TRM/ODCM 6.3.10 (condition E) and the associated actions ensure that this function is preserved. Therefore, these changes do not create a possibility for an accident of a different type than any previously evaluated in the FSAR.

- 7 Result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered? ☐ Yes ☒ No

**BASIS:**

The proposed changes make no physical changes to the plant or plant system and operating procedures are not affected. No design basis limits for a fission product barrier are affected by the proposed changes. Inoperability of the offgas pre-treatment monitor, taking grab samples or the use of a portable monitor has no effect on fission product barriers. Therefore, these changes do not result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered.

- 8 Result in a departure from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses? ☐ Yes ☒ No

**BASIS:**

The proposed changes make no changes to analysis methods or methods used to evaluate events described in the FSAR. The design basis of the offgas system and the supporting analyses used to establish the basis are not affected by the proposed change. Therefore, these changes do not depart from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses.



## 10CFR50.54(q) EVALUATION FORM

6. 10CFR50.54(q) states in part: "The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10CFR50.47(b) and the requirements of Appendix E of 10CFR 50." Review the planning standards contained in 10CFR50.47(b) and 10CFR50, Appendix E to determine if any of the standards are affected by the change. Check the applicable abbreviated standard below if it is affected.

### 10CFR50.47(b) STANDARDS

- (1) ☐ Assignment of ERO Responsibilities by licensee, state & county.
- (2) ☐ Adequate staffing and response, both Onsite and Offsite.
- (3) ☐ Arrangements for assistance, and state and local staff provided for at the EOF.
- (4) ☐ Emergency Classification/Action Levels and minimum initial offsite response.
- (5) ☐ Notification to state/local/ERO, and Notification to the public provided for.
- (6) ☐ Communications-State/local/ERO and the public.
- (7) ☐ Information to the public/media on a periodic basis.
- (8) ☐ Emergency facilities and equipment are provided and maintained.
- (9) ☐ Methods/systems/equipment for monitoring for offsite consequences.
- (10) ☐ Protective actions for the plume exposure pathway/EPZ for workers and public.
- (11) ☐ Emergency worker exposure controls.
- (12) ☐ Medical services for contaminated injured personnel.
- (13) ☐ General plans for reentry and recovery.
- (14) ☐ Periodic exercises and drills. Deficiencies are identified and corrected.
- (15) ☐ Radiological emergency response training provided.
- (16) ☐ Responsibilities for Emergency Plan development/review/distribution.

### 10CFR50, APPENDIX E STANDARDS

- ☐ (I), (II), (III) Emergency Plan as described in the FSAR.
- ☐ (IV)A Emergency organization for coping with radiological emergencies.
- ☒ (IV)B Assessing the release of radiological material and associated EALs.
- ☐ (IV)C Emergency classification and EALs and notification/activation of the ERO.
- ☐ (IV)D Notification of NRC, State, locals and public. Dissemination of information.
- ☐ (IV)E Emergency facilities/equipment with communications systems and medical arrangements.
- ☐ (IV)F Training on and exercising the Emergency Plan.
- ☐ (IV)G Plan/Procedure maintenance, and surveillance of equipment and supplies.
- ☐ (IV)H Reentry and recovery following an accident.
- ☐ (V) Changes to the Emergency Plan and procedures are sent to the NRC.
- ☐ (VI) Maintain the Emergency Response Data System (ERDS).

### OTHER

- ☐ (1) The means or time of evacuating the Protective Area or the EP Owner Controlled Area
- ☐ (2) Public use of the station's Owner Controlled Area
- ☐ (3) Emergency information provided to the public in terms of method or content.

## 10CFR50.54(q) EVALUATION FORM

### 7. DETERMINATION

**YES** \_\_\_ **NO** **X** Based upon the section 6 review, does the revision result in the loss of the ability to meet any of the standards described in 10CFR50.47(b) or 10CFR50, Appendix E, or decrease the effectiveness of the Emergency Plan?

If **YES** is checked, then the revision must receive prior approval from the NRC.

If **NO** is checked, provide evaluation/justification below (attach additional pages, if necessary).

### 8. EVALUATION/JUSTIFICATION

This evaluation focuses on the requirements to increase the allowed outage time for the offgas pre-treatment monitor as evaluated in LDC 2003-025 and the associated 10CFR50.59 Safety Evaluation. The increase in the allowed outage time from 3 to 30 days is evaluated. The following documents were reviewed in regard to inoperability of equipment used for EAL determinations:

• 10CFR50.47(b)	• 10CFR50, Appendix E
• Grand Gulf Emergency Plan	• NUREG 0654
• NUREG 0737	

The above documents do not discuss inoperability of equipment that is used for EAL determination. The current EALs have multiple indicators for entry into the EAL. Inherent in the application of multiple indicators in Table 4-1 of the Emergency Plan is the use of the "or" word which implies that any of the EALs can be used for entry into the Emergency Classification. This means that if one of the EALs is unavailable, the other EAL would be used. An example would be an EAL dependent piece of equipment becomes inoperable, the Emergency Classification could still be determined by the other EALs. For the case of the fuel damage indication the EAL logic is one out of four for Unusual Event and one out of three for the Alert classification. Although this change does allow for an increase in the allowed outage time for the offgas pre-treatment monitor, grab sampling or monitoring of portable radiation monitors will still be required for the entire duration the offgas pre-treatment monitor is inoperable thus ensuring there is some form of indication for fuel damage. This sampling or monitoring will also ensure compliance with Technical Specification 3.7.5 by either grab sampling or monitoring of portable radiation monitors. Compliance with Technical Specification 3.7.5 further ensures we are complying with the Emergency Plan requirements to monitor for fuel damage.

This change does not decrease the effectiveness of the Emergency Plan for the following reasons:

- There are multiple fuel damage EAL indicators available in addition to the offgas pre-treatment monitor.
- There are no NRC requirements that prohibit this change - the rules to change the ODCM/TRM are applied and a full 10CFR50.59 safety evaluation for LDC 2003-025 addresses the increase in allowed outage time.
- Compliance with Technical Specification 3.7.5 is preserved due to sampling or monitoring and ensures fuel damage monitoring.
- The offgas pre-treatment system will be monitored or sampled for the entire duration of the allowed outage time – fuel damage detection will be preserved.
- There is no affect on 10CFR50 Appendix E and 50.47(b).

Based on the above information, no Emergency Plan changes are needed and the 10CFR50.59 process is the proper process to be used for this change and this change may be implemented.


10CFR50.54(q) EVALUATION FORM

9. APPROVAL

Prepared by: <u>MJ Harrison / [Signature]</u>	Date: <u>5/12/04</u>
(Signature)	
Reviewed by: <u>R Sumrell / [Signature]</u>	Date: <u>5/12/04</u>
(Signature)	
Approved by: <u>[Signature] (M.F. Gagnon)</u>	Date: <u>5-12-04</u>
(Manager, Emergency Planning)	

**GGNS 50.59 Safety Evaluation Number**

**SE 2004-0004-R00**

	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>1</b>	<b>of</b>	<b>11</b>

# **I. OVERVIEW / SIGNATURES**

**Facility:** Grand Gulf Nuclear Station

**Document Reviewed:** ER-GG-2003-0234 Change/Rev. 0

**System Designator(s)/Description:** P75 – Standby Diesels, P81 – HPCS Diesels

## **Description of Proposed Change**

ER GGN-2003-0234 request Engineering provide a one time extension of the 10 year inspection to December of 2005 for DG fuel oil storage tank (SR TR 3.8.3.6). This request applies to Division 1 and 2 fuel oil storage tanks.

If the proposed activity, in its entirety, involves any one of the criteria below, check the appropriate box, provide a justification/basis in the Description above, and forward to a Reviewer. No further 50.59 Review is required. If none of the criteria is applicable, continue with the 50.59 Review.

- ☐ The proposed activity is editorial/typographical as defined in Section 5.2.2.1.
- ☐ The proposed activity represents an "FSAR-only" change as allowed in Section 5.2.2.2\_\_\_\_\_.  
(Insert item # from Section 5.2.2.2).

If further 50.59 Review is required, check the applicable review(s): (Only the sections indicated must be included in the Review.)

<input type="checkbox"/>	<b>SCREENING</b>	Sections I, II, III, and IV required
<input type="checkbox"/>	<b>50.59 EVALUATION EXEMPTION</b>	Sections I, II, III, IV, and V required
<input checked="" type="checkbox"/>	<b>50.59 EVALUATION (#:</b> <u>2004-0004-R00</u> )	Sections I, II, III, IV, and VI required

**Preparer:** Robert W. Fuller / Robert W Fuller / EOI / DE-Mech / 8-9-04  
Name (print) / Signature / Company / Department / Date

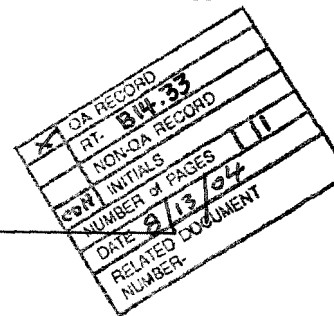
**Reviewer:** Andrew W. Fox / Andrew W Fox / EOI / DE - Mech / 9 Aug 2004  
Name (print) / Signature / Company / Department / Date

**OSRC:** DENNIS P. WILES / D P Wiles / 8/9/04  
Chairman's Name (print) / Signature / Date  
[Required only for Programmatic Exclusion Screenings (see Section 5.8) and 50.59 Evaluations.]


meeting  
#23-2#44

**List of Assisting/Contributing Personnel:**  
Name:

**Scope of Assistance:**



	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
<b>ATTACHMENT 1</b>		<b>50.59 REVIEW FORM</b>	Page	2	of	11

## II. SCREENING

### A. Licensing Basis Document Review

1. Does the proposed activity impact the facility or a procedure as described in any of the following Licensing Basis Documents?

Operating License	YES	NO	CHANGE # and/or SECTIONS IMPACTED
Operating License	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Orders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If "YES", obtain NRC approval prior to implementing the change by initiating an LBD change in accordance with NMM LI-113 (Reference 2.2.13). (See Section 5.1.13 for exceptions.)

LBDs controlled under 50.59	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
FSAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FSAR Appendix 3A, Reg. Guide 1.137, LBD 2003-091
TS Bases	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Technical Requirements Manual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TRM SR TR3.8.3.6, LBD 2003-091
Core Operating Limits Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluation Reports <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If "YES", perform an Exemption Review per Section V OR perform a 50.59 Evaluation per Section VI AND initiate an LBD change in accordance with NMM LI-113 (Reference 2.2.13).

LBDs controlled under other regulations	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
Quality Assurance Program Manual <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Emergency Plan <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fire Protection Program <sup>3</sup> (includes the Fire Hazards Analysis)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Offsite Dose Calculations Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	


If "YES", evaluate any changes in accordance with the appropriate regulation AND initiate an LBD change in accordance with NMM LI-113 (Reference 2.2.13).

2. Does the proposed activity involve a test or experiment not described in the FSAR? ☐ Yes  
☒ No  
 If "yes," perform an Exemption Review per Section V OR perform a 50.59 Evaluation per Section VI.
3. Does the proposed activity potentially impact equipment, procedures, or facilities utilized for storing spent fuel at an Independent Spent Fuel Storage Installation? ☐ Yes  
☐ No  
☒ N/A  
 (Check "N/A" if dry fuel storage is not applicable to the facility.)  
 If "yes," perform a 72.48 Review in accordance with NMM Procedure LI-112.  
 (See Sections 1.5 and 5.3.1.5 of the EOI 10CFR50.59 Review Program Guidelines.)

<sup>1</sup> If "YES," see Section 5.1.4.

<sup>2</sup> If "YES," notify the responsible department and ensure a 50.54 Evaluation is performed. Attach the 50.54 Evaluation.

<sup>3</sup> If "YES," evaluate the change in accordance with the requirements of the facility's Operating License Condition.

 <i>Entergy</i>	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 1		50.59 REVIEW FORM	Page	3	of	11

## B. Basis

Provide a clear, concise basis for the answers given in the applicable sections above. Explain why the proposed activity does or does not impact the Operating License/Technical Specifications and/or the FSAR and why the proposed activity does or does not involve a new test or experiment not previously described in the FSAR. Adequate basis must be provided within the Screening such that a third-party reviewer can reach the same conclusions. Simply stating that the change does not affect TS or the FSAR is not an acceptable basis. See EOI 50.59 Guidelines Section 5.6.6 for guidance.)

The purpose of the evaluation is to provide the rationale for extending the Division I and II fuel storage tanks inspection to December of 2005. The one time inspection extension will be documented in the TRM requirement SR TR3.8.3.6 and FSAR Appendix 3A, Reg. Guide 1.137. The change is based on the minor wall wear and degradation observed in the last Diesel Generator Fuel tanks inspections (ref. MNCR 108-92, MNCR 174-92 and MAI 327093. The TRM and FSAR revision will be to take credit for the minor wall wear and wall degradation to the Diesel Generator Fuel Storage tank. The wall degradation is due to the sample element. The sample element is the device used to measure the tank volume and the degradation is due to monthly use.

### Operating License:


The Grand Gulf Nuclear Station (GGNS) operating license does not affect Diesel Generator Fuel tank inspections. The Technical Specifications and the Environmental Protection Plan are not impacted by this ER. Therefore, the proposed activity does not impact the GGNS operating license.

### Technical Specifications:

The Diesel Generator Fuel tank inspection is not covered by Technical Specifications. However, Technical Requirement Manual Surveillance Requirement SR TR3.8.3.6 has requirements for Fuel tank inspections. The evaluation will not create a system configuration or operating condition such that a Technical Specifications LCO or surveillance requirement is no longer adequate. Likewise, the evaluation will not bypass or invalidate features required to be operable by the Technical Specifications or exceed any limits specified in the Operating License and Technical Specifications. Therefore, no Technical Specifications change is required for the issuance of this evaluation.

### UFSAR:

The UFSAR is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank inspection to December 2005. The one time exception to the inspection will allow the Fuel Oil Storage Tank inspection to be extended to December 2005. This 50.59 provides a basis for the Diesel Generator Fuel Storage Tank inspection extension to December 2005.

 <i>Entergy</i>	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 1		50.59 REVIEW FORM	Page	4	of	11

#### NRC Orders:

The NRC Orders issued at Grand Gulf are not affected by this evaluation because this evaluation deals with Diesel Generator Fuel Oil Storage tank inspection and this evaluation is not to be used for security reasons.

#### Technical Specification Bases:

There are no Technical Specifications or Bases impacted by this activity. The Technical Specification for Diesel Fuel Oil is 3.8.3 and the surveillance requirement under this Technical Specification is TR3.8.3.6 for Diesel Generator Fuel Oil Storage Tank inspection will remain the same. This is an evaluation for increasing the inspection to December 2005 which is not part of the Technical Specification Bases.

#### Technical Requirements Manual (TRM):

Technical Requirements Manual SR TR3.8.3.6 is affected by this activity. This section Table is revised to indicate the inspection extension for one time to December 2005. This section mentions that the fuel storage tank inspection is in conjunction with of ASME Boiler and Pressure Vessel Section XI inspection. The only ASME B&PV Section XI requirement is pressurizing the tank with the fuel still in the tank. This 50.59 clarifies that Diesel Generator Fuel Oil storage tank inspection will be extended one time to December 2005. The reason is that previous diesel generator fuel oil storage tank inspections discovered only minor wear and wall degradation to the fuel oil tank and that increasing the inspection to December 2005 would be acceptable.

#### Core Operating Limits Report:

This activity does not impact the COLR (GGNS Core Operating Limits Report). This evaluation explains extending the Diesel Fuel Oil Storage tank inspection to December 2005. It does not have any impact on the COLR and does not affect any licensing activities.

#### Offsite Dose Calculations Manual:


This activity does not impact any equipment required to monitor offsite dose. Therefore, no changes to the ODCM is required.

#### NRC Safety Evaluation Reports:

There is no impact to any SERs by providing an evaluation for evaluating extending the diesel fuel oil storage tank inspection to December 2005.

#### Quality Assurance Program Manual:

This evaluation complies with all requirements of the Entergy Quality Assurance Program Manual, as applicable. This activity does not change any commitments contained in the QAPM. Therefore, this activity does not require a change to the QAPM.

	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>5</b>	<b>of</b>	<b>11</b>

Emergency Plan:

There is no impact to the Emergency Plan for evaluating extending the diesel generator fuel oil storage tank inspection to December of 2005.

Fire Protection Program:

This activity does not change any commitments contained in the Fire Protection Program. Therefore, this activity does not require a change to the Fire Protection Program.

### C. References

Discuss the methodology for performing the LBD search. State the location of relevant licensing document information and explain the scope of the review such as electronic search criteria used (e.g., key words) or the general extent of manual searches per Section 5.3.6.4 of LI-101. **NOTE: Ensure that electronic and manual searches are performed using controlled copies of documents. If you have any questions, contact your site Licensing department.**

LBDs/Documents reviewed via keyword search:

Keywords:

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LBDs/Documents reviewed manually:

TRM SR TR3.8.3.6, UFSAR Appendix 3A page 3A/1.137-1 & 2, UFSAR Sections 8.3 and 9.5.4 and Technical Specification Bases 3.8.3

**D. Is the validity of this Review dependent on any other change?** (See Section 5.3.4 of the EOI 10CFR50.59 Program Review Guidelines.)

☐ Yes  
☒ No

If "Yes," list the required changes.

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 <i>Entergy</i>	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 1		50.59 REVIEW FORM	Page	6	of	11

### III. ENVIRONMENTAL SCREENING


If any of the following questions is answered "yes," an Environmental Review must be performed in accordance with NMM Procedure EV-115, "Environmental Evaluations," and attached to this 50.59 Review. Consider both routine and non-routine (emergency) discharges when answering these questions.

Will the proposed Change being evaluated:

Yes   No

1.   ☐   ☒   Involve a land disturbance of previously disturbed land areas in excess of one acre (i.e., grading activities, construction of buildings, excavations, reforestation, creation or removal of ponds)?
2.   ☐   ☒   Involve a land disturbance of undisturbed land areas (i.e., grading activities, construction, excavations, reforestation, creating, or removing ponds)?
3.   ☐   ☒   Involve dredging activities in a lake, river, pond, or stream?
4.   ☐   ☒   Increase the amount of thermal heat being discharged to the river or lake?
5.   ☐   ☒   Increase the concentration or quantity of chemicals being discharged to the river, lake, or air?
6.   ☐   ☒   Discharge any chemicals new or different from that previously discharged?
7.   ☐   ☒   Change the design or operation of the intake or discharge structures?
8.   ☐   ☒   Modify the design or operation of the cooling tower that will change water or air flow characteristics?
9.   ☐   ☒   Modify the design or operation of the plant that will change the path of an existing water discharge or that will result in a new water discharge?
10.   ☐   ☒   Modify existing stationary fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)?<sup>1</sup>
11.   ☐   ☒   Involve the installation of stationary fuel burning equipment or use of portable fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)?<sup>1</sup>
12.   ☐   ☒   Involve the installation or use of equipment that will result in an air emission discharge?
13.   ☐   ☒   Involve the installation or modification of a stationary or mobile tank?
14.   ☐   ☒   Involve the use or storage of oils or chemicals that could be directly released into the environment?
15.   ☐   ☒   Involve burial or placement of any solid wastes in the site area that may affect runoff, surface water, or groundwater?

<sup>1</sup> See NMM Procedure EV-117, "Air Emissions Management Program," for guidance in answering this question.

	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>7</b>	<b>of</b>	<b>11</b>

#### IV. SECURITY PLAN SCREENING

If any of the following questions is answered "yes," a Security Plan review must be performed by the Security Department to determine actual impact to the Plan and the need for a change to the Plan.


##### A. Could the proposed activity being evaluated:

- |     | <u>Yes</u>                          | <u>No</u>                           |  |
|-----|-------------------------------------|-------------------------------------|--|
| 1.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Add, delete, modify, or otherwise affect Security department responsibilities (e.g., including fire brigade, fire watch, and confined space rescue operations)?  |
| 2.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Result in a breach to any security barrier(s) (e.g., HVAC ductwork, fences, doors, walls, ceilings, floors, penetrations, and ballistic barriers)?   |
| 3.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Cause materials or equipment to be placed or installed within the Security Isolation Zone?   |
| 4.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Affect security lighting by adding or deleting lights, structures, buildings, or temporary facilities?   |
| 5.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify or otherwise affect the intrusion detection systems (e.g., E-fields, microwave, fiber optics)?  |
| 6.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the operation or field of view of the security cameras?   |
| 7.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify or otherwise affect (block, move, or alter) installed access control equipment, intrusion detection equipment, or other security equipment?   |
| 8.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify or otherwise affect primary or secondary power supplies to access control equipment, intrusion detection equipment, other security equipment, or to the Central Alarm Station or the Secondary Alarm Station? |
| 9.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify or otherwise affect the facility's security-related signage or land vehicle barriers, including access roadways?  |
| 10. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify or otherwise affect the facility's telephone or security radio systems?   |

The Security Department answers the following questions if one of the questions was answered "yes".

- B. Is the Security Plan actually impacted by the proposed activity? ☐ Yes ☐ No
- C. Is a change to the Security Plan required? ☐ Yes Change # (optional) ☐ No

Name of Security Plan reviewer (print) / Signature / Date

 <i>Entergy</i>	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 1		50.59 REVIEW FORM	Page	8	of	11

## VI. 50.59 EVALUATION

- A. **Executive Summary** (Serves as input to NRC summary report. Limit to one page or less. Send an electronic copy to the site licensing department after OSRC approval, if available.)

### **Brief description of change, test, or experiment:**


Extending the Division I and II Diesel Fuel Oil Storage Tank inspection to December of 2005. This is a one time extension and will be documented in TRM SR TR3.8.3.6 and FSAR 3A/1.137.

### **Reason for proposed Change:**

This change is being done to accommodate work activities associated with the Diesel Fuel Oil Storage Tank.

### **50.59 Evaluation summary and conclusions**

The purpose of the evaluation is to provide the rationale for a one time extension the inspection of the Diesel Generator Fuel Oil Storage tanks to December 2005. This is in SR TR3.8.3.6. The enhancement is based on previous ten year inspections showing minor wear and wall degradation to the Diesel Generator Tank walls and no serious deterioration of the diesel generator fuel oil storage tanks. The wall degradation is due to the sample element probes in the tank and this is minor. The sample element is the device used to measure the tank volume and the degradation is due to monthly use. These inspections are documented in MNCR 108-92, MNCR 174-92 and MAI 327093. The proposed activity does not adversely affect the design function of the Diesel Fuel Oil storage tanks as described in the FSAR. Inspection of the tanks will still occur based on the minor wear discovered in the Diesel Generator Fuel Oil tanks from previous inspections. The proposed activity does not adversely affect a method of performing or controlling a design function of the Diesel Fuel Oil storage tank as described in the FSAR. The function of the fuel oil storage tank is to store fuel and it will maintain that function even with the decreased frequency of inspection. The proposed activity does not adversely affect a method of evaluation (i.e., DG Fuel Oil Storage Tank inspection) that demonstrates intended design functions of the Diesel Fuel Oil Storage tanks described in the FSAR will still be accomplished. The inspection time is being extended to December 2005.

	EN-S NUCLEAR MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
ATTACHMENT 1		50.59 REVIEW FORM	Page	9	of	11

**B. License Amendment Determination**

Does the proposed Change being evaluated represent a change to a method of evaluation **ONLY**? If "Yes," Questions 1 – 7 are not applicable; answer only Question 8. If "No," answer all questions below.

☐ Yes  
☒ No

**Does the proposed Change:**

1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the FSAR? 
☐ Yes  
☒ No

**BASIS:**

The frequency of occurrence of an accident is not affected by extending the Division I and II Diesel Fuel Oil Storage Tank inspection to December 2005. UFSAR 3A/1.137 is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank inspection. The one time exception to the scheduled inspection will allow the Fuel Oil Storage Tank inspection to be extended to December 2005. This 50.59 provides a basis for the Diesel Generator Fuel Storage Tank inspection extension to December 2005.


2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? 
☐ Yes  
☒ No

**BASIS:**

UFSAR 3A/1.137 is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank inspection.

The enhancement is based on previous ten year inspections showing minor wear and wall degradation to the Diesel Generator Tank walls and no serious deterioration of the diesel generator fuel oil storage tanks. The wall degradation is due to the sample element probes in the tank and this is minor. These inspections are documented in MNCR 108-92, MNCR 174-92 and MAI 327093. The proposed activity does not adversely affect the design function of the Diesel Fuel Oil storage tanks as described in the FSAR. Inspection of the tanks will still occur. The inspection schedule extension will be based on the minor wear discovered in the Diesel Generator Fuel Oil tanks from previous inspections. The proposed activity does not adversely affect a method of performing or controlling a design function of the Diesel Fuel Oil storage tank as described in the FSAR.



	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	<b>QUALITY RELATED ADMINISTRATIVE</b>	<b>LI-101</b>	<b>Revision 3</b>		
		<b>INFORMATION USE</b>				
<b>ATTACHMENT 1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>10</b>	<b>of</b>	<b>11</b>

3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the FSAR? ☐ Yes  
☒ No

**BASIS:**

UFSAR 3A/1.137 is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank inspection. The one time exception to the scheduled inspection will allow the Fuel Oil Storage Tank inspection to be extended to December 2005.

The consequences of a Diesel failure or Diesel Fuel Oil storage tank failure remained unchanged. The proposed activity does not adversely affect the design function of the Diesel Fuel Oil storage tanks as described in the FSAR. Inspection of the tanks will still occur. The scheduled inspection extension is based on the minor wear discovered in the Diesel Generator Fuel Oil tanks from previous inspections. The proposed activity does not adversely affect the consequences of an accident previously evaluated in the FSAR.

4. Result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes  
☒ No

**BASIS:**


UFSAR 3A/1.137 is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank scheduled inspection. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank scheduled inspection. The one time exception to the inspection will allow the Fuel Oil Storage Tank inspection to be extended to December 2005.

The consequences of a Diesel failure or Diesel Fuel Oil storage tank remained unchanged. The proposed activity does not adversely affect the design function of the Diesel Fuel Oil storage tanks as described in the FSAR. Inspection of the tanks will still occur. It will be extended based on the minor wear discovered in the Diesel Generator Fuel Oil tanks from previous inspections. The proposed activity does not adversely affect the consequences of component malfunction previously evaluated in the FSAR.

5. Create a possibility for an accident of a different type than any previously evaluated in the FSAR? ☐ Yes  
☒ No

**BASIS:**

The possibility of a different type of accident is not affected by extending the Diesel Fuel Oil Storage Tank inspection inspection to December 2005. There are no new components being added to the tank and the tank is not being modified or changed. The UFSAR is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank scheduled inspection. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank scheduled inspection. The one time exception to the inspection will allow the Fuel Oil Storage Tank inspection to be extended to December 2005. This 50.59 provides a basis for the Diesel Generator Fuel Storage Tank inspection extension to December 2005.

	<b>EN-S NUCLEAR MANAGEMENT MANUAL</b>	QUALITY RELATED ADMINISTRATIVE	LI-101	Revision 3		
		INFORMATION USE				
<b>ATTACHMENT 1</b>		<b>50.59 REVIEW FORM</b>	<b>Page</b>	<b>11</b>	<b>of</b>	<b>11</b>

6. Create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS**

The UFSAR is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank scheduled inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank inspection to December 2005.

The enhancement is based on previous ten year inspections showing minor wear and wall degradation to the Diesel Generator Tank walls and no serious deterioration of the diesel generator fuel oil storage tanks. The wall degradation is due to the sample element probes in the tank and this is minor. These inspections are documented in MNCR 108-92, MNCR 174-92 and MAI 327093. The proposed activity does not adversely affect the design function of the Diesel Fuel Oil storage tanks as described in the FSAR. Inspection of the tanks will still occur. The scheduled inspection extension will be based on the minor wear discovered in the Diesel Generator Fuel Oil tanks from previous inspections. The proposed activity does not produce a different result for the malfunction of the Diesel Fuel Oil storage tank as described in the FSAR.

7. Result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered? ☐ Yes ☒ No

**BASIS:**

The UFSAR is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank scheduled inspection.

The enhancement is based on previous ten year inspections showing minor wear and wall degradation to the Diesel Generator Tank walls and no serious deterioration of the diesel generator fuel oil storage tanks. The wall degradation is due to the sample element probes in the tank and this is minor. These inspections are documented in MNCR 108-92, MNCR 174-92 and MAI 327093. The proposed activity does not adversely affect the design function of the Diesel Fuel Oil storage tanks as described in the FSAR. Inspection of the tanks will still occur. The scheduled inspection extension will be based on the minor wear discovered in the Diesel Generator Fuel Oil tanks from previous inspections. There are no fission barriers affected by extending the inspection to December 2005 of the Diesel Fuel Oil storage tank as described in the FSAR.

8. Result in a departure from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses? ☐ Yes ☒ No

**BASIS:**

The UFSAR is affected by this evaluation because it is a one time extension of the Division I and II Fuel Oil Storage tank inspection to December 2005. UFSAR section for Regulatory Guide 1.137 on page 3A/1.137 identifies the Fuel oil system for Standby Diesel Generators. This part of the Regulatory Guide will be changed for the one time extension of the Diesel Fuel Oil Storage Tank inspection to December 2005.

There is no change in method of inspection of the Diesel Fuel Oil Storage tank.

**GGNS 50.59 Safety Evaluation Number**

**SE 2004-0005-R00**

I. OVERVIEW / SIGNATURES

Facility: Grand Gulf Nuclear Station

Document Reviewed: GGNS ER-2004-0138-000

Change/Rev.: 0

System Designator(s)/Description: E51

Description of Proposed Change

The proposed change reclassifies the containment isolation provisions for the RCIC steam turbine exhaust containment penetration (penetration 29). The existing configuration credits the closed RCIC system pressure boundary and a remote manual isolation valve (E51F068-A) as the two required containment barriers. The revised configuration utilizes two automatic isolation valves (E51F068-A and E51F040) in conjunction with an additional locked closed manual valve (E51F212). The revised configuration also requires physical changes to convert E51F068-A to an automatic isolation valve on a Group 9 isolation signal. The physical changes to add the group 9 isolation to E51F068-A are to be completed under ER-2004-0138-001.

Check the applicable review(s): (Only the sections indicated must be included in the Review.)

<input type="checkbox"/>	EDITORIAL CHANGE of a Licensing Basis Document	Section I
<input type="checkbox"/>	SCREENING	Sections I and II required
<input type="checkbox"/>	50.59 EVALUATION EXEMPTION	Sections I, II, and III required
<input checked="" type="checkbox"/>	50.59 EVALUATION (#: <u>SE 2004-0005-ROO</u> )	Sections I, II, and IV required

Preparer: William E. Long Jr. / William E. Long Jr. / EOI / NE-SA / 10-22-04  
Name (print) / Signature / Company / Department / Date

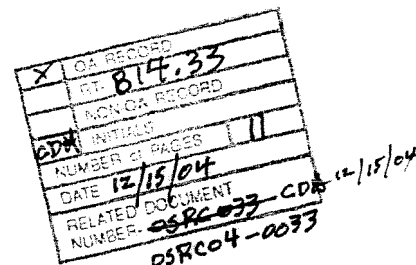
Reviewer: Robert W. Fuller / Robert W Fuller / EOI / DE-Mech / 10-22-04  
Name (print) / Signature / Company / Department / Date

OSRC: M. A. Krupa / M. A. Krupa / 11-22-04  
Chairman's Name (print) / Signature / Date

[Required only for Programmatic Exclusion Screenings (see Section 5.8) and 50.59 Evaluations.]

Meeting  
033-2004

12/15/04  
50.59 Coordinator



## II. SCREENINGS

### A. Licensing Basis Document Review

1. Does the proposed activity impact the facility or a procedure as described in any of the following Licensing Basis Documents?

Operating License	YES	NO	CHANGE # and/or SECTIONS IMPACTED
Operating License	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Orders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**If "YES", obtain NRC approval prior to implementing the change by initiating an LBD change in accordance with NMM LI-113. (See Section 5.2[13] for exceptions.)**

LBDs controlled under 50.59	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
FSAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LBDC-2004-050
TS Bases	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Technical Requirements Manual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LBDC-2004-050
Core Operating Limits Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluation Report and supplements for the initial FSAR <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluations for amendments to the Operating License <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**If "YES", perform an Exemption Review per Section III OR perform a 50.59 Evaluation per Section IV OR obtain NRC approval prior to implementing the change. If obtaining NRC approval, document the LBD change in Section II.A.5; no further 50.59 review is required. However, the change cannot be implemented until approved by the NRC. AND initiate an LBD change in accordance with NMM LI-113.**

LBDs controlled under other regulations	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
Quality Assurance Program Manual <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Emergency Plan <sup>2, 3</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fire Protection Program <sup>3, 4</sup> (includes the Fire Hazards Analysis)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Offsite Dose Calculations Manual <sup>3, 4</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**If "YES", evaluate any changes in accordance with the appropriate regulation AND initiate an LBD change in accordance with NMM LI-113. No further 50.59 review is required.**

<sup>1</sup> If "YES," see Section 5.2[5]. No LBD change is required.

<sup>2</sup> If "YES," notify the responsible department and ensure a 50.54 Evaluation is performed. Attach the 50.54 Review.

<sup>3</sup> Changes to the Emergency Plan, Fire Protection Program, and Offsite Dose Calculation Manual must be approved by the OSRC in accordance with NMM OM-119.

<sup>4</sup> If "YES," evaluate the change in accordance with the requirements of the facility's Operating License Condition or under 50.59, as appropriate.

2. Does the proposed activity involve a test or experiment not described in the FSAR?

☐ Yes

☒ No

If "yes," perform a 50.59 Evaluation per Section IV OR obtain NRC approval prior to implementing the change AND initiate an LBD change in accordance with NMM LI-113. If obtaining NRC approval, document the change in Section II.A.5; no further 50.59 review is required. However, the change cannot be implemented until approved by the NRC.

3. Basis

Explain why the proposed activity does or does not impact the Operating License/Technical Specifications and/or the FSAR and why the proposed activity does or does not involve a new test or experiment not previously described in the FSAR. Discuss other LBDs if impacted. Adequate basis must be provided within the Screening such that a third-party reviewer can reach the same conclusions. Simply stating that the change does not affect TS or the FSAR is not an acceptable basis. See EOI 50.59 Guidelines Section 5.3.2 for guidance.

**Operating License/Technical Specifications:**

Although reclassification will subject E51F040 to the requirements of Specification 3.6.1, the proposed classification of E51F040 and E51F212 as containment isolation valves does not require changes to this or any other specification or the operating license since the valves controlled by this specification are listed in the TRM. As containment isolation valves, additional testing requirements apply to these valves as established by existing programs. No new testing is required. Therefore, changes to the GGNS Operating License or Technical Specifications are not required and no new testing or experiments not previously described are involved.

**UFSAR/TRM:**

The above noted sections of the UFSAR and TRM are affected by this evaluation including the corresponding UFSAR sections of the TRM. These changes are needed to capture the revised design basis for penetration 29. The changes to the TRM and the UFSAR associated with E51F068-A will be implemented during implementation of ER-2004-0138-001.

**Technical Specification Bases:**

The proposed changes are consistent with the current TS bases and no changes are required. Therefore, no TS bases are affected.

**NRC Orders:**

The NRC Orders issued at Grand Gulf are not affected by this evaluation because the changes only deal with containment isolation provisions for penetration 29. This evaluation is not related to plant security which is the subject of Grand Gulf's current NRC Orders.

**Core Operating Limits Report:**

This activity does not impact the COLR (GGNS Core Operating Limits Report). The COLR has no requirements associated the containment isolation provisions.

**NRC Safety Evaluation Reports:**

There are no SERs impacted by the proposed changes. Previous evaluations prepared by the NRC for the current TS remain valid. The proposed changes are consistent with the NRC evaluations prepared for GGNS.

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**50.59 REVIEW FORM**ER-GGN-2004-0138-000, Attachment 9.1

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Page 4 of 11

**4. References**

Discuss the methodology for performing LBD searches. State the location of relevant licensing document information and explain the scope of the review such as electronic search criteria used (e.g., key words) or the general extent of manual searches per Section 5.4.1[5](d) of LI-101. **NOTE: Ensure that manual searches are performed using controlled copies of the documents. If you have any questions, contact your site Licensing department.**

LBDs/Documents reviewed via keyword search:      Keywords:

UFSAR, TS, TS Bases, COLR, SERs, TRM

E51F040, RCIC Isolation, E51F068, penetration 29

LBDs/Documents reviewed manually:

None

5. **Is the validity of this Review dependent on any other change?** (See Section 5.3.4 of the EOI 10 CFR 50.59 Program Review Guidelines.) ☒ Yes ☐ No

**If "YES", list the required changes/submittals. The changes covered by this 50.59 Review cannot be implemented without approval of the other identified changes (e.g., license amendment request). Establish an appropriate notification mechanism to ensure this action is completed.**

ER 2003-0138-000 evaluates compliance with GDC 56 for penetration 29. This includes the requirement that E51F068-A is modified to automatically isolate on a Group 9 isolation signal. This auto isolation will be implemented under supplemental ER 2004-0138-001. As a result, this evaluation is not completely valid until the supplemental ER is implemented.

## B. ENVIRONMENTAL SCREENING

If any of the following questions is answered "yes," an Environmental Review must be performed in accordance with NMM Procedure EV-115, "Environmental Evaluations," and attached to this 50.59 Review. Consider both routine and non-routine (emergency) discharges when answering these questions.

Will the proposed Change being evaluated:

- |     | <u>Yes</u>                          | <u>No</u>                           |  |
|-----|-------------------------------------|-------------------------------------|--|
| 1.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve a land disturbance of previously disturbed land areas in excess of one acre (i.e., grading activities, construction of buildings, excavations, reforestation, creation or removal of ponds)? |
| 2.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve a land disturbance of undisturbed land areas (i.e., grading activities, construction, excavations, reforestation, creating, or removing ponds)?  |
| 3.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve dredging activities in a lake, river, pond, or stream?   |
| 4.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Increase the amount of thermal heat being discharged to the river or lake?   |
| 5.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Increase the concentration or quantity of chemicals being discharged to the river, lake, or air?   |
| 6.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge any chemicals new or different from that previously discharged?  |
| 7.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Change the design or operation of the intake or discharge structures?  |
| 8.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify the design or operation of the cooling tower that will change water or air flow characteristics?  |
| 9.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Modify the design or operation of the plant that will change the path of an existing water discharge or that will result in a new water discharge?   |
| 10. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Modify existing stationary fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)? <sup>1</sup>   |
| 11. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve the installation of stationary fuel burning equipment or use of portable fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)? <sup>1</sup>               |
| 12. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve the installation or use of equipment that will result in a new or additional air emission discharge?   |
| 13. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve the installation or modification of a stationary or mobile tank?   |
| 14. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve the use or storage of oils or chemicals that could be directly released into the environment?  |
| 15. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Involve burial or placement of any solid wastes in the site area that may affect runoff, surface water, or groundwater?  |

<sup>1</sup> See NMM Procedure EV-117, "Air Emissions Management Program," for guidance in answering this question.



**C. SECURITY PLAN SCREENING**

If any of the following questions is answered "yes," a Security Plan Review must be performed by the Security Department to determine actual impact to the Plan and the need for a change to the Plan.

Could the proposed activity being evaluated:

- |     | <u>Yes</u>               | <u>No</u>                           |  |
|-----|--------------------------|-------------------------------------|--|
| 1.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Add, delete, modify, or otherwise affect Security department responsibilities (e.g., including fire brigade, fire watch, and confined space rescue operations)?  |
| 2.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Result in a breach to any security barrier(s) (e.g., HVAC ductwork, fences, doors, walls, ceilings, floors, penetrations, and ballistic barriers)?   |
| 3.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Cause materials or equipment to be placed or installed within the Security Isolation Zone?   |
| 4.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Affect (block, move, or alter) security lighting by adding or deleting lights, structures, buildings, or temporary facilities?   |
| 5.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the intrusion detection systems (e.g., E-fields, microwave, fiber optics)?  |
| 6.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the operation or field of view of the security cameras?   |
| 7.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect (block, move, or alter) installed access control equipment, intrusion detection equipment, or other security equipment?   |
| 8.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect primary or secondary power supplies to access control equipment, intrusion detection equipment, other security equipment, or to the Central Alarm Station or the Secondary Alarm Station? |
| 9.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the facility's security-related signage or land vehicle barriers, including access roadways?  |
| 10. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the facility's telephone or security radio systems?   |

Documentation for accepting any "yes" statement for these reviews will be attached to this 50.59 Review or referenced below.

**D. INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) SCREENING**

**Not Applicable to GGNS at this time per LI-101, Revision 4 Section 5.4.4[1] and LI-112, Revision 1**

If any of the following questions is answered "yes," an ISFSI Review must be performed in accordance with NMM Procedure LI-112, "72.48 Review," and attached to this Review.

Will the proposed Change being evaluated:

- |     | <u>Yes</u>               | <u>No</u>                |  |
|-----|--------------------------|--------------------------|--|
| 1.  | <input type="checkbox"/> | <input type="checkbox"/> | Any activity that directly impacts spent fuel cask storage or loading operations?  |
| 2.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve the Independent Spent Fuel Storage Installation (ISFSI) including the concrete pad, security fence, and lighting?                            |
| 3.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the on-site transport equipment or path from the Fuel Building to the ISFSI?   |
| 4.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the design or operation of the Fuel Building fuel bridge including setpoints and limit switches?                                 |
| 5.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the Fuel Building or Control Room(s) radiation monitoring?   |
| 6.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the Fuel Building pools including pool levels, cask pool gates, cooling water sources, and water chemistry?                      |
| 7.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the Fuel Building handling equipment (e.g., bridges and cask cranes, structures, load paths, lighting, auxiliary services, etc)? |
| 8.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the Fuel Building electrical power?  |
| 9.  | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the Fuel Building ventilation?   |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the ISFSI security?  |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to off-site radiological release projections from non-ISFSI sources?  |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to spent fuel characteristics?  |
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | Redefine/change heavy load pathways?   |
| 14. | <input type="checkbox"/> | <input type="checkbox"/> | Fire and explosion protection near or in the on-site transport paths or near the ISFSI?  |
| 15. | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the loading bay or supporting components?  |
| 16. | <input type="checkbox"/> | <input type="checkbox"/> | New structures near the ISFSI?   |
| 17. | <input type="checkbox"/> | <input type="checkbox"/> | Modifications to any plant systems that support dry fuel storage activities?   |
| 18. | <input type="checkbox"/> | <input type="checkbox"/> | Involve a change to the nitrogen supply, service air, demineralized water or borated water system in the Fuel Building?                              |

#### IV. 50.59 EVALUATION

##### License Amendment Determination

Does the proposed Change being evaluated represent a change to a method of evaluation ☐ Yes  
ONLY? If "Yes," Questions 1 – 7 are not applicable; answer only Question 8. If "No," answer ☒ No  
all questions below.

Does the proposed Change:

1. Result in more than a minimal increase in the frequency of occurrence of an accident ☐ Yes  
previously evaluated in the FSAR? ☒ No

BASIS:

As described in the UFSAR 6.2.4 and in SRP 6.2.4, Containment Isolation System, the design objective of the containment isolation system is to allow the normal or emergency passage of fluids through the containment boundary while preserving the ability of the boundary to prevent or limit the escape of fission products that may result from postulated accidents. As described in UFSAR 6.2.4.3.2, those lines penetrating the containment and communicating with the containment interior are required to meet 10CFR50, Appendix A, General Design Criterion (GDC) 56. The engineering evaluation (ER-2004-0138-000) for the revised configuration describes in detail the basis for meeting the GDC requirements under the "some other basis" provision of GDC56. Primary containment penetrations not satisfying the explicit requirements of the GDC are discussed in supplement #1 of the GGNS SER (NUREG-0831). Specific criteria based on the alternative acceptance criteria from SRP 6.2.4 are presented as the basis for accepting the GGNS alternative containment isolation configurations in the SER supplement. The NRC concluded that the application of these criteria was acceptable for satisfying the requirements of criteria 55 and 56 of the GDC under the "some other basis" provision. A comparison of these requirements and the SRP 6.2.4 requirements indicates that compliance with the SRP bounds the requirements stipulated in the SER supplement.

The conditions representing a departure from the explicit GDC requirements involve the placement of both isolation valves outside containment and the use of a check valve as the outboard isolation barrier. GDC 56 criterion 4 requires two valves, one inside the containment and one outside the containment. GDC 56 also stipulates that a simple check valve may not be used as the automatic isolation valve outside containment. Supplement #1 of the GGNS SER approved for GGNS the departure from the explicit GDC requirements and identified alternative criteria that satisfied the GDC requirements. Item 4 states that isolation provisions that consist of two valves in series both of which are outside the containment was acceptable since "locating one of the valves inside containment would subject it to more severe environmental conditions (including suppression pool dynamic loads)." This statement is true for the RCIC exhaust penetration since it enters the containment approximately 20 ft above the normal suppression pool water level. As discussed in ER-2004-0138-000, the revised configuration also satisfies additional GDC and SRP 6.2.4 criteria. Specifically, the GDC 56 states that "A simple check valve is not an acceptable automatic isolation valve for this application." A simple check valve is defined as a valve that closes on reverse flow conditions only. An automatic isolation valve is a "valve whose closure is initiated by automatic means without any action by a plant operator...or a simple or positive closing check valve". These definitions appear in ANS 56.2/ANSI N271, 1976, Containment Isolation Provisions for Fluid Systems. With minor exceptions, ANS 56.2/ANSI N271, 1976 was endorsed by the NRC (Ref. Regulatory Guide 1.141) as describing an acceptable method for complying with the Commission's requirements for containment isolation of fluid systems. Modifications to the counterweight on E51F040 completed during RF13 under ER-GG-2004-0043-000 thru 003 ensure that the valve closes without reverse flow. This function was verified during the RCIC system operability test following RF13. Therefore, E51F040 is not considered a simple check valve since reverse flow is not required for the valve to fully close. E51F040 was also leak rate tested during RF13 with no seat rework. The valve passed with zero leakage reported.

Although exhaust line check valves in similar applications have experienced operational problems at other facilities and at GGNS, the modifications to the counterweight and the valve's pedigree support the use of E51F040 as a containment isolation valve. In fact, this valve was originally a containment isolation valve

at GGNS until it was dropped in favor of the closed system boundary approach (Ref: Q&R 021.50). In addition, the existing E51F040 and the RCIC exhaust line are designed to ASME Class 2 and seismic category 1 requirements. E51F212 is an ASME Class 1 component and is also designed to seismic category 1 requirements. The design pressure of the exhaust line and the isolation valves exceeds that of the containment. As a result, the appropriate reliability and performance considerations are included in the design of these isolation barriers and reflect the importance to safety of assuring their containment capability under accident conditions. This ensures automatic isolation of penetration 29 when exhaust flow terminates and the RCIC turbine is no longer performing its function.

The RCIC system is referenced in the UFSAR discussions for several transients and accidents; however, the proposed change only affects the containment isolation provisions for the RCIC exhaust penetration. The system is not credited in the safety analysis for accident mitigation. Automatic isolation of E51F068-A on a Group 9 isolation signal (60 psig and 1.39 psig drywell pressure). The RCIC system will continue to perform its intended functions as described in the UFSAR since the system's current design shuts down the system when steam pressure is reduced below 60 psig. As a result, no accident initiators are affected. Therefore, the proposed changes represent no more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the FSAR.

2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes ☒ No

BASIS:

The proposed configuration adopts a new containment isolation provision for the RCIC exhaust line to the suppression pool. The previous design relied on a single remote manual valve and the closed RCIC system to provide the level of redundancy and reliability required by the GDC for containment penetrations. This configuration was recently found to be a potential containment leakage path (CR2004-0318) and a revised configuration that also meets the redundancy and reliability requirements of the GDC. The revised configuration utilizes two automatic isolation valves to meet the GDC requirements. As described in detail in the response to ER-2004-0138-000, the alternate provisions of SRP 6.2.4 and the GGNS licensing basis are satisfied thereby ensuring the reliability of the configuration as a result, there is no more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the UFSAR.

As discussed above, the revised configuration has no functional impact on the RCIC system. Therefore, the likelihood of a failure or malfunction of the RCIC system is not significantly increased.

3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the FSAR? ☐ Yes ☒ No

BASIS:

As discussed in the TS bases for the group 9 isolation, isolation of the RCIC exhaust is indirectly assumed in the LOCA dose analysis because the turbine exhaust leakage path is not assumed to contribute to offsite doses. As discussed in the evaluation of ER-2004-0138-000, programmatic changes to incorporate leakage from penetration 29 as determined from ASME in-service testing into the aggregate containment liquid leakage limit described in UFSAR 15.6.5.5.4 are included as part of this change. This leakage is included as part of the LOCA dose analysis consequences associated with a design basis accident. This limit will not increase as a result of this change. Therefore, the proposed changes do not result in more than a minimal increase in the consequences of an accident.

4. Result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes ☒ No

BASIS:

As discussed in the TS bases for the group 9 isolation, isolation of the RCIC exhaust is implicitly assumed in the LOCA dose analysis because the turbine exhaust leakage path is not assumed to contribute to offsite doses. For the final configuration, the redundant penetration barrier (valve E51F068-A) does not rely on leakage detection and the associated operator action to manually isolate the penetration in the event of an equipment malfunction. Therefore, failure of E51F040 or E51F212 will not result in additional containment leakage or the associated radiological consequences. As discussed in the evaluation of ER-2004-0138-000, programmatic changes to incorporate leakage from penetration 29 as determined from ASME in-service testing into the aggregate containment leakage limit are included as part of this change. This leakage is included as part of the LOCA dose analysis consequences associated with a design basis accident. This limit will not increase as a result of this change. Therefore, the proposed changes do not result in more than a minimal increase in the consequences of an accident. Nevertheless, the proposed changes do not result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

5. Create a possibility for an accident of a different type than any previously evaluated in the FSAR?

☐ Yes  
☒ No

BASIS:

The proposed change reclassifies the containment isolation provisions for the RCIC exhaust containment penetration (penetration 29). The existing configuration credits the closed RCIC system and a remote manual isolation valve (E51F068-A) as the two required containment barriers. The revised configuration utilizes two automatic isolation valves (E51F068-A and E51F040) in conjunction with a manual valve that is locked closed (E51F212). Both configurations are intended to meet GDC 56 criteria for containment isolation and utilize existing valves; however, the existing configuration was identified as susceptible to post accident liquid leakage (Ref. CR-2004-0318). The revised configuration does not impact operation of the RCIC system since auto isolation of E51F068-A only occurs as part of a normal system isolation. This isolation is concurrent with the automatic isolation of other RCIC system valves that shut the system down when it is no longer performing its function. Physical changes to the plant are limited to those needed to add a group 9 auto-isolation signal to E51F068-A. This is being accomplished under supplemental engineering request 2004-0138-001. No new accident precursors or accident scenarios are created and the RCIC system function is not affected. RCIC system response during an SBO event is not affected. Therefore, these changes do not create a possibility for an accident of a different type than any previously evaluated in the FSAR.

6. Create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR?

☐ Yes  
☒ No

BASIS:

As discussed above, only the isolation provisions for penetration 29 are affected by the proposed change. As discussed in ER-2004-0138-001, the affected components are fully qualified to perform the containment isolation functions (e.g., ASME Class 2 or better, seismic category 1). The GDC requirements require redundant isolation barriers. Although this change creates a new failure mechanism where E51F068-A could fail to automatically close, this failure does not cause a different result from failures previously evaluated since the redundant isolation barrier would isolate the penetration. The same line of reasoning applies to failure of E51F040 to automatically close. Therefore, these changes do not create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR.

7. Result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered?

☐ Yes  
☒ No

BASIS:

The fission product barrier associated with this change is the containment itself. In accordance with the requirements of SRP 6.2.4, the revised barrier components have a design pressure and temperature that exceeds that of containment. Note that this aspect of the configuration is also required by the current configuration. The proposed changes do not result in changes to the operation of the RCIC system or the amount of steam exhausted to the containment. As a result, no additional heat is added to the containment and the containment design basis pressure and temperature limits are unaffected. Therefore, these changes do not result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered.

8. Result in a departure from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses?

☐ Yes  
☒ No

BASIS:

The proposed changes make no changes to analysis methods or methods used to evaluate events described in the FSAR. Therefore, these changes do not depart from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses.

**If any of the above questions is checked "YES", obtain NRC approval prior to implementing the change by initiating a change to the Operating License in accordance with NMM Procedure ENS-LI-113.**

**GGNS 50.59 Safety Evaluation Number**

**SE 2004-0006-R00**

I. OVERVIEW / SIGNATURES

Facility: Grand Gulf Nuclear Station

Document Reviewed: GGNS ER-2003-0261-000

Change/Rev.: 0

System Designator(s)/Description: Various

Description of Proposed Change

The purpose of this ER is to evaluate removing requirements for the automatic isolation function of specific secondary containment isolation valves while demonstrating that design function of the secondary containment is preserved and without increasing the consequences of postulated accidents. The changes proposed as a result of this evaluation will also enhance the ability of plant operators to recover from plant transients and accidents without compromising the health and safety of the public. The existing isolations are intended to ensure that the function of the secondary containment and the primary containment are not compromised by failures associated with those non-safety related systems that provide no accident mitigation function. These systems are not required to operate post accident or for safe shutdown. The affected systems are the instrument air system (P53), the Fire Protection System (P64), the Plant Service Water System (P44), and the plant chilled water system (P71). Implementation of any changes associated with this evaluation will be performed under supplement ER-2003-0261-001.

Check the applicable review(s): (Only the sections indicated must be included in the Review.)

<input type="checkbox"/>	EDITORIAL CHANGE of a Licensing Basis Document	Section I
<input type="checkbox"/>	SCREENING	Sections I and II required
<input type="checkbox"/>	50.59 EVALUATION EXEMPTION	Sections I, II, and III required
<input checked="" type="checkbox"/>	50.59 EVALUATION (#: <u>SE 2004-006</u> )	Sections I, II, and IV required

OSRC Meeting # 036-2004

Preparer: William E. Long Jr. / William E. Long Jr. / EOI / NE-SA / 12-17-04  
Name (print) / Signature / Company / Department / Date

Reviewer: Robert W. Fuller / Robert W Fuller / ENS / DE-Mech / 12-17-04  
Name (print) / Signature / Company / Department / Date

OSRC: DPW / 1/20/05  
Chairman's Name (print) / Signature / Date Dennis P. Wiles  
[Required only for Programmatic Exclusion Screenings (see Section 5.8) and 50.59 Evaluations.]

C. Holifield / C. Holifield / 2/22/05  
50.59 Coordinator



## II. SCREENINGS

### A. Licensing Basis Document Review

1. Does the proposed activity impact the facility or a procedure as described in any of the following Licensing Basis Documents?

Operating License	YES	NO	CHANGE # and/or SECTIONS IMPACTED
Operating License	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Orders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**If "YES", obtain NRC approval prior to implementing the change by initiating an LBD change in accordance with NMM LI-113. (See Section 5.2[13] for exceptions.)**

LBDs controlled under 50.59	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
FSAR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See section A.3, Note 1
TS Bases	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See section A.3, Note 1
Technical Requirements Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See section A.3, Note 1
Core Operating Limits Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluation Report and supplements for the initial FSAR <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluations for amendments to the Operating License <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**If "YES", perform an Exemption Review per Section III OR perform a 50.59 Evaluation per Section IV OR obtain NRC approval prior to implementing the change. If obtaining NRC approval, document the LBD change in Section II.A.5; no further 50.59 review is required. However, the change cannot be implemented until approved by the NRC. AND initiate an LBD change in accordance with NMM LI-113.**

LBDs controlled under other regulations	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
Quality Assurance Program Manual <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Emergency Plan <sup>2,3</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fire Protection Program <sup>3,4</sup> (includes the Fire Hazards Analysis)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Offsite Dose Calculations Manual <sup>3,4</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**If "YES", evaluate any changes in accordance with the appropriate regulation AND initiate an LBD change in accordance with NMM LI-113. No further 50.59 review is required.**

<sup>1</sup> If "YES," see Section 5.2[5]. No LBD change is required.

<sup>2</sup> If "YES," notify the responsible department and ensure a 50.54 Evaluation is performed. Attach the 50.54 Review.

<sup>3</sup> Changes to the Emergency Plan, Fire Protection Program, and Offsite Dose Calculation Manual must be approved by the OSRC in accordance with NMM OM-119.

<sup>4</sup> If "YES," evaluate the change in accordance with the requirements of the facility's Operating License Condition or under 50.59, as appropriate.

2. Does the proposed activity involve a test or experiment not described in the FSAR?

☐ Yes  
☒ No

If "yes," perform a 50.59 Evaluation per Section IV OR obtain NRC approval prior to implementing the change AND initiate an LBD change in accordance with NMM LI-113. If obtaining NRC approval, document the change in Section II.A.5; no further 50.59 review is required. However, the change cannot be implemented until approved by the NRC.

3. Basis

Explain why the proposed activity does or does not impact the Operating License/Technical Specifications and/or the FSAR and why the proposed activity does or does not involve a new test or experiment not previously described in the FSAR. Discuss other LBDs if impacted. Adequate basis must be provided within the Screening such that a third-party reviewer can reach the same conclusions. Simply stating that the change does not affect TS or the FSAR is not an acceptable basis. See EOI 50.59 Guidelines Section 5.3.2 for guidance.

**Operating License/Technical Specifications:**

Only those secondary containment isolation valves performing a safety function are subject to the TS requirements. Removal of the automatic isolation function does not, in itself, remove valves from being subject to the operability requirements of TS 3.6.4.2. However, the specific TS requirements are not affected by this change. Therefore, changes to the GGNS Operating License or Technical Specifications are not required and no new testing or experiments not previously described are involved.

**UFSAR/TRM:**

Several sections of the UFSAR and TRM are potentially affected by this evaluation including the corresponding UFSAR sections of the TRM. These changes are only needed when these changes are implemented under ER supplement 1. The changes to the TRM and the UFSAR will therefore be implemented during implementation of ER-2003-0261-001.

**Technical Specification Bases:**

Implementation of these changes will require changes to the TS bases to include the revised design basis for the secondary containment isolation valves as well as the revised drawdown criteria. These changes will be incorporated into the TS bases as part of supplement 1 to this ER.

**NRC Orders:**

The NRC Orders issued at Grand Gulf are not affected by this evaluation because the changes only deal with secondary containment isolation provisions. This evaluation is not related to plant security which is the subject of Grand Gulf's current NRC Orders.

**Core Operating Limits Report:**

This activity does not impact the COLR (GGNS Core Operating Limits Report). The COLR has no requirements associated with the containment isolation provisions.

**NRC Safety Evaluation Reports:**

There are no SERs impacted by the proposed changes. Previous evaluations prepared by the NRC for the current TS remain valid. The proposed changes are consistent with the NRC evaluations prepared for GGNS.

Note 1: ER 2003-0261-000 evaluates the specific requirements associated with removing secondary containment isolations from selected systems. Since these changes represent a relaxation from the current requirements affecting this equipment, no licensing document or other changes to plant documents are needed until the plant is modified by the removal of these isolation signals. Implementation of these changes and the associated changes to LBDs is governed entirely by ER-2003-0261-001.

4. **References**

Discuss the methodology for performing LBD searches. State the location of relevant licensing document information and explain the scope of the review such as electronic search criteria used (e.g., key words) or the general extent of manual searches per Section 5.4.1[5](d) of LI-101. **NOTE: Ensure that manual searches are performed using controlled copies of the documents. If you have any questions, contact your site Licensing department.**

LBDs/Documents reviewed via keyword search:      Keywords:

UFSAR, TS, TS Bases, COLR, SERs, TRM

secondary containment, bypass, infiltration, SGTS, isolation

LBDs/Documents reviewed manually:

None

5. **Is the validity of this Review dependent on any other change?** (See Section 5.3.4 of the EOI 10 CFR 50.59 Program Review Guidelines.)

☒ Yes

☐ No

Specific changes implemented by ER-2003-0261-001 that support this evaluation are the addition of the P71 and P53 pressure switches to the EQ program, a revision to procedure 01-S-06-2, Conduct of Operations, to ensure administrative controls are in place to prevent maintenance activities from creating secondary containment in-leakage paths and, a revision to LLRT procedure 17-S-05-1, Local Leak Rate Testing Program, to revise the leakage limit for the P71 containment isolation valves (P71F148, P71F149, P71F150, and P71F0151) from 1040 SCCM to 100 SCCM and to ensure that this limit is not increased.

These are all post-action requirements in the ER for the design and implementation of ER-2003-0261-001.

**If "YES", list the required changes/submittals. The changes covered by this 50.59 Review cannot be implemented without approval of the other identified changes (e.g., license amendment request). Establish an appropriate notification mechanism to ensure this action is completed.**

**B. ENVIRONMENTAL SCREENING**

If any of the following questions is answered "yes," an Environmental Review must be performed in accordance with NMM Procedure EV-115, "Environmental Evaluations," and attached to this 50.59 Review. Consider both routine and non-routine (emergency) discharges when answering these questions.

Will the proposed Change being evaluated:

Yes   No

1.   ☐   ☒   Involve a land disturbance of previously disturbed land areas in excess of one acre (i.e., grading activities, construction of buildings, excavations, reforestation, creation or removal of ponds)?
2.   ☐   ☒   Involve a land disturbance of undisturbed land areas (i.e., grading activities, construction, excavations, reforestation, creating, or removing ponds)?
3.   ☐   ☒   Involve dredging activities in a lake, river, pond, or stream?
4.   ☐   ☒   Increase the amount of thermal heat being discharged to the river or lake?
5.   ☒   ☒   Increase the concentration or quantity of chemicals being discharged to the river, lake, or air?
6.   ☐   ☒   Discharge any chemicals new or different from that previously discharged?
7.   ☐   ☒   Change the design or operation of the intake or discharge structures?
8.   ☒   ☒   Modify the design or operation of the cooling tower that will change water or air flow characteristics?
9.   ☐   ☒   Modify the design or operation of the plant that will change the path of an existing water discharge or that will result in a new water discharge?
10.   ☐   ☒   Modify existing stationary fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)?<sup>1</sup>
11.   ☐   ☒   Involve the installation of stationary fuel burning equipment or use of portable fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)?<sup>1</sup>
12.   ☒   ☒   Involve the installation or use of equipment that will result in a new or additional air emission discharge?
13.   ☒   ☒   Involve the installation or modification of a stationary or mobile tank?
14.   ☐   ☒   Involve the use or storage of oils or chemicals that could be directly released into the environment?
15.   ☐   ☒   Involve burial or placement of any solid wastes in the site area that may affect runoff, surface water, or groundwater?

<sup>1</sup> See NMM Procedure EV-117, "Air Emissions Management Program," for guidance in answering this question.

**C. SECURITY PLAN SCREENING**

**If any of the following questions is answered "yes," a Security Plan Review must be performed by the Security Department to determine actual impact to the Plan and the need for a change to the Plan.**

**Could the proposed activity being evaluated:**

Yes    No

1.    ☐    ☒    Add, delete, modify, or otherwise affect Security department responsibilities (e.g., including fire brigade, fire watch, and confined space rescue operations)?
2.    ☐    ☒    Result in a breach to any security barrier(s) (e.g., HVAC ductwork, fences, doors, walls, ceilings, floors, penetrations, and ballistic barriers)?
3.    ☐    ☒    Cause materials or equipment to be placed or installed within the Security Isolation Zone?
4.    ☐    ☒    Affect (block, move, or alter) security lighting by adding or deleting lights, structures, buildings, or temporary facilities?
5.    ☐    ☒    Modify or otherwise affect the intrusion detection systems (e.g., E-fields, microwave, fiber optics)?
6.    ☐    ☒    Modify or otherwise affect the operation or field of view of the security cameras?
7.    ☐    ☒    Modify or otherwise affect (block, move, or alter) installed access control equipment, intrusion detection equipment, or other security equipment?
8.    ☐    ☒    Modify or otherwise affect primary or secondary power supplies to access control equipment, intrusion detection equipment, other security equipment, or to the Central Alarm Station or the Secondary Alarm Station?
9.    ☐    ☒    Modify or otherwise affect the facility's security-related signage or land vehicle barriers, including access roadways?
10.   ☐    ☒    Modify or otherwise affect the facility's telephone or security radio systems?

**Documentation for accepting any "yes" statement for these reviews will be attached to this 50.59 Review or referenced below.**

**D. INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) SCREENING**

*Not Applicable to GGNS at this time per LI-101, Revision 5 Section 5.4.4[1] and LI-112, Revision 1*

If any of the following questions is answered "yes," an ISFSI Review must be performed in accordance with NMM Procedure LI-112, "72.48 Review," and attached to this Review.

Will the proposed Change being evaluated:

- |     | <u>Yes</u>               | <u>No</u>                           |  |
|-----|--------------------------|-------------------------------------|--|
| 1.  | <input type="checkbox"/> | <input type="checkbox"/>            | Any activity that directly impacts spent fuel cask storage or loading operations?  |
| 2.  | <input type="checkbox"/> | <input type="checkbox"/>            | Involve the Independent Spent Fuel Storage Installation (ISFSI) including the concrete pad, security fence, and lighting?                            |
| 3.  | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the on-site transport equipment or path from the Fuel Building to the ISFSI?   |
| 4.  | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the design or operation of the Fuel Building fuel bridge including setpoints and limit switches?                                 |
| 5.  | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the Fuel Building or Control Room(s) radiation monitoring?   |
| 6.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building pools including pool levels, cask pool gates, cooling water sources, and water chemistry?                      |
| 7.  | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the Fuel Building handling equipment (e.g., bridges and cask cranes, structures, load paths, lighting, auxiliary services, etc)? |
| 8.  | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the Fuel Building electrical power?  |
| 9.  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building ventilation?   |
| 10. | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the ISFSI security?  |
| 11. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to off-site radiological release projections from non-ISFSI sources?  |
| 12. | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to spent fuel characteristics?  |
| 13. | <input type="checkbox"/> | <input type="checkbox"/>            | Redefine/change heavy load pathways?   |
| 14. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Fire and explosion protection near or in the on-site transport paths or near the ISFSI?  |
| 15. | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the loading bay or supporting components?  |
| 16. | <input type="checkbox"/> | <input type="checkbox"/>            | New structures near the ISFSI?   |
| 17. | <input type="checkbox"/> | <input type="checkbox"/>            | Modifications to any plant systems that support dry fuel storage activities?   |
| 18. | <input type="checkbox"/> | <input type="checkbox"/>            | Involve a change to the nitrogen supply, service air, demineralized water or borated water system in the Fuel Building?                              |

IV. 50.59 EVALUATION

License Amendment Determination

Does the proposed Change being evaluated represent a change to a method of evaluation ☐ Yes  
ONLY? If "Yes," Questions 1 – 7 are not applicable; answer only Question 8. If "No," answer ☒ No  
all questions below.

Does the proposed Change:

1. Result in more than a minimal increase in the frequency of occurrence of an accident ☐ Yes  
previously evaluated in the FSAR? ☒ No

BASIS:

The SSCs affected by this change are the secondary containment isolation valves associated with the affected systems, the non-safety related systems themselves and the secondary containment boundary. The safety functions affected by the proposed changes are ensuring the integrity of the secondary containment boundary and the prevention of secondary containment bypass leakage through the use of redundant containment isolation valves or other design features (water seals, system venting, etc.). The secondary containment drawdown analysis [Ref. Calculation M3.9.8, Rev. 3] performed for this change assuming simultaneous in-leakage flow paths in the affected systems demonstrated that postulated piping failures do not significantly affect the performance of the secondary containment boundary. For the plant service water and fire carbon-dioxide systems, the secondary containment isolation valves are not credited in the analysis since bypass leakage is not possible for systems that do not penetrate the primary containment. For the plant chilled water system, thru-line bypass leakage is prevented by the loop seals inherent in the piping configuration; although the secondary containment isolation valves are retained as an additional boundary. For the firewater system, bypass leakage is prevented by redundant closed system valves. Because the isolation valves are no longer credited in the accident analysis, a malfunction of the isolation valves' automatic isolation function is no longer possible (fire protection, plant service water, and plant chilled water). The secondary containment boundary was shown to maintain its integrity even given simultaneous failures of all un-isolated lines penetrating the secondary containment. As a result, the likelihood of a failure of secondary containment is not affected.

Specific design features ensure that equipment malfunctions can be accommodated without comprising the design function of the secondary containment. No accident initiators are affected by this change. In fact, spurious actuations creating plant transients that challenge safety system are expected to be reduced after this change is implemented. Therefore, this change does not result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the FSAR.

2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes  
☒ No

BASIS:

The SSCs affected by this change are the secondary containment isolation valves associated with the affected systems, the non-safety related systems themselves and the secondary containment boundary. The safety functions affected by the proposed changes are ensuring the integrity of the secondary containment boundary to maintain a vacuum of 0.25 in w.g. post accident and the prevention of secondary containment bypass leakage using redundant secondary containment isolation valves. The secondary containment drawdown analysis [Ref. Calculation M3.9.8, Rev. 3] performed for this change assuming simultaneous in-leakage flow paths in the affected systems demonstrated that postulated piping failures do not significantly affect the performance of the secondary containment boundary. For the plant service water and fire carbon-dioxide systems, the secondary containment isolation valves are not credited in the analysis since bypass leakage is not possible for systems that do not penetrate the primary containment. For the plant chilled water system, thru-line bypass leakage is prevented by the loop seals inherent in the

Page 9 of 12

piping configuration; although the secondary containment isolation valves are retained as an additional boundary. For the instrument air system, the secondary containment isolation valves are not needed to prevent thru-line bypass leakage since the system is vented to the auxiliary building atmosphere if the system depressurizes. For the firewater system, bypass leakage is prevented by redundant closed system valves. Because the isolation valves are no longer credited in the accident analysis, a malfunction of the isolation valves' automatic isolation function is no longer possible. The secondary containment boundary was shown to maintain its integrity even given simultaneous failures of all un-isolated lines penetrating the secondary containment. As a result, the likelihood of a failure of secondary containment is not affected.

Specific design features ensure that equipment malfunctions can be accommodated without comprising the design function of the secondary containment. Containment leakage potentially bypassing the secondary containment is prevented by either venting to the secondary containment or passive design features. Since the engineering evaluations and analyses demonstrated that all applicable design and licensing requirements will continue to be met, the likelihood of a failure or malfunction of the secondary containment isolation system is not significantly increased. Therefore the proposed change does not result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR

3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the FSAR? ☐ Yes ☒ No

BASIS:

As discussed above, the proposed relaxations do not impact the ability of the primary or secondary containment to perform its safety function. No additional secondary containment leakage is created and offsite radiological effects associated with accidents previously evaluated in the FSAR are not increased.

The SSCs affected by this change are the secondary containment isolation valves associated with the affected systems, the non-safety systems themselves, and the secondary containment boundary. The piping systems where automatic secondary containment isolation is being eliminated by this change were evaluated for the effects of postulated failures in UFSAR 3.6A.1.1. The pipe failure protection conforms to Appendix A of 10 CFR 50, General Design Criterion 4, Environmental and Missile Design Bases. The overall design for this protection is in compliance with USNRC Regulatory Guide 1.46 and NRC Branch Technical Positions (BTP) APCSB 3-I and MEB 3-1. For non-nuclear piping systems, the requirements stipulate that moderate-energy piping as defined in subsection UFSAR 3.6A.2.Ib was capable of producing only critical cracks. High-energy piping included those systems or portions of systems in which the maximum operating temperature exceeded 200 F or the maximum operating pressure exceeded 275 psig during normal plant conditions. Piping systems or portions of systems pressurized above atmospheric pressure during normal plant conditions and not identified as high-energy piping are considered moderate-energy piping. In the UFSAR analysis, the crack opening is assumed to be a circular orifice of cross-sectional flow area equal to one-half the pipe inside diameter times one-half the pipe wall thickness. Given these simultaneous failures, the secondary containment boundary was shown to maintain its integrity even given simultaneous failures of all un-isolated lines 2 inches and smaller penetrating the secondary containment. As a result, the radiological doses associated with the failure of secondary containment are not affected.

The secondary containment isolation valves function not only to maintain the integrity of the secondary containment boundary but to prevent secondary containment bypass leakage for those systems where bypass leakage is possible. Design features for Grand Gulf prevent bypass leakage. As listed in UFSAR Table 6.2-42, "Evaluation of Potential Secondary Bypass Leakage Paths", both the Plant Chilled Water and Instrument Air systems are potential sources of bypass leakage. The Plant Service Water and Firewater systems are not bypass leakage sources. The UFSAR table identifies the bypass leakage barriers for the instrument air system as the redundant primary containment isolation valves, redundant secondary containment isolation valves, and system venting to the secondary containment. Since the system venting provides an effective barrier to bypass leakage, the secondary containment isolation valves are not needed to prevent leakage. This venting occurs well before the system pressure will decrease below the containment design pressure of 15 psig thereby ensuring no bypass leakage.



## Page 10 of 12

The plant chilled water system's barriers described by the UFSAR table include redundant primary and secondary containment isolation valves in conjunction with a water seal. As discussed in detail in the Engineering Request, the water seal is actually a loop seal that effectively prevents bypass leakage. Given the conservative containment post LOCA pressure profile reported in UFSAR Figure 6.2-5, the water seal in the PCW system effectively prevents leakage without crediting the secondary containment isolation valves. Since significant inventory is not lost from the loop seal, the 30 day inventory requirement is maintained. Note that the assumptions of this evaluation are dependent on a revised leakage limit for the P71 containment penetrations.

Specific design features ensure that containment leakage is not increased and that the secondary containment will be maintained at the required negative pressure to prevent unfiltered leakage from escaping. Containment leakage potentially bypassing the secondary containment continues to be prevented by other design features. The engineering evaluations and analyses demonstrate that all applicable design and regulatory requirements are met and containment leakage is not increased or impacted by the proposed changes; therefore the proposed changes do not result in more than a minimal increase in the consequences of an accident.

4. Result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes ☒ No

## BASIS:

As discussed above, the proposed relaxations do not impact the ability of the primary or secondary containment to perform its safety function. No additional containment leakage is created and offsite radiological effects associated with accidents previously evaluated in the FSAR are not increased.

Specific design features ensure that equipment malfunctions can be accommodated without comprising the design function of the secondary containment. Containment leakage potentially bypassing the secondary containment continues to be prevented by a combination of active and passive design features. Therefore, the proposed changes do not result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

5. Create a possibility for an accident of a different type than any previously evaluated in the FSAR? ☐ Yes ☒ No

## BASIS:

The proposed changes eliminate the automatic isolation function for selected secondary containment isolation valves. The proposed configuration will allow these systems to continue to operate and perform their functions following a design basis or other events. In some cases, maintenance activities on the P44 or P64 systems inside the secondary containment rely on administrative controls to ensure a closed barrier is in place sufficient to prevent excessive secondary containment in-leakage. Since this passive barrier is in place during these maintenance activities, no redundant barriers are required and additional in-leakage paths are not created. Therefore, maintenance activities in conjunction with the proposed changes do not create the possibility for an accident of a different type than any previously evaluated. Note that this evaluation is dependent on changes to administrative procedures to ensure that maintenance activities do not create unanalyzed secondary containment in-leakage paths.

Many accidents and transients postulated to occur do not result in the release of fission products or the corresponding need for secondary containment isolation. Operation of those systems penetrating containment is unaffected. No new plant equipment is added and the likelihood of postulated piping failures and other accidents is not increased by the proposed changes. No new accidents are created and the postulated accidents affected by these changes are bounded by UFSAR analyses. Therefore, these changes do not create a possibility for an accident of a different type than any previously evaluated in the FSAR.

## Page 11 of 12

6. Create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR?

☐ Yes  
☒ No

## BASIS:

The evaluation demonstrated that creation of a secondary containment bypass path is not possible because, of the four systems considered, two systems, plant service water and the carbon dioxide portion of the fire protection system, do not penetrate the primary containment. The firewater portion cannot be a source of bypass leakage since sufficient barriers are in place to preclude leakage (i.e., system is isolated from the containment penetration by redundant system valves.) For those systems that penetrate the containment (P71 and P53), both systems operate post-LOCA at a pressure greater than that of the containment. Although not required to ensure the secondary containment design functions discussed above are preserved, the auxiliary building isolation valves will move to the fail-safe position (closed) in the event of a loss of power or air (e.g., LOP/LOCA). The instrument air system also retains mitigating design features such that, in the event of an instrument air line failure that causes the system to depressurize, the system is vented to the auxiliary building on low system pressure preventing bypass leakage. The design features of the plant chilled water system (e.g., loop seals) ensure that bypass leakage is prevented without credit for the secondary containment isolation valves. For those systems that do not have the potential for containment leakage to bypass the secondary containment (P64 and P44), any operator corrective actions taken in response to events that manually isolate these systems are not credited for mitigating radiological releases following a design basis accident. Therefore, these valves can be removed from TRM table 3.6.4.2-1 since they no longer provide a safety function. The remaining secondary containment isolation valves are retained as manual isolation valves. In some cases, maintenance activities on the P44 or P64 systems inside the secondary containment rely on administrative controls to ensure a closed barrier is in place sufficient to prevent excessive secondary containment in-leakage. Since this passive barrier is in place during these maintenance activities, no redundant barriers are required and additional in-leakage paths are not created. Therefore, maintenance activities do not create the possibility of a malfunction of with a different result.

The proposed changes were determined to result in only a small amount of additional secondary containment in-leakage thereby ensuring that the SGTS will maintain adequate vacuum in the secondary containment and therefore the SGTS will continue to perform its safety function. Secondary containment bypass leakage is also prevented by the proposed design through other design features. Therefore, these changes do not create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR.

Page 12 of 12

7. Result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered?

☐ Yes  
☒ No

BASIS:

As discussed above, in addition to the auxiliary building secondary containment boundary, the fission product barriers associated with this change are venting of the instrument air system and the loop seals of the plant chilled water system. The piping systems penetrating the secondary containment effectively limit in-leakage preserving the secondary containment function. In the unlikely event that there was a failure of one of the lines whose secondary containment isolation is being removed, an analysis of the additional secondary containment in-leakage demonstrated that the ability of the SGTS is not compromised. The additional in-leakage associated with these failures is accounted for in the surveillance criteria for the SGTS. A revision to the UFSAR Chapter 15 dose analysis to account for the deletion of secondary containment isolation signals is therefore unnecessary since no additional secondary containment in-leakage or secondary containment bypass leakage is created. The abilities of the SGTS to draw down and maintain a negative pressure of 0.25 in w.g. on the secondary containment barrier in accordance with analytical requirements are not compromised by this change.

As discussed in the response to question 5, only the Instrument Air and Plant Chilled water systems penetrate the primary containment and are a potential source of secondary containment bypass leakage. The firewater system is isolated from the containment penetration by redundant locked closed system valves. The remaining systems, the Plant Service Water system and the fire CO2 system, do not penetrate the primary containment. Although the leakage limits for the Plant Chilled Water system are revised, this change is consistent with the valves' design and performance. The design limits for the primary containment isolation valves associated with these systems are not affected and no other design limits are affected or challenged by the proposed changes. Therefore, these changes do not result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered.

8. Result in a departure from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses?

☐ Yes  
☒ No

BASIS:

The only analysis performed for this change is the secondary containment drawdown analysis. The methods used to perform this analysis are not described in the UFSAR and are consistent with regulatory requirements and industry standards. Therefore, these changes do not depart from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses.

**If any of the above questions is checked "YES", obtain NRC approval prior to implementing the change by initiating a change to the Operating License in accordance with NMM Procedure ENS-LI-113.**

**GGNS 50.59 Safety Evaluation Number**

**SE 2005-0001-R00**

## 50 59 REVIEW FORM

## I OVERVIEW / SIGNATURES

Facility: Grand Gulf Nuclear Station

Document Reviewed: STI-GG-2005-0001-00

Change/Rev : 0

System Designator(s)/Description Control Room Tracer Gas Test

## Description of Proposed Change.

This evaluation is for a Special Test Instruction (STI) for determining the Control Room in-leakage to support the NRC's Generic Letter 2003-001. Specifically, the test will quantify the in-leakage in the normal and isolated modes of operation. A small concentration of an inert tracer gas will be injected into the Control Room envelope and the in-leakage will be determined based upon the rate of change in the tracer gas concentration.

Check the applicable review(s). (Only the sections indicated must be included in the Review.)

<input type="checkbox"/>	EDITORIAL CHANGE of a Licensing Basis Document	Section I
<input type="checkbox"/>	SCREENING	Sections I and II required
<input type="checkbox"/>	50.59 EVALUATION EXEMPTION	Sections I, II, and III required
<input checked="" type="checkbox"/>	50 59 EVALUATION (# 2005-0001-R00)	Sections I, II, and IV required

Preparer

(Chris Loyd)

Chris Loyd / EOT / System Eng / 2/24/05

Name (print) / Signature / Company / Department / Date

Reviewer

(Greg Broadbent)

G Broadbent / EOT / Nuc Eng / 2/24/05

Name (print) / Signature / Company / Department / Date

OSRC:

M. A Krupa / M. A Krupa / 3-4-05

Chairman's Name (print) / Signature / Date

[Required only for Programmatic Exclusion Screenings and 50 59 Evaluations]

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STICN-01 page 11 of 23

**II SCREENINGS****A Licensing Basis Document Review**

1. Does the proposed activity impact the facility or a procedure as described in any of the following Licensing Basis Documents?

Operating License	YES	NO	CHANGE # and/or SECTIONS IMPACTED
Operating License	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Orders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If "YES", obtain NRC approval prior to implementing the change by initiating an LBD change in accordance with NMM ENS-LI-113. (See Section 5.2[13] for exceptions.)

LBDs controlled under 50 59	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
FSAR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
TS Bases	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Technical Requirements Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Core Operating Limits Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluation Report and supplements for the initial FSAR <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NRC Safety Evaluations for amendments to the Operating License <sup>1</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If "YES", perform an Exemption Review per Section III OR perform a 50 59 Evaluation per Section IV OR obtain NRC approval prior to implementing the change. If obtaining NRC approval, document the LBD change in Section II.A.5, no further 50.59 review is required. However, the change cannot be implemented until approved by the NRC AND initiate an LBD change in accordance with NMM ENS-LI-113

LBDs controlled under other regulations	YES	NO	CHANGE # (if applicable) and/or SECTIONS IMPACTED
Quality Assurance Program Manual <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Emergency Plan <sup>2, 3</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fire Protection Program <sup>3, 4</sup> (includes the Fire Hazards Analysis)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Offsite Dose Calculations Manual <sup>3, 4</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<sup>1</sup> If "YES," see Section 5.2[5]. No LBD change is required.

<sup>2</sup> If "YES," notify the responsible department and ensure a 50 54 Evaluation is performed. Attach the 50 54 Review.

<sup>3</sup> Changes to the Emergency Plan, Fire Protection Program, and Offsite Dose Calculation Manual must be approved by the OSRC in accordance with NMM OM-119.

<sup>4</sup> If "YES," evaluate the change in accordance with the requirements of the facility's Operating License Condition or under 50 59, as appropriate.

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If "YES", evaluate any changes in accordance with the appropriate regulation AND initiate an LBD change in accordance with NMM ENS-LI-113. No further 50.59 review is required.

**2 Does the proposed activity involve a test or experiment not described in the FSAR?**

☒ Yes

☐ No

If "yes," perform a 50.59 Evaluation per Section IV OR obtain NRC approval prior to implementing the change AND initiate an LBD change in accordance with NMM LI-113. If obtaining NRC approval, document the change in Section II.A 5; no further 50.59 review is required. However, the change cannot be implemented until approved by the NRC.

**3. Basis**

Explain why the proposed activity does or does not impact the Operating License/Technical Specifications and/or the FSAR and why the proposed activity does or does not involve a new test or experiment not previously described in the FSAR. Discuss other LBDs if impacted. Adequate basis must be provided within the Screening such that a third-party reviewer can reach the same conclusions. Simply stating that the change does not affect TS or the FSAR is not an acceptable basis.

This Special Test Instruction (STI) will align the main Control Room habitability systems in various modes of operation, as described in the FSAR and governed by existing GGNS procedures, such that the tracer gas methodology can be utilized to determine the in-leakage into the Control Room envelope. The various modes of operation and equipment line-ups for each of the test are described in the FSAR and do not operate the system outside the bounds described in the FSAR or Technical Specifications. This test does not impact the facility or a procedure as described in any of the Licensing Basis documents.

The injection of small quantities of tracer gas (sulfur hexafluoride and nitrogen mixture) into the control envelope is not described in the FSAR, therefore this test may represent a test or experiment not described in the FSAR, calling for a 50.59 evaluation.

**4 References**

Discuss the methodology for performing LBD searches. State the location of relevant licensing document information and explain the scope of the review such as electronic search criteria used (e.g., key words) or the general extent of manual searches per Section 5.5.1(d) of LI-101. **NOTE: Ensure that manual searches are performed using controlled copies of the documents. If you have any questions, contact your site Licensing department.**

LBDs/Documents reviewed via keyword search      Keywords

FSAR Sections 6.4, 9.4, 15      toxic gas, chlorine, tracer gas, habitability

Tech Specs 3.7.3, 3.7.4, 3.3.7.1 and associated Bases

LBDs/Documents reviewed manually

None

**5. Is the validity of this Review dependent on any other change?**

☐ Yes

☒ No

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If "YES", list the required changes/submittals. The changes covered by this 50.59 Review cannot be implemented without approval of the other identified changes (e.g., license amendment request). Establish an appropriate notification mechanism to ensure this action is completed.

## B. ENVIRONMENTAL SCREENING

If any of the following questions is answered "yes," an Environmental Review must be performed in accordance with NMM Procedure ENS-EV-115, "Environmental Evaluations," and attached to this 50.59 Review. Consider both routine and non-routine (emergency) discharges when answering these questions.

Will the proposed Change being evaluated:

- |    | <u>Yes</u>               | <u>No</u>                           |  |
|----|--------------------------|-------------------------------------|--|
| 1  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a land disturbance of previously disturbed land areas in excess of one acre (i.e., grading activities, construction of buildings, excavations, reforestation, creation or removal of ponds)? |
| 2  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a land disturbance of undisturbed land areas (i.e., grading activities, construction, excavations, reforestation, creating, or removing ponds)?  |
| 3  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve dredging activities in a lake, river, pond, or stream?   |
| 4  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Increase the amount of thermal heat being discharged to the river or lake?   |
| 5  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Increase the concentration or quantity of chemicals being discharged to the river, lake, or air?   |
| 6  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Discharge any chemicals new or different from that previously discharged?  |
| 7  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Change the design or operation of the intake or discharge structures?  |
| 8  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify the design or operation of the cooling tower that will change water or air flow characteristics?  |
| 9  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify the design or operation of the plant that will change the path of an existing water discharge or that will result in a new water discharge?   |
| 10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify existing stationary fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)? <sup>1</sup>   |
| 11 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve the installation of stationary fuel burning equipment or use of portable fuel burning equipment (i.e., diesel fuel oil, butane, gasoline, propane, and kerosene)? <sup>1</sup>               |
| 12 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve the installation or use of equipment that will result in a new or additional air emission discharge?   |
| 13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve the installation or modification of a stationary or mobile tank?   |
| 14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve the use or storage of oils or chemicals that could be directly released into the environment?  |
| 15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve burial or placement of any solid wastes in the site area that may affect runoff, surface water, or groundwater?  |

<sup>1</sup> See NMM Procedure ENS-EV-117, "Air Emissions Management Program," for guidance in answering this question.

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**C. SECURITY PLAN SCREENING**

If any of the following questions is answered "yes," a Security Plan Review must be performed by the Security Department to determine actual impact to the Plan and the need for a change to the Plan.

Could the proposed activity being evaluated:

- |    | <u>Yes</u>               | <u>No</u>                           |  |
|----|--------------------------|-------------------------------------|--|
| 1  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Add, delete, modify, or otherwise affect Security department responsibilities (e g , including fire brigade, fire watch, and confined space rescue operations)?  |
| 2  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Result in a breach to any security barrier(s) (e g , HVAC ductwork, fences, doors, walls, ceilings, floors, penetrations, and ballistic barriers)?   |
| 3  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Cause materials or equipment to be placed or installed within the Security Isolation Zone?   |
| 4  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Affect (block, move, or alter) security lighting by adding or deleting lights, structures, buildings, or temporary facilities?   |
| 5  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the intrusion detection systems (e g , E-fields, microwave, fiber optics)?  |
| 6  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the operation or field of view of the security cameras?   |
| 7  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect (block, move, or alter) installed access control equipment, intrusion detection equipment, or other security equipment?   |
| 8  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect primary or secondary power supplies to access control equipment, intrusion detection equipment, other security equipment, or to the Central Alarm Station or the Secondary Alarm Station? |
| 9  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the facility's security-related signage or land vehicle barriers, including access roadways?  |
| 10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modify or otherwise affect the facility's telephone or security radio systems?   |

Documentation for accepting any "yes" statement for these reviews will be attached to this 50 59 Review or referenced below.

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**D. INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) SCREENING**

(NOTE: This section is not applicable to Waterford 3 and may be removed from 50.59 Reviews performed for Waterford 3 proposed activities )

If any of the following questions is answered "yes," an ISFSI Review must be performed in accordance with NMM Procedure ENS-LI-112, "72.48 Review," and attached to this Review.

Will the proposed Change being evaluated:

- |    | <u>Yes</u>               | <u>No</u>                           |  |
|----|--------------------------|-------------------------------------|--|
| 1  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any activity that directly impacts spent fuel cask storage or loading operations?  |
| 2  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve the Independent Spent Fuel Storage Installation (ISFSI) including the concrete pad, security fence, and lighting?                            |
| 3  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the on-site transport equipment or path from the Fuel Building to the ISFSI?   |
| 4  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the design or operation of the Fuel Building fuel bridge including setpoints and limit switches?                                 |
| 5  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building or Control Room(s) radiation monitoring?   |
| 6  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building pools including pool levels, cask pool gates, cooling water sources, and water chemistry?                      |
| 7  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building handling equipment (e.g , bridges and cask cranes, structures, load paths, lighting, auxiliary services, etc)? |
| 8  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building electrical power?  |
| 9  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the Fuel Building ventilation?   |
| 10 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the ISFSI security?  |
| 11 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to off-site radiological release projections from non-ISFSI sources?  |
| 12 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to spent fuel characteristics?  |
| 13 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Redefine/change heavy load pathways?   |
| 14 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Fire and explosion protection near or in the on-site transport paths or near the ISFSI?  |
| 15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the loading bay or supporting components?  |
| 16 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | New structures near the ISFSI?   |
| 17 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Modifications to any plant systems that support dry fuel storage activities?   |
| 18 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Involve a change to the nitrogen supply, service air, demineralized water or borated water system in the Fuel Building?                              |

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- 2 Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS**

This STI gives guidance on performing a tracer gas test, using sulfur hexafluoride, on the Control Room envelope to quantify in-leakage. The inert tracer gas concentration is extremely small, non-reactive and will have no effect on HEPA filters, other system components, habitability systems, or operators. This gas has commonly been used for tracer gas testing at many other sites and at GGNS for condenser in-leakage with no detectable effects.

The equipment line-up for this test will replicate that which is described in the FSAR for the normal and isolated modes of operation. The equipment will not be operated outside the bounds of existing procedures or Technical Specifications. This line-up does not make the habitability equipment inoperable nor prevent the equipment from performing its safety function.

The habitability equipment provides cooling for important to safety equipment in the Control Room. The low concentrations of tracer gas will not alter the cooling capacity of the equipment nor will the charcoal efficiency, if installed, in the emergency filtration units be affected, therefore, the functionality of the habitability equipment will be maintained.

Although the STI requests limits on Control Room ingress and egress, all doors will remain operable and available for use in the event they are necessary to respond to plant events. Arrangements have been made to ensure that any necessary fire watches and security rounds will continue to be performed with limited Control Room ingress and egress.

Thus, the STI will not result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

- 3 Result in more than a minimal increase in the consequences of an accident previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS**

This test will not require the plant to be operated outside the bounds of existing procedures or Technical Specifications. The test will not increase the dose to the Control Room operators or the public, therefore, this STI will not result in any increase in the consequences of an accident previously evaluated in the FSAR.

- 4 Result in more than a minimal increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS**

This test will not require the plant to be operated outside the bounds of existing procedures or Technical Specifications. All Control Room HVAC systems will remain operable and capable of performing their safety function during this test. Should a malfunction of important to safety equipment occur during the test, credited redundant equipment will continue to be available. No credible failure scenario could result in increased dose consequences beyond that previously assumed, as it would be bound by single failure criteria. The test will not increase the dose to the Control Room operators or the public, therefore, this STI will not result in any increase in the consequences of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

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- 5 Create a possibility for an accident of a different type than any previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS.**

This test will not require the plant to be operated outside the bounds of existing procedures or Technical Specifications. The equipment line-up will replicate that which is described in the FSAR for Control Room HVAC operation in the normal and isolated modes of operation. All systems will remain operable and capable of performing their safety function during this test. The mixing fans that will be placed in the Envelope are required to provide adequate mixing of the environment where no return/supply registers exist. These fans have been properly evaluated under GGNS-CS-17 and will not adversely affect the Control Room Envelope or this test. No new system interactions or failure modes are created, thus, no possibility for an accident of a different type than any previously evaluated in the FSAR can be created.

- 6 Create a possibility for a malfunction of a structure, system, or component important to safety with a different result than any previously evaluated in the FSAR? ☐ Yes ☒ No

**BASIS**

The equipment line-up for this test will replicate that which is described in the FSAR for Control Room HVAC operation in the normal and isolated modes of operation. The low concentrations of tracer gas will not alter the cooling capacity of the equipment nor will the charcoal efficiency, if installed in the emergency filtration units be affected, therefore, the functionality of the habitability equipment will be maintained. All systems will remain operable and capable of performing their safety function during this test. Thus, the STI will not result in any increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the FSAR.

- 7 Result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered? ☐ Yes ☒ No

**BASIS**

The Control Room envelope and habitability systems has no impact on fuel clad, reactor pressure boundary, or containment other than providing a safe environment for the SSC's within the Control Room envelope. The low concentration of tracer gas inside the Control Room envelope will not have any effect on the operator's health or ability to perform their duties during normal or emergency operations. The Control Room habitability system will remain functional and will therefore maintain the required temperature for the equipment located within the envelope. Thus, the STI cannot result in a design basis limit for a fission product barrier as described in the FSAR being exceeded or altered.

- 8 Result in a departure from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses? ☐ Yes ☒ No

**BASIS**

This STI is being used to validate design information that provides basis for the Control Room habitability. Additionally, the tracer gas test has been reviewed and is required by the NRC's Generic Letter 2003-01. The method of evaluation described in the FSAR (e.g. offsite dose calculations, Control Room habitability calculations, and toxic gas evaluations) is not altered. The test may serve as input for future evaluations, but this STI collects data and does not change the method of evaluations, thus, does not result in a departure from a method of evaluation described in the FSAR used in establishing the design bases or in the safety analyses.

If any of the above questions is checked "YES", obtain NRC approval prior to implementing the change by initiating a change to the Operating License in accordance with NMM Procedure ENS-LI-113

01-11-01 01:01

### COMMITMENT CHANGE EVALUATION FORM

<b>Commitment Number:</b>	A-16164	<b>Plant Licensing Tracking Number:</b>	CCE 2004-0001
<b>Source Document:</b>	AECM 90/0156		
<b>Commitment:</b>	<b>Deletion?</b> <input type="checkbox"/>	<b>Revision?</b> <input checked="" type="checkbox"/>	
<b>Has the original commitment been implemented?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO, Notify Plant Licensing			

**Original Commitment Description:**

Grand Gulf will implement a procedure by 1/1/91 which will require documented contact with key non-NSSS vendors on an annual basis. This procedure will also control the list of non-NSSS vendors to be contacted annually.

The original commitment has previously been revised by CCE 2001-0005 and reads:

NS will require documented contact with non-NSSS vendors once every other calendar year. The next contact will be completed in the calendar year 2004 by ANO. This process will also control the list of non-NSSS vendors to be contacted.

**Revised Commitment Description:**

NS key vendor contact process will require periodic documented contact with key non-NSSS vendors. This process will also control the list of non-NSSS vendors to be contacted.

**Summary of Justification for Change or Deletion:**

Generic Letter 90-03 requires licensees to maintain a vendor interface program which is a good faith documented effort to periodically contact the vendors of key non-NSSS safety-related components (such as auxiliary feedwater pumps, batteries, inverters, battery chargers, cooling water pumps, and valve operators) to obtain any technical information applicable to this equipment.

Over the years Entergy Operations has contacted approximately 44 vendors per key vendor contact cycle. Although ENS requested updated material non over 500 technical bulletins, updates were received on less than 9 % of these technical bulletins. Furthermore, only a small fraction of the updates received were determined applicable to plant equipment. To date none of the information received resulted in any corrective actions or plant modifications. (Based on CEO-98/00079, CEO-99/00086 and CEO-2000-00089. 2003 results have yet to be compiled.)

DC-148 currently controls the key vendor contact process and contact frequency. This procedure presently requires a documented contact with identified key vendors every two years. CR-ECH-2003-00081 documents that the last key vendor contact was not performed until 2003. DC-148 requires the next contact to be performed by ANO in 2004. Thus, the period between contacts would effectively be only one year. In actuality, any good faith documented effort via an approved vendor interface program established using sound supporting data and/or engineering judgment should meet the intent of the Generic Letter and have no adverse effect on plant equipment.

(Attach additional sheets if necessary)

Refer to Attachment 9.4 for a flow diagram that outlines the commitment change evaluation process.

<b>Prepared By:</b>	Vicki B Morgan / Vicki B Morgan <small>Print Name/Signature</small>	5/11/04 <small>Date</small>
<b>Management Approval:</b>	T.H. Thurmon / T.H. Thurmon <small>Print Name/Signature</small>	5-13-04 <small>Date</small>
<b>Plant Licensing Management Concurrence:</b>	C. B. Bottomill / C. B. Bottomill <small>Print Name/Signature</small>	5-17-04 <small>Date</small>

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**PART I**

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**1.1** Is the existing commitment located in the Updated Final Safety Analysis Report, Emergency Plan, Quality Assurance Program, Fire Protection Program, or Security Plan?

☐ **YES** STOP. Do not proceed with this evaluation. Instead use appropriate codified process (e.g., 10 CFR 50.71(e), 10 CFR 50.54) to evaluate commitment.

☒ **NO** Go to Part II.

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**PART II**

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**2.1** Could the change negatively impact the ability of a System, Structure, or Component (SSC) to perform its safety function or negatively impact the ability of plant personnel to ensure the SSC is capable of performing its intended safety function?

☐ **YES** Go to Question 2.2.

☒ **NO** Continue with Part III. Briefly describe rationale:

Information received as a result of historical key vendor contacts (CEO-98/00079, CEO-9900086 and CEO-2000-00089) has not been safety significant. Typically, technical information of safety significant nature is received and processed as a 10CFR Part 21 notification or via the OE process.

**2.2** Perform a safety evaluation using the following 10 CFR 50.92 criteria to determine if a significant hazards consideration exists:

Does the revised commitment involve a significant increase in the probability or consequences of an accident previously evaluated?

☐ **YES**      ☐ **NO**

Basis:

Does the revised commitment create the possibility of a new or different kind of accident from any previously evaluated?

☐ **YES**      ☐ **NO**

Basis:

Does the revised commitment involve a significant reduction in a margin of safety?

☐ **YES**      ☐ **NO**

Basis:

If any of the above questions are answered Yes, STOP. Do not proceed with the revision, OR discuss change with NRC and obtain necessary approvals prior to implementation of the proposed change. If all three questions are answered NO, go to Part III.  
(Attach additional sheets as necessary.)

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### PART III

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3.1 Was the original commitment (e.g., response to NOV, etc.) to restore an Obligation (i.e., rule, regulation, order or license condition)?

☐ YES Go to question 3.2.

☒ NO Go to Part IV.

3.2 Is the proposed revised commitment date necessary and justified?

☐ YES Briefly describe rationale (attach additional sheets as necessary) and notify NRC of revised commitment date prior to the original commitment date.

Rationale:

☐ NO STOP. Do not proceed with the revision, OR apply for appropriate regulatory relief.

---

### PART IV

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4.1 Was the original commitment: (1) explicitly credited as the basis for a safety decision in an NRC SER, (2) made in response to an NRC Bulletin or Generic Letter, or (3) made in response to a request for information under 10 CFR 50.54(f) or 10 CFR 2.204?

☒ YES Go to Question 4.2.

☐ NO Go to Part V.

4.2 Has the original commitment been implemented?

☒ YES STOP, You have completed this evaluation. Revise the commitment and notify NRC of revised commitment in summary report.

☐ NO Go to Question 5.1.

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### PART V

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5.1 Was the original commitment made to minimize recurrence of a condition adverse to quality (e.g., a long-term corrective action stated in an LER)?

☐ YES Go to Question 5.2.

☐ NO STOP. You have completed this evaluation. Revise the commitment. No NRC notification required.



5.2

Is the revised commitment necessary to minimize recurrence of the condition adverse to quality?

☐ YES

Revise the commitment and notify NRC of revised commitment in next annual/RFO interval summary report.

☐ NO

Revise commitment: no NRC notification is required:

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#### REFERENCES

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List documents (e.g., procedures, NRC submittals, etc.) affected by this change.

Doc. Number	Description
ES-DC-148	Key Vendor Contact Procedure

**GGNS Commitment Change Evaluation  
Number**

**CCE 2004-002**

## COMMITMENT CHANGE EVALUATION FORM

<b>Commitment Number:</b>	A 16002 & A 16003	<b>Plant Licensing Tracking Number:</b>	CCE-2004-0002
<b>Source Document:</b>	AECM-90/0007		
<b>Commitment:</b>	<b>Deletion?</b> <input type="checkbox"/>	<b>Revision?</b> <input checked="" type="checkbox"/>	
<b>Has the original commitment been implemented?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO, Notify Plant Licensing			

### Original Commitment Description:

Commitment Description Based on AECM-90/0007, Attachment 1, II.B, Page 5, Paragraphs 2 and 3:

#### Air to Water Heat Exchangers

The following heat exchangers are included in this category:

- ESF Switchgear Room Coolers
- RHR Room Coolers
- LPCS Room Coolers
- HPCS Room Cooler
- RCIC Room Cooler
- Fuel Pool Cooling and Cleanup Room Coolers

Sufficient instrumentation is installed or will be provided to measure SSW flows and all process temperatures. The room cooler air flows will be determined by calculation.

Performance testing of these heat exchangers will be performed. Temperature and flow compensation of test results to the design conditions will be included as part of the planned testing program. If, due to insufficient heat loads, it is not possible to obtain statistically significant extrapolated results, then visual inspections of both the air and water sides of the heat exchangers will be performed, where possible, to ensure cleanliness. The test results will be trended to monitor degradation of cooling water flow. Procedures will be revised by RF04 (for Division I and III heat exchangers) or RF05 (for Division II heat exchangers) to perform testing of these heat exchangers.

### Revised Commitment Description:

#### Air to Water Heat Exchangers

The following heat exchangers are included in this category:

- ESF Switchgear Room Coolers
- RHR Room Coolers
- **LPCS Room Cooler**
- HPCS Room Cooler
- RCIC Room Cooler
- Fuel Pool Cooling and Cleanup Room Coolers.

Sufficient instrumentation is **installed** to measure SSW flows and all process temperatures. The room cooler air flows **are measured by M&TE's**.

**Thermal Performance Testing can be performed per the mechanical standard, MS 39.0, and existing procedures for these heat exchangers, in which case temperature and flow compensation of test results to the design conditions is included as part of the planned testing program. However, due to insufficient heat loads in most tests, it is not possible to obtain statistically significant extrapolated results. Therefore, Thermal Performance Testing will be periodically performed only for the following group of air-to-water heat exchangers, for which only marginal heat removal capabilities could be demonstrated by such tests in the past:**

#### Group 1 (Low Margin)

- **RHR Room Coolers**
- **LPCS Room Cooler**
- **HPCS Room Cooler.**

1/	QA RECORD
	RT = 1314.37
	NON-QA RECORD
	INITIALS <i>WPH</i>
	NUMBER of PAGES 6
	DATE 5/25/04
	RELATED DOCUMENT NUMBER =

For the remaining heat exchangers, namely:

**Group 2 (High Margin)**

- ESF Switchgear Room Coolers
- RCIC Room Cooler
- Fuel Pool Cooling and Cleanup Room Coolers,

for which ample heat removal capability margins exist based on recent heat exchanger thermal performance evaluations per Rev. 2 of MS 39.0, "Alternative Heat Exchanger Testing" will be performed periodically while Thermal Performance Testing can be performed as needed.

The MS 39.0 will be modified to define "Alternative Heat Exchanger Testing", and make it the preferred method of heat exchanger testing for the Group 2 air-to-water heat exchangers. The frequency for the Alternative Heat Exchanger Testing is currently set as once per 18 months. The testing will include the following:

- Measurement of air flow rate,
- For the RCIC Room Cooler, visual inspection, and cleaning as required, of the air side,
- For an ESF Switchgear Room Cooler or a Fuel Pool Cooling and Cleanup Room Cooler, review of periodical air-side visual inspections and cleaning already performed via existing repetitive tasks since last Alternative Heat Exchanger Testing,
- Trending and/or evaluation of the results on SSW flow rate for the target room cooler, individual SSW heat exchanger throttle valve positions, and SSW pump discharge pressure from SSW flow surveillances and flow balances already performed periodically to ensure an adequate SSW flow rate via existing repetitive tasks since last Alternative Heat Exchanger Testing, the existing procedures for ESF Switchgear Room Coolers to be modified to include SSW surveillances data for the RHR "A" & "B" Room Coolers, LPCS Room Cooler, RCIC Room Cooler, and Fuel Pool Cooling and Cleanup Room Coolers, and to provide the required data elements for trending,
- For a "B" ESF Switchgear Room Cooler, verification that an acid flush has been performed via a fixed-interval repetitive task since last Alternative Heat Exchanger Testing, the current on-demand task to be changed to a once-per-18-month task,
- For an "A" ESF Switchgear Room Cooler, documentation of any on-demand acid flush performed via an existing repetitive task since last Alternative Heat Exchanger Testing, and
- For a RCIC Room Cooler or Fuel Pool Cooling and Cleanup Room Cooler, documentation of any on-demand acid flush performed via a to-be-developed repetitive task since last Alternative Heat Exchanger Testing.

The frequency currently set for the acid flush of the "B" ESF Switchgear Room Coolers is no less than once per 18 months. This frequency for acid flush and the frequency set for Alternative Heat Exchanger Testing may be reduced in the future if the reduction can be justified.

The existing procedure for performing the Thermal Performance Testing will be modified to include the details for performing Alternative Heat Exchanger Testing for the Group 2 air-to-water heat exchangers as an option.

**Summary of Justification for Change or Deletion:**

The justifications for the above commitment changes in the testing of Group 2 air-to-water heat exchangers are, as detailed in ER-GG-2003-0205-000, Rev. 0 developed for LO-GLO-2003-00010 CA-00007:

- Rev. 2 and later revisions of MS 39.0 used in the evaluation of heat exchanger Thermal Performance Testing data replaced the previous design room temperatures with new maximum allowable room temperatures under accident conditions based on equipment qualification for use in predicting the room cooler heat removal capabilities. The new values are higher than previous values, resulting in heat removal capability margins that are so large that no

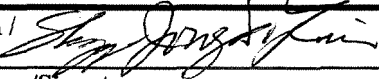
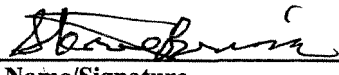
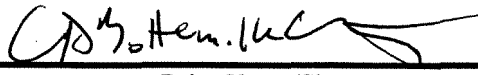
plausible gradual increases in tube-side fouling or additional thrown-in test uncertainties could possibly exhaust as long as both the water and air flow rate requirements are met. Therefore, there is no real need for rigorous thermal performance testing of these room coolers,

- EPRI technical reports TR-107397 and 1007248 identified the impracticality of Thermal Performance Testing of air-to-water heat exchangers, including low test heat loads, and demonstrated the insensitivity of a room cooler's heat removal capability to the tube-side fouling, as long as the water-side and air-side flow rate requirements are met. It is described in these reports a pragmatic rationale that some other utilities (e.g., LaSalle Station of Exelon Nuclear) have already used to justify a revision to their GL 89-13 program with respect to air-to-water heat exchangers to provide for a technically superior and more cost-effective alternative to existing efforts,
- The Alternative Heat Exchanger Testing method described herein and detailed in the above-mentioned ER embraces the water-side and air-side testing/inspection, monitoring, and trending advocated by the EPRI technical reports, and
- The original commitments already stipulated that insufficient test heat loads might lead to this course of visual inspections and trending to monitor degradation in water and air flow rates in lieu of Thermal Performance Testing.

The Alternative Heat Exchanger Testing is deemed capable of detecting SSW system and heat exchanger degradation associated with air-to-water heat exchangers no later than Thermal Performance Testing. Therefore, the overall GL 89-13 heat exchanger testing program will be able to ensure the heat exchanger's capability to meet the heat removal requirement under limiting conditions.

(Attach additional sheets if necessary)

Refer to Attachment 9.4 for a flow diagram that outlines the commitment change evaluation process.

Prepared By:	Shyy-Jong D. Lin / 	05/10/04
	Print Name/Signature	Date
Management Approval:	STEVE BURRIS 	5/20/04
	Print Name/Signature	Date
Plant Licensing Management Concurrence:	CDH-Hen. LLC 	5-27-04
	Print Name/Signature	Date

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**PART I**

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**1.1** Is the existing commitment located in the Updated Final Safety Analysis Report, Emergency Plan, Quality Assurance Program, Fire Protection Program, or Security Plan?

☐ **YES** STOP. Do not proceed with this evaluation. Instead use appropriate codified process (e.g., 10 CFR 50.71(e), 10 CFR 50.54) to evaluate commitment.

☒ **NO** Go to Part II.

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**PART II**

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**2.1** Could the change negatively impact the ability of a System, Structure, or Component (SSC) to perform its safety function or negatively impact the ability of plant personnel to ensure the SSC is capable of performing its intended safety function?

☐ **YES** Go to Question 2.2.

☒ **NO** Continue with Part III. Briefly describe rationale:

The original commitments already stipulated that insufficient test heat loads might lead to this course of visual inspections and trending to monitor degradation in water and air flow rates in lieu of Thermal Performance Testing. The Alternative Heat Exchanger Testing method described herein and detailed in ER-GG-2003-0205-000, Rev. 0 embraces the water-side and air-side testing/inspection, monitoring, and trending advocated by the EPRI technical reports. It is a technically superior and more cost-effective alternative to existing efforts. The method is deemed capable of detecting SSW system and heat exchanger degradation associated with air-to-water heat exchangers no later than Thermal Performance Testing. The overall GL 89-13 heat exchanger testing program will be able to ensure the heat exchanger's capability to meet the heat removal requirement under limiting conditions.

**2.2** Perform a safety evaluation using the following 10 CFR 50.92 criteria to determine if a significant hazards consideration exists:

Does the revised commitment involve a significant increase in the probability or consequences of an accident previously evaluated?

☐ **YES**      ☐ **NO**

**Basis:**

Does the revised commitment create the possibility of a new or different kind of accident from any previously evaluated?

☐ **YES**      ☐ **NO**

**Basis:**

Does the revised commitment involve a significant reduction in a margin of safety?

☐ **YES**      ☐ **NO**

**Basis:**

If any of the above questions are answered Yes, STOP. Do not proceed with the revision, OR discuss change with NRC and obtain necessary approvals prior to implementation of the proposed change. If all three questions are answered NO, go to Part III.  
(Attach additional sheets as necessary.)

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### PART III

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3.1 Was the original commitment (e.g., response to NOV, etc.) to restore an Obligation (i.e., rule, regulation, order or license condition)?

☐ YES Go to question 3.2.

☒ NO Go to Part IV.

3.2 Is the proposed revised commitment date necessary and justified?

☐ YES Briefly describe rationale (attach additional sheets as necessary) and notify NRC of revised commitment date prior to the original commitment date.

Rationale:

☐ NO STOP. Do not proceed with the revision, OR apply for appropriate regulatory relief.

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### PART IV

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4.1 Was the original commitment: (1) explicitly credited as the basis for a safety decision in an NRC SER, (2) made in response to an NRC Bulletin or Generic Letter, or (3) made in response to a request for information under 10 CFR 50.54(f) or 10 CFR 2.204?

☒ YES Go to Question 4.2.

☐ NO Go to Part V.

4.2 Has the original commitment been implemented?

☒ YES STOP, You have completed this evaluation. Revise the commitment and notify NRC of revised commitment in summary report.

☐ NO Go to Question 5.1.

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### PART V

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5.1 Was the original commitment made to minimize recurrence of a condition adverse to quality (e.g., a long-term corrective action stated in an LER)?

☐ YES Go to Question 5.2.

☐ NO STOP. You have completed this evaluation. Revise the commitment. No NRC notification required.

- 5.2 Is the revised commitment necessary to minimize recurrence of the condition adverse to quality?
- ☐ YES Revise the commitment and notify NRC of revised commitment in next annual/RFO interval summary report.
- ☐ NO Revise commitment: no NRC notification is required:

#### REFERENCES

1. LO-GLO-2003-00010, "ES Heat Exchanger Assessment"
2. LO-GLO-2003-00010 CA-00007, "Implement ER-GG-2003-0205-000"
3. ER-GG-2003-0205-000, Rev. 0, Provide justifications to remove as many as readily justifiable safety-related room coolers from the list of room coolers for which GGNS has committed in the GGNS NRC GL 89-13 program to performing Thermal Performance Testing
4. NRC GL 89-13

List documents (e.g., procedures, NRC submittals, etc.) affected by this change.

Doc. Number	Description
AECM-90/0007	Response to Generic Letter 89-13; Service Water System Problems Affecting Safety-Related Equipment
MS 39.0	Mechanical Standard for Thermal Performance Testing of Safety-Related Standby Service Water Heat Exchangers
Plant Procedure 17-S-06-22	SSW A Performance
Plant Procedure 17-S-06-23	SSW B Performance
Plant Procedure 17-S-03-29	GL 89-13 Thermal Performance Data Collection and Analysis
Plant Procedure 04-1-03-T46-1	A ESF Switchgear Room Coolers Flow Test
Plant Procedure 04-1-03-T46-2	B ESF Switchgear Room Coolers Flow Test
PASSPORT PMRQ #50017341-01	1T51B006 Perform Thermal Performance Testing... (Task for RCIC Room Cooler)
PASSPORT PMRQ #50028967-01	1T51B007A Perform Thermal Performance Testing... (Task for FPCC A Room Cooler)
PASSPORT PMRQ #50017346-01	1T51B007B Perform Thermal Performance Testing... (Task for FPCC B Room Cooler)



**GGNS Commitment Change Evaluation  
Number**

**CCE 2004-003**

## COMMITMENT CHANGE EVALUATION FORM

<b>Commitment Number:</b>	35091	<b>Plant Licensing Tracking Number:</b>	CCE 2004-00003
<b>Source Document:</b>	GNRO-2001/0020		
<b>Commitment:</b>	<b>Deletion?</b> <input type="checkbox"/>	<b>Revision?</b> <input checked="" type="checkbox"/>	
<b>Has the original commitment been implemented?</b>		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO, Notify Plant Licensing

**Original Commitment Description:**

By 12/31/2004 we now plan to replace our Appendix R required fire barriers that are currently protected with Kaowool Fire Wrap with a fire wrap that satisfies all applicable NRC regulatory and technical requirements verses continuing with a requalification plan.

**Revised Commitment Description:**

By 12/31/2005 we now plan to replace our Appendix R required fire barriers currently protected with Kaowool Fire Wrap with a fire wrap that satisfies all applicable NRC regulatory and technical requirements.

**Summary of Justification for Change or Deletion:**

GGNS's original plan to address the Kaowool Fire Barrier Wrap issue was to conduct fire tests to establish a fire resistance rating for the system installed. An adequacy evaluation would then be performed for the areas containing this fire wrap material based on actual field condition at GGNS and the demonstrated fire rating for the Kaowool system. After review of the As-built Kaowool wrap system, GGNS changed the plan and committed to replacing the Appendix R required fire barriers utilizing the Kaowool fire wrap system with one that satisfies all applicable NRC regulatory and technical requirements. The Kaowool fire barrier wrap is being replaced with a 3M Interam<sup>tm</sup> E-54A fire wrap system on electrical circuits located in the Containment, Control, & Auxiliary Buildings. Approximately 15% of the work in the Containment Building and approximately 75% of the work in the Control Building has been completed to date. Review of the installation rate for fire wrap installed to date [measured in man hours per square foot (mh/sf) of material installed] reveals that the original GGNS installation estimate was low, in some areas by a factor of 3.5. This under estimate was the result of GGNS estimators utilizing vendor provided installation rates that were based on easy access, minimal raceway supports and minimal interferences. Actual field conditions at GGNS are that almost all the work is elevated & congested and the number of interferences is high. In addition, a number of the applications are non-typical requiring additional engineering hours to resolve. For these reasons the actual installation man-hours and cost to complete this project has increased substantially, making it impractical, if not impossible, to complete the project by the originally scheduled/committed date of 12/31/2004. A recovery plan has been developed and approved. This recovery plan includes additional funding and schedule for increasing the number of installer, engineering, & quality control personnel to support an additional crew (one crew utilized to date). This recovery plan will allow completion of the entire project by the end of 2005.

(Attach additional sheets if necessary)

Refer to Attachment 9.4 for a flow diagram that outlines the commitment change evaluation process.

<b>Prepared By:</b>	Michael R. Cumbest/ <i>Michael R. Cumbest</i>	7/8/04
	<b>Print Name/Signature</b>	<b>Date</b>
<b>Management Approval:</b>	William T. White/ <i>William T. White</i>	7/13/2004
	<b>Print Name/Signature</b>	<b>Date</b>
<b>Plant Licensing Management Concurrence:</b>	<i>CAHottcm:lln</i> <i>CAH</i>	7-14-04
	<b>Print Name/Signature</b>	<b>Date</b>

<input checked="" type="checkbox"/> QA RECORD
RT 1514.37
<input checked="" type="checkbox"/> NON-QA RECORD
INITIALS <i>WWT</i>
NUMBER OF PAGES 4
DATE 7/14/04
RELATED DOCUMENT NUMBER GNRO-04/00042 (to be issued)

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**PART I**

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**1.1 Is the existing commitment located in the Updated Final Safety Analysis Report, Emergency Plan, Quality Assurance Program, Fire Protection Program, or Security Plan?**

☐ **YES STOP. Do not proceed with this evaluation. Instead use appropriate codified process (e.g., 10 CFR 50.71(e), 10 CFR 50.54) to evaluate commitment.**

☒ **NO Go to Part II.**

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**PART II**

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**2.1 Could the change negatively impact the ability of a System, Structure, or Component (SSC) to perform its safety function or negatively impact the ability of plant personnel to ensure the SSC is capable of performing its intended safety function?**

☐ **YES Go to Question 2.2.**

☒ **NO Continue with Part III. Briefly describe rationale:**

Compensatory measures for inoperable fire barriers identified in the UFSAR/Technical Requirements Manual have been implemented and will be maintained until the new fire wrap system is completed. These pre-approved compensatory measures assure compliance and no negative impact on GGNS ability to safely shutdown with a fire in the affected areas. In addition, the Kaowool fire wrap system is maintained until removal for replacement.

**2.2 Perform a safety evaluation using the following 10 CFR 50.92 criteria to determine if a significant hazards consideration exists:**

**Does the revised commitment involve a significant increase in the probability or consequences of an accident previously evaluated?**

☐ **YES**      ☐ **NO**

**Basis:**

**Does the revised commitment create the possibility of a new or different kind of accident from any previously evaluated?**

☐ **YES**      ☐ **NO**

**Basis:**

**Does the revised commitment involve a significant reduction in a margin of safety?**

☐ **YES**      ☐ **NO**

**Basis:**

**If any of the above questions are answered Yes, STOP. Do not proceed with the revision, OR discuss change with NRC and obtain necessary approvals prior to implementation of the proposed change. If all three questions are answered NO, go to Part III.  
(Attach additional sheets as necessary.)**

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### PART III

---

3.1 Was the original commitment (e.g., response to NOV, etc.) to restore an Obligation (i.e., rule, regulation, order or license condition)?

☒ YES Go to question 3.2.

☐ NO Go to Part IV.

3.2 Is the proposed revised commitment date necessary and justified?

☒ YES Briefly describe rationale (attach additional sheets as necessary) and notify NRC of revised commitment date prior to the original commitment date.

**Rationale:**

Refer to "Summary of Justification for Change or Deletion"

☐ NO STOP. Do not proceed with the revision, OR apply for appropriate regulatory relief.

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### PART IV

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4.1 Was the original commitment: (1) explicitly credited as the basis for a safety decision in an NRC SER, (2) made in response to an NRC Bulletin or Generic Letter, or (3) made in response to a request for information under 10 CFR 50.54(f) or 10 CFR 2.204?

☐ YES Go to Question 4.2.

☐ NO Go to Part V.

4.2 Has the original commitment been implemented?

☐ YES STOP, You have completed this evaluation. Revise the commitment and notify NRC of revised commitment in summary report.

☐ NO Go to Question 5.1.

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### PART V

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5.1 Was the original commitment made to minimize recurrence of a condition adverse to quality (e.g., a long-term corrective action stated in an LER)?

☐ YES Go to Question 5.2.

☐ NO STOP. You have completed this evaluation. Revise the commitment. No NRC notification required.

- 5.2 Is the revised commitment necessary to minimize recurrence of the condition adverse to quality?
- ☐ YES Revise the commitment and notify NRC of revised commitment in next annual/RFO interval summary report.
- ☐ NO Revise commitment: no NRC notification is required:


#### REFERENCES

List documents (e.g., procedures, NRC submittals, etc.) affected by this change.

<u>Doc. Number</u>	<u>Description</u>
GNRO-2000-00042	Letter from J.C. Roberts (GGNS Director, Nuclear Safety Assurance) to U.S. NRC, dated June 1, 2000, "Plans to Address Kaowool Issues"
GNRO-2001/00020	Letter from J.C. Roberts (GGNS Director, Nuclear Safety Assurance) to U.S. NRC, dated March 8, 2001, "Plans to Address Kaowool Issues"

**GGNS Commitment Change Evaluation  
Number**

**CCE 2004-004**

	<p align="center"><b>NUCLEAR MANAGEMENT MANUAL</b></p>	<p>COMPANY PROCEDURE NO. LI-110 REV. No. 0 Attachment 9.3</p> <p align="right">Page <u>1</u> of <u>4</u></p>
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**COMMITMENT CHANGE EVALUATION FORM**

Commitment Number: P-25086 Plant Licensing Tracking Number: CCE 2004-0004

Source Document: SIL-108

Commitment: Deletion? ☐ Revision? ☒

Has the original commitment been implemented? ☒ YES ☐ NO, Notify Plant Licensing

Original Commitment Description:

Axial alignment of Traversing Incore probe and calibration X-Y recorder.

Revised Commitment Description:

Delete requirement to calibrate X-Y recorder, because X-Y recorder is obsolete.

Summary of Justification for Change or Deletion: When SIL-108 was originally issued, GGNS used the process computer to collect TIP data and X-Y recorder to record data. Data is now stored in PDS, therefore X-Y recorder is no longer needed. In addition, recorder and necessary parts are obsolete. Axial alignment still necessary. (Attach additional sheets if necessary) Performed per 17-S-02-203. Refer to Attachment 9.4 for a flow diagram that outlines the commitment change evaluation process.

Prepared By: D. McCullough Date: 8/16/04  
Print Name/Signature

Management Approval: Ken Walker Date: 8/16/04  
Print Name/Signature

Plant Licensing Management Concurrence: CARB Hemilla Date: 8-17-04  
Print Name/Signature



PART I

1.1 Is the existing commitment located in the Updated Final Safety Analysis Report, Emergency Plan, Quality Assurance Program, Fire Protection Program, or Security Plan?

☐ YES STOP. Do not proceed with this evaluation. Instead use appropriate codified process (e.g., 10 CFR 50.71(e), 10 CFR 50.54) to evaluate commitment.

☒ NO Go to Part II.

PART II

2.1 Could the change negatively impact the ability of a System, Structure, or Component (SSC) to perform its safety function or negatively impact the ability of plant personnel to ensure the SSC is capable of performing its intended safety function?

☐ YES Go to Question 2.2.

☒ NO Continue with Part III. Briefly describe rationale: TIP data is stored in PDS, X-Y recorder is no longer necessary. Axial alignment still performed through implementing procedure.

2.2 Perform a safety evaluation using the following 10 CFR 50.92 criteria to determine if a significant hazards consideration exists:

Does the revised commitment involve a significant increase in the probability or consequences of an accident previously evaluated?

☐ Yes ☐ No  
Basis:

Does the revised commitment create the possibility of a new or different kind of accident from any previously evaluated?

☐ YES ☐ NO  
Basis:

Does the revised commitment involve a significant reduction in a margin of safety?

☐ YES ☐ NO  
Basis:

If any of the above questions are answered Yes, STOP. Do not proceed with the revision, OR discuss change with NRC and obtain necessary approvals prior to implementation of the proposed change. If all three questions are answered NO, go to Part III.  
(Attach additional sheets as necessary.)





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PART III

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3.1 Was the original commitment (e.g., response to NOV, etc.) to restore an Obligation (i.e., rule, regulation, order or license condition)?

☐ YES Go to question 3.2.

☒ NO Go to Part IV.

3.2 Is the proposed revised commitment date necessary and justified?

☐ YES Briefly describe rationale (attach additional sheets as necessary) and notify NRC of revised commitment date prior to the original commitment date.

Rationale:

☐ NO STOP. Do not proceed with the revision, OR apply for appropriate regulatory relief.

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PART IV

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4.1 Was the original commitment: (1) explicitly credited as the basis for a safety decision in an NRC SER, (2) made in response to an NRC Bulletin or Generic Letter, or (3) made in response to a request for information under 10 CFR 50.54(f) or 10 CFR 2.204?

☐ YES Go to Question 4.2.

☒ NO Go to Part V.

4.2 Has the original commitment been implemented?

☐ YES STOP, You have completed this evaluation. Revise the commitment and notify NRC of revised commitment in summary report.

☐ NO Go to Question 5.1.

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PART V

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5.1 Was the original commitment made to minimize recurrence of a condition adverse to quality (e.g., a long-term corrective action stated in an LER)?

☒ YES Go to Question 5.2.

☐ NO STOP. You have completed this evaluation. Revise the commitment. No NRC notification required.



NUCLEAR  
MANAGEMENT MANUAL

COMPANY PROCEDURE NO. LI-110 REV. No. 0  
Attachment 9.3

Page 4 of 4

- 5.2 Is the revised commitment necessary to minimize recurrence of the condition adverse to quality?
- ☐ YES Revise the commitment and notify NRC of revised commitment in next annual/RFO interval summary report.
- ☒ NO Revise commitment: no NRC notification is required:

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REFERENCES

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List documents (e.g., procedures, NRC submittals, etc.) affected by this change.

Doc. Number

Description

**GGNS Commitment Change Evaluation  
Number**

**CCE 2004-005**

## COMMITMENT CHANGE EVALUATION FORM

<b>Commitment Number:</b>	A-12544; P-24258	<b>Plant Licensing Tracking Number:</b>	CCE 2004-0005
<b>Source Document:</b>	AECM-87/0095 AECM-87/0169.ATT.1,PG.22,5.S4		
<b>Commitment:</b>	Deletion? <input type="checkbox"/> Revision? <input checked="" type="checkbox"/>		
<b>Has the original commitment been implemented?</b>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO, Notify Plant Licensing		

**Original Commitment Description:**

DEVELOP/IMPLEMENT ADMINISTRATIVE CONTROLS TO REQUIRE OPERATOR BE STATIONED AT SSW BLOWDOWN LINE ISOLATION VALVES WHEN BLOWDOWN IN PROGRESS ALLOWING ISOLATION VALVES TO BE CLOSED IF SSW NEEDED TO PERFORM ITS DESIGN FUNCTIONS

**Revised Commitment Description:**

DEVELOP/IMPLEMENT ADMINISTRATIVE CONTROLS TO REQUIRE OPERATOR BE DESIGNATED TO INSURE CLOSURE OF SSW BLOWDOWN LINE ISOLATION VALVES WHEN BLOWDOWN IS IN PROGRESS IF SSW IS NEEDED TO PERFORM ITS DESIGN FUNCTIONS

**Summary of Justification for Change or Deletion:**

The original commitment was created to compensate for the design flaw that the two SSW isolation blowdown valves on each loop are powered by common MCCs. If a LOCA occurred during blowdown, a single MCC failure would cause the valves to remain open therefore an operator would be required to manually close these valves. The revised commitment still allows for this action while freeing operations personnel to attend to other plant matters. The SSW basin water levels are kept well above the tech spec requirements, therefore allowing a margin of time for a designated operator to perform this task. Also, the isolation valves are located near the SSW basins, so radiological conditions will not inhibit the designated operator from closing these valves.

(Attach additional sheets if necessary)

Refer to Attachment 9.4 for a flow diagram that outlines the commitment change evaluation process.

<b>Prepared By:</b>	Dusty Weiss / <i>[Signature]</i> M. CAUSEY / <i>[Signature]</i> <small>Print Name/Signature</small>	11/17/04 <small>Date</small>
<b>Management Approval:</b>	Dave Jones / <i>[Signature]</i> <small>Print Name/Signature</small>	11/17/04 <small>Date</small>
<b>Plant Licensing Management Concurrence:</b>	James E. Owens / <i>[Signature]</i> for CAB <small>Print Name/Signature</small>	11/22/04 <small>Date</small>

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**PART I**

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**1.1**      **Is the existing commitment located in the Updated Final Safety Analysis Report, Emergency Plan, Quality Assurance Program, Fire Protection Program, or Security Plan?**

☐      **YES**      **STOP. Do not proceed with this evaluation. Instead use appropriate codified process (e.g., 10 CFR 50.71(e), 10 CFR 50.54) to evaluate commitment.**

☒      **NO**      **Go to Part II.**

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**PART II**

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**2.1**      **Could the change negatively impact the ability of a System, Structure, or Component (SSC) to perform its safety function or negatively impact the ability of plant personnel to ensure the SSC is capable of performing its intended safety function?**

☐ **YES**      **Go to Question 2.2.**

☒ **NO**      **Continue with Part III. Briefly describe rationale:**

This change will maintain the operator's ability to insure closure of the SSW blowdown isolation valves. If the valves were to not close automatically, the operator would be able to close them manually without significant water lost to blowdown.

**2.2**      **Perform a safety evaluation using the following 10 CFR 50.92 criteria to determine if a significant hazards consideration exists:**

**Does the revised commitment involve a significant increase in the probability or consequences of an accident previously evaluated?**

☐ **YES**      ☐ **NO**

**Basis:**

**Does the revised commitment create the possibility of a new or different kind of accident from any previously evaluated?**

☐ **YES**      ☐ **NO**

**Basis:**

**Does the revised commitment involve a significant reduction in a margin of safety?**

☐ **YES**      ☐ **NO**

**Basis:**

**If any of the above questions are answered Yes, STOP. Do not proceed with the revision , OR discuss change with NRC and obtain necessary approvals prior to implementation of the proposed change. If all three questions are answered NO, go to Part III.  
(Attach additional sheets as necessary.)**

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### PART III

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3.1 Was the original commitment (e.g., response to NOV, etc.) to restore an Obligation (i.e., rule, regulation, order or license condition)?

☐ YES Go to question 3.2.

☒ NO Go to Part IV.

3.2 Is the proposed revised commitment date necessary and justified?

☐ YES Briefly describe rationale (attach additional sheets as necessary) and notify NRC of revised commitment date prior to the original commitment date.

Rationale:

☐ NO STOP. Do not proceed with the revision, OR apply for appropriate regulatory relief.

---

### PART IV

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4.1 Was the original commitment: (1) explicitly credited as the basis for a safety decision in an NRC SER, (2) made in response to an NRC Bulletin or Generic Letter, or (3) made in response to a request for information under 10 CFR 50.54(f) or 10 CFR 2.204?

☐ YES Go to Question 4.2.

☒ NO Go to Part V.

4.2 Has the original commitment been implemented?

☐ YES STOP, You have completed this evaluation. Revise the commitment and notify NRC of revised commitment in summary report.

☐ NO Go to Question 5.1.

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### PART V

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5.1 Was the original commitment made to minimize recurrence of a condition adverse to quality (e.g., a long-term corrective action stated in an LER)?

☒ YES Go to Question 5.2. (NOTE: Made in response to AECM-87/0095, AECM-87/0169, & LER 86-029-09)

☐ NO STOP. You have completed this evaluation. Revise the commitment. No NRC notification required.

5.2

Is the revised commitment necessary to minimize recurrence of the condition adverse to quality?

☒ YES

Revise the commitment and notify NRC of revised commitment in next annual/RFO interval summary report.

☐ NO

Revise commitment: no NRC notification is required:

**REFERENCES**

List documents (e.g., procedures, NRC submittals, etc.) affected by this change.

<u>Doc. Number</u>	<u>Description</u>
Proc. 04-1-01-P41-1	SSW Blowdown Procedure: Note directly under section 5.3 to be changed from stationed operator to designated operator to implement this commitment change.
Proc. 04-1-02-1H13-P870	Alarm Response Instruction: (NOTE: No changes are needed on this procedure) Procedure has step to close SSW blowdown isolation valves if low level alarm occurs for either SSW basin. This provides a reminder of designated task to operations. See step 4.1.2 on pages 25 (A Basin) and 234 (B Basin).

**GGNS Commitment Change Evaluation  
Number**

**CCE 2005-001**



## COMMITMENT CHANGE EVALUATION FORM

<b>Commitment Number:</b>	P-23866, P-23867, P-23868, P-23869, P-23870, P-23871, P-23872	<b>Plant Licensing Tracking Number:</b>	CCE 2005-0001
<b>Source Document:</b>	Correspondence Letter #MAEC-89/0021		
<b>Commitment:</b>	<b>Deletion?</b> <input checked="" type="checkbox"/> <b>Revision?</b> <input type="checkbox"/>		
<b>Has the original commitment been implemented?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO, Notify Plant Licensing			

**Original Commitment Description:**

SERI Procedure for 10 CFR 50.59 Eval.

**Revised Commitment Description:**

Delete P-23866, P-23867, P-23868, P-23869, P-23870, P-23871, and P-23872.

WA 2/17/05

9/28/88

**Summary of Justification for Change or Deletion:**

The identified commitments are continuing compliance commitments entered to track items identified in the source document, MAEC-89/0021. This letter documents the summary of a meeting held with the NRC on 1/25/89 pertaining to the GG site-specific 50.59 procedure. The 50.59 rule, on which this procedure was based, has since been changed by the NRC. The site-specific procedure has since been replaced by NMM Procedure ENS-LI-101, which reflects the requirements of the revised 50.59 rule. There are no requirements within the 50.59 rule to establish and maintain a 50.59 procedure. Therefore, the identified items, although possible worthwhile enhancements to the procedure, are not required to meet 50.59.

Based on review of these commitments, the items are contained within LI-101. However, they are NOT requirements that must be implemented and maintained. Therefore, P-23866, P-23867, P-23868, P-23869, P-23870, P-23871, and P-23872 should be deleted.

(Attach additional sheets if necessary)

Refer to Attachment 9.4 for a flow diagram that outlines the commitment change evaluation process.

<b>Prepared By:</b>	Guy Davant <i>Guy H. Davant</i> Print Name/Signature	2-16-05 Date
<b>Management Approval:</b>	Jerry Burford <i>J Burford</i> Print Name/Signature	2-16-05 Date
<b>Plant Licensing Management Concurrence:</b>	CA Botwin <i>CA Botwin</i> Print Name/Signature	3-1-05 Date

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**PART I**

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**1.1** Is the existing commitment located in the Updated Final Safety Analysis Report, Emergency Plan, Quality Assurance Program, Fire Protection Program, or Security Plan?

☐ **YES** STOP. Do not proceed with this evaluation. Instead use appropriate codified process (e.g., 10 CFR 50.71(e), 10 CFR 50.54) to evaluate commitment.

☒ **NO** Go to Part II.

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**PART II**

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**2.1** Could the change negatively impact the ability of a System, Structure, or Component (SSC) to perform its safety function or negatively impact the ability of plant personnel to ensure the SSC is capable of performing its intended safety function?

☐ **YES** Go to Question 2.2.

☒ **NO** Continue with Part III. Briefly describe rationale:

This commitment does not involve operation of any plant equipment.

**2.2** Perform a safety evaluation using the following 10 CFR 50.92 criteria to determine if a significant hazards consideration exists:

Does the revised commitment involve a significant increase in the probability or consequences of an accident previously evaluated?

☐ **YES**      ☐ **NO**

Basis:

Does the revised commitment create the possibility of a new or different kind of accident from any previously evaluated?

☐ **YES**      ☐ **NO**

Basis:

Does the revised commitment involve a significant reduction in a margin of safety?

☐ **YES**      ☐ **NO**

Basis:

If any of the above questions are answered Yes, STOP. Do not proceed with the revision, OR discuss change with NRC and obtain necessary approvals prior to implementation of the proposed change. If all three questions are answered NO, go to Part III.  
(Attach additional sheets as necessary.)

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### PART III

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3.1 Was the original commitment (e.g., response to NOV, etc.) to restore an Obligation (i.e., rule, regulation, order or license condition)?

☐ YES Go to question 3.2.

☒ NO Go to Part IV.

3.2 Is the proposed revised commitment date necessary and justified?

☐ YES Briefly describe rationale (attach additional sheets as necessary) and notify NRC of revised commitment date prior to the original commitment date.

**Rationale:**

☐ NO STOP. Do not proceed with the revision, OR apply for appropriate regulatory relief.

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### PART IV

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4.1 Was the original commitment: (1) explicitly credited as the basis for a safety decision in an NRC SER, (2) made in response to an NRC Bulletin or Generic Letter, or (3) made in response to a request for information under 10 CFR 50.54(f) or 10 CFR 2.204?

☐ YES Go to Question 4.2.

☒ NO Go to Part V.

4.2 Has the original commitment been implemented?

☐ YES STOP, You have completed this evaluation. Revise the commitment and notify NRC of revised commitment in summary report.

☐ NO Go to Question 5.1.

---

### PART V

---

5.1 Was the original commitment made to minimize recurrence of a condition adverse to quality (e.g., a long-term corrective action stated in an LER)?

☐ YES Go to Question 5.2.

☒ NO STOP. You have completed this evaluation. Revise the commitment. No NRC notification required.

- 5.2 Is the revised commitment necessary to minimize recurrence of the condition adverse to quality?
- ☐ YES Revise the commitment and notify NRC of revised commitment in next annual/RFO interval summary report.
- ☐ NO Revise commitment: no NRC notification is required:

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#### REFERENCES

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List documents (e.g., procedures, NRC submittals, etc.) affected by this change.

<u>Doc. Number</u>	<u>Description</u>
NMM Procedure ENS-LI-101	10 CFR 50.59 Review Program