UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

February 21, 1991

Docket No. 50-416

FACILITY: Grand Gulf Nuclear Facility (GGNS), Unit 1

LICENSEE: Entergy Operations, Inc.

SUBJECT: SUMARY OF FEBRUARY 5, 1991 MEETING REGARDING PROGRAMS AND ORGANIZATIONS FOR SAFETY ASSESSMENTS

The NRC project manager for GGNS met with the licensee at the GGNS site to hear and discuss licensee's programs and organizations for making safety assessments and to discuss the schedule for review of current and future licensing actions. Enclosure 1 lists participants in the meeting. Enclosure 2 provides an agenda. Enclosure 3 is a draft form for screening changes to equipment and procedures to determine if a 10CFR50.59 safety analysis is required. Enclosure 4 lists current licensing actions. Enclosure 5 lists future licensing actions. Enclosures 2 through 5 were prepared by the licensee.

The licensee described the broad range of activities that are performed by the Quality Programs and Nuclear Licensing Departments. The licensee participates in industry groups working on generic safety matters including NUMARC, BWR Owners Groups, and the Hydrogen Control Owners Group. For example the licensee is a participant in the BWR Owners Group that is studying technical specifications for Operational Conditions 4 and 5. The licensee reviews significant events to find safety improvements on its own initiative. For example, the loss of shutdown cooling at the Vogtle Plant was reviewed prior to the last refueling outage to assure safe scheduling of equipment maintemance. Many audits are performed in specialized areas such as security, emergency planning, fitness for duty, 10CFR50.59 procedures, the materials nonconformance process and the design change process. In-depth safety system functional assessments (SSFA) of a selected system's design bases, performance, surveillance procedures and technical specifications are performed. The Safety Review Committee requests some audits and reviews audit reports, quality deficiency reports and 10CFR50.59 safety analyses. The Vice President, Operations GGNS, attends biweekly exit meetings of the Quality Programs audit groups.

The licensee described activities of Nuclear Plant Engineering that involve safety assessments including design modifications for the Regulatory Guide 1.97 neutron flux monitor, rerouting floor drains to reduce radwaste volumes, instrument setpoint calculations, electrical distribution calculations, design basis calculations, and snubber reduction modifications. When deficiencies are found through these activities, LERs and material nonconformance reports are written and corrections made. All major design changes are analyzed in accord with 10CFR50.59 and a written report is prepared. Minor design changes are screened to determine whether a 10CFR50.59 safety analysis is required.

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Activities of the Operational Analysis Section/Independent Safety Engineering Group include assessments of plant activities (for example, refueling floor activities and diesel generator fuel oil receipt and storage), analysis of industry significant events, analysis of GGNS offnormal events and coordination of NRPDS input. A monthly report of activities is prepared. The section has 12 personnel including 4 licensed personnel and 4 shift technical advisors.

The licensee described activities in the licensing basis document support group which presently has 4 persons in it. The 10CFR50.59 screening form is being changed to expand the scope of changes to be considered to include changes which could alter the function of systems described in the FSAR. Documentation of the basis for not requiring a written safety analysis and a review by another person is also required by the revised form. Enclosure 3 is a copy of the draft form. The licensee is working with NUMARC to incorporate improvements to the 10CFR50.59 process as recommended in NSAC-125.

The NRC staff provided comments on the November 30, 1990 report to the NRC of 10CFR50.59 safety analysis summaries. Most of the summaries are well written and adequately describe the change and safety analysis. Improvements may be made for future summaries by providing a narrative of the safety analysis without restating the findings which are required by 10CFR50.59.

The licensee described the implementation of administrative procedures to prepare written safety evaluations for use of the new Technical Specification 3.0.4 which allows changes in Operational Conditions while in an Action statement provided the Action statement to be entered does not require a shutdown. A table of information is provided in a Technical Specification Position Statement (TSPS) which identifies each Action statement that requires a written safety analysis before entering it. The new TS 3.0.4 is used primarily during a refueling. During the last outage, about half of the usages were known from the outage schedule and so the safety analysis was made before the outage. The remainder required analyses immediately prior to use. The TSPS requires documentation of each usage.

The licensee stated that the spent fuel pool cooling and cleanup system SSFA identified 19 recommendations, concerns or observations, of which 5 are still open. The next SSFA will be made for the GGNS high pressure core spray system (HPCS) followed by SSFAs for the HPCSs of the other three domestic BWR-6s. Additional benefit is expected from an audit of the four systems by the same team. The HPCS was selected partly because it is one of the most safety-important systems based on PRA studies.

The licensee described the blackness testing of spent fuel racks to determine the size and distribution of gaps in the Boraflex panels of the high density spent fuel racks. The procedures are given in the Plant Operations Manual Sections 17-S-02-30 and 17-S-02-300. Spent fuel is unloaded into a test region having 104 cells. Prior to refueling, the fuel is removed from the test region and blackness tests are run. Storage of the fuel is arranged so that the test

region receives the maximum cumulative gamma radiation. Criticality analyses to demonstrate shutdown margin are based on gap assumptions which bound measured data.

Schedules for completion of licensing actions were provided by the staff as follows:

Intergranular stress corrosion cracking (GL 88-01)	06/30/91
Safety implications of control systems (GL 89-19)	12/04/91
Settlement of structures	03/31/91
Loss of fill oil in Rosemount transmitters (B 90-01)	04/30/91
RWCU system isolation instrumentation (TS change)	12/04/91
Pressure-Temperature limits (TS change)	11/26/91
Fire Protection (License Condition change)	03/30/91
Ground water level monitoring and control	07/31/92
Termination of Unit 2 CP	01/31/92
Service water system problems (GL 89-13) Completed	12/13/90

The licensee said that the final safety analysis of hydrogen control measures for degraded core accidents would require about 6 months to prepare after two remaining generic issues which affect containment survivability are resolved; availability of containment spray and peak containment pressure. The Hydrogen Control Owners Group met with the staff on February 12, 1991 to discuss these issues.

L L Kintner

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Enclosure 1

Participants in February 5, 1991 Meeting

between

NRC and ENTERGY OPERATIONS, INC.

at

Grand Gulf Nuclear Station

NRC	Entergy Operations, Inc.
L. L. Kintner	M. J. Meisner
	L. F. Daughtery
	C. C. Hayes
	F. W. Titus
	C. W. Angle
	R. W. Byrd
	J. O. Fowler
	R. J. Errington
	W. K. Hughey

NRC Project Manager Informational Discussions

February 5, 1991

1.	Selected aspects of Grand Gulf safety assessment activities	
	- Overview, generic issue activity	M. J. Meisner
	- SRC/PSRC; LERs; QDR/MNCR processes	L. F. Daughtery
	- Quality Programs - audits/assessments	C. C. Hayes
	- Design Engineering activities	F. W. Titus
	- OAS/ISEG activities	C. W. Angle
2.	Selected aspects of 10CFR50.59 program	
	- Activities in response to SALP recommendations	R. W. Byrd
	- TS 3.0.4 process/experiences	J. O. Fowler
3.	Safety System Functional Assessments	C. C. Hayes
	- Process	
	- SFPCC approach and results	
4.	Spent fuel pool monitoring program	R. T. Errington
5.	Scheduling of revised P/T limits submittal prior to 10 EFPY	W. K. Hughey
6.	Status of submittal on hydrogen control	W. K. Hughey
7.	Status of GGNS submittals pending NRC review	L. L. Kinoner

Draft

Enclosure 3

Entergy Operations	MANAGEMENT MANUAL VOLUME III	SITE DIRECTIVE NO. G4.110 REV. NO. 1 ATTACHMENT II Page 1 of 1

SAFETY AND ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW FORM

A) Documented Evaluated: _____

B) Description of the proposed change: _____

SAFETY EVALUATION APPLICABILITY REVIEW

C) Does the proposed change or activity represent a change to the Technical Specifications?
YES__
NO___

D) Does the proposed change or activity represent:
(1) A change to the facility which alters, or has the potential to alter, the information, operation, function or ability to perform the function of a system, structure or component described in the SAR?
YES__ Explain:
NO___ _____

(2) A change to a procedure which alters, or has the potential to alter, a procedure described, outlined or summarized in the SAR?
YES__ Explain:
NO___ _____

(3) A test or experiment not described in the SAR or which require that a system be operated in an abnormal manner that is not described or previously analyzed in the SAR?
YES__ Explain:
NO___ _____

ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW

E) Does the proposed changed or activity represent a change to the Environmental Protection Plan? (If yes, perform environmental evaluation.)
YES__
NO___

F) Does the proposed change or activity represent a change that will or may affect the environment? (If yes, perform an environmental evaluation.)
YES__
NO___

PREPARER _____ _____ _____
Name Job Title Date

REVIEWER _____ _____ _____
Name Job Title Date

SUBMITTALS AWAITING RESPONSE

	SUBMITTAL SUBJECT	LATEST SUBMITTAL
1.	RAI; P-T LIMITS	11-30-90
2.	RWCU ROOM NAME CHANGE	5-4-90
3.	GL 88-12; REMOVAL OF FIRE PROTECTION TSs	8-22-90
4.	GL 88-01; ASSOCIATED TS CHANGES (IGSCC)	12-7-90
5.	UNIT 2 CP CANCELLATION	12-27-90
6.	RAI; CAT. I STRUCTURES SETTLEMENT ISSUES	11-30-90
7.	GL 89-19; UNRESOLVED SAFETY ISSUE A-47 RESOLUTION (CONTROL SYSTEMS)	5-4-90
8.	RAI; RELATED TO NRC BULLETIN 90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANSMITTERS	9-12-90
9.	SER; GROUNDWATER MONITORING PROGRAM	12-21-90
10.	GL 89-13; SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPMENT	1-29-90

TENTATIVE SUBMITTAL FORECAST

(NEXT 5 MONTHS)

	SUBMITTAL DESCRIPTION	TARGET SUBMITTAL DATE
1.	EXTEND TS INSTRUMENTS AOTs AND STIs	5-91
2.	GL 89-14; REMOVAL OF 3.25 LIMIT ON STIs	4-91
3.	GL 90-02; FUEL ASSEMBLY DESCRIPTION	4-91
4.	REVISE REFUELING PLATFORM INTERLOCKS	6-91
5.	REVISE DG FUEL OIL STORAGE VOLUMES	3-91
6.	CONTAINMENT PURGE RESPONSE	4-91
7.	10CFR50.44; HYDROGEN CONTROL FINAL ANALYSIS	3-91
8.	10CFR50.62; ARI DIVERSITY REQUIREMENTS	3-91
9.	10CFR55 FORM 474; SIMULATOR FACILITY CERTIFICATION	3-91
10.	GL 89-10, SUPPL 3; MOV TESTING RESPONSE	3-91
11.	HYDROGEN CONTROL QUARTERLY STATUS REPOI	2-91
12.	ISI OUTAGE SUMMARY REPORT	4-91
13.	GL 90-09; SNUBBER ALTERNATIVE REQUIREMENTS	5-91

As of 2-1-91
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region receives the maximum cumulative gamma radiation. Criticality analyses to demonstrate shutdowm margin are based on gap assumptions which bound measured data.

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cc w/enclosure:
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Docket File	NRC & Local PDRs	F. Miraglia(12G18)
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PD4-1 Reading File	T. Quay	L. Kintner
OGC MS15B18	E. Jordan (MNBB3701)	NRC Participants
ACRS (10) (MSP-315)	J. Caldwell (MS 17G21)	

OFC	:PD4-1/PD	:PD4-1/D	:	:	:	:
NAME	:LKintner:lh	:TQuay	:	:	:	:
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