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RBG-45901

February 06, 2002

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

SUBJECT: River Bend Station, Unit 1
Docket No. 50-458
License Amendment Request
Deletion of Turbine Building High Temperature inputs to Main Steam Line
Isolation logic, Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g.,
1.h. and 1.i.

REFERENCES: Cooper Nuclear Station Amendment No. 178 to Facility Operating
License DPR-46 (TAC NO. M98317), dated July 31, 1998.

Dear Sir or Madam:

Pursuant to 10CFR50.90, Entergy Operations, Inc. (Entergy) hereby requests the following amendment for River Bend Station, Unit 1 (RBS). Entergy proposes to remove the requirement for Main Steam Isolation Valve (MSIV) isolations on certain area temperatures from Technical Specifications section 3.3.6.1, Primary Containment and Drywell Isolation Instrumentation.

During operation in the summer months at River Bend, the ambient temperatures of the Turbine Building south steam tunnel, turbine deck, and mezzanine steam piping areas have historically trended close to their isolation set points. This reduced operating margin, during peak summer temperatures, has resulted in half isolation signals occurring due to reasons other than actual steam leaks in the areas (e.g., ventilation system failures). The proposed TS change will allow Entergy to relocate these requirements into station procedures and perform modifications to alleviate the potential for an unwarranted plant transient. Once the requirements are removed from the TS, Entergy intends to remove the automatic Main Steam Line isolation function in each of these areas. Entergy also intends to provide an associated alarm feature in the Control Room. Therefore operators will be able to evaluate the condition and initiate manual isolation, if required. These changes will prevent unnecessary challenges to the safe operation of the plant that may be caused by high ambient temperatures not related to steam leakage in those areas.

The proposed change has been evaluated in accordance with 10CFR50.91(a)(1) using criteria in 10CFR50.92(c) and it has been determined that this change involves no significant hazards considerations. The bases for these determinations are included in the attached submittal. Please note that Entergy is only requesting NRC approval to remove the requirements for these

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isolation functions from the Technical Specifications. Any changes to the design or to plant procedures will be made pursuant to 10 CFR 50.59 and are not a part of this application.

The proposed change includes new commitments as summarized in Attachment 4.

The Turbine Building Area Temperature switches for Functions 1.f., 1.g., 1.h. and 1.i. of Technical Specification Table 3.3.6.1-1, are not assumed to mitigate the consequences of a DBA or transient, and are not an input assumption for any DBA analysis. Therefore the Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i., for these area temperature switches, do not meet any of the criteria in 10CFR50.36 and may be removed from the Technical Specification. Regulatory Guide 1.45 "Reactor Coolant Pressure Boundary Leakage Detection Systems" does not apply to this portion of the main steam line piping in the Turbine Building since it is not part of the Reactor Coolant Pressure Boundary.

Changes similar to those requested by Entergy were approved for Cooper Nuclear Station as a relocation of specific turbine building area temperature monitoring requirements to their TRM during their conversion to Improved Technical Specifications in July 1998 (Reference 1).

Entergy requests approval of the proposed amendment by June 7, 2002. This need date is based on River Bend's desire to facilitate the necessary modifications to the plant prior to the peak summer temperatures expected in 2002.

Once approved, the amendment shall be implemented within 60 days. Although this request is neither exigent nor emergency, your prompt review is requested.

If you have any questions or require additional information, please contact Greg Norris at 225-336-6391.

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 6, 2002.

Sincerely,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

PDH/GPN

Attachments:

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Changes to TS Bases pages (mark-up for information only)
4. List of Regulatory Commitments

cc: U. S. Nuclear Regulatory Commission
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Attachment 1

RBG-45901

Analysis of Proposed Technical Specification Change

1.0 DESCRIPTION

This letter is a request to amend Operating License(s) NPF-47 for River Bend Station, Unit 1 (RBS).

The proposed change(s) will revise the Technical Specifications to delete the Turbine Building High Temperature inputs to Main Steam Line Isolation logic, Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i.

During operation in the summer months at River Bend, the ambient temperatures of the Turbine Building south steam tunnel, turbine deck, and mezzanine steam piping areas have historically trended close to their isolation set points. This reduced operating margin, during peak summer temperatures, has resulted in half isolation signals occurring due to reasons other than actual steam leaks in the areas (e.g., ventilation system failures). The proposed TS change will allow Entergy to relocate these requirements into station procedures and perform modifications to alleviate the potential for an unwarranted plant transient. Once the requirements are removed from the TS, Entergy intends to remove the automatic Main Steam Line isolation function in each of these areas. Entergy also intends to provide an associated alarm feature in the Control Room. Therefore operators will be able to evaluate the condition and initiate manual isolation, if required. The proposed changes will prevent unnecessary challenges to the safe operation of the plant that may be caused by high ambient temperatures not related to steam leakage in those areas.

Please note that Entergy is only requesting NRC approval to remove the requirements for these isolation functions from the Technical Specifications. Any changes to the design or to plant procedures will be made pursuant to 10 CFR 50.59 and are not a part of this application. Entergy requests approval of the proposed amendment by June 7, 2002, based on River Bend's desire to facilitate the necessary modifications to the plant prior to the peak summer temperatures expected in 2002.

2.0 PROPOSED CHANGE

Entergy proposes to change the River Bend Station (RBS) Technical Specifications (TS) such that the Main Steam Line Isolation functions on high ambient temperature in the pipe routing areas of the turbine building are relocated to licensee controlled station procedures. In Technical Specification Table 3.3.6.1-1 (Primary Containment and Drywell Isolation Instrumentation), these are functions 1.f., 1.g., 1.h. and 1.i. The isolation from the Main Steam Tunnel Temperature - High (function 1.e.), as well as all the other redundant and diverse isolation functions will remain unchanged.

The proposed TS change will allow Entergy to relocate these requirements into station procedures and perform 10 CFR 50.59 evaluations for the modification and removal of the automatic Main Steam Line isolation function in each of these areas. A Turbine Building Area High Temperature alarm will be provided to the operator in the Control Room instead of the existing Main Steam Isolation Valve (MSIV) automatic isolation function. This will allow the operator to respond to the alarm and determine if an actual leak is occurring. Confirmation of a leak may be obtained by a second alarm on high temperature, turbine building exhaust high radiation alarms, plant stack exhaust high radiation alarms, or visual observation.

In summary, the proposed change will revise the River Bend Technical Specifications to remove the requirements for the Turbine Building High Temperature inputs to Main Steam Line Isolation logic, (i.e., Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i.). The Turbine Building Area Temperature switches for Functions 1.f., 1.g., 1.h. and 1.i. of Technical Specification Table 3.3.6.1-1, are not assumed to mitigate the consequences of a DBA or transient, and are not an input assumption for any DBA analysis. The Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i., for these area temperature switches, do not meet any of the criteria in 10CFR50.36 and may therefore be removed from the Technical Specifications. Marked-up TS pages indicating the proposed changes are provided in Attachment 2.

Respective changes will also be made to the TS Bases in accordance with the Bases Control Program of TS 5.5.11. The Bases for Technical Specification 3.3.6.1 will remain applicable for Function 1.e. as currently written. References to Functions 1.f., 1.g., 1.h. and 1.i. will be removed. These changes are provided in Attachment 3 for your information.

3.0 BACKGROUND

The main steam tunnel provides radiation protection from the four main steam lines that are contained within it. In addition, feedwater, RCIC, RHR, and RWCU lines are contained within the tunnel. The portion of the tunnel located within the containment has a rectangular cross section of 34 ft inside width by 19 ft inside height and extends horizontally from the drywell wall toward the steel containment wall. Within containment, the tunnel is supported by the drywell wall and is separated from the steel containment by a 3-in rattle space. The bottom of the tunnel is located 40 ft above the top of the reactor building foundation mat. The side walls, top, and bottom of the tunnel are constructed of 4-ft thick reinforced concrete sections, designed to withstand pipe rupture loads due to high energy line breaks. The main steam tunnel passes through and is an integral part of the auxiliary building. The turbine building is located immediately adjacent to and south of the auxiliary building, with the main steam tunnel passing through north-south and terminating at the turbine generator.

Each of the four 24-in. main steam lines is welded to the appropriate reactor nozzle (el 155 ft) above the top of the shield wall. After the first elbow, each line runs downward to an approximate el. 129 ft, and then horizontally through the drywell and containment penetrations, and the auxiliary building steam tunnel, and then into the turbine building. (reference USAR figures 1.2-10, 12, 14, 18, 33, 34, 36 for general arrangement)

Areas outside the containment, which are monitored for primary coolant leakage, include: equipment areas in the auxiliary building, the main steam tunnel, and the turbine building. The process piping for each system to be monitored for leakage (e.g. feedwater, RCIC, RHR suction, and RWCU suction lines) is located in compartments or rooms separate from other systems where feasible so that leakage may be detected by area temperature indications.

Thermocouples and RTD's are used to sense high ambient temperatures in monitored areas. The temperature elements are located or shielded so that they are sensitive to air temperatures only and not radiated heat from hot piping or equipment. These monitors have temperature setpoints, which are predicated on an area temperature rise equivalent to reactor coolant leakage into the monitored areas of 25 gpm. The temperature trip set points are a function of room size and the type of ventilation provided. These monitors typically provide alarm, indication and recording in the main control room, and trip the isolation logic to close selected

isolation valves (e.g., the main steam tunnel monitors close the MSIV and MSL drain isolation valves).

In addition to the MSIV isolation on high ambient temperature in the steam tunnel, River Bend also has isolation functions on high ambient temperature in the pipe routing areas of the turbine building, in which the steam lines are located outside the containment. These sixteen additional temperature monitors are located in the south steam tunnel (turbine building side), the turbine deck, and the mezzanine level of the turbine building. The areas are referred to in Technical Specifications as Main Steam Tunnel Area (El.95 ft.), Main Steam Tunnel Area (El.114 ft.), Main Steam Line Turbine Shield Wall, and MSL Moisture Separator and Reheater Area. High temperature in these areas could indicate a leak in a main steam line. When a predetermined increase in the ambient temperature in the pipe routing areas of the turbine building is detected, automatic isolation signals, which Entergy proposes to remove from the Technical Specifications, currently initiate the closure of all main steam isolation valves and main steam line drain valves.

4.0 TECHNICAL ANALYSIS

Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i temperature switches, Main Steam Tunnel Area Temperature - High (El. 95 ft.) (LDS-ES1A,B,C,D); Main Steam Tunnel Area Temperature - High (El. 114ft.) (LDS-ES2A,B,C,D); Main Steam Line Turbine Shield Wall Temperature - High (LDS-ES3A,B,C,D); and MSL Moisture Separator and Reheater Area Temperature - High (LDS-ES4A,B,C,D), which are included in the main steam line temperature detection system are proposed to be removed from Technical Specification. The steam tunnel temperature switches, Main Steam Tunnel Temperature - High (E31-N604A,B,C,D), will be retained in Technical Specification Table 3.3.6.1-1.

The Turbine Building Temperature switches are used to detect a main steam line leak of a magnitude of 25 gpm equivalent steam leak and, for small breaks of this size, no credit is taken for the automatic isolation of the MSIVs by these area temperature switches. Thus, the Turbine Building Area Temperature switches are not assumed to mitigate the consequences of a DBA or transient, and are not an input assumption for any DBA analysis. The Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i., for these area temperature switches does not meet any of the criteria in 10CFR50.36 and may therefore be removed from the Technical Specification. In addition, the onsite and offsite dose consequences for a manual isolation have been calculated to remain orders of magnitude below acceptance criteria for this type of event because virtually no water carryover (and resulting iodine) is expected to occur.

The current design provides an isolation signal on detection of high temperatures in the south steam tunnel, the turbine deck, and the mezzanine. The isolation set points are based upon detection of a 25 gpm equivalent steam leak after one hour.

A discussion of the turbine building leak detection is also provided in Section 5.2 of the GESSAR as well as Section 5.2.5.1.3 of the River Bend Station Updated Safety Analysis Report.

Detection of excess leakage external to the primary containment (e.g., process line break outside containment) is provided by diverse features. These include detection by low reactor water level, high process line flow, and high ambient temperature in the piping or equipment

areas. These monitors provide alarm and indication in the main control room and trip the isolation logic to cause closure of appropriate system isolation valves on indication of excess leakage.

In addition to these containment isolation system features, areas outside the containment are monitored by the radiation monitoring system, which alarms on detection of high radiation levels. The auxiliary building drain sumps and turbine building sumps collect leakage and are alarmed for high sump level. These leakage detection features are not part of the containment isolation system.

Not all leakage detection features need to provide automatic containment isolation. Not all BWRs include the Turbine Building Area High Temperature isolation function.

General Design Criteria 54 requires that:

Piping systems penetrating primary reactor containment shall be provided with leak detection, isolation, and containment having redundancy, reliability, and performance capabilities which reflect the importance to safety of isolating these piping systems.

The RBS design incorporates various and diverse leak detection and containment isolation features to meet the requirements of GDC 54. It is proposed that the Turbine Building Area High Temperature isolation function be removed from the TS requirements for containment isolation instrumentation. Appropriate automatic isolations for MSIVs are still retained in accordance with GDC 54 by other diverse leakage detection features such as detection of low reactor water level, high main steam line flow, low main steam line pressure, and main steam tunnel high ambient temperature.

Turbine Building Area Temperature alarm features will be retained, within station procedures, with the set point based upon the 25 gpm equivalent steam leak, however, the automatic isolation function would be deleted by plant modifications based upon a 10 CFR 50.59 evaluation. Procedures would require the operator to respond to alarms and determine if an actual leak is occurring. Confirmation of a leak may be obtained by a second alarm on high temperature, turbine building exhaust high radiation alarms, plant stack exhaust high radiation alarms, or visual observation.

5.0 REGULATORY ANALYSIS

5.1 Applicable Regulatory Requirements/Criteria

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met.

Entergy has determined that the proposed changes do not require any exemptions or relief from regulatory requirements, other than the TS, and do not affect conformance with any GDC differently than described in the SAR.

5.2 No Significant Hazards Consideration

Entergy Operations, Inc. (Entergy) proposes to revise the River Bend Technical Specifications to remove the requirements for the Main Steam Line automatic isolation on detection of certain Turbine Building high temperature conditions (i.e., Technical Specification Table 3.3.6.1-1 Functions 1.f., 1.g., 1.h. and 1.i). Entergy has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

There is no credit taken in any licensing basis analysis for the main steam line isolation valve (MSIV) closure on the turbine area high temperature and there are no calculations that credit the subject isolation function as a mitigative feature. A review of Chapters 5, 6, 11, 12, and 15 of the USAR confirmed that the subject isolation function was not credited in any analysis for mitigating fuel cladding damage, mitigating challenges to vessel integrity, or mitigating dose to plant staff or the general public. This conclusion is consistent with the discussion of the function in the current Technical Specification Bases (B 3.3.6.1). Removing this requirement from the TS will allow the licensee to make changes to the design or function of the instrumentation provided the changes meet the 10 CFR 50.59 criteria. Entergy intends to make changes that will reduce unwarranted challenges to the MSIVs, associated isolation and actuation logic, and minimize the likelihood of an unwarranted plant transient due to increased ambient temperatures for reasons other than a steam leak. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed change removes the automatic MSIV isolation function associated with high temperatures in certain Turbine Building areas from the requirements of the Technical Specifications. Relocating requirements for this isolation function to licensee control does not introduce any new failure mechanisms or introduce any new accident precursors. Any subsequent changes to the design or function of the instrumentation must meet the criteria of 10 CFR 50.59.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No.

There is no credit taken in any licensing basis analysis for the main steam line isolation (MSIV closure) on the turbine area high temperature. Therefore, since the MSIV isolation function on the Turbine Building Area High Temperature is not credited as a mitigating feature in any analysis which establishes thermal limits, evaluates peak vessel pressure, evaluates peak containment / drywell pressure, or evaluates radiological consequences (on and off site), there is no adverse impact on any margin of safety.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Entergy concludes that the proposed amendment(s) present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

Environmental Considerations

The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 PRECEDENCE

Not all BWR Technical Specifications include the Turbine Building Area High Temperature isolation function. Grand Gulf Station Technical Specifications, for example, do not include a Turbine Building Area High Temperature isolation function.

Changes similar to those requested by Entergy were approved for Cooper Nuclear Station as a relocation of specific turbine building area temperature monitoring requirements to their TRM during their conversion to Improved Technical Specifications in July 1998 (Reference 1).

Attachment 2

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Proposed Technical Specification Changes (mark-up)

Table 3.3.6.1-1 (page 1 of 5)
Primary Containment and Drywell Isolation Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS PER TRIP SYSTEM | CONDITIONS REFERENCED FROM REQUIRED ACTION C.1 | SURVEILLANCE REQUIREMENTS | ALLOWABLE VALUE |
|--|--|--|--|--|--|
| 1. Main Steam Line Isolation | | | | | |
| a. Reactor Vessel Water Level — Low Low Low, Level 1 | 1,2,3 | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7 | ≥ -147 inches |
| b. Main Steam Line Pressure — Low | 1 | 2 | E | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7 | ≥ 837 psig |
| c. Main Steam Line Flow — High | 1,2,3 | 2 per MSL | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7 | ≤ 190 psid, Line A ≤ 194 psid, Line B ≤ 194 psid, Line C ≤ 194 psid, Line D |
| d. Condenser Vacuum — Low | 1,2(a), 3(a) | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≥ 7.6 inches Hg vacuum |
| e. Main Steam Tunnel Temperature — High | 1,2,3 | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 148.5°F |
| f. Main Steam Tunnel Area Temperature — High (El. 95ft) | 1,2,3 | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 145.3°F |
| g. Main Steam Tunnel Area Temperature — High (El. 114ft) | 1,2,3 | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 145.3°F |
| h. Main Steam Line Turbine Shield Wall Temperature-High | 1,2,3 | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 111.3°F |

(continued)

(a) With any turbine stop valve not closed.

Primary Containment and Drywell Isolation Instrumentation
3.3.6.1

Table 3.3.6.1-1 (page 2 of 5)
Primary Containment and Drywell Isolation Instrumentation

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS PER TRIP SYSTEM | CONDITIONS REFERENCED FROM REQUIRED ACTION C.1 | SURVEILLANCE REQUIREMENTS | ALLOWABLE VALUE |
|--|--|--|--|--|------------------------------------|
| 1. Main Steam Line Isolation (continued) | | | | | |
| i. MSL Moisture Separator and Reheater Area Temperature - High | 1,2,3 | 2 | D | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 130°F |
| j. Manual Initiation | 1,2,3 | 2 | G | SR 3.3.6.1.6 | NA |
| 2. Primary Containment and Drywell Isolation | | | | | |
| a. Reactor Vessel Water Level - Low Low, Level 2 | 1,2,3 | 2 ^(b) | H | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≥ -47 inches |
| b. Drywell Pressure - High | 1,2,3 | 2 ^(b) | H | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 1.88 psid |
| c. Containment Purge Isolation Radiation - High | 1,2,3 | 1 | K | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 1.57 R/hr |
| d. Manual Initiation | 1,2,3 | 2 ^(b) | G | SR 3.3.6.1.6 | NA |
| 3. Reactor Core Isolation Cooling (RCIC) System Isolation | | | | | |
| a. RCIC Steam Line Flow - High | 1,2,3 | 1 | F | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≤ 135.5 inches water |
| b. RCIC Steam Line Flow Time Delay | 1,2,3 | 1 | F | SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6 | ≥ 3 seconds and ≤ 13 seconds |
| c. RCIC Steam Supply Line Pressure - Low | 1,2,3 | 1 | F | SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 | ≥ 55 psig |
| (continued) | | | | | |

(b) Also required to initiate the associated drywell isolation function.

Attachment 3

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Changes to TS Bases pages (mark-up for information only)

BASES

APPLICABLE
SAFETY ANALYSES,
LCO, and
APPLICABILITY
(continued)

1.e, 1.f, 1.g, 1.h, 1.i, Main Steam Tunnel Ambient
Temperature—High

Ambient Temperature—High is provided to detect a leak in the RCPB, and provides diversity to the high flow instrumentation. The isolation occurs when a very small leak has occurred. If the small leak is allowed to continue without isolation, offsite dose limits may be reached. However, credit for these instruments is not taken in any transient or accident analysis in the USAR, since bounding analyses are performed for large breaks such as MSLBs.

Ambient temperature signals are initiated from thermocouples located in the area being monitored. Four channels of each ambient temperature Function are available and are required to be OPERABLE to ensure that no single instrument failure can preclude the isolation function. Each Function has one temperature element.

The ambient temperature monitoring Allowable Value is chosen to detect a leak equivalent to 25 gpm.

This Function isolates the Group 6 valves.

1.j. Manual Initiation

The Manual Initiation push button channels introduce signals into the MSL isolation logic that are redundant to the automatic protective instrumentation and provide manual isolation capability. There is no specific USAR safety analysis that takes credit for this Function. It is retained for the isolation function as required by the NRC in the plant licensing basis.

There are four push buttons for the logic, two manual initiation push buttons per trip system. There is no Allowable Value for this Function since the channels are mechanically actuated based solely on the position of the push buttons.

Four channels of Manual Initiation Function are available and are required to be OPERABLE.

(continued)

Attachment 4

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List of Regulatory Commitments

List of Regulatory Commitments

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

| COMMITMENT | TYPE (Check one) | | SCHEDULED COMPLETION DATE (If Required) |
|--|------------------------|--------------------------|--|
| | ONE- TIME ACTION | CONTINUING COMPLIANCE | |
| A Turbine Building Area High Temperature alarm will be provided to the operator in the Control Room instead of the existing Main Steam Isolation Valve (MSIV) automatic isolation function. This will allow the operator to respond to the alarm and determine if an actual leak is occurring. | | X | |
| | | | |
| | | | |
| | | | |