



Entergy

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Rick J. King
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February 6, 1997

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
M/S P1-37
Washington, DC 20555-0001

Subject: Reply to Notice of Violation IR 96-016
River Bend Station - Unit I
License No. NPF-47
Docket No. 50-458

File Nos.: G9.5, G15.4.1

RBG-43713
RBF1-97-0043

Gentlemen:

Pursuant to the provisions of 10CFR2.201, attached is the Entergy Operations, Inc. response to the notice of violations described in NRC Inspection Report (IR) 96-016.

Violation 50-458/9616-01 involving an inadequate system operating procedure for the hydrogen control system is addressed in Attachment A. Violation 50-458/9616-02 involving proper implementation of the safety function determination program is addressed in Attachment B. Violation 50-458/9616-03 involving improper implementation of ASME Code, Section XI, is addressed in Attachment C.

Based on information provided in Attachment A, we request that example 2 of violation 50-458/9616-01 be reconsidered. Clarifications are provided in each subject violation to ensure the examples and information represent the results of our investigation.

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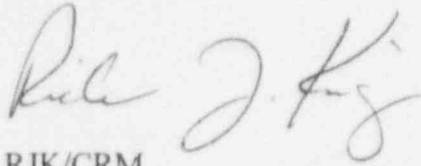
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Should you have any questions regarding the attached information, please contact Mr. David Lorring of my staff at (504) 381-4157.

Sincerely,

A handwritten signature in cursive script, appearing to read "Rick J. King".

RJK/CRM
attachments

cc: U. S. Nuclear Regulatory Commission
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ATTACHMENT A
REPLY TO NOTICE OF VIOLATION 50-458/9616-01

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Violation:

Technical Specification (TS) 5.4.1.a states, in part, that written procedures shall be maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operations)," Revision 2, February 1978. Item 4 of Appendix A to Regulatory Guide 1.33 recommends procedures for the operation of safety-related systems.

Contrary to the above, listed below are examples where Procedure SOP-0040, "Hydrogen Mixing, Purge, Recombiners, and Igniters," Revision 9, was not properly maintained:

1. Each of the four igniter panels had a master breaker that was not identified on the Procedure SOP-0040 breaker lineup. Failure to verify these breakers closed could have resulted in groups of 5 igniter circuits being unable to perform their intended safety function.
2. Procedure SOP-0040, Attachment 3C, "Electrical Lineup for the Hydrogen Recombiners," conflicted with the control board lineup Attachment 4C "Control Board Lineup - Hydrogen Recombiners," in that Attachment 3C required the breakers to be open while Attachment 4C required the breakers to be closed.
3. Procedure SOP-0040, Attachment 1, "Valve Lineup for Hydrogen Purge," failed to specify the required status for Valves CPP-V3, -V4, and -V5. Valve CPP-V3 was specified open in lieu of locked open, Valve CPP-V4 was specified locked/capped instead of locked closed and capped, and Valve CPP-V5 was specified capped in lieu of closed and capped.

Reasons for the Violation:

The cause for the first violation example is an inappropriate determination of which components to include in the System Operating Procedure (SOP) lineups. The hydrogen control system (HCS) panels differ from other 120/240 voltage alternating current (vac) distribution panels in that, rather than supplying multiple functions with multiple indicators of failure, the hydrogen control system panel main breakers are part of a single function circuit with no direct indication of failure.

ATTACHMENT A
REPLY TO NOTICE OF VIOLATION 50-458/9616-01

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For the second example, the interface between the electrical lineup and control board lineup within Procedure SOP-0040 is implemented as designed. SOP lineups are structured such that valve, electrical, and instrument lineups place systems in a standby configuration and the control board lineups place these systems in a ready-for-service configuration. Valve, electrical, and instrument lineups are generally designed to allow for concurrent performance, but the control board lineups cannot be performed without electrical power to the affected components. The Procedure SOP-0040 electrical lineup positions the breakers for the hydrogen recombiners as "open" to allow remote closure of the breakers via the performance of the control board lineup. This example cited in the violation is not considered to be a discrepancy.

The cause of the third example was inadequate technical verification of the procedure within the Operations department. Revision 8 to Procedure SOP-0040 showed these valves in the correct positions, while revision 9 (issued September 4, 1996) contained incomplete position descriptions. A line-for-line comparison of the two revisions should have identified the discrepancies, but was not performed.

Corrective Actions That Have Been Taken:

- An editorial change was issued to revise Procedure SOP-0040 and update the Control Room system lineups correcting the identified valve position discrepancies.
- As an interim measure, administrative control of the four main HCS breakers was established using Procedure OSP-0014, "Administrative Control of Equipment and/or Services."

Corrective Actions That Will Be Taken to Avoid Further Violations:

- Procedure SOP-0040 will be revised to show the four main HCS breakers in the "on" position.
- The need for inclusion of other safety-related 120/240 vac main breakers into appropriate procedures will be evaluated.
- An evaluation will be performed of Operations' procedure verification and validation processes.

Date When Full Compliance Will Be Achieved:

Full compliance was achieved on November 22, 1996, when administrative control was established on the HCS main breakers.

ATTACHMENT B
REPLY TO NOTICE OF VIOLATION 50-458/9616-02
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Violation:

TS 3.0.6 specifies, in part, that when a supported system limiting condition for operation (LCO) is not solely met due to a support system LCO not being met, the conditions and required actions associated with this supported system are not required to be entered. Only the support system LCO actions are required to be entered. In this event, additional evaluations and limitations may be required in accordance with TS 5.5.10, "Safety Function Determination Program."

TS 5.5.10 states, in part, "...a loss of safety function may exist when a support system is inoperable, and: a. A required system redundant to system(s) supported by the inoperable support system is also inoperable..."

TS 3.5.1 H requires, in part, that with both high pressure core spray (HPCS) and low pressure core spray (LPCS) inoperable enter LCO 3.0.3 immediately.

Procedure OSP-0040, "LCO Tracking and Safety Function Determination Program," Revision 1, Step 3.4.1 specifies that a cross-divisional check must be performed to ensure that no loss of safety function goes undetected and Step 4.2.5, specified that if TS 3.0.6 is entered to prevent entering additional LCOs for supported systems, perform an evaluation as required by TS 5.5.10 to ensure no loss of safety function exists. Further, Procedure OSP-0040, Enclosure 1, "Support-Supported LCO Matrix," indicated upon entry into support LCO TS 3.7.1 (SSW), a review of supported LCO 3.5.1 (ECCS-Operating) was required.

Contrary to the above, on November 14, 1996, operators removed the Division I standby service water system (a support system for LPCS) from service while the HPCS system was already inoperable because of a disabled room cooler without performing a loss of safety function determination as required by TS 5.5.10 and Procedure OSP-0040.

Reasons for the Violation:

On November 14, 1996, authorized maintenance and testing activities resulted in conditions that could have caused a short duration entry into Technical Specification Limiting Condition for Operation (LCO) 3.0.3. The Control Room Supervisor (CRS) did not recognize that Division I and Division III Emergency Core Cooling Systems (ECCS) were redundant. This led to a failure to identify the potential loss of safety function; making the use of LCO 3.0.6 to delay entry into required actions inappropriate. Had the Division I Standby Service Water (SSW) inoperability occurred concurrently with Auxiliary Building Unit Cooler #5 (HVR-UC5) not running, entry into LCO 3.0.3 would have been required by LCO 3.5.1, Condition H.

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- Training content did not adequately address relation of task to overall plant operation. The Control Room Supervisor (CRS) was unaware of the relationship of Division III ECCS to Division I and II ECCS. Discussions within the Operations department indicated that most licensed operators were not aware of this relationship. The initial and requalification training content does not identify this condition. Furthermore, training content supporting Procedure OSP-0040, "LCO Tracking and Safety Function Determination Program," and the Safety Function Determination Program did not identify this redundant relationship.
- Omission of relevant information from the procedure. Procedure OSP-0040 did not contain information on the redundant condition. The Support/Supported System Matrix did not identify Condition H as the appropriate TS reference. Procedure OSP-0040 is not intended to be a stand alone document, however this significant information should have been included.
- Documents not used correctly. Despite the training material and procedure shortcomings identified above, enough information was available for the on-shift Operations and Work Management Center personnel to determine the correct course of action. A more thorough review of the TS Bases could have identified this condition.

Corrective Actions That Have Been Taken:

- All Senior Reactor Operators (SRO) were made aware of this event and of the redundant nature of Division I and III equipment.
- Procedure OSP-0040 has been revised to include a reference to Condition H in the ECCS (3.5.1) Support/Supported block of the matrix. An additional note has been added to identify the fact that Division III ECCS is redundant to Divisions I and II.

Corrective Actions That Will Be Taken to Avoid Further Violations:

- Initial and licensed operator training content will be revised to include a discussion of the redundant nature of Division III ECCS with Divisions I and II.

ATTACHMENT B
REPLY TO NOTICE OF VIOLATION 50-458/9616-02

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- OSP-0040 will be reviewed to determine if conditions other than Condition H of TS 3.5.1 should be added to the matrix for those systems supported by Standby Service Water (SSW).
- Licensed operators will review this event during Licensed Operator Requalification. Emphasis will be placed on the need to carefully review all applicable TS sections when making a Safety Function Determination.

Date When Full Compliance Will Be Achieved:

EOI is in full compliance.

ATTACHMENT C
REPLY TO NOTICE OF VIOLATION 50-458/9616-03

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Violation:

10 CFR 50.55a(f) specifies the regulatory requirements to maintain an inservice test program for safety-related components.

Updated Final Safety Analysis Report, Section 9.1.3 specifies that the design basis of the spent fuel pool cooling system includes the ability of a single division to remove the required spent fuel pool heat load during accidents and specifies that the spent fuel pool cooling pumps will be tested in accordance with ASME Code Section XI. ASME Code Section XI, Subsection IWP-3230(c), "Corrective Action," specifies that correction shall be either replacement or repair per IWP-3111, or shall be an analysis to demonstrate that the condition does not impair pump operability and that the pump will still fulfill its function. A new set of reference values shall be established after such analysis.

Contrary to the above, on December 14, 1996, inservice test personnel failed to establish a new set of reference values as required by ASME Code Section XI, Subsection IWP-3230 prior to placing the Train A spent fuel pool cooling pump in service to maintain pool temperatures, with Train B out of service periodically from August 18 to November 11.

Reasons for the Violation:

The cause for this violation is because there was no formal guidance for controlling the out-of-service time for this American Society of Mechanical Engineering (ASME) equipment. Since the Spent Fuel Pool Cooling (SFC) pumps are not in TS, they are not controlled by a Limiting Condition for Operation (LCO). Also, sufficient importance (to warrant scheduling a test outside the system window) was not placed on restoring the system by the test scheduler. The management expectation to restore safety-related equipment following maintenance activities was not adequately emphasized.

Corrective Actions That Have Been Taken:

A review of other pumps tested in the inservice testing (IST) program revealed that the SFC pumps are the only case where the component had no associated LCO to define an outage duration. Operations Policy #006 was revised to require that a tracking LCO be initiated for SFC component inoperabilities and will not permit the equipment to be "returned to service" until the cause of the deviation has been determined and the condition corrected.

ATTACHMENT C
REPLY TO NOTICE OF VIOLATION 50-458/9616-03
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Corrective Actions That Will Be Taken to Avoid Further Violations:

- A review of Inservice Testing (IST) components, which have no associated LCO's will be performed. TRM change requests will be evaluated for these components.
- A method will be developed to ensure that components placed on the IST Exception List due to test failure, or the inability to successfully complete the surveillance test for other reasons, are placed on the applicable LCO(s) or Tracking LCO(s) to ensure the components are not returned to service without successful performance of the IST surveillance test.
- A shift briefing will be provided for Licensed Operators on this event.

Date When Full Compliance Will Be Achieved:

Full compliance was achieved on November 7, 1996, when SFC-P1A satisfactorily passed the required operability surveillance test.