



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

OCT 16 1995

Entergy Operations, Inc.
ATTN: John R. McGaha, Vice President -
Operations, River Bend Station
P.O. Box 220
St. Francisville, Louisiana 70775

SUBJECT: RIVER BEND IMPROVED TECHNICAL SPECIFICATIONS (ITS) IMPLEMENTATION

This refers to the meeting conducted in the Region IV office on September 26, 1995. This meeting related to the status of your implementation of the ITS. During the meeting, your staff summarized the chronological milestones related to development of the ITS. Also, your staff described the activities during the past year related to training, upgrading of procedures, familiarization of operators with the ITS, and communication to plant personnel about the implementation of the ITS.

NRC understands that your staff implemented the ITS around noon on Sunday, October 1, 1995, because of relatively low activity and minimal distractions. We were encouraged by the planned management oversight and by your plans to perform a self-assessment of your ITS. In addition, based on your lessons learned related to implementing revised procedures and providing training from other facilities, NRC considered your actions to be conservative and prudent.

As discussed at the meeting, NRC will be performing an inspection following your refueling outage planned for January-February 1996 to evaluate your implementation of the ITS.

In accordance with Section 2.796 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter will be placed in the NRC's Public Document Room.

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

J. E. Dyer, Director
Division of Reactor Projects

Attachments:

1. Attendance List
2. Licensee Presentation

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PDR ADOCK 0500045B
P PDR

Entergy Operations, Inc.

-2-

cc:

Entergy Operations, Inc.
ATTN: Harold W. Keiser, Executive Vice
President and Chief Operating Officer
P.O. Box 31995
Jackson, Mississippi 39286-1995

Entergy Operations, Inc.
ATTN: Jerrold G. Dewease, Vice President
Operations Support
P.O. Box 31995
Jackson, Mississippi 39286-1995

Entergy Operations, Inc.
ATTN: Michael B. Sellman, General Manager
Plant Operations
P.O. Box 220
St. Francisville, Louisiana 70775

Entergy Operations, Inc.
ATTN: James J. Fisicaro, Director
Nuclear Safety
River Bend Station
P.O. Box 220
St. Francisville, Louisiana 70775

Wise, Carter, Child & Caraway
ATTN: Robert B. McGehee, Esq.
P.O. Box 651
Jackson, Mississippi 39205

Winston & Strawn
ATTN: Mark J. Wetterhahn, Esq.
1401 L Street, N.W.
Washington, D.C. 20005-3502

Entergy Operations, Inc.
ATTN: Otto P. Bulich, Manager
Nuclear Licensing
P.O. Box 220
St. Francisville, Louisiana 70775

The Honorable Richard P. Ieyoub
Attorney General
P.O. Box 94095
Baton Rouge, Louisiana 70804-9095

H. Anne Plettinger
3456 Villa Rose Drive
Baton Rouge, Louisiana 70806

President of West Feliciana
Police Jury
P.O. Box 1921
St. Francisville, Louisiana 70775

Cajun Electric Power Coop. Inc.
ATTN: Larry G. Johnson, Director
Systems Engineering
10719 Airline Highway
P.O. Box 15540
Baton Rouge, Louisiana 70895

William H. Spell, Administrator
Louisiana Radiation Protection Division
P.O. Box 82135
Baton Rouge, Louisiana 70884-2135

bcc to DMB (IE01)

bcc distrib. by RIV:

L. J. Callan
 Branch Chief (DRP/D)
 Project Engineer (DRP/D)
 MIS System
 RIV File
 Senior Resident Inspector (Cooper)

Resident Inspector
 Leah Tremper (OC/LFDCB, MS: TWFN 9E10)
 Senior Resident Inspector (Grand Gulf)
 DRSS-FIPB
 Branch Chief (DRP/TSS)

DOCUMENT NAME:

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10/12/95	10/13/95	10/14/95					

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ATTACHMENT 1

1. Licensee

- M. Campbell, Project Management Engineer, River Bend
- J. Carlson, Control Room Supervisor, River Bend
- M. Chilson, Licensing Engineer, River Bend
- G. Davant, Supervisor, Nuclear Licensing, River Bend
- J. Fisicaro, Director Nuclear Safety, River Bend
- B. Ford, Senior Lead Engineer, Grand Gulf
- R. Roberts, Project Manager, Procedures Upgrade Project, River Bend
- L. Woods, Operations Superintendent, River Bend

2. NRC

- H. Bundy, Reactor Engineer, Operations Branch, Region IV
- C. Grimes, Chief, Technical Specifications Branch, Office of Nuclear Reactor Regulation (NRR)
- T. Gwynn, Director, Division of Reactor Safety, Region IV
- P. Harrell, Chief, Project Branch D, Region IV
- W. Johnson, Acting Deputy Director, Division of Reactor Projects, Region IV
- S. McCrory, Reactor Engineer, Operations Branch, Region IV
- T. McKernon, Reactor Engineer, Operations Branch, Region IV
- G. Pick, Project Engineer, Project Branch D, Region IV
- D. Proulx, Resident Inspector, Region IV
- C. Schulten, Senior Reactor Engineer, Technical Specifications Branch, NRR
- L. Smith, Reactor Inspector, Engineering Branch, Region IV
- W. Smith, Senior Resident Inspector, Region IV
- D. Wigginton, Project Manager, NRR

***IMPROVED
TECHNICAL
SPECIFICATIONS***

***Implementation
at
River Bend Station***

September 26, 1995





PARTICIPANTS

★ Jim Fisicaro

– Director - Nuclear Safety

★ Lenny Woods

– Operations Superintendent

★ Jerrell Campbell

– ITS Team Project Manager

★ Rickey Roberts

– Manager - Procedure Upgrade Project

★ John Carlson

– Supervisor - Training

★ Guy Davant

– Supervisor - Licensing



ITS IMPLEMENTATION

- | | | |
|--------------|---|--|
| I. | OPENING COMMENTS | Jim Fisicaro |
| II. | WHAT STARTED THIS?
WHAT IS ITS? | Guy Davant |
| III. | WHY ITS AT RIVER BEND? | Lenny Woods |
| IV. | HOW HAS RIVER BEND
PREPARED? | Guy Davant
Jerrell Campbell
John Carlson
Rickey Roberts |
| V. | HOW HAVE WE
COMMUNICATED WITH
PLANT PERSONNEL? | Jerrell Campbell |
| VI. | HOW DO WE KNOW
WE ARE READY? | Guy Davant |
| VII. | WHAT HAPPENS
OCTOBER 1? | Lenny Woods |
| VIII. | SUMMARY AND
CONCLUSIONS | Jim Fisicaro |





OPENING COMMENTS

- ★ History of ITS
- ★ ITS at River Bend
 - Development
 - Preparation for implementation
 - Expected gains

WHAT STARTED THIS?

- ★ Initial Evaluation
- ★ Technical Specification
Improvement Project





INITIAL EVALUATION

- ★ Lack of well-defined criteria for TS
 - Massive increase in volume
 - Diverted attention from important requirements
 - Potential impact on safety
- ★ NRC / Industry study of needed improvements



TECH SPEC IMPROVEMENT PROJECT

- ★ Clarify scope and purpose of TS
- ★ Focus attention on items important to safety
- ★ More efficient use of NRC and industry resources
- ★ Selection criteria developed
 - NEDO-31466, “Technical Specification Screening Criteria Application and Risk Assessment”



WHAT IS ITS?

- ★ Selection Criteria
- ★ Improvements
- ★ Relocated Information
- ★ Technical Requirements Manual

SELECTION CRITERIA

- ★ Instrumentation used to detect degradation of the RCPB.
- ★ A process variable that is an initial condition of a DBA or transient.
- ★ An SSC that is credited to mitigate a DBA or transient.
- ★ An SSC which operating experience or PSA has shown to be significant to public health and safety.



SELECTION CRITERIA

- ★ Information not meeting the criteria can be relocated to other programs.



ITS

IMPROVEMENTS

- ★ Consistency among plants
- ★ Number of specs drastically reduced
 - Relocated
 - Deleted
- ★ Details removed
 - Procedural guidance
 - Post-maintenance activities
 - Testing requirements



ITS

IMPROVEMENTS

- ★ Much improved BASES section
- ★ AOTs lengthened
- ★ Surveillance frequencies extended
- ★ Human factors improvements
 - Organization
 - ◆ 5 chapters vs. 6
 - ◆ Organization of Safety Limits, LCOs, Surveillance Requirements
 - Definitions
 - Reformatted and rewritten

CTS PAGES



REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY VALVES

SAFETY/RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.2.1 The safety valve function of at least 5 of the following valves and the relief valve function of at least 4 additional valves of the following valves, other than those satisfying the safety valve function requirement, shall be OPERABLE with the specified lift settings:

<u>Number of Valves</u>	<u>Function</u>	<u>Setpoint* (psig)</u>
7	Safety	1165 (+)0(-)2%
5	Safety	1180 (+)0(-)2%
4	Safety	1190 (+)0(-)2%
1	Relief	1103 ± 15 psig
8	Relief	1113 ± 15 psig
7	Relief	1123 ± 15 psig

The acoustic monitor for each OPERABLE valve shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

- a. With the safety and/or relief valve function of one or more of the above required safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. With one or more safety/relief valves stuck open, close the stuck open safety/relief valve(s); if suppression pool average water temperature is 105°F or greater, place the reactor mode switch in the Shutdown position.
- c. With one or more safety/relief valve acoustic monitors inoperable, restore the inoperable monitor(s) to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

*The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

RIVER BEND - UNIT 1

3/4 4-7

RECEIVED

MAY 13 1988

Amendment No. 22

S D C

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.2.1.1 The acoustic monitor for each safety/relief valve shall be demonstrated OPERABLE by performance of a:

- a. CHANNEL FUNCTIONAL TEST at least once per 31 days, and
- b. CHANNEL CALIBRATION at least once per 18 months.*

4.4.2.1.2 The relief valve function pressure actuation instrumentation shall be demonstrated OPERABLE by performance of a:

- a. CHANNEL FUNCTIONAL TEST, including calibration of the trip unit set-point, at least once per 31 days.
- b. CHANNEL CALIBRATION, LOGIC SYSTEM FUNCTIONAL TEST and simulated automatic operation of the entire system at least once per 18 months.

*The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test.

REACTOR COOLANT SYSTEM

REACTOR COOLANT SYSTEM

3/4.4 REACTOR COOLANT SYSTEM

BASES

3/4.4.2 SAFETY/RELIEF VALVES

The safety valve function of the safety/relief valves (SRV) is to prevent the reactor coolant system from being pressurized above the Safety Limit of 1375 psig, in accordance with the ASME Code. A total of 9 OPERABLE safety-relief valves is required to limit reactor pressure to within ASME III allowable values for the worst case upset transient. Any combination of 4 SRVs operating in the relief mode and 5 SRVs operating in the safety mode is acceptable.

Demonstration of the safety-relief valve lift settings will occur only during shutdown and will be performed in accordance with the provisions of Specification 4.0.5.

The low-low set system ensures that safety/relief valve discharges are minimized for a second opening of these valves, following any overpressure transient. This is achieved by automatically lowering the closing setpoint of 5 valves and lowering the opening setpoint of 2 valves following the initial opening. In this way, the frequency and magnitude of the containment blowdown duty cycle is substantially reduced. Sufficient redundancy is provided for the low-low set system such that failure of any one valve to open or close at its reduced setpoint does not violate the design basis.

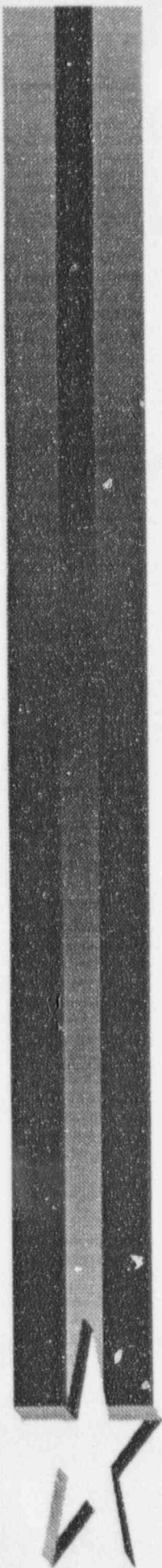
Because the failure of any reactor steam dome pressure instrument channels [providing relief SRV opening and LLS opening and closing pressure setpoints] in one trip system will not prevent the associated SRV from performing its relief and LLS function, 7 days is allowed to restore a trip system to OPERABLE status (refer to Action c of TS 3.4.2.2). In this condition, the remaining OPERABLE trip system is adequate to perform the relief and LLS initiation function. However, the overall reliability is reduced because a single failure in the OPERABLE trip system could result in a loss of relief or LLS function.

The 7 day Completion Time is considered appropriate for the relief and LLS function because of the redundancy of sensors available to provide initiation signals and the redundancy of the relief and LLS design. In addition, the probability of multiple relief or LLS instrumentation channel failures, which renders the remaining trip system inoperable, occurring together with an event requiring the relief or LLS function during the 7 day Completion Time is very low.

If one SRV low-low set function cannot be restored to OPERABLE status within 14 days (refer to Action a), or if more than one SRV low-low set functions are inoperable (refer to Action b), or if either low-low set pressure actuation trip system is inoperable and cannot be restored to OPERABLE status within 7 days (refer to Action c), then the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least HOT SHUTDOWN within 12 hours and to COLD SHUTDOWN within the next 24 hours.

The allowed 12 and 24 hour Completion Times referenced above are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

ITS PAGES



3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.4 Safety/Relief Valves (S/RVs)

LCO 3.4.4 The safety function of five S/RVs shall be OPERABLE,
AND
The relief function of four additional S/RVs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required S/RVs inoperable.	A.1 Be in MODE 3.	12 hours
	<u>AND</u> A.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY								
SR 3.4.4.1 Verify the safety function lift setpoints of the required S/RVs are as follows: <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Number of S/RVs</u></th> <th style="text-align: center;"><u>Setpoint (psig)</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">≥ 1141.7 and ≤ 1165</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">≥ 1156.4 and ≤ 1180</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">≥ 1166.2 and ≤ 1190</td> </tr> </tbody> </table>	<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>	7	≥ 1141.7 and ≤ 1165	5	≥ 1156.4 and ≤ 1180	4	≥ 1166.2 and ≤ 1190	In accordance with the Inservice Testing Program
<u>Number of S/RVs</u>	<u>Setpoint (psig)</u>								
7	≥ 1141.7 and ≤ 1165								
5	≥ 1156.4 and ≤ 1180								
4	≥ 1166.2 and ≤ 1190								

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.4.4.2 -----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify each required relief function S/RV actuates on an actual or simulated automatic initiation signal.</p>	<p>18 months</p>
<p>SR 3.4.4.3 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify each required S/RV opens when manually actuated.</p>	<p>18 months on a STAGGERED TEST BASIS for each valve solenoid</p>

B 3.4 REACTOR COOLANT SYSTEM (RCS)

B 3.4.4 Safety/Relief Valves (S/RVs)

BASES

BACKGROUND

The American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Ref. 1) requires the Reactor Pressure Vessel be protected from overpressure during upset conditions by self actuated safety valves. As part of the nuclear pressure relief system, the size and number of safety/relief valves (S/RVs) are selected such that peak pressure in the nuclear system will not exceed the ASME Code limits for the reactor coolant pressure boundary (RCPB).

The S/RVs are located on the main steam lines between the reactor vessel and the first isolation valve within the drywell. Each S/RV discharges steam through a discharge line to a point below the minimum water level in the suppression pool.

The S/RVs can actuate by either of two modes: the safety mode or the relief mode. In the safety mode (or spring mode of operation), the direct action of the steam pressure in the main steam lines will act against a spring loaded disk that will pop open when the valve inlet pressure exceeds the spring force. In the relief mode (or power actuated mode of operation), a pneumatic piston or cylinder and mechanical linkage assembly are used to open the valve by overcoming the spring force, even with the valve inlet pressure equal to 0 psig. The pneumatic operator is arranged so that its malfunction will not prevent the valve disk from lifting if steam inlet pressure reaches the spring lift set pressures.

In the relief mode, valves may be opened manually or automatically at the selected preset pressure. Five of the S/RVs providing the relief function also provide the low-low set relief function specified in LCO 3.6.1.6, "Low-Low Set (LLS) Valves." Seven of the S/RVs that provide the relief function are part of the Automatic Depressurization System specified in LCO 3.5.1, "ECCS—Operating." The instrumentation associated with the relief valve function and low-low set relief function is discussed in the Bases for LCO 3.3.6.5, "Relief and Low-Low Set (LLS) Instrumentation," and instrumentation for the ADS function is discussed in LCO 3.3.5.1, "Emergency Core Cooling System (ECCS) Instrumentation."

(continued)

BASES

LCO
(continued)

-2% of the nominal setpoint to account for potential setpoint drift to provide an added degree of conservatism. Operation with fewer valves OPERABLE than specified, or with setpoints outside the ASME limits, could result in a more severe reactor response to a transient than predicted, possibly resulting in the ASME Code limit on reactor pressure being exceeded.

APPLICABILITY

In MODES 1, 2, and 3, the specified number of S/RVs must be OPERABLE since there may be considerable energy in the reactor core and the limiting design basis transients are assumed to occur. The S/RVs may be required to provide pressure relief to discharge energy from the core until such time that the Residual Heat Removal (RHR) System is capable of dissipating the heat.

In MODE 4, decay heat is low enough for the RHR System to provide adequate cooling, and reactor pressure is low enough that the overpressure limit is unlikely to be approached by assumed operational transients or accidents. In MODE 5, the reactor vessel head is unbolted or removed and the reactor is at atmospheric pressure. The S/RV function is not needed during these conditions.

ACTIONS

A.1 and A.2

With less than the minimum number of required S/RVs OPERABLE, a transient may result in the violation of the ASME Code limit on reactor pressure. If one or more required S/RVs are inoperable, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE
REQUIREMENTS

SR 3.4.4.1

This Surveillance demonstrates that the required S/RVs will open at the pressures assumed in the safety analysis of Reference 2. The demonstration of the S/RV safety function

(continued)

BASES (continued)

APPLICABLE
SAFETY ANALYSES

The overpressure protection system must accommodate the most severe pressure transient. Evaluations have determined that the most severe transient is the closure of all main steam isolation valves (MSIVs) followed by reactor scram on high neutron flux (i.e., failure of the direct scram associated with MSIV position) (Ref. 2). For the purpose of the analyses, four of the S/RVs are assumed to operate in the relief mode, and five in the safety mode. The analysis results demonstrate that the design S/RV capacity is capable of maintaining reactor pressure below the ASME Code limit of 110% of vessel design pressure (110% x 1250 psig = 1375 psig). This LCO helps to ensure that the acceptance limit of 1375 psig is met during the design basis event.

Reference 3 discusses additional events that are expected to actuate the S/RVs. From an overpressure standpoint, the design basis events are bounded by the MSIV closure with flux scram event described above.

S/RVs satisfy Criterion 3 of the NRC Policy Statement.

LCO

The safety function of five S/RVs is required to be OPERABLE in the safety mode, and an additional four S/RVs (other than the five S/RVs that satisfy the safety function) must be OPERABLE in the relief mode. The requirements of this LCO are applicable only to the capability of the S/RVs to mechanically open to relieve excess pressure. In Reference 2, an evaluation was performed to establish the parametric relationship between the peak vessel pressure and the number of OPERABLE S/RVs. The results show that with a minimum of five S/RVs in the safety mode and four S/RVs in the relief mode OPERABLE, the ASME Code limit of 1375 psig is not exceeded.

The S/RV setpoints are established to ensure the ASME Code limit on peak reactor pressure is satisfied. The ASME Code specifications require the lowest safety valve be set at or below vessel design pressure (1250 psig) and the highest safety valve be set so the total accumulated pressure does not exceed 110% of the design pressure for conditions. The transient evaluations in Reference 3 are based on these setpoints, but also include the additional uncertainties of

(continued)

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.4.4.1 (continued)

lift settings must be performed during shutdown, since this is a bench test, and in accordance with the Inservice Testing Program. The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

The Frequency was selected because this Surveillance must be performed during shutdown conditions and is based on the time between refuelings.

SR 3.4.4.2

The required relief function S/RVs are required to actuate automatically upon receipt of specific initiation signals. A system functional test is performed to verify the mechanical portions of the automatic relief function operate as designed when initiated either by an actual or simulated initiation signal. The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.6.5.4 overlaps this SR to provide complete testing of the safety function.

The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

This SR is modified by a Note that excludes valve actuation. This prevents an RPV pressure blowdown.

SR 3.4.4.3

A manual actuation of each required S/RV is performed to verify that the valve is functioning properly and no blockage exists in the valve discharge line. This can be demonstrated by the response of the turbine control valves or bypass valves, by a change in the measured steam flow, or any other method suitable to verify steam flow (e.g., tailpipe temperature or acoustic monitor). Adequate reactor

(continued)

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.4.4.3 (continued)

steam pressure must be available to perform this test to avoid damaging the valve. Also, adequate steam flow must be passing through the main turbine or turbine bypass valves to continue to control reactor pressure when the S/RVs divert steam flow upon opening. Sufficient time is therefore allowed after the required pressure and flow are achieved to perform this test. Adequate pressure at which this test is to be performed is consistent with the pressure recommended by the valve manufacturer. Plant startup is allowed prior to performing this test because valve OPERABILITY and the setpoints for overpressure protection are verified, per ASME requirements, prior to valve installation. Therefore, this SR is modified by a Note that states the Surveillance is not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. The 12 hours allowed for manual actuation after the required pressure is reached is sufficient to achieve stable conditions for testing and provides a reasonable time to complete the SR. If the valve fails to actuate due only to the failure of the solenoid but is capable of opening on overpressure, the safety function of the S/RV is considered OPERABLE.

The 18 month on a STAGGERED TEST BASIS Frequency ensures that each solenoid for each S/RV is alternately tested. The 18 month Frequency was developed based on the S/RV tests required by the ASME Boiler and Pressure Vessel Code, Section XI (Ref. 1). Operating experience has shown that these components usually pass the Surveillance when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

REFERENCES

1. ASME, Boiler and Pressure Vessel Code, Section III and XI.
 2. USAR, Section 5.2.2.2.3.
 3. USAR, Section 15.
-



RELOCATED INFORMATION

- ★ Controlled by the licensee
- ★ NRC informed of changes via program reporting requirements
- ★ Currently resides in the TRM or BASES

TECHNICAL REQUIREMENTS MANUAL

- ★ Living document
 - Part of SAR by reference - Appendix 16A
- ★ Originally implemented under CTS
- ★ Contains relocated information
- ★ Changes controlled under 10CFR50.59 process
- ★ Reviewed by QA
- ★ Reviewed and approved by FRC

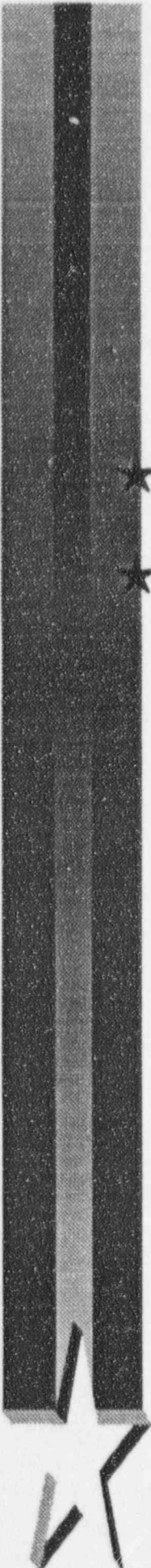


PLANTS WITH ITS

- ★ Crystal River - mid 1994
- ★ Clinton - 1/95
- ★ Grand Gulf - 3/95
- ★ Hatch - 7/95

WHY ITS AT RIVER BEND?

- ★ Take advantage of improvements
 - Improvements allowed by Generic Letters
 - ◆ Snubber testing
 - ◆ Fire protection
 - ◆ Radiological and environmental monitoring
 - Focus attention on items important to safety
 - Improved BASES section



WHY ITS AT RIVER BEND?

- ★ It's a better document
- ★ Drastically reduces potential for interpretations



HOW HAS RBS PREPARED FOR ITS?

- ★ License Amendment
Development
- ★ ITS Project Team
- ★ Training
- ★ Document Changes



LICENSE AMENDMENT

- ★ Developed as part of BWROG subcommittee
 - Wide range of experience
 - Extensive feedback of lessons learned
 - Changes categorized
 - ◆ More Restrictive - “M”
 - ◆ Less Restrictive - “L”
 - ◆ Administrative - “A”
 - ◆ Relocated - “R”

LICENSE AMENDMENT

- ★ Site organizations involved
 - Operations
 - Engineering
 - Licensing
- ★ Reviewed by site departments to ensure accuracy
- ★ Reviewed/approved by FRC and NRB
- ★ Submitted to NRC
- ★ Approved by NRC 7/20/95



ITS PROJECT TEAM MISSION

- ★ Identify required activities and ensure they are completed
 - Obtain license amendment
 - Revise procedures
 - Train plant staff
- ★ Implement with smooth transition from CTS to ITS
 - No LERs or NOVs
- ★ Implement within budget



ITS PROJECT TEAM

★ Representatives from plant staff

- Operations
- Maintenance
- Training
- Licensing
- Outage Management
- System Engineering
- Station Document Control
- Procedures
- QA



ITS PROJECT TEAM

- ★ Incorporated lessons learned from Grand Gulf and Clinton
- ★ Developed an integrated schedule to support 10/1/95 implementation

TRAINING

- ★ Prepare appropriate plant staff personnel
- ★ Train the instructors
 - Instructors for ITS
 - ◆ 40 hours of training
 - ◆ Provided by Licensing
 - ◆ Line-by-line examination of changes
 - ◆ Each training group represented



TRAINING

- ★ Train the operators
 - Requalification modules
 - ◆ 30 hours
 - ◆ Taught by ITS instructors
 - ◆ Monitored by Licensing
 - ◆ Comprehensive 2-hour exam
 - Initial training
 - ◆ Train to ITS following exam (9/95)
 - Trained on ITS, TRM, SFDP
 - Positive reactions
 - ◆ Anticipate challenge areas

TRAINING

- ★ Train the operators (cont'd)
 - ITS in Control Room, Work Management Center, and Simulator
- ★ Train other Ops personnel
 - Remaining instructors
 - Ops Engineer, Technical Assistants
 - 8-hour session



TRAINING

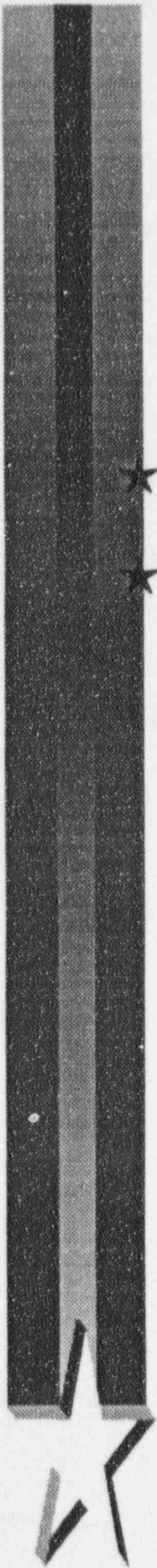
- ★ Train plant staff personnel
 - Based on needs of each discipline
 - Quarterly general training
 - Specific department training
 - ◆ Engineering
 - ◆ Outage Management
 - ◆ Procedures
 - ◆ 50.59 Safety Evaluation preparers

TRAINING

★ Train Management

- Middle and upper management
- Major concepts
 - ◆ Changes
 - ◆ Impact on plant





DOCUMENT CHANGES

- ★ Procedures
- ★ Databases

PROCEDURES

- ★ Impacted procedures
 - 58 “M”s
 - 255 “L”s
 - 1156 “A”s and “R”s
- ★ “M”s and “L”s revised prior to implementation
- ★ Others revised after implementation



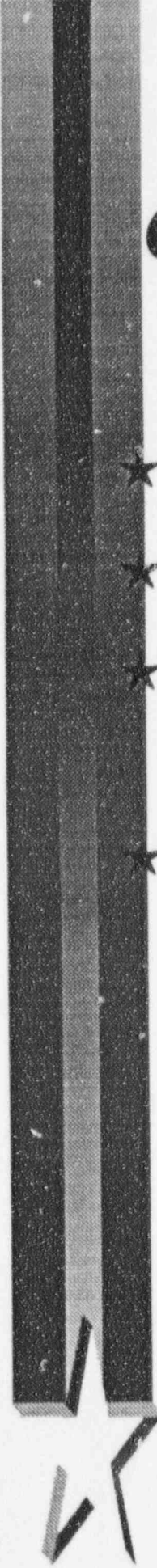
PROCEDURES

- ★ Established controls
 - Latest revisions marked up to reflect ITS
 - Mark-ups reviewed by Licensing
 - Typed procedures V&V'd by SROs
- ★ Procedures approved
 - “M”s - 58
 - “L”s - 209
 - On schedule to support implementation

DATABASES

- ★ STP-TS Cross-Reference Matrix
- ★ LSFT-TS Cross-Reference Matrix
- ★ STP Event-Related Matrix





HOW DO WE COMMUNICATE WITH PLANT PERSONNEL?

- ★ *Inside Entergy* articles
- ★ Quarterly engineering training
- ★ Monthly ITS Project Progress Reports
- ★ Presentations to plant management



HOW DO WE KNOW WE ARE READY?

- ★ Independent Checks
 - Licensing
 - Procedures
 - Training
- ★ QA Audits
- ★ Transition Plan
 - Implementation activities
 - Management concurrence

INDEPENDENT CHECKS

★ Licensing

- ITS and TRM compared against Amendment 81
- Procedure mark-ups verified against ITS and TRM

★ Procedures

- Procedure mark-ups verified against ITS and TRM

★ Training

- ITS and TRM reviewed during training activities

QA AUDITS



★ ITS

- Completed
- Information accurately reflected

★ TRM

- Completed
- Information accurately relocated

★ Procedures

- Working
- Ensure “M” requirements reflected in procedures



TRANSITION PLAN

- ★ Key activities needed 30 - 45 days prior to implementation
 - Verify training for appropriate plant personnel
 - Prepare ITS- impacted procedure revisions for issue

WHAT HAPPENS ON OCTOBER 1?

- ★ Authorization to Implement
 - Departments have taken appropriate actions
 - Recommended by ITS Project Team
 - Authorized by Executive Sponsor
- ★ Activate Operating License Manual and procedures
- ★ Current LCOs to ITS
- ★ 24-hour Licensing support

SUMMARY

★ Why implement ITS at River Bend?

– ITS vast improvement over CTS

- ◆ Clearly and concisely written
- ◆ Reflects only safety significant information
- ◆ Reduced regulatory burden
- ◆ Reduced operating costs



SUMMARY

- ★ How has River Bend prepared?
 - Trained appropriate plant personnel
 - Incorporated lessons learned from other plants
 - ◆ No reportable events or violations
 - Recognize challenges
- ★ How do we know we are ready to implement?
 - Follow Transition Plan
 - Plant Management concurrence