

May 11, 2006

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555-0001

Ladies and Gentlemen:

ULNRC-05280



**DOCKET NUMBER 50-483
CALLAWAY PLANT
UNION ELECTRIC COMPANY
PROPOSED REVISION TO TECHNICAL SPECIFICATION 3.7.2
"MAIN STEAM ISOLATION VALVES (MSIVs)" AND REVISION TO
TECHNICAL SPECIFICATION 3.7.3 "MAIN FEEDWATER ISOLATION
VALVES (MFIVs) and MAIN FEEDWATER REGULATING VALVES
(MFRVs) and MAIN FEEDWATER REGULATING VALVE BYPASS
VALVES (MFRVBVs)" TO REMOVE VALVE ISOLATION TIME
FROM TECHNICAL SPECIFICATIONS
(LICENSE AMENDMENT REQUEST OL 1255)**

Pursuant to 10 CFR 50.90, AmerenUE hereby requests an amendment to the Facility Operating License No. NPF-30 for Callaway Plant. The requested amendment would incorporate the attached changes into the Callaway Plant Technical Specifications. Specifically, the requested amendment would revise Technical Specifications (TS) 3.7.2, "Main Steam Isolation Valves (MSIVs)," to remove the specific valve isolation time from the Surveillance Requirement (SR) 3.7.2.1. The MSIV specific isolation time is currently provided in the TS Bases.

The requested amendment would also revise TS 3.7.3, "Main Feedwater Isolation Valves (MFIVs) and Main Feedwater Regulating Valves (MFRVs) and Main Feedwater Regulating Valve Bypass Valves (MFRVBVs)," to remove the specific valve isolation times from SR 3.7.3.1 and SR 3.7.3.3. The MFRV and MFRVBV specific isolation times are currently provided in the TS Bases. The MFIV specific isolation time is stated in SR 3.7.3.3 to be within the limits of TS Figure 3.7.3-1. The proposed change removes the specific reference to Figure 3.7.3-1 from SR 3.7.3.3 and relocates the TS Figure to the TS Bases.

A001

The proposed changes remove the specific details of valve operability (i.e., the isolation time), but continue to require the affected valves to be verified operable including being capable of isolating within the required time. The proposed changes are consistent with the traveler, TSTF-491, Revision 2, "Removal of Main Steam and Main Feedwater Valve Isolation Times from Technical Specifications."

Other TS Bases changes for the proposed specification revisions are included for information and reflect the proposed changes.

Essential information is provided in the attachments to this letter. Attachment 1 provides a detailed description and technical evaluation of the proposed changes, including AmerenUE's determination that the proposed changes involve no significant hazards consideration. Attachment 2 provides the existing TS pages marked-up to show the proposed changes. Attachment 3 provides a copy of the revised TS pages with the proposed changes incorporated (if approved). Attachment 4 provides the existing TS Bases pages marked-up to show the associated proposed Bases changes (for information only).

This letter identifies actions committed to by AmerenUE in this submittal. Other statements are provided for information purposes and are not considered to be commitments. A summary of the regulatory commitments included in this submittal is provided in Attachment 5.

The Callaway Plant Review Committee and a subcommittee of the Nuclear Safety Review Board have reviewed and approved this amendment application. In addition, it has been determined that this amendment application involves no significant hazards consideration as determined per 10 CFR 50.92, and that pursuant to 10 CFR 51.22(b) no environmental assessment should be required to be prepared in connection with the issuance of this amendment.

AmerenUE respectfully requests approval of the proposed license amendment by November 30, 2006. The approved amendment will be implemented within 90 days of approval.

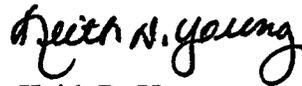
Pursuant to 10 CFR 50.91(b)(1), AmerenUE is providing the State of Missouri with a copy of this proposed amendment.

ULNRC-05280
May 11, 2006
Page 3

If you should have any questions on the above or attached, please contact Dave Shafer at (314) 554-3104 or Dwyla Walker at (314) 554-2126.

Very truly yours,

Executed on: May 11, 2006



Keith D. Young
Manager, Regulatory Affairs

DJW/jdg

- Attachments:
- 1) Evaluation
 - 2) Markup of Technical Specification pages
 - 3) Retyped Technical Specification pages
 - 4) Markup of Technical Specification Bases pages
(For information only)
 - 5) Summary of Regulatory Commitments

ULNRC-05280
May 11, 2006
Page 4

cc: U.S. Nuclear Regulatory Commission (Original and 1 copy)
Attn: Document Control Desk
Mail Stop P1-137
Washington, DC 20555-0001

Mr. Bruce S. Mallett
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-4005

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. Jack N. Donohew (2 copies)
Licensing Project Manager, Callaway Plant
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop O-7D1
Washington, DC 20555-2738

Missouri Public Service Commission
Governor Office Building
200 Madison Street
PO Box 360
Jefferson City, MO 65102-0360

Deputy Director
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

ATTACHMENT 1

ULNRC-05280

EVALUATION

EVALUATION

1.0 INTRODUCTION

This letter is a request to amend Operating License NPF-30 for Callaway Plant.

The requested amendment would revise Technical Specifications (TS) 3.7.2, "Main Steam Isolation Valves (MSIVs)," to remove the specific valve isolation time from the Surveillance Requirement (SR) 3.7.2.1. Currently, the MSIV specific isolation time is provided in the TS Bases.

The requested amendment would also revise TS 3.7.3, "Main Feedwater Isolation Valves (MFIVs) and Main Feedwater Regulating Valves (MFRVs) and Main Feedwater Regulating Valve Bypass Valves (MFRVBVs)," to remove the specific valve isolation times from SR 3.7.3.1 and SR 3.7.3.3. Currently, the MFRV and MFRVBV specific isolation times are provided in the TS Bases.

The MFIV specific isolation time is stated in SR 3.7.3.3 to be within the limits of TS Figure 3.7.3-1. SR 3.7.3.3 and TS Figure 3.7.3-1 were evaluated and incorporated into TS as approved by the NRC in Amendment 170, dated November 17, 2005 to the Callaway Operating License. The proposed change removes the specific reference to Figure 3.7.3-1 from SR 3.7.3.3 and relocates the TS Figure to the TS Bases.

The proposed change removes the specific details of valve operability (i.e., the isolation time), but continues to require the MSIVs, MFIVs, MFRVs, and MFRVBVs to be verified operable, including being capable of isolating within the required time. The proposed change is consistent with the Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-491, Revision 2, "Removal of Main Steam and Main Feedwater Valve Isolation Times from Technical Specifications," (Reference 8.1).

2.0 DESCRIPTION OF PROPOSED AMENDMENT

TS SR 3.7.2.1 currently states "Verify isolation time of each MSIV is ≤ 5 seconds." Proposed TS SR 3.7.2.1 states "Verify isolation time of each MSIV is within limits." The MSIV specific isolation time is currently provided in the TS Bases.

TS SR 3.7.3.1 currently states "Verify the closure time of each MFRV and MFRVBV is ≤ 15 seconds." Proposed TS SR 3.7.3.1 states "Verify the closure time of each MFRV and MFRVBV is within limits." The MFRV and MFRVBV specific isolation times are currently provided in the TS Bases.

TS SR 3.7.3.3 currently states "Verify the closure time of each MFIV is within the limits of Figure 3.7.3-1." Proposed TS SR 3.7.3.3 states "Verify the closure time of each MFIV is within limits." The proposed change removes the specific reference to Figure 3.7.3-1 from SR 3.7.3.3 and relocates the TS Figure to the TS Bases.

The proposed change removes specific isolation times for the isolation valves from the described SRs and replaces it with a generic statement to verify the valve isolation time is within limits. The specific valve isolation time required to meet the SRs is relocated outside of the TS into the TS Bases.

The proposed change makes the described surveillances more consistent with the Engineered Safety Feature (ESF) Response Time surveillance requirement in TS 3.3.2, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation" or similar to the Reactor Trip System (RTS) Response Time surveillance requirement in TS 3.3.1, "Reactor Trip System (RTS) Instrumentation." SR 3.3.2.10 states "Verify ESFAS RESPONSE TIMES are within limits." SR 3.3.1.16 states "Verify RTS RESPONSE TIMES are within limits." The ESF and RTS Response Time acceptance criteria are located outside of the TS in the updated Callaway FSAR, a document that is subject to control by the 10 CFR 50.59 process.

Similar to the ESF and RTS Response Time acceptance criteria, the proposed change would provide the location of the MSIV, MFIV, MFRV, and MFRVBV specific isolation time acceptance criteria outside of the TS and into the TS Bases, a document subject to control by the 10 CFR 50.59 process. Locating these specific valve isolation time acceptance criteria in the TS Bases will allow the described valve isolation times to be revised, if required, in accordance with 10 CFR 50.59 instead of a license amendment request.

Attachment 2 provides the proposed TS markups and Attachment 3 provides the clean copies of the proposed markups. Attachment 4 provides the TS Bases markups for information only.

3.0 BACKGROUND

3.1 MSIVs

The MSIVs isolate steam flow from the secondary side of the steam generators following a high energy line break (HELB). MSIV closure terminates flow from the unaffected (intact) steam generators. One MSIV is located in each main steam line outside, but close to, containment. The MSIVs are downstream from the main steam safety valves (MSSVs) and auxiliary feedwater (AFW) pump turbine steam supply, to prevent MSSV and AFW isolation from the steam generators by MSIV closure. Closing the MSIVs isolates each steam generator from the others, and isolates the turbine, Condenser Steam Dump System, and other auxiliary steam supplies from the steam

generators. The MSIV is a 28 inch gate valve with dual-redundant hydraulic actuators. The MSIVs close on a main steam isolation signal generated by low steam line pressure, high steam line negative pressure rate or High-2 containment pressure. The MSIVs fail as is on loss of control or actuation power. The design basis of the MSIVs is established by the containment analysis for the large steam line break (SLB) inside containment, discussed in the FSAR, Section 6.2.1.4 (Reference 8.2) and is affected by the accident analysis of the SLB events presented in the FSAR, Section 15.1.5 (Reference 8.3). FSAR Chapter 10.3 (Reference 8.4) contains additional information describing the functional requirements of the Main Steam Supply System and the MSIVs.

3.2 MFIVs, MFRVs, and MFRVBVs

The MFIVs isolate main feedwater (MFW) flow to the secondary side of the steam generators following a HELB. The MFRVs and MFRVBVs function to control feedwater flow to the steam generators and provide backup isolation of MFW flow in the event an MFIV fails to close. Closure of the MFIVs or MFRVs and MFRVBVs terminates flow to the steam generators, terminating the event for feedwater line breaks (FWLBs) occurring upstream of the MFIVs or MFRVs and MFRVBVs. The consequences of events occurring in the main steam lines or in the MFW lines downstream from the MFIVs will be mitigated by their closure. Closure of the MFIVs or MFRVs and MFRVBVs effectively terminates the addition of feedwater to an affected steam generator, limiting the mass and energy release for SLBs or FWLBs inside containment, and reducing the cooldown effects for SLBs. The MFIVs isolate the nonsafety related portions from the safety related portions of the system. In the event of a secondary side pipe rupture inside containment, the valves limit the quantity of high energy fluid that enters containment through the break, and provide a pressure boundary for the controlled addition of auxiliary feedwater to the intact loops. The MFIVs and MFRVs and MFRVBVs close on receipt of any safety injection signal, a T_{avg} - Low coincident with reactor trip (P-4), a low-low steam generator level, or steam generator water level-high high signal.

Note the MFIV is a 14-inch gate valve with a system-medium actuator. A plant modification replaced the MFIV hydraulic actuators with system-medium actuators. Since the MFIV actuators are system-medium actuators, the MFIV isolation time is provided as a function of steam generator steam pressure. The MFIV isolation time is actually a function of the pressure at the MFIV; however, there is no indication of pressure at the MFIV. As a result, the MFIV isolation time acceptance criteria is based on steam generator pressure and the stroke time limit curve is conservatively developed to account for the difference between steam generator pressure and the pressure at the MFIVs.

The impact of an MFIV isolation time as a function of steam generator steam pressure on the safety analyses was evaluated (References 8.5 and 8.6). The evaluation concluded that a variable MFIV isolation time is acceptable with respect to the safety

analyses. TS SR 3.7.3.3 provides a stroke time test requirement more appropriate to the MFIV system-medium actuator design and its associated system-pressure dependent stroke time. Specifically, SR 3.7.3.3 requires verifying that the closure time for each MFIV is within the limits of TS Figure 3.7.3-1. TS Figure 3.7.3-1 is a curve of the MFIV isolation time limit as a function of steam generator steam pressure, in lieu of a single-valued stroke time limit. Meeting the MFIV isolation times in Figure 3.7.3-1 ensures the safety analyses remain valid. SR 3.7.3.3 and TS Figure 3.7.3-1 were incorporated into the TS as approved by the NRC in Amendment 170, dated November 17, 2005 to the Callaway Operating License.

FSAR Chapter 10.4.7 (Reference 8.7) contains additional information describing the functional requirements of the Main Feedwater System.

3.3 ESF Response Times and Main Steam and Main Feedwater Isolation

The MSIVs, MFIVs, MFRVs, and MFRVBVs are herein referred to generically as the Main Steam and Main Feedwater isolation valves. The proposed change involves the ESF Functions of Main Steam and Main Feedwater Isolation described in Sections 3.1 and 3.2 above. The specific valve isolation times are important to the Main Steam and Main Feedwater Isolation Functions because they are part of the associated overall ESF Response Time assumed in the SLB and FWLB accident analyses.

As discussed in TS SR 3.3.2.10 Bases, the SR verifies the individual channel ESF RESPONSE TIMES are less than or equal to the maximum values assumed in the accident analyses. Individual component response times are not modeled in the accident analyses. The analyses model the overall or total elapsed time, from the point at which the parameter exceeds the trip setpoint value at the sensor, to the point at which the equipment in both trains reaches the required functional state (e.g., pumps at rated discharge pressure, valves in full open or closed position). The accident analyses include the sum of the following response time components: (a) sensing circuitry delay time from the time the trip setpoint is reached at the sensor until an Engineered Safety Feature Actuation System (ESFAS) actuation signal is generated by the Solid State Protection System (SSPS); (b) any intentional time delay set into the trip circuitry (e.g., NLL cards (lead/lag) associated with the steam line pressure high negative rate trip function) to add margin or prevent spurious trip signals; and (c) the time for the final actuation devices to reach the required functional state (e.g., valve stroke time, pump or fan spin-up time).

By definition the ESF response time includes the time it takes the ESF equipment to perform its safety function. TS 1.1, Engineered Safety Feature (ESF) Response Time, states in part: "The ESF RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.)."

TS SR 3.3.2.10 allows the ESF Response Time for the Main Steam and Main Feedwater Isolation Functions to be controlled outside of the TS. However the specific valve isolation times (part of the ESF Response Time) are required to be retained within TS SR 3.7.2.1, SR 3.7.3.1, and SR 3.7.3.3. This requirement for the valve isolation portion of the ESF Response Time for the Main Steam and Main Feedwater Isolation Functions to remain in the TS is unique. Specific values for the ESF pump and valve operation times associated with other ESF Function Response Times are not included in the TS. The retention of specific valve isolation times in TS SR 3.7.2.1, SR 3.7.3.1, and SR 3.7.3.3 introduces an unnecessary inconsistency in TS regarding the treatment of Response Times. The inconsistency could result in license amendment requests that may not have been required if the Response Times for the Main Steam and Main Feedwater ESF Functions were controlled outside of the TS in the TS Bases.

Allowing the ESF Response Times to be controlled outside of the TS, under 10 CFR 50.59 control, would eliminate the need for license amendment requests for changes that do not meet the threshold for a license amendment under the provisions of 10 CFR 50.59. The proposed TS change allows the valve isolation portion of the Main Steam and Main Feedwater ESF Function Response Times to be controlled outside of the TS (in the same manner as all other ESF Response Times). The proposed TS change resolves the inconsistencies and permits the ESF Function Response Times to be treated the same.

3.4 Regulatory Requirements for Main Steam and Main Feedwater ESF Function Response Times in TS

10 CFR 50.36(c)(2)(ii) requires that an LCO be established for each item meeting one of the criteria listed within the regulation. The MSIVs satisfy Criterion 3 of 10 CFR 50.36(c)(2)(ii). The MFIVs satisfy Criterion 3 of 10 CFR 50.36(c)(2)(ii). The MFRVs and MFRVBVs are backup and diverse equipment and they satisfy Criterion 4 of 10 CFR 50.36(c)(2)(ii). Based on these requirements, the TS contain LCOs for both the Main Steam Isolation Valves and the Main Feedwater System Isolation valves. The proposed change does not eliminate the LCOs for these valves. LCO 3.7.2 and LCO 3.7.3 continue to require the valves to be operable and contain surveillances to confirm the valves are maintained operable. 10 CFR 50.36(c)(2)(ii) does not specify the particular requirements or the level of detail to be included in the required LCOs. The proposed change removes the detail (i.e., specific valve isolation time) from the surveillances SR 3.7.2.1, SR 3.7.3.1, and SR 3.7.3.3.

The NRC has previously approved the removal of detail from TS surveillances. An example is provided by the NRC SER associated with Amendment 104, dated November 22, 1995 to the Callaway Operating License. Amendment 104 implemented Generic Letter (GL) 93-08, "Relocation of Technical Specification Tables of Instrument Response Time Limits", which allowed the relocation of specific Response Time values from the TS. In the NRC SER for the Amendment, the NRC addressed the requirements of 10 CFR 50.36. The NRC stated that "The changes associated with the implementation

of Generic Letter 93-08 involve only the relocation of the RTS and ESFAS response time tables but retain the surveillance requirement to perform the response time testing....Because it does not alter the TS requirements to ensure that the response times of the RTS and ESFAS instruments are within their limits, the staff has concluded that relocation of these response time limit tables from the TS to updated FSAR is acceptable.....10 CFR 50.36 does not require the response time tables to be retained in technical specifications. Requirements related to the operability, applicability, and surveillance requirements (including performance of testing to ensure response times) for RTS and ESFAS systems are retained due to those systems' importance in mitigating the consequences of an accident. However, the staff determined that the inclusion of specific response time requirements for the various instrumentation channels and components addressed by Generic Letter 93-08 was not required. The response times are considered to be an operational detail related to the licensee's safety analyses and are adequately controlled by the requirements of 10 CFR 50.59....the ability of the RTS and ESFAS systems to perform their safety functions is not adversely impacted by the relocation of the response time tables from the TS to the updated FSAR." The SER approved the relocation of the specific Response Time values from the TS based on the remaining LCO and surveillance requirements being considered adequate to meet the intent of 10 CFR 50.36(c)(2)(ii). The proposed change relocates the specific stroke times for the Main Steam and Main Feedwater isolation valves to the TS Bases. Similar to the updated FSAR, the TS Bases are controlled under 10 CFR 50.59.

Similar to GL 93-08, an earlier GL 91-08, "Removal of Component Lists from Technical Specifications," allowed the removal of list of containment isolation valves and the associated isolation time for each valve from the TS. Regarding the removal of the valve isolation times from the TS, GL 91-08 on page 4 of Enclosure 1 stated: "The removal of valve closure times that are included in some plant TS would not alter the TS requirements to verify that valve stroke times are within their limits. Therefore, removal of these closure times is acceptable." The NRC approved Amendment 113 dated June 28, 1996 to the Callaway Operating License. Amendment 113 in part implemented GL 91-08 by allowing the removal of the list of containment isolation valves and their associated isolation times (Table 3.6-1) from TS to the updated FSAR. The associated NRC SER stated "The relocation of component lists to plant-controlled documents allows for timely updates of the lists without the formal requirement of a TS amendment.....The relocation of Table 3.6-1 from the TS to Chapter 16 of the FSAR is editorial in nature and does not result in any physical change to the plant. In accordance with the provisions of GL 91-08, which require lists removed from the TS to be relocated to controlled documents, Table 3.6-1 will be placed in Chapter 16 of the FSAR. Changes to the FSAR are subject to the requirements of 10 CFR 50.59.....The staff therefore finds that removal of the table of containment isolation valves does not alter existing TS requirements, and that ceasing to require license amendments to change the table would not be inimical to the public health and safety." TS 3.6.3, "Containment Isolation Valves", provides the surveillance requirements for containment isolation valves. TS SR 3.6.3.5 states: "Verify the isolation time of each automatic power operated containment isolation valve is within

limits." The TS SR 3.6.3.5 Bases states that: "The isolation time test ensures the valve will isolate in a time period less than or equal to that assumed in the safety analyses." The proposed change relocates the specific stroke times for the Main Steam and Main Feedwater isolation valves to the TS Bases. Similar to the updated FSAR, the TS Bases are controlled under 10 CFR 50.59.

In summary the proposed TS change is consistent with the intent and implementation of the GLs discussed above and with the legal requirements of 10 CFR 50.36. The proposed change adjusts the level of detail in the TS but retains the essential requirements that ensure the operability of the Main Steam and Main Feedwater System components consistent with the rest of the TS. The proposed change improves the internal consistency of the TS. The removal of system and component operability details from TS is not a new concept. The majority of TS LCOs simply require the system or component to be operable and the surveillances to verify the component or variable is within limits. The detailed requirements for system or component operability are typically described and controlled outside of the TS.

In addition to TS 3.7.2 and 3.7.3 surveillance requirements to verify operability, the surveillance subjects the Main Steam and Main Feedwater Isolation valves to periodic testing in accordance with the Inservice Testing (IST) Program. Compliance with the IST Program is required by 10 CFR 50.55a and by the TS in Section 5.5.8. Failure to meet the applicable ASME valve operability requirements would also result in these valves being declared inoperable. As such, the TS provides multiple requirements to assure the Main Steam and Main Feedwater System Isolation valves are maintained operable.

3.5 Traveler, TSTF-491, Revision 2 Applicability

This amendment request is based on traveler, TSTF-491, Revision 2, "Removal of Main Steam and Main Feedwater Valve Isolation Times from Technical Specifications." The proposed changes are consistent with the traveler, including the difference associated with the Main Feedwater Isolation Valve stroke time. The traveler contemplates the relocation of single value acceptance criteria for valve isolation times outside of the TS into a licensee document subject to control by the 10 CFR 50.59 process.

The proposed change for the MSIVs, the MFRVs, and the MFRVBVs removes specific single value acceptance criteria for the valve isolation times from TS SR 3.7.2.1 and SR 3.7.3.1. The specific values are not required to be relocated to the TS Bases because in this case the values are already provided in the TS Bases. The TS Bases are subject to control by the 10 CFR 50.59 process.

The proposed change to SR 3.7.3.3 removes the reference to TS Figure 3.7.3-1 from the SR and relocates the Figure 3.7.3-1 to the TS 3.7.3 Bases. Although the traveler contemplates the relocation of single value acceptance criteria for valve isolation time,

the relocation of Figure 3.7.3-1 to the TS Bases is applicable. As discussed in Section 3.2 above, the MFIV actuator is a system-medium actuator that is dependent on steam generator steam pressure. SR 3.7.3.3 provides a stroke time test requirement more appropriate to the MFIV system-medium actuator design and its associated system-pressure dependent stroke time. TS Figure 3.7.3-1 is a curve of the MFIV isolation time limit as a function of steam generator steam pressure, in lieu of a single-valued stroke time limit. Evaluations were performed and concluded that a variable MFIV isolation time is acceptable with respect to the accident analyses. Meeting the MFIV isolation times in Figure 3.7.3-1 ensures the accident analyses remain valid. As such, the relocation of the specific values for valve stroke time (single value acceptance criteria or variable acceptance criteria) would not impact TS requirements that the Main Steam and Main Feedwater System isolation valves test within limits.

4.0 TECHNICAL ANALYSIS

The proposed change revises TS 3.7.2 and TS 3.7.3 surveillance requirements to remove specific valve isolation times from the associated surveillances. The specific valve isolation times are replaced with the requirement to verify the valve isolation time is within limits. The specific valve isolation time required to meet the surveillances is relocated outside of the TS into the TS Bases (subject to control by the 10 CFR 50.59 process). For the MSIVs, MFRVs, and MFRVBVs the specific isolation time is already provided in the TS Bases. For the MFIVs, TS Figure 3.7.3-1 is being relocated to the TS 3.7.3 Bases.

The specific valve isolation times are important to the accident analyses because they are part of the associated overall ESF Response Time assumed in the accident analyses. However, individual component actuation times that make up the total ESF Response Time are not modeled in the associated accident analyses. Only the overall or total Response Time is considered in the accident analyses. The NRC has already determined (per GL 93-08) that the ESF Response Times (which include by TS definition, the associated equipment actuation times) do not need to be in the TS. As such, the removal of the Main Steam and Main Feedwater System valve isolation times from TS is acceptable because this level of detail is not necessary to be included in the TS to provide adequate protection of public health and safety. An example is how the ESF Response Times are treated in TS. Note that TS 3.3.2 continues to retain LCO requirements for affected valves to be operable and associated SRs to verify the valve isolation times are within limit. Therefore, after the proposed removal of the Main Steam and Main Feedwater System valve isolation times, the TS 3.7.2 and 3.7.3 will continue to retain LCO requirements for the Main Steam and Main Feedwater System isolation valves to be operable and the associated SRs to verify the valve isolation times are within limits. TS 3.7.2 and 3.7.3 will continue to be in compliance with the technical specification requirements of 10 CFR 50.36(c)(2)(ii).

In addition, TS provide further assurance the Main Steam and Main Feedwater System isolation valves are maintained operable, beyond the specific LCO and SR requirements of TS 3.7.2 and 3.7.3. TS 3.3.2 contains operability requirements for the ESF instrumentation that include surveillances which require the verification of the ESF Response Time (which also includes the specific valve isolation times). Additionally, the Main Steam and Main Feedwater System valves are subject to periodic testing in accordance with the Inservice Testing (IST) Program. Compliance with the IST Program is required in TS 5.5.8. Therefore, the retained TS requirements continue to provide adequate assurance the Main Steam and Main Feedwater System valves are maintained operable and that the plant will be operated in a safe manner within the bounds of the applicable accident analyses.

The proposed change includes the relocation of TS Figure 3.7.3-1 outside of TS 3.7.3 and into the TS 3.7.3 Bases. The specific isolation acceptance criteria for the MSIVs, MFRVs, and MFRVBVs are already provided in the TS Bases. The TS Bases are subject to control by 10 CFR 50.59. Thus, the Main Steam and Main Feedwater valve isolation times will be provided in the TS Bases and will be subject to the same level of control as currently applicable to all the ESF Response Times.

In summary, the proposed change does not alter TS requirements for the Main Steam and Main Feedwater System isolation valves to be operable nor does it change the TS requirement for the valves to isolate within the required time. As such, the proposed change is acceptable because it does not affect the assumptions of any accident analyses or TS compliance with the requirements of 10 CFR 50.36(c)(2)(ii). The proposed change simply adjusts the level of detail contained in TS 3.7.2 and 3.7.3 to be more consistent with the requirements of other ESF equipment required operable in the TS. The relocation of the specific valve isolation times to the TS Bases, a document subject to control by 10 CFR 50.59, results in the same level of control being applied to the Main Steam and Main Feedwater System isolation times as is currently applicable to the equally important RTP System and ESF Response Times. The same level of control for the Main Steam and Main Feedwater System valves is also applicable to the specific operability requirements as for other ESF equipment (e.g., Safety Injection pumps and valves) required to be operable by the TS. Therefore, the proposed change also improves the consistency of the TS with regard to the treatment of specific equipment operability requirements and ESF Response Times.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

The requested amendment would revise Technical Specifications (TS) 3.7.2, "Main Steam Isolation Valves (MSIVs)," to remove the specific valve isolation time from the Surveillance Requirement (SR) 3.7.2.1. The requested amendment would also revise TS 3.7.3, "Main Feedwater Isolation Valves (MFIVs) and Main Feedwater

Regulating Valves (MFRVs) and Main Feedwater Regulating Valve Bypass Valves (MFRVBVs)," to remove specific valve isolation times from SR 3.7.3.1 and SR 3.7.3.3. The specific isolation times are either already provided in the TS Bases or they are relocated to the TS Bases.

AmerenUE has evaluated whether or not a significant hazards consideration is involved with the proposed changes by focusing on the three standards set forth in 10 CFR 50.92(c) as discussed below:

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

Response: No

Because the proposed change removes specific isolation times from the TS and relocates the specific values to the TS Bases, there are no design or physical changes to the facility or to the Main Steam and Main Feedwater System isolation valves themselves. The design and functional performance requirements, operational characteristics, and reliability of these components remain unchanged. There is therefore no impact on the design safety function of the valves to close (as an accident mitigator), nor is there any change with respect to inadvertent closure (as a potential transient initiator). Since no failure mode or initiating condition that could cause an accident (including any plant transient) evaluated per the FSAR-described safety analyses is created or affected, the change cannot involve a significant increase in the probability of an accident previously evaluated. The probability of an accident is not affected. The Main Steam and Main Feedwater System isolation valves are assumed to function to mitigate some accidents (for example, SLB and FWLB). The proposed change only affects the level of detail included in the TS. The TS requirements continue to provide the same level of assurance as before that the Main Steam and Main Feedwater System isolation valves are capable of performing their intended safety function. These isolation valves will continue to be verified operable in the same manner as before. As such, the proposed change does not affect the ability of the isolation valves to perform their assumed mitigation function.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed change only affects the level of detail included in the TS. The TS requirements continue to provide the same level of assurance as before that the Main Steam and Main Feedwater System isolation valves are capable of performing their intended safety function. The Main Steam and Main Feedwater System isolation valves will continue to be verified operable in the same manner. As such, the proposed change does not involve a modification to the physical configuration of the plant (i.e., no new equipment will be installed) or change in the methods governing normal plant operation. The proposed change will not impose any new or different requirements or introduce a new accident initiator, accident precursor, or malfunction mechanism. Additionally, there is no change in the types or increases in the amounts of any effluent that may be released off-site and there is no increase in individual or cumulative occupational exposure.

Therefore, the proposed changes do not create a new or different kind of accident from any accident previously evaluated.

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

Response: No

The proposed change does not reduce the margin of safety. The proposed change only affects the level of detail included in the TS. The TS requirements continue to provide the same level of assurance as before that the Main Steam and Main Feedwater System isolation valves will continue to be verified operable in the same manner as before. As such, the proposed change does not affect the assumptions of any accident analysis or the availability or operability of any plant equipment.

Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

Based on the above evaluations, AmerenUE concludes that the above described change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92 and accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The proposed change affects the content of the TS. 10 CFR 50.36 is the regulation that provides requirements regarding the content of technical specifications. Specifically, 10 CFR 50.36(c)(2)(ii) states that: "A technical specification limiting condition for operation of a nuclear reactor must be established for each item meeting one or more of the following criteria:...." The proposed change affects TS 3.7.2 for the Main Steam Isolation Valves (MSIVs) and TS 3.7.3 for the Main Feedwater Isolation Valves (MFIVs) and Main Feedwater Regulating Valves (MFRVs) and Main Feedwater

Regulating Bypass Valves (MFRVBVs). These valves have been determined to meet the criteria referred to by 10 CFR 50.36(c)(2)(ii). Consistent with the requirements of 10 CFR 50.36(c)(2)(ii), a limiting condition for operation or LCO has been established for these valves. The proposed change only affects the level of detail included in the TS LCO and the level of regulatory control applicable to the details removed from the TS. The proposed change makes the level of detail in TS 3.7.2 and TS 3.7.3 more consistent with other similar TS LCOs. The established LCOs remain intact and continue to require the Main Steam and Main Feedwater System isolation valves to be operable in accordance with 10 CFR 50.36(c)(2)(ii). The proposed change does not alter the operability requirements for the Main Steam and Main Feedwater System isolation valves and the valves will continue to be verified operable in the same manner as before. Therefore, the TS requirements continue to provide adequate assurance the Main Steam and Main Feedwater System isolation valves are maintained operable and that the plant will be operated in a safe manner within the bounds of the applicable accident analyses.

The proposed change includes the relocation of the specific valve isolation times outside of the TS and into the TS Bases, if the values are not currently provided in the TS Bases. The TS Bases are subject to control by 10 CFR 50.59. The placement of the specific valve isolation times in the TS Bases is acceptable because it will assure changes to the valve isolation times will be evaluated and prior NRC review and approval obtained when required by 10 CFR 50.59.

Based on the considerations discussed above, 1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, 2) such activities will be conducted in compliance with the Commission's regulations, and 3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

AmerenUE has determined that 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 gamma radiation exposure. As demonstrated above the amendment involves "no significant hazards consideration". The requested amendment does not change the facility and does not involve any change in manner of operation of any plant systems. The requested amendment does not increase the gamma radiation dose resulting from the operation of any plant system. Furthermore, implementation of the proposed change does not contribute to occupational gamma radiation exposure.

As discussed above, the proposed changes do not involve a significant hazards consideration and the consequences from postulated accident analyses remain bounded by current analyses. There is no increase in occupational radiation exposure related to

the changes. 10 CFR 51.22(b) specifies the criteria for categorical exclusion from the requirements for a specific environmental assessment per 10 CFR 51.21. Accordingly, the proposed changes meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed change is not required.

7.0 PRECEDENTS

Callaway is aware that the Beaver Valley Power Station has received verbal approval from the NRC for its application of traveler, TSTF-491, Revision 0, to relocate the Main Steam Isolation Valve closure time from TS as part of the ITS Conversion. NRC verbal approval was given during the NRC review of the Beaver Valley ITS Conversion LAR #s 296 (Unit 1) and 169 (Unit 2).

8.0 REFERENCES

- 8.1 Traveler, TSTF-491, Revision 2, "Removal of Main Steam and Main Feedwater Valve Isolation Times from Technical Specifications."
- 8.2 FSAR Section 6.2.1.4, " Mass and Energy Release Analysis for Postulated Secondary Pipe Ruptures Inside Containment."
- 8.3 FSAR Section 15.1.5, "Steam System Piping Failure."
- 8.4 FSAR Section 10.3, "Main Steam Supply System."
- 8.5 Westinghouse Letter, SCP-05-027, Revision 2, dated September 9, 2005.
- 8.6 WCAP-16265-P, dated August 2004.
- 8.7 FSAR Section 10.4.7, "Condensate and Feedwater System."
- 8.8 TS and Bases 3.3.1, "Reactor Trip System (RTS) Instrumentation."
- 8.9 TS and Bases 3.3.2, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation."
- 8.10 TS and Bases 3.6.3, "Containment Isolation Valves."
- 8.11 TS and Bases 3.7.2, "Main Steam Isolation Valves (MSIVs)."

- 8.12 TS and Bases 3.7.3, "Main Feedwater Isolation Valves (MFIVs) and Main Feedwater Regulating Valves (MFRVs) and Main Feedwater Regulating Valve Bypass Valves (MFRVBVs)."
- 8.13 Standard Technical Specifications, NUREG-1431.
- 8.14 Generic Letter 93-08, "Relocation of Technical Specification Tables of Instrument Response Time Limits," dated December 29, 1993.
- 8.15 Generic Letter 91-08, "Removal of Component Lists From Technical Specifications," dated May 5, 1991.

ATTACHMENT 2

ULNRC- 05280

MARKUP OF TECHNICAL SPECIFICATION PAGES

SURVEILLANCE REQUIREMENTS

| | SURVEILLANCE | FREQUENCY |
|------------|---|---|
| SR 3.7.2.1 | <p>NOTE</p> <p>Only required to be performed in MODES 1 and 2.</p> <p>Verify isolation time of each MSIV is ≤ 5 seconds. <i>within limits.</i></p> | <p>In accordance with the Inservice Testing Program</p> |
| SR 3.7.2.2 | <p>NOTE</p> <p>Only required to be performed in MODES 1 and 2.</p> <p>Verify each MSIV actuates to the isolation position on an actual or simulated actuation signal.</p> | <p>18 months</p> |

OL-1255

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---------------------------------|-----------------|
| D. Two valves in the same flow path inoperable. | D.1 Isolate affected flow path. | 8 hours |
| E. Required Action and associated Completion Time not met. | E.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> E.2 Be in MODE 4. | 12 hours |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|--|--|
| <p>SR 3.7.3.1</p> <p>----- NOTE ----- Only required to be performed in MODES 1 and 2.</p> <p>Verify the closure time of each MFRV and MFRVBV is ≤ 15 seconds.</p> <p><i>within limits.</i></p> | In accordance with the Inservice Testing Program |
| <p>SR 3.7.3.2</p> <p>----- NOTE ----- For the MFRVs and MFRVBVs, only required to be performed in MODES 1 and 2.</p> <p>Verify each MFIV, MFRV and MFRVBV actuates to the isolation position on an actual or simulated actuation signal.</p> | 18 months |
| <p>SR 3.7.3.3</p> <p>Verify the closure time of each MFIV is within the limits of Figure 3.7.3.1.</p> | In accordance with the Inservice Testing Program |

OL-1255

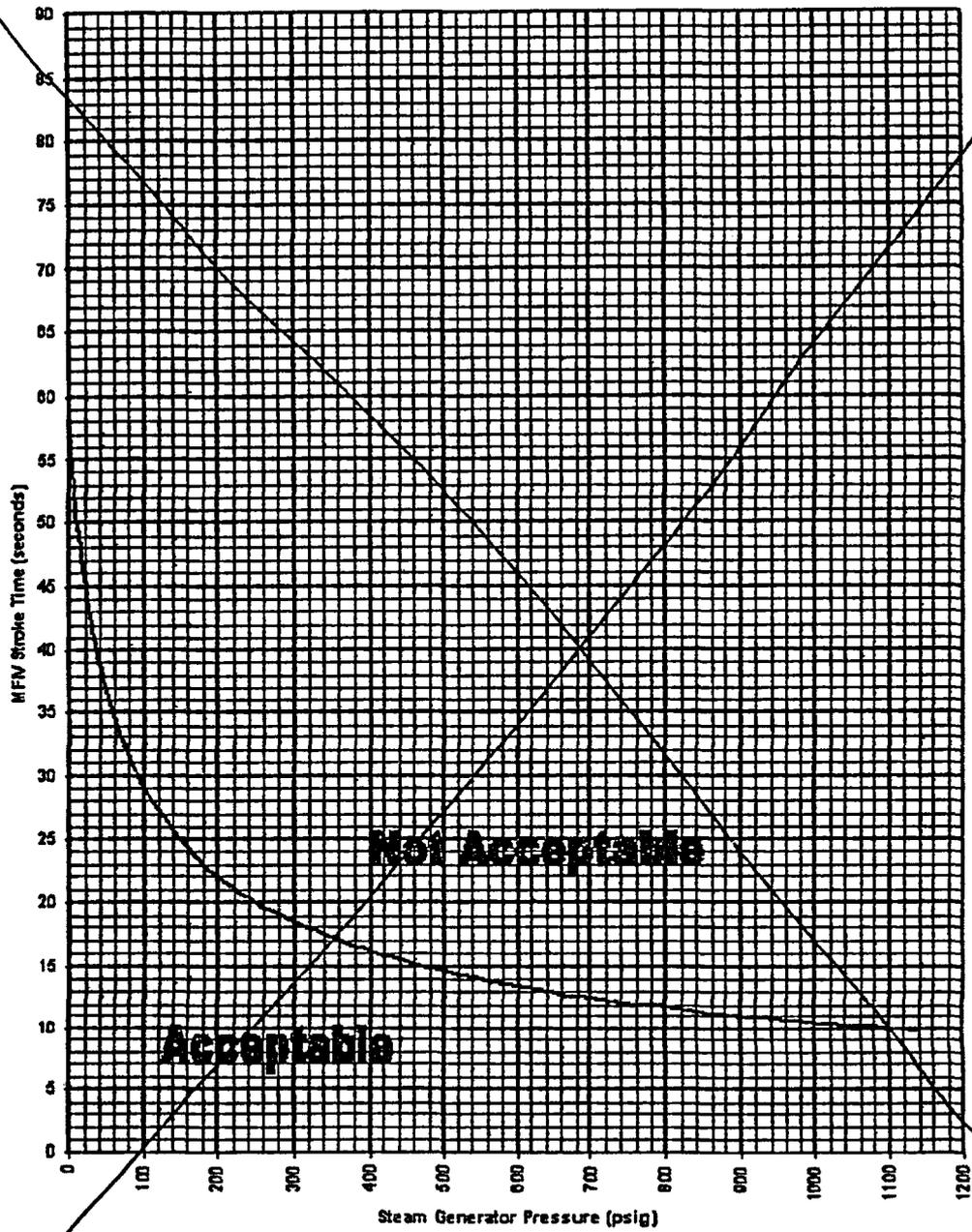


Figure 3.7.3-1 (page 1 of 1)
MFIV Stroke Time Limit vs Steam Generator Pressure

ATTACHMENT 3

ULNRC- 05280

RETYPE MARKUP OF TECHNICAL SPECIFICATION PAGES

(To Be Provided Later)

ATTACHMENT 4

ULNRC- 05280

**PROPOSED TECHNICAL SPECIFICATION BASES CHANGES
(for information only)**

BASES

ACTIONS D.1 and D.2 (continued)

must be placed at least in MODE 3 within 6 hours, and in MODE 4 within 12 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from MODE 2 conditions in an orderly manner and without challenging unit systems.

SURVEILLANCE
REQUIREMENTS

SR 3.7.2.1

This SR verifies that the MSIV closure time is ≤ 5.0 seconds from each actuator train when tested pursuant to the Inservice Test Program. The MSIV isolation time is assumed in the accident and containment analyses. This Surveillance is normally performed upon returning the unit to operation following a refueling outage. The MSIVs should not be tested at power, since even a part stroke exercise increases the risk of a valve closure when the unit is generating power.

The Frequency is in accordance with the Inservice Testing Program.

This test is conducted in MODE 3 with the unit at nominal operating temperature and pressure. This SR is modified by a Note that allows entry into and operation in MODE 3 prior to performing the SR. This allows a delay of testing until MODE 3, to establish conditions consistent with those under which the acceptance criterion was generated.

SR 3.7.2.2

This SR verifies that each MSIV is capable of closure on an actual or simulated actuation signal. The manual fast close handswitch in the Control Room provides an acceptable actuation signal. This Surveillance is normally performed upon returning the unit to operation following a refueling outage in conjunction with SR 3.7.2.1. However, it is acceptable to perform this surveillance individually. The frequency of MSIV testing is every 18 months. The 18 month Frequency for testing is based on the refueling cycle. This Frequency is acceptable from a reliability standpoint. This SR is modified by a Note that allows entry into and operation in MODE 3 prior to performing the SR. This allows a delay of testing until MODE 3, to establish conditions consistent with those necessary to perform SR 3.7.2.1 and SR 3.7.2.2 concurrently.

REFERENCES

1. FSAR, Section 10.3, Main Steam Supply System.
2. FSAR, Section 6.2, Containment Systems.

(continued)

BASES

BACKGROUND
(continued)

upstream of the AFW injection point so that AFW may be supplied to the steam generators following MFIV or MFRV and MFRVBV closure. The piping volume from these valves to the steam generators is accounted for in calculating mass and energy releases, and purged and refilled prior to AFW reaching the steam generator following either an SLB or FWLB.

The MFIVs and MFRVs and MFRVBVs close on receipt of any safety injection signal, a T_{avg} - Low coincident with reactor trip (P-4), a low-low steam generator level, or steam generator water level - high high signal. MFIVs may also be actuated manually. In addition to the MFIVs and MFRVs and MFRVBVs a check valve inside containment is available. The check valve isolates the feedwater line penetrating containment and ensures the pressure boundary of any intact loop not receiving auxiliary feedwater.

The MFIV actuators consist of two separate system-medium actuation trains each receiving an actuation signal from one of the redundant ESFAS channels. A single active failure in one power train would not prevent the other power train from functioning. The MFIVs provide the primary success path for events requiring feedwater isolation and isolation of non-safety-related portions from the safety-related portion of the system, such as, for auxiliary feedwater addition.

The MFRV and MFRVBV actuators consist of two separate actuation trains each receiving an actuation signal from one of the redundant ESFAS channels. Both trains are required to actuate to close the valve.

A description of the MFIVs and MFRVs and MFRVBVs is found in the FSAR, Section 10.4.7 (Ref. 1).

**APPLICABLE
SAFETY
ANALYSES**

Credit is taken in accident analysis for the MFIVs to close on demand. The function of the MFRVs and associated bypass valves as discussed in the accident analysis is to provide a diverse backup function to the MFIVs for the potential failure of an MFIV to close even though the MFRVs are located in the non-safety-related portion of the feedwater system. Further assurance of feedwater flow termination is provided by the SGFP trip function; however, SGFP trip is not credited in accident analysis. The accident analysis credits the main feedwater check valves as backup to the MFIVs to prevent SG blowdown for pipe ruptures in the non-seismic Category I portions of the feedwater system outside containment.

The impact of an MFIV isolation time as a function of steam generator steam pressure on the safety analyses has been evaluated in Reference 2 and 7. The evaluation concluded that a variable MFIV isolation time is acceptable with respect to the safety analyses. Figure B.3.7.3-1 is a curve

TSBCN 04-015

(continued)

BASES

APPLICABLE
SAFETY
ANALYSES
(continued)

of the MFIV isolation time limit as a function of steam generator steam pressure. Meeting the MFIV isolation times in Figure 3.7.3-1 ensures that the evaluations performed in Reference 2 and 7 remain valid.

Criterion 3 of 10 CFR 50.36(c)(2)(ii) indicates that components that are part of the primary success path and that actuate to mitigate an event that presents a challenge to a fission product barrier should be in Technical Specifications. The primary success path of a safety analysis consists of the combination and sequences of equipment needed to operate (including redundant trains/components) so that the plant response to the event remains within appropriate acceptance criteria. The primary success path does not include backup and diverse equipment. The MFIVs, with their dual-redundant actuation trains, are the primary success path for feedwater isolation. The MFIVs satisfy Criterion 3 of 10 CFR 50.36(c)(2)(ii). The MFRVs and MFRVBVs are backup and diverse equipment. The MFRVs and MFRVBVs satisfy Criterion 4 of 10 CFR 50.36(c)(2)(ii).

TSBCN 04-015

Figure B 3.7.3-1

LCO

This LCO ensures that the MFIVs and MFRVs and MFRVBVs will isolate MFW flow to the steam generators, following an FWLB or main steam line break. The MFIVs will also isolate the nonsafety related portions from the safety related portions of the system.

This LCO requires that four MFIVs and four MFRVs and four MFRVBVs be OPERABLE. The MFIVs and MFRVs and MFRVBVs are considered OPERABLE when both of their actuation trains are operable, their isolation times are within limits when given an isolation actuation signal, and they are capable of closing on an isolation actuation signal. The MFIVs are considered OPERABLE when isolation times are within the limits of Figure 3.7.3-1 when given a fast close signal and they are capable of closing on an isolation actuation signal. For the MFRVs and MFRVBVs, the LCO requires only that the trip close function is OPERABLE. No OPERABILITY requirements are imposed on the analog controls shown on Reference 5.

Failure to meet the LCO requirements can result in additional mass and energy being released to containment following an SLB or FWLB inside containment. A feedwater isolation signal on high steam generator level is relied on to terminate an excess feedwater flow event.

APPLICABILITY

The MFIVs and MFRVs and MFRVBVs must be OPERABLE whenever there is significant mass and energy in the Reactor Coolant System and steam generators. This ensures that, in the event of an HELB, a single failure cannot result in the blowdown of more than one steam generator.

(continued)

BASES

**SURVEILLANCE
REQUIREMENTS**
(continued)

SR 3.7.3.2

This SR verifies that each MFIV and MFRV and MFRVBV is capable of closure on an actual or simulated actuation signal. For the MFIVs the manual fast close handswitch in the Control Room provides an acceptable actuation signal. Each MFIV actuation train must be tested separately. For the MFRVs and the MFRVBVs, actuation of solenoids locally at the MFRVs and MFRVBVs constitutes an acceptable simulated actuation signal. This Surveillance is normally performed upon returning the unit to operation following a refueling outage in conjunction with SR 3.7.3.1. However, it is acceptable to perform this surveillance individually.

The frequency of MFIV and MFRV and MFRVBV testing is every 18 months. The 18 month Frequency for testing is based on the refueling cycle. This Frequency is acceptable from a reliability standpoint. This SR is modified by a NOTE that allows entry into and operation in MODE 3 prior to performing the SR for the MFRVs and MFRVBVs. This allows a delay of testing until MODE 3, to establish conditions consistent with those necessary to perform SR 3.7.3.1 and SR 3.7.3.2 concurrently for the MFRVs and MFRVBVs.

TSBCN 04-015

Figure B 3.7.3-1

SR 3.7.3.3

This SR verifies that the closure time of each MFIV is within the limits of ~~Figure 3.7.3-1~~ from each actuation train when tested pursuant to the Inservice Testing Program. The MFIV closure time is assumed in the accident and containment analyses. ~~Figure 3.7.3-1~~ is a curve of the MFIV isolation time limit as a function of steam generator steam pressure, since there is no pressure indication available at the MFIVs. The acceptance curve for the MFIV stroke time conservatively accounts for the potential pressure differential between the steam generator pressure indication and the pressure at the MFIVs. Meeting the MFIV isolation times in ~~Figure 3.7.3-1~~ ensures that the evaluations performed in Reference 2 and Reference 7 remain valid. This Surveillance is normally performed upon returning the unit to operation following a refueling outage. These valves should not be tested at power since even a partial stroke exercise increases the risk of a valve closure with the unit generating power.

The Frequency for this SR is in accordance with the Inservice Testing Program.

(continued)

BASES (continued)

- REFERENCES
1. FSAR, Section 10.4.7, Condensate and Feedwater System.
 2. Westinghouse Letter, SCP-05-027, Revision 2, dated September 9, 2005.
 3. FSAR, Table 7.3-14, NSSS Instrument Operating Conditions for Isolation Functions.
 4. NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants."
 5. FSAR Figure 7.2-1, Sheets 13 and 14.
 6. FSAR Figure 10.4-6, Sheets 1 and 2.
 7. WCAP-16265-P, dated August 2004.
 8. ASME, Boiler and Pressure Vessel Code, Section XI.
-

← INSERT
FIGURE B 3.7.3-1 →
TSBCN 04-015

" INSERT "

MFIVs and MFRVs and MFRV Bypass Valves

3.7.3

B 3.7.3

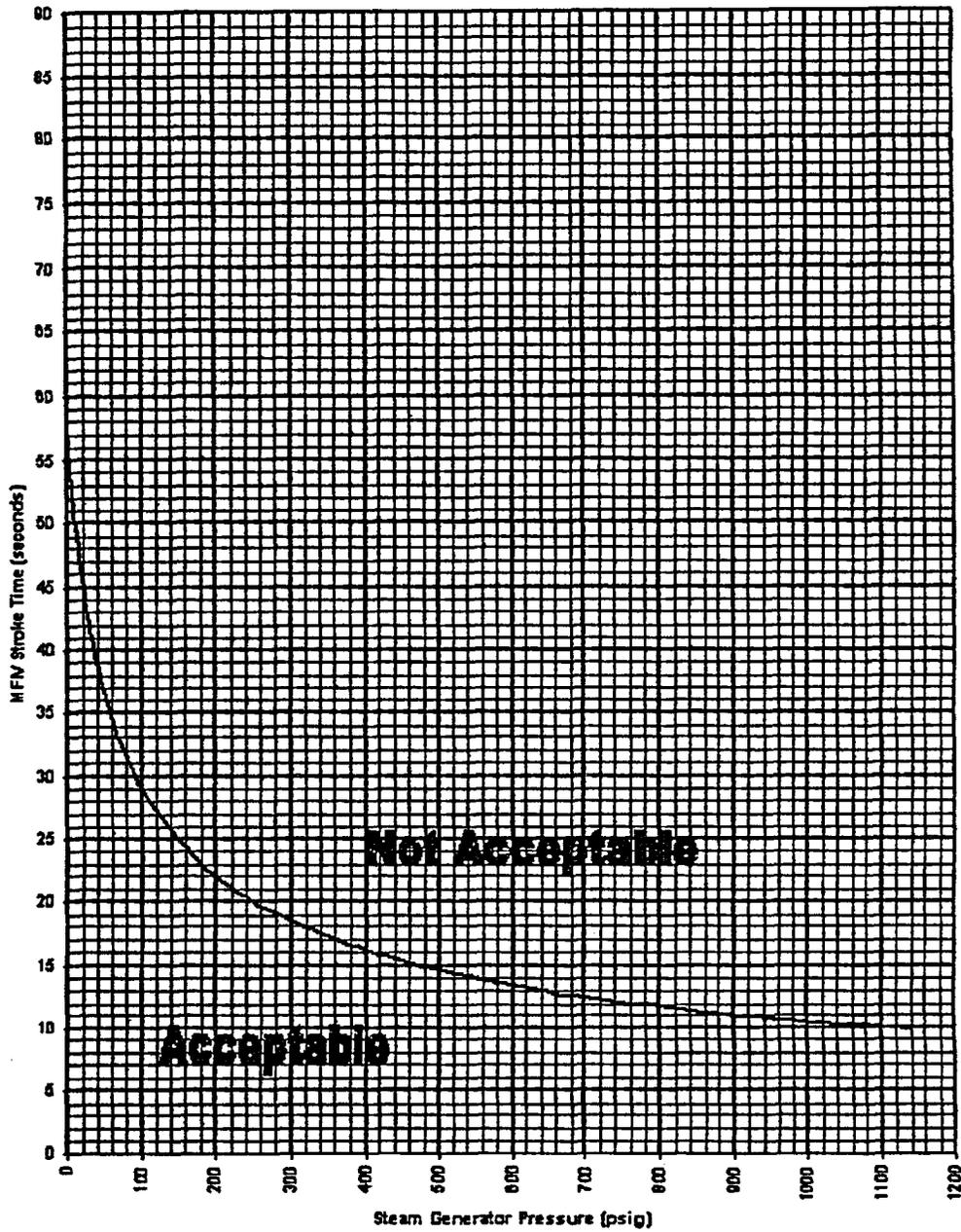


Figure B 3.7.3-1

Figure 3.7.3-1 (page 1 of 1)
MFIV Stroke Time Limit vs Steam Generator Pressure

CALLAWAY PLANT

3.7.9
B 3.7-10

Amendment No. 170

ATTACHMENT 5

ULNRC- 05280

SUMMARY OF REGULATORY COMMITMENTS

SUMMARY OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by AmerenUE, Callaway Plant in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Dave E. Shafer, Superintendent, Licensing at AmerenUE, Callaway Plant, (314) 554-3104.

| COMMITMENT | Due Date/Event |
|--|--|
| The proposed amendment will be implemented within 90 days after approval | 90 days following NRC approval |
| Identified TS Bases changes will be incorporated into the TS Bases during implementation of the amendment. | During implementation of the amendment |