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Docket Number 50-346

License Number NPF-3

Serial Number 2663

August 7, 2000

United States Nuclear Regulatory Commission
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Subject: License Amendment Application to Revise Technical Specification (TS) Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation; to Add TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves and Associated Bases; and to Add TS 3/4.7.1.9, Turbine Stop Valves, and Associated Bases. (License Amendment Request No. 98-0014, TAC MA9560)

Ladies and Gentlemen:

Enclosed is an application for an amendment to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1, Operating License Number NPF-3, Appendix A, Technical Specifications. The proposed changes involve Technical Specification (TS) Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation; new TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves and associated Bases; and new TS 3/4.7.1.9, Turbine Stop Valves, and associated Bases.

The proposed changes would revise TS Bases 3/4.3.1 and 3/4.3.2 to clarify the actions that must be performed when Steam and Feedwater Rupture Control System (SFRCS) components and SFRCS-actuated components are inoperable. Specifically, the proposed change would provide guidance on which TS actions are applicable for SFRCS-actuated components. Also, the proposed changes would add new TS 3/4.7.1.8 which would provide appropriate requirements for the Main Feedwater Control Valves and the Startup Feedwater Control Valves. Additionally, the proposed changes would add TS 3/4.7.1.9 which would provide requirements for the Turbine Stop Valves. The proposed changes are consistent with the intent of NUREG-1430, "Standard Technical Specifications – Babcock and Wilcox Plants," Revision 1, April 1995.

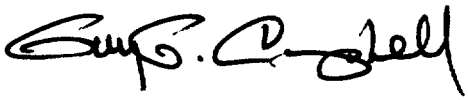
On June 19, 2000, during TS-required surveillance testing of the SFRCS, solenoid valve SV-SP6A2, which is one of two solenoid valves required to reposition in order for Main

A001

Feedwater Control Valve SP6A to close, failed to provide proper indication following a simulated SFRCS trip. Without this proper indication, it could not be confirmed that SP6A was capable of closing. It was therefore assumed that the valve was not able to meet its required SFRCS response time. Since there is no TS Limiting Condition for Operation for the Main Feedwater Control Valves, the DBNPS conservatively entered TS 3.0.3 and a plant shutdown was initiated. Shortly thereafter, it was determined that SV-SP6A2 was repositioning and was capable of performing its safety function but was not providing proper indication. At this point, TS 3.0.3 was exited and the plant returned to full power. One cause of this TS 3.0.3 entry and undesired plant transient was the lack of any specific TS Action for an inoperable Feedwater Control Valve. The enclosed application for amendment, if approved, would provide new actions to take when Main Feedwater Control Valves, Startup Feedwater Control Valves, and Turbine Stop Valves are inoperable. All of these components currently have SFRCS response time requirements, but there are no specific TS Actions to take when the components are inoperable. Presently, the DBNPS is taking actions to improve the reliability of solenoid valves installed on the Main Feedwater Control and Startup Feedwater Control Valves. However, due to the possibility of future failures similar to the SV-SP6A2 failure and the desire to avoid unnecessary plant transients in the future, FENOC requests this amendment be approved by October 31, 2000.

Should you have any questions or require additional information, please contact Mr. David H. Lockwood, Manager - Regulatory Affairs, at (419) 321-8450.

Very truly yours,



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Enclosures

cc:

J. E. Dyer, Regional Administrator, NRC Region III
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D. J. Shipley, Executive Director, Ohio Emergency Management Agency, State of Ohio (NRC Liaison)
K. S. Zellers, NRC Region III, DB-1 Senior Resident Inspector
Utility Radiological Safety Board

APPLICATION FOR AMENDMENT

TO

FACILITY OPERATING LICENSE NUMBER NPF-3

DAVIS-BESSE NUCLEAR POWER STATION

UNIT NUMBER 1

Attached are the requested changes to the Davis-Besse Nuclear Power Station, Unit Number 1 Facility Operating License Number NPF-3. Also included is the Safety Assessment and Significant Hazards Consideration.

The proposed changes (submitted under cover letter Serial Number 2663) concern:

Appendix A, Technical Specifications:

TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves, and Associated Bases
TS 3/4.7.1.9, Turbine Stop Valves, and Associated Bases
TS Bases 3/4.3.1 and 3/4.3.2 , Reactor Protection System and Safety System Instrumentation

I, Guy G. Campbell, state that (1) I am Vice President - Nuclear of the FirstEnergy Nuclear Operating Company, (2) I am duly authorized to execute and file this certification on behalf of the Toledo Edison Company and The Cleveland Electric Illuminating Company, and (3) the statements set forth herein are true and correct to the best of my knowledge, information and belief.

By: Guy G. Campbell
Guy G. Campbell, Vice President - Nuclear

Affirmed and subscribed before me this 7th day of August, 2000.

Nora L. Flood
Notary Public, State of Ohio Nora L. Flood
My commission expires September 4, 2002.

The following information is provided to support issuance of the requested changes to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1 Operating License Number NPF-3, Appendix A, Technical Specifications (TS) 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves, and associated Bases; 3/4.7.1.9, Turbine Stop Valves, and associated Bases; and TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation.

A. Time Required to Implement: The License Amendment associated with this license amendment application is to be implemented within 120 days after NRC issuance.

B. Reason for Change (License Amendment Request Number 98-0014):

The proposed changes would revise TS Bases 3/4.3.1 and 3/4.3.2 to clarify the actions that must be performed when SFRCS components and SFRCS-actuated components are inoperable. Specifically, the proposed change would provide guidance on which TS actions are applicable for SFRCS-actuated components. Also, the proposed changes would add new TS 3/4.7.1.8 which would provide appropriate requirements for the Main Feedwater Control Valves and the Startup Feedwater Control Valves. Additionally, the proposed changes would add TS 3/4.7.1.9 which would provide requirements for the Turbine Stop Valves.

C. Safety Assessment and Significant Hazards Consideration: See Attachment 1.

D. Environmental Assessment: See Attachment 2.

E. Simplified Drawing of Main Feedwater System Control and Isolation Valves. See Attachment 3.

Docket Number 50-346
License Number NPF-3
Serial Number 2663
Attachment 1

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION FOR LICENSE AMENDMENT REQUEST NUMBER 98-0014

(27 pages follow)

SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION FOR LICENSE AMENDMENT REQUEST NUMBER 98-0014

TITLE:

Proposed Modification to the Davis-Besse Nuclear Power Station (DBNPS) Unit Number 1, Facility Operating License NPF-3, Appendix A, Technical Specifications (TS), to Revise TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation; to Add TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves, and Associated Bases; and to Add TS 3/4.7.1.9, Turbine Stop Valves, and Associated Bases.

DESCRIPTION:

The purpose of this License Amendment Request is to modify the DBNPS Operating License NPF-3, Appendix A, Technical Specifications, to clarify the requirements for Steam and Feedwater Rupture Control System (SFRCS) actuated components. The proposed changes would:

- Add TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves to read:

  3.7.1.8 The Main Feedwater Control Valves (MFCVs) and associated Startup Feedwater Control Valves (SFCVs) shall be OPERABLE.

  APPLICABILITY: MODES 1, 2, and 3.

  ACTION:

  With one or more MFCVs or SFCVs inoperable, isolate the affected flowpath within 72 hours and verify the flowpath is isolated once per 7 days, or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

  SURVEILLANCE REQUIREMENTS

  4.7.1.8 Each MFCV and SFCV shall be demonstrated OPERABLE by performance of Surveillance Requirement 4.3.2.2.3.

- Add TS Bases 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves to read:

The OPERABILITY of the main feedwater control valves (MFCVs) and startup feedwater control valves (SFCVs) ensures that feedwater flow to the steam generators can be isolated following an SFRCS actuation. The MFCVs and SFCVs support the Main Feedwater Stop Valves (MFSVs) in performing the main feedwater isolation function. Operability of the MFSVs is addressed by TS 3/4.6.3. The main feedwater isolation function limits the overcooling of the RCS following feedwater line breaks, main steam line breaks, and excess feedwater events. The isolation function also limits the mass and energy released to containment during a main feedwater line break or a Main Steam Line Break (MSLB) event. The ACTION requires isolating any inoperable flowpath through the MFCVs and SFCVs. In the context of this specification, a flowpath consists of the primary flowpath through the MFCVs or the bypass flowpath through the SFCVs. Isolating a flowpath requires closing the inoperable valve or closing a valve in the same flowpath. This ACTION ensures that the isolation function of the valves will be performed. When a flowpath can not be isolated within the appropriate time, the plant must be placed in a condition where the MFCVs and SFCVs are no longer required to perform their isolation function. The OPERABILITY of the MFCVs and SFCVs is met by ensuring that they meet the SFRCS RESPONSE TIME requirements.

- Add TS 3/4.7.1.9, Turbine Stop Valves, to read:

  3.7.1.9 Four Turbine Stop Valves shall be OPERABLE.

  APPLICABILITY: MODES 1, 2, and 3.

  ACTION:

  With one or more Turbine Stop Valves inoperable, close the inoperable valve(s) within 8 hours and verify the valve(s) is closed once per 7 days, or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

  SURVEILLANCE REQUIREMENTS

  4.7.1.9 Each Turbine Stop Valve shall be demonstrated OPERABLE by performance of Surveillance Requirement 4.3.2.2.3.

- Add TS Bases 3/4.7.1.9, Turbine Stop Valves, to read:

  The OPERABILITY of the turbine stop valves (TSVs) ensures that both steam generators will not blowdown during a Main Steam Line Break (MSLB). The TSVs provide a backup to the isolation function of the main steam isolation valves (MSIVs) for a MSLB downstream of the MSIVs. The ACTION requires closing the inoperable TSVs. This action ensures that the isolation function of the

valves will be performed. When a valve or valves can not be closed within the appropriate time, the plant must be placed in a condition where the TSVs are no longer required to perform their isolation function. The OPERABILITY of the TSVs is met by ensuring that they meet the SFRCS RESPONSE TIME requirements.

- Revise TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation, by adding the following paragraph:

  Surveillance Requirement 4.3.2.2.3 requires demonstration that each SFRCS function can be performed within the applicable SFRCS RESPONSE TIME. When this surveillance requirement can not be met due to an inoperable SFRCS-actuated component, the LCO ACTION associated with the inoperable actuated component should be entered. When the SFRCS RESPONSE TIME surveillance requirement can not be met due to inoperable components within the SFRCS, ACTION 16 of Table 3.3-11 should be followed.

- Revise TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation, by modifying a paragraph to read:

  An SFRCS channel consists of 1) the sensing device(s), 2) associated logic and output relays, and 3) power sources. The SFRCS output signals that close the Main Feedwater Block Valves (FW-779 and FW-780) and trip the Anticipatory Reactor Trip System (ARTS) are not required to mitigate any accident and are not credited in any safety analysis. Therefore, LCO 3.3.2.2 does not apply to these functions.

- Revise TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation, by moving the paragraph that starts "The SFRCS response time for the turbine stop valve . . . " to consolidate statements regarding SFRCS response time requirements.

- Revise the TS Index consistent with the changes described above.

The proposed changes are consistent with the intent of NUREG-1430, "Standard Technical Specifications – Babcock and Wilcox Plants," Revision 1, April 1995 (NUREG-1430), and are shown on the attached marked-up Operating License pages.

SYSTEMS, COMPONENTS, AND ACTIVITIES AFFECTED:

The proposed changes affect the operational requirements of the Steam and Feedwater Rupture Control System, Main Feedwater Control Valves, Main Feedwater Startup Control Valves, and Turbine Stop Valves. There are no hardware modifications involved.

FUNCTIONS OF THE AFFECTED SYSTEMS, COMPONENTS, AND ACTIVITIES:

Steam and Feedwater Rupture Control System

The Steam and Feedwater Rupture Control System (SFRCS) is described in DBNPS Updated Safety Analysis Report (USAR) Section 7.4.1.3, Steam and Feedwater Rupture Control System (SFRCS). The design goal of the SFRCS is to prevent the release of high energy steam by isolating secondary piping breaks, to automatically start the Auxiliary Feedwater System in the event of a main steam line or main feedwater line rupture, to automatically start the Auxiliary Feedwater System on the loss of both main feed pumps or the loss of all four RC pumps, and to prevent steam generator overfill and subsequent spillover into the main steam lines. The SFRCS provides a close signal to the Main Feedwater Block Valves (MFBVs) and a trip signal to the Anticipatory Reactor Trip System (ARTS). The signals to the MFBVs and ARTS are not credited in any safety analysis. These signals are described in USAR Section 7.4.1.3.9, Non-Safety Systems, and Section 7.4.1.4.1.1, System Logic.

Main Feedwater Control Valves and Startup Feedwater Control Valves

The Main Feedwater System is described in USAR Section 10.4.7, Condensate and Feedwater Systems. The Main Feedwater Control Valves (MFCVs) and Startup Feedwater Control Valves (SFCVs) are described in USAR Section 3.6.2.7.1.6, Main Feedwater System, and Section 15.4.4.2.2, Methods of Analysis. The MFCVs and SFCVs are designed to control and isolate main feedwater flow to the steam generators. The MFCVs and SFCVs provide a safety related backup to the feedwater isolation function of the Main Feedwater Stop Valves (MFSVs). There is one MFSV, one MFCV, and one SFCV located upstream of the each steam generator. The MFSV and MFCV are located on the primary feedwater flow path during power operation. One SFCV is located on each MFCV bypass line. The MFSVs provide a means of isolating flow to the steam generators. The MFCVs and SFCVs provide a means of controlling the amount of feedwater flow to the steam generators during normal plant operations. The function of the MFSVs, MFCVs, and SFCVs is to isolate main feedwater flow to the steam generators in the event of an SFRCS actuation. This function limits the overcooling of the RCS following a Main Feedwater Line Break (MFLB), Main Steam Line Break (MSLB), or excess feedwater event. This function also limits the mass and energy released to containment during a MFLB or MSLB. This function is ensured by verifying the valves close within the required SFRCS response time.

Turbine Stop Valves

The TSVs are described in USAR Section 10.2.4.1, Turbine Steam Flow Control. The TSVs are designed to quickly shut-off steam flow to the turbine and prevent turbine overspeed under emergency conditions. The TSVs are credited with closing on SFRCS

actuation following a MSLB to prevent the blowdown of both steam generators. This function provides a backup to the safety function of the Main Steam Isolation Valves.

EFFECTS ON SAFETY:

TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation

The proposed changes to TS Bases 3/4.3.1 and 3/4.3.2 clarify the Technical Specification requirements for the Steam and Feedwater Rupture Control System (SFRCS) and for SFRCS-actuated components. The proposed changes would add a paragraph that provides guidance on the appropriate actions to take when the SFRCS Response Time requirement can not be met. The proposed statement would state that when the SFRCS Response Time requirement can not be met due to an inoperable SFRCS-actuated component, the LCO associated with the inoperable component should be entered. The proposed statement would also state that when the SFRCS Response Time can not be met due to an inoperable component within the SFRCS, that TS 3.3.2.2, Table 3.3-11, Action 16, be entered. This statement ensures that actions are taken which are appropriate for the component that is inoperable. This guidance is consistent with the current practice at the DBNPS.

Another statement is being proposed for addition to the bases that would specifically exclude the SFRCS signals to the Main Feedwater Block Valves and the Anticipatory Reactor Trip System (ARTS) from the TS-required logic. This statement is being added to provide clarification of which SFRCS functions are required by TS. This statement is consistent with current TS requirements and the DBNPS Updated Safety Analysis Report Sections 7.4.1.3.9, Non-Safety Systems, and 7.4.1.4.1.1, System Logic.

A parenthetical phrase is proposed for deletion from the Bases. This phrase modifies the SFRCS associated logic and output relays to include isolation of main feedwater non-essential valves and turbine trip valves. The functions included in the parenthesis will now be addressed by the proposed new TS 3/4.7.1.8 and 3/4.7.1.9 as described below.

The proposed changes to TS Bases 3/4.3.1 and 3/4.3.2 are administrative in nature. The changes provide clarification of existing SFRCS requirements and do not affect any system hardware. Based on the above, the proposed change has no adverse effect on plant safety.

TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves

A new TS 3/4.7.1.8 is proposed for addition to the DBNPS Technical Specifications. This new TS would specify requirements for the Main Feedwater Control Valves and Startup Feedwater Control Valves. The proposed specification is consistent with the intent of TS 3.7.3 of NUREG-1430. The proposed LCO would require that all MFCVs and SFCV be operable while the plant is in Modes 1, 2, and 3.

With one or more MFCV or SFCV incapable of isolating a flow path, the failure of the Main Feedwater Stop Valve (MFSV) in the same Main Feedwater train under accident conditions would prevent isolation of feedwater flow to the steam generator. Under these circumstances it is appropriate to take corrective action to isolate the inoperable flowpath or place the plant in a safe condition. If one or more MFCVs or SFCVs were inoperable, the proposed Action would require that the inoperable flowpath(s) be isolated within 72 hours and that the flowpath be verified isolated at least once per 7 days. If the flowpath could not be isolated within 72 hours, the plant would be placed in a condition where the MFCVs and SFCVs are not required. The 72 hour allowed outage time (AOT) is consistent with the requirements of TS 3.7.3 of NUREG-1430 for plants such as the DBNPS which have a MFSV in series with each MFCV and SFCV in each feedwater train. This AOT is also extremely conservative with respect to the risk significance of the valves as compared to the guidelines of Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis." The actions required for an inoperable MFSV are addressed in TS 3/4.6.3, Containment Isolation Valves. The proposed Action is consistent with the Actions for conditions A., B., C., and E. of TS 3.7.3 of NUREG-1430.

The proposed Surveillance Requirement (SR) 4.7.1.8 for the MFCVs and SFCVs ensures the SFRCS response time requirements of SR 4.3.2.2.3 can be satisfied. This testing ensures that the MFCVs and SFCVs can close within the time assumed in the safety analyses. This SR is required to be performed at least once per refueling interval. This requirement is consistent with the current SFRCS testing requirements and SR 3.7.3.1 of NUREG-1430.

A new Bases Section 3/4.7.1.8 is proposed for addition. This section would provide the basis for the new TS 3/4.7.1.8 as required by 10 CFR 50.36(a). This change is administrative in nature and does not create any new requirements.

The proposed addition of TS 3/4.7.1.8 and associated Bases provide clear guidance for appropriate actions to take when MFCVs and SFCVs are not operable. The proposed new TS is consistent with Specification 3.7.3 of NUREG-1430. Based on the above, the proposed addition of TS 3/4.7.1.8 and associated Bases does not adversely impact plant safety.

TS 3/4.7.1.9, Turbine Stop Valves

A new TS 3/4.7.1.9 is proposed for addition to the DBNPS Technical Specifications. This new TS would specify requirements for the Turbine Stop Valves (TSVs). The proposed LCO would require that all four TSVs be operable while the plant is in Modes 1, 2, and 3. In Modes 1, 2, and 3, the TSVs are relied upon to prevent the blowdown of both steam generators in the event of a Main Steam Line Break (MSLB) and failure of a Main Steam Isolation Valve. In Modes 4, 5, and 6, no function is performed by the TSVs.

The operability of a TSV requires that it be able to close in less than the TS SFRCS Response Time. When a TSV is incapable of performing its function, a single failure of a MSIV following a MSLB would result in both steam generators blowing down. When the TSVs are incapable of performing their function, it is appropriate to take action to close the inoperable valve(s) and verify it is closed at least once per 7 days or place the plant in a condition where TSVs are not required to be operable. The proposed Action would allow 8 hours to close an inoperable TSV before a plant shutdown would be required. This 8 hour AOT is consistent with the likelihood of a MSLB, the function the TSVs perform, and the redundant safety equipment available. There is no standard TS in NUREG-1430 for the TSVs. The AOT for MSIVs in NUREG-1430 is 8 hours. The proposed AOT for the TSVs is 8 hours based on the fact that the TSVs perform a backup function to the MSIVs for certain accident scenarios.

The proposed Surveillance Requirement (SR) 4.7.1.9 for the TSVs ensures the SFRCS response time requirements of SR 4.3.2.2.3 can be satisfied. This testing ensures that the TSVs can close within the time assumed in the safety analyses. This SR is required to be performed once per refueling interval. This requirement is consistent with the current SFRCS testing requirements.

A new Bases Section 3/4.7.1.9 is proposed for addition. This section would provide the basis for the new TS 3/4.7.1.9 as required by 10 CFR 50.36(a). This change is administrative in nature and does not create any new requirements.

The proposed addition of TS 3/4.7.1.9 and associated Bases provide clear guidance for appropriate actions to take when TSVs are not operable. Based on the above, the proposed addition of TS 3/4.7.1.9 and associated Bases does not adversely impact plant safety.

SIGNIFICANT HAZARDS CONSIDERATION:

The Nuclear Regulatory Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazard exists due to a proposed amendment to an Operating License for a facility. A proposed amendment involves no significant hazards consideration if operation of the facility in accordance with the proposed changes would: (1) Not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) Not create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Not involve a significant reduction in a margin of safety. The Davis-Besse Nuclear Power Station (DBNPS) has reviewed the proposed changes and determined that a significant hazards consideration does not exist because operation of the Davis-Besse Nuclear Power Station, Unit No. 1, in accordance with these changes would:

1a. Not involve a significant increase in the probability of an accident previously evaluated because no such accidents are affected by the proposed changes. The

amendment application proposes to revise Technical Specification (TS) Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation, to clarify Steam and Feedwater Rupture Control System (SFRCS) requirements; to add new TS 3/4.7.1.8, Main Feedwater Control Valves (MFCVs) and Startup Feedwater Control Valves (SFCVs); to add new TS 3/4.7.1.9, Turbine Stop Valves (TSVs); and to make associated changes to the Bases and TS Index.

The proposed change would provide clear guidance for the actions required when SFRCS logic and SFRCS-actuated components are inoperable. The new TSs for MFCVs, SFCVs, and TSVs provide appropriate operational requirements for these SFRCS-actuated components. The proposed change will not change any system hardware or testing requirements. Initiating conditions and assumptions remain as previously analyzed for accidents in the DBNPS Updated Safety Analysis Report (USAR). The proposed changes to the TS Bases and Index are consistent with the changes described above.

The proposed changes are consistent with the intent of NUREG-1430, "Standard Technical Specifications – Babcock and Wilcox Plants," Revision 1, April 1995. The proposed change does not involve a change to any plant hardware and does not affect the probability of any equipment malfunction or accident-initiating event.

1b. Not involve a significant increase in the consequences of an accident previously evaluated because the source term, containment isolation, or radiological releases are not affected by the proposed changes. The proposed changes ensure that excessive unavailability of SFRCS-actuated equipment which is used to mitigate accident consequences does not occur. The reliability of the plant hardware and the ability of the SFRCS-actuated equipment to perform its safety function are not affected. Existing system and component redundancy is not affected by the proposed changes. The existing system and component operation is not affected by the proposed changes, and the assumptions used in evaluating the radiological consequences in the DBNPS USAR are not invalidated. Therefore, for each postulated accident the consequences remain bounded by the consequences from the previously evaluated accidents.

2. Not create the possibility of a new or different kind of accident from any accident previously evaluated because these proposed changes do not involve any physical changes to systems or components, nor do they alter the manner in which the systems or components are operated.

3. Not involve a significant reduction in a margin of safety because, for the proposed changes, there are no new or significant changes to the initial conditions contributing to accident severity or consequences. Accordingly, there are no significant reductions in a margin of safety.

CONCLUSION:

On the basis of the above, the DBNPS has determined that the License Amendment Request does not involve a significant hazards consideration. As this License Amendment Request concerns a proposed change to the Technical Specifications that must be reviewed by the Nuclear Regulatory Commission, this License Amendment Request does not constitute an unreviewed safety question.

ATTACHMENTS:

Attached are the proposed marked-up changes to the Operating License.

REFERENCES:

1. DBNPS Operating License NPF-3, Appendix A, Technical Specifications, through Amendment 241.

2. DBNPS Updated Safety Analysis Report, through Revision 21.

3. NUREG-1430, "Standard Technical Specifications – Babcock and Wilcox Plants," Revision 1, April 1995.

4. Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," July 1998.

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

INDEX

BASES

INFORMATION ONLY

INSTRUMENTATION

STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.2.2 The Steam and Feedwater Rupture Control System (SFRCS) instrumentation channels shown in Table 3.3-11 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3-12, with the exception of the Steam Generator Level-Low Functional Unit which shall be set consistent with the Allowable Value column of Table 3.3-12.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With a SFRCS instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3-12, declare the channel inoperable and apply the applicable ACTION requirement of Table 3.3-11, until the channel is restored to OPERABLE status with the trip setpoint adjusted consistent with Table 3.3-12.

b. With a SFRCS instrumentation channel inoperable, take the action shown in Table 3.3-11.

SURVEILLANCE REQUIREMENTS

4.3.2.2.1 Each SFRCS instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST during the MODES and at the frequencies shown in Table 4.3-11.

4.3.2.2.2 The logic for the bypasses shall be demonstrated OPERABLE during the at power CHANNEL FUNCTIONAL TEST of channels affected by bypass operation. The total bypass function shall be demonstrated OPERABLE at least once per REFUELING INTERVAL during CHANNEL CALIBRATION testing of each channel affected by bypass operation.

4.3.2.2.3 The STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM RESPONSE TIME* of each SFRCS function shall be demonstrated to be within the limit at least once per REFUELING INTERVAL. Each test shall include at least one channel per function such that all channels are tested at least once every N times the REFUELING INTERVAL where N is the total number of redundant channels in a specific SFRCS function as shown in the "Total No. of Channels" Column of Table 3.3-11.

* The Main Steam Isolation Valves (MSIVs) response time is to be the time elapsed from the monitored variable exceeding the trip setpoint until the MSIV is fully closed. The Turbine Stop Valves (TSVs) response time is to be the time elapsed from the main steam line low pressure trip condition until the TSV is fully closed.

INFORMATION ONLY

TABLE 3.3-11

STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	ACTION
1. Main Steam Pressure Low Instrument Channels*	2	1	2	16#
a. PS 3689B Steam Line 1 Channel 1				
b. PS 3689D Steam Line 2 Channel 1				
c. PS 3689F Steam Line 1 Channel 1				
d. PS 3689H Steam Line 2 Channel 1				
e. PS 3687A Steam Line 2 Channel 2				
f. PS 3687C Steam Line 1 Channel 2				
g. PS 3687E Steam Line 2 Channel 2				
h. PS 3687G Steam Line 1 Channel 2				

INFORMATION ONLY

TABLE 3.3-11 (Continued)

STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	ACTION
2. Feedwater/Steam Generator Differential Pressure - High Instrument Channels	2	1	2	16#
a. PDS 2685A Feedwater/Steam Generator 2 Channel 2 PDS 2685B Feedwater/Steam Generator 2 Channel 2				
b. PDS 2685C Feedwater/Steam Generator 2 Channel 1 PDS 2685D Feedwater/Steam Generator 2 Channel 1				
c. PDS 2686A Feedwater/Steam Generator 1 Channel 1 PDS 2686B Feedwater/Steam Generator 1 Channel 1				
d. PDS 2686C Feedwater/Steam Generator 1 Channel 2 PDS 2686D Feedwater/Steam Generator 1 Channel 2				
3. Steam Generator Level - Low Instrument Channels	2	1	2	16#
a. LSLL SP9B8 Steam Generator 1 Channel 1 LSLL SP9B9 Steam Generator 1 Channel 1				
b. LSLL SP9A6 Steam Generator 2 Channel 1 LSLL SP9A7 Steam Generator 2 Channel 1				
c. LSLL SP9A8 Steam Generator 2 Channel 2 LSLL SP9A9 Steam Generator 2 Channel 2				

INFORMATION ONLY

TABLE 3.3-11 (Continued)

STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	ACTION
3. Steam Generator Level - Low Instrument Channels (continued)				
d. LSLL SP9B6 Steam Generator 1 Channel 2 LSLL SP9B7 Steam Generator 1 Channel 2	2	1	2	16
4. Loss of RCP Channels				
5. Manual Initiation (Push buttons)				
a. Initiate AFPT #1	1	1	1	17
b. Initiate AFPT #2	1	1	1	17
c. Initiate AFPT #1 and Isolate SG #1	1	1	1	17
d. Initiate AFPT #2 and Isolate SG #2	1	1	1	17

INFORMATION ONLY

TABLE 3.3-11 (Continued)

TABLE NOTATION

* May be bypassed when steam pressure is below 750 psig. Bypass shall be automatically removed when the steam pressure exceeds 800 psig.

\# The provisions of Specification 3.0.4 are not applicable.

ACTION STATEMENTS

ACTION 16 - With the number of OPERABLE Channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed until performance of the next required CHANNEL FUNCTIONAL TEST provided the inoperable section of the channel is placed in the tripped condition within 1 hour.

ACTION 17 - With the number of OPERABLE Channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT

INFORMATION ONLY

TABLE 3.3-12

STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM
INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNITS	TRIP SETPOINTS	ALLOWABLE VALUES
1. Steam Line Pressure - Low	≥ 591.6 psig	≥ 591.6 psig* ≥ 586.6 psig**
2. Steam Generator Level - Low(1)	N.A.	≥ 16.9"*
3. Steam Generator Feedwater Differential Pressure - High(2)	≤ 197.6 psid	≤ 197.6 psid* ≤ 199.6 psid**
4. Reactor Coolant Pumps - Loss of	High ≤ 1384.6 amps Low ≥ 106.5 amps	≤ 1384.6 amps# ≥ 106.5 amps#

(1) Actual water level above the lower steam generator tubesheet.
(2) Where differential pressure is steam generator minus feedwater pressure.
*Allowable Value for CHANNEL FUNCTIONAL TEST
**Allowable Value for CHANNEL CALIBRATION
#Allowable Value for CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION

INFORMATION ONLY

DELETED

INFORMATION ONLY

TABLE 4.3-11

STEAM AND FEEDWATER RUPTURE CONTROL SYSTEM
INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	
1. Instrument Channel				
a. Steam Line Pressure - Low	S	E	M	|
b. Steam Generator Level - Low	S	R	M	
c. Steam Generator - Feedwater Differential Pressure - High	S	E	M	|
d. Reactor Coolant Pumps - Loss of	S	E	M	|
2. Manual Actuation	NA	NA	R	

PLANT SYSTEMS

MAIN FEEDWATER CONTROL VALVES AND STARTUP FEEDWATER CONTROL VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.8 The Main Feedwater Control Valves (MFCVs) and associated Startup Feedwater Control Valves (SFCVs) shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

With one or more MFCVs or SFCVs inoperable, isolate the affected flowpath within 72 hours and verify the flowpath is isolated once per 7 days, or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.8 Each MFCV and SFCV shall be demonstrated OPERABLE by performance of Surveillance Requirement 4.3.2.2.3.

PLANT SYSTEMS

TURBINE STOP VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.9 Four Turbine Stop Valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

With one or more Turbine Stop Valves inoperable, close the inoperable valve(s) within 8 hours and verify the valve(s) is closed once per 7 days, or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.9 Each Turbine Stop Valve shall be demonstrated OPERABLE by performance of Surveillance Requirement 4.3.2.2.3.

INFORMATION ONLY

BASES

3/4.3.1 and 3/4.3.2 REACTOR PROTECTION SYSTEM AND SAFETY SYSTEM INSTRUMENTATION

The OPERABILITY of the RPS, SFAS and SFRCS instrumentation systems ensure that 1) the associated action and/or trip will be initiated when the parameter monitored by each channel or combination thereof exceeds its setpoint, 2) the specified coincidence logic is maintained, 3) sufficient redundancy is maintained to permit a channel to be out of service for testing or maintenance, and 4) sufficient system functional capability is available for RPS, SFAS and SFRCS purposes from diverse parameters.

The OPERABILITY of these systems is required to provide the overall reliability, redundance and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of each of these systems is consistent with the assumptions used in the accident analyses.

The surveillance requirements specified for these systems ensure that the overall system functional capability is maintained comparable to the original design standards. The periodic surveillance tests performed at the minimum frequencies are sufficient to demonstrate this capability. The response time limits for these instrumentation systems are located in the Updated Safety Analysis Report and are used to demonstrate OPERABILITY in accordance with each system's response time surveillance requirements.

For the RPS, SFAS Table 3.3-4 Functional Unit Instrument Strings d, e, and f, and Interlock Channel a, and SFRCS Table 3.3-12 Functional Unit 2:

Only the Allowable Value is specified for each Function. Nominal trip setpoints are specified in the setpoint analysis. The nominal trip setpoints are selected to ensure the setpoints measured by CHANNEL FUNCTIONAL TESTS do not exceed the Allowable Value if the bistable is performing as required. Operation with a trip setpoint less conservative than the nominal trip setpoint, but within its Allowable Value, is acceptable provided that operation and testing are consistent with the assumptions of the specific setpoint calculations. Each Allowable Value specified is more conservative than the analytical limit assumed in the safety analysis to account for instrument uncertainties appropriate to the trip parameter. These uncertainties are defined in the specific setpoint analysis.

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the entire channel will perform the intended function. Setpoints must be found within the specified Allowable Values. Any setpoint adjustment shall be consistent with the assumptions of the current specific setpoint analysis.

A CHANNEL CALIBRATION is a complete check of the instrument channel, including the sensor. The test verifies that the channel responds to the measured parameter within the necessary range and accuracy. CHANNEL CALIBRATION leaves the channel adjusted to account for instrument drift to ensure that the instrument channel remains operational between successive tests. CHANNEL CALIBRATION shall find that measurement errors and bistable setpoint errors are within the assumptions of the setpoint analysis. CHANNEL CALIBRATIONS must be performed consistent with the assumptions of the setpoint analysis.

The frequency is justified by the assumption of an 18 or 24 month calibration interval in the determination of the magnitude of equipment drift in the setpoint analysis.

3/4.3 INSTRUMENTATION

BASES

3/4.3.1 and 3/4.3.2 REACTOR PROTECTION SYSTEM AND SAFETY SYSTEM INSTRUMENTATION (Continued)

The measurement of response time at the specified frequencies provides assurance that the RPS, SFAS, and SFRCS action function associated with each channel is completed within the time limit assumed in the safety analyses.

Response time may be demonstrated by any series of sequential, overlapping or total channel test measurements provided that such tests demonstrate the total channel response time as defined. Sensor response time verification may be demonstrated by either 1) in place, onsite or offsite test measurements or 2) utilizing replacement sensors with certified response times.

The SFRCS RESPONSE TIME for the turbine stop valve closure is based on the combined response times of main steam line low pressure sensors, logic cabinet delay for main steam line low pressure signals and closure time of the turbine stop valves. This SFRCS RESPONSE TIME ensures that the auxiliary feedwater to the unaffected steam generator will not be isolated due to a SFRCS low pressure trip during a main steam line break accident.

Surveillance Requirement 4.3.2.2.3 requires demonstration that each SFRCS function can be performed within the applicable SFRCS RESPONSE TIME. When this surveillance requirement can not be met due to an inoperable SFRCS-actuated component, the LCO ACTION associated with the inoperable actuated component should be entered. When the SFRCS RESPONSE TIME surveillance requirement can not be met due to inoperable components within the SFRCS, ACTION 16 of Table 3.3-11 should be followed.

The actuation logic for Functional Units 4.a., 4.b., and 4.c. of Table 3.3-3, Safety Features Actuation System Instrumentation, is designed to provide protection and actuation of a single train of safety features equipment, essential bus or emergency diesel generator. Collectively, Functional Units 4.a., 4.b., and 4.c. function to detect a degraded voltage condition on either of the two 4160 volt essential buses, shed connected loads, disconnect the affected bus(es) from the offsite power source and start the associated emergency diesel generator. In addition, if an SFAS actuation signal is present under these conditions, the sequencer channels for the two SFAS channels which actuate the train of safety features equipment powered by the affected bus will automatically sequence these loads onto the bus to prevent overloading of the emergency diesel generator. Functional Unit 4.a. has a total of four units, one associated with each SFAS channel (i.e., two for each essential bus). Functional Units 4.b. and 4.c. each have a total of four units, (two associated with each essential bus); each unit consisting of two undervoltage relays and an auxiliary relay.

An SFRCS channel consists of 1) the sensing device(s), 2) associated logic and output relays ~~(including Isolation of Main Feedwater Non Essential Valves and Turbine Trip)~~, and 3) power sources. The SFRCS output signals that close the Main Feedwater Block Valves (FW-779 and FW-780) and trip the Anticipatory Reactor Trip System (ARTS) are not required to mitigate any accident and are not credited in any safety analysis. Therefore, LCO 3.3.2.2 does not apply to these functions.

~~The SFRCS response time for the turbine stop valve closure is based on the combined response times of main steam line low pressure sensors, logic cabinet delay for main steam line low pressure signals and closure time of the turbine stop valves. This SFRCS response time ensures that the auxiliary feedwater to the unaffected steam generator will not be isolated due to a SFRCS low pressure trip during a main steam line break accident.~~

3/4.3 INSTRUMENTATION

BASES

3/4.3.1 and 3/4.3.2 REACTOR PROTECTION SYSTEM AND SAFETY SYSTEM INSTRUMENTATION (Continued)

Safety-grade anticipatory reactor trip is initiated by a turbine trip (above 45 percent of RATED THERMAL POWER) or trip of both main feedwater pump turbines. This anticipatory trip will operate in advance of the reactor coolant system high pressure reactor trip to reduce the peak reactor coolant system pressure and thus reduce challenges to the pilot operated relief valve. This anticipatory reactor trip system was installed to satisfy Item II.K.2.10 of NUREG-0737. The justification for the ARTS turbine trip arming level of 45% is given in BAW-1893, October, 1985.

within the closure times of the surveillance requirements are consistent with the assumptions used in the safety analyses.

3/4.7.1.6 SECONDARY WATER CHEMISTRY - Deleted

3/4.7.1.7 MOTOR DRIVEN FEEDWATER PUMP SYSTEM

The OPERABILITY of the Motor Driven Feedwater Pump System ensures that the Reactor Coolant System can be cooled down from normal operating conditions in the event of the total loss of Main Feedwater and Auxiliary Feedwater Pumps.

The Motor Driven Feedwater Pump System must be capable of providing feedwater flow to each steam generator in order to be OPERABLE.

The Motor Driven Feedwater Pump flow capability ensures that adequate feedwater flow is available to remove Decay Heat and reduce the Reactor Coolant System temperature to where the Decay Heat System may be placed into operation.

When conducting tests of the Motor Driven Feedwater Pump System in MODE 1 at greater than 40% RATED THERMAL POWER which requires local manual realignment of valves which make the system inoperable, a dedicated individual shall be stationed at the realigned train's valves, in communication with the control room, able to restore the valves to normal system OPERABLE status. However, it is not required to have this dedicated individual stationed if both trains of the Auxiliary Feedwater System are OPERABLE pursuant to Technical Specification 3/4.7.1.2 because two sources of auxiliary feedwater to the steam generators are OPERABLE. In either situation, the Motor Driven Feedwater Pump System with the local manual realigned valves is inoperable and the Limiting Condition for Operation ACTION must be followed.

When at 40% RATED THERMAL POWER or less and in MODES 1, 2, or 3, the Motor Driven Feedwater Pump System may be aligned to provide a flow path from the Deaerator Storage Tank through the Motor Driven Feedwater Pump to the Main Feedwater System. During this Motor Driven Feedwater Pump mode of operation, a flow path from the Condensate Storage Tanks through the Motor Driven Feedwater Pump to the Auxiliary Feedwater System shall be maintained with the ability for manual positioning of valves such that the flow path can be established. The ability for local, manual operation is demonstrated by verifying the presence of the handwheels for all manual valves and the presence of either handwheels or available power supply for motor operated valves.

3/4.7.1.8 MAIN FEEDWATER CONTROL VALVES AND STARTUP FEEDWATER CONTROL VALVES

The OPERABILITY of the main feedwater control valves (MFCVs) and startup feedwater control valves (SFCVs) ensures that feedwater flow to the steam generators can be isolated following an SFRCS actuation. The MFCVs and SFCVs support the Main Feedwater Stop Valves (MFSVs) in performing the main feedwater isolation function. OPERABILITY of the MFSVs is addressed by TS 3/4.6.3. The main feedwater isolation function limits the overcooling of the RCS following feedwater line breaks, main steam line breaks, and excess feedwater events. The isolation function also limits the mass and energy released to containment during a main feedwater line break or a Main Steam Line Break (MSLB) event. The ACTION requires isolating any inoperable flowpath through the MFCVs and SFCVs. In the context of this specification, a flowpath consists of the primary flowpath through the MFCVs or the bypass flowpath through the SFCVs. Isolating a flowpath requires closing the inoperable valve or closing a valve in the same flowpath. This ACTION ensures that the isolation function of the valves will be performed. When a flowpath can not be isolated within the appropriate time, the plant must be placed in a condition where the MFCVs and SFCVs are no longer required to perform their isolation function. The OPERABILITY of the MFCVs and SFCVs is met by ensuring that they meet the SFRCS RESPONSE TIME requirements.

3/4.7.1.9 TURBINE STOP VALVES

The OPERABILITY of the turbine stop valves (TSVs) ensures that both steam generators will not blowdown during a Main Steam Line Break (MSLB). The TSVs provide a backup to the isolation function of the main steam isolation valves (MSIVs) for a MSLB downstream of the MSIVs. The ACTION requires closing the inoperable TSVs. This action ensures that the isolation function of the valves will be performed. When a valve or valves can not be closed within the appropriate time, the plant must be placed in a condition where the TSVs are no longer required to perform their isolation function. The OPERABILITY of the TSVs is met by ensuring that they meet the SFRCS RESPONSE TIME requirements.

3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations of 110°F and 237 psig are based on a steam generator RT_{NDT} of 40°F and are sufficient to prevent brittle fracture.

3/4.7.3 COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the component cooling water system ensures that sufficient cooling capacity is available for continued operation of safety related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

3/4.7.4 SERVICE WATER SYSTEM

The OPERABILITY of the service water system ensures that sufficient cooling capacity is available for continued operation of safety related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

ADDITIONAL CHANGES PREVIOUSLY PROPOSED BY LETTER
Serial No. 2619 Date 11/4/99

3/4.7.5 ULTIMATE HEAT SINK

The limitations on the ultimate heat sink level and temperature ensure that sufficient cooling capacity is available to either 1) provide normal cooldown of the facility, or 2) to mitigate the effects of accident conditions within acceptable limits.

The limitations on minimum water level and maximum temperature are based on providing a 30 day cooling water supply to safety related equipment without exceeding their design basis temperature and is consistent with the recommendations of Regulatory Guide 1.27, "Ultimate Heat Sink for Nuclear Plants" March 1974.

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

The OPERABILITY of the control room emergency ventilation system ensures that 1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and 2) the control room will remain habitable for operations personnel during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix "A", 10 CFR 50.

The Station Vent Normal Range Radiation Monitoring isolation function provides that under the required conditions, an isolation signal will be given. The Station Vent Normal Range Radiation Monitors provide isolation and shutdown of the control room normal ventilation system.

With one or both channels of Station Vent Normal Range Radiation Monitoring instrumentation inoperable, the provisions of Action statements b or c, respectively, are applicable. The provisions of Action statement a are not applicable.

Under the Action statements for inoperable Station Vent Normal Range Radiation Monitoring instrumentation, should the control room normal ventilation system be isolated and at least one train of the control room emergency ventilation system be placed in operation, these systems would be in a state equivalent to that which they would be in following an actual high radiation condition. Plant operation can continue indefinitely in this state, provided that control room temperature can be maintained in an acceptable range, with the control room emergency ventilation system obtaining fresh-air makeup as described in the Updated Safety Analysis Report Section 9.4.1, "Control Room."

Surveillance Requirement 4.7.6.1.e.2 requires verification that the control room normal ventilation system can be isolated by a Station Vent Normal Range Radiation Monitoring test signal.

Additional testing requirements for the Station Vent Normal Range Radiation Monitoring instrumentation are provided in the ODCM for gaseous effluent releases.

ENVIRONMENTAL ASSESSMENT
FOR
LICENSE AMENDMENT REQUEST NUMBER 98-0014

Identification of Proposed Action

This proposed action involves the Davis-Besse Nuclear Power Station (DBNPS), Unit 1, Operating License Number NPF-3, Appendix A, Technical Specifications (TS). The proposed license amendment application involves: TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation; new TS 3/4.7.1.8, Main Feedwater Control Valves and Startup Feedwater Control Valves and associated Bases; new TS 3/4.7.1.9, Turbine Stop Valves, and associated Bases; and related changes to the TS Index.

The purpose of the proposed TS changes is to clarify the actions that must be performed when Steam and Feedwater Rupture Control System (SFRCS) components and SFRCS-actuated components are inoperable. Specifically, the proposed change would provide guidance on which TS actions are applicable for SFRCS-actuated components

Need for the Proposed Action

On June 19, 2000, during TS-required surveillance testing of the SFRCS, solenoid valve SV-SP6A2, which is one of two solenoid valves required to reposition in order for Main Feedwater Control Valve SP6A to close, failed to provide proper indication following a simulated SFRCS trip. Without this proper indication, it could not be confirmed that SP6A was capable of closing. It was therefore assumed that the valve was not able to meet its required SFRCS response time. Since there is no TS Limiting Condition for Operation for the Main Feedwater Control Valves, the DBNPS conservatively entered TS 3.0.3, and a plant shutdown was initiated. Shortly thereafter, it was determined that SV-SP6A2 was repositioning and was capable of performing its safety function, but was not providing proper indication. At this point, TS 3.0.3 was exited and the plant returned to full power.

One cause of this TS 3.0.3 entry and undesired plant transient was the lack of any specific TS Action for an inoperable Feedwater Control Valve. The proposed amendment, if approved, would provide new actions to take when Main Feedwater Control Valves, Startup Feedwater Control Valves, and Turbine Stop Valves are inoperable, thereby avoiding unnecessary plant transients in the future, should similar problems with these components occur.

Environmental Impact of the Proposed Action

As described in the Safety Assessment and Significant Hazards Consideration (SASHC) for the proposed license amendment application, the DBNPS has determined that the structures, systems, and components which could be affected by the proposed license amendment will continue to be capable of performing their safety functions.

The proposed license amendment application involves a change to a requirement with respect to the use of plant components located within the restricted area as defined in 10 CFR Part 20. As discussed in the SASHC, this proposed license amendment does not involve a significant hazards consideration. The proposed changes do not alter source terms, containment isolation, or allowable releases. In addition, the proposed changes do not involve an increase in the amounts, and no change in the types, of any radiological effluents that may be allowed to be released offsite. Furthermore, there is no increase in the individual or cumulative occupational radiation exposure.

With regard to potential non-radiological impacts, the proposed license amendment involves no increase in the amounts or change in the types of any non-radiological effluents that may be released offsite, and has no other environmental impact.

Based on the above, the DBNPS concludes that there are no significant radiological or non-radiological environmental impacts associated with the proposed license amendment.

Alternatives to the Proposed Action

Since the DBNPS has concluded that the environmental effects of the proposed action are not significant, any alternatives will have only similar or greater environmental impacts. The principal alternative would be to not grant the license amendment. Since the environmental impacts of the proposed action are not significant, denial of the proposed license amendment would not significantly reduce the environmental impacts attributable to the plant.

Alternative Use of Resources

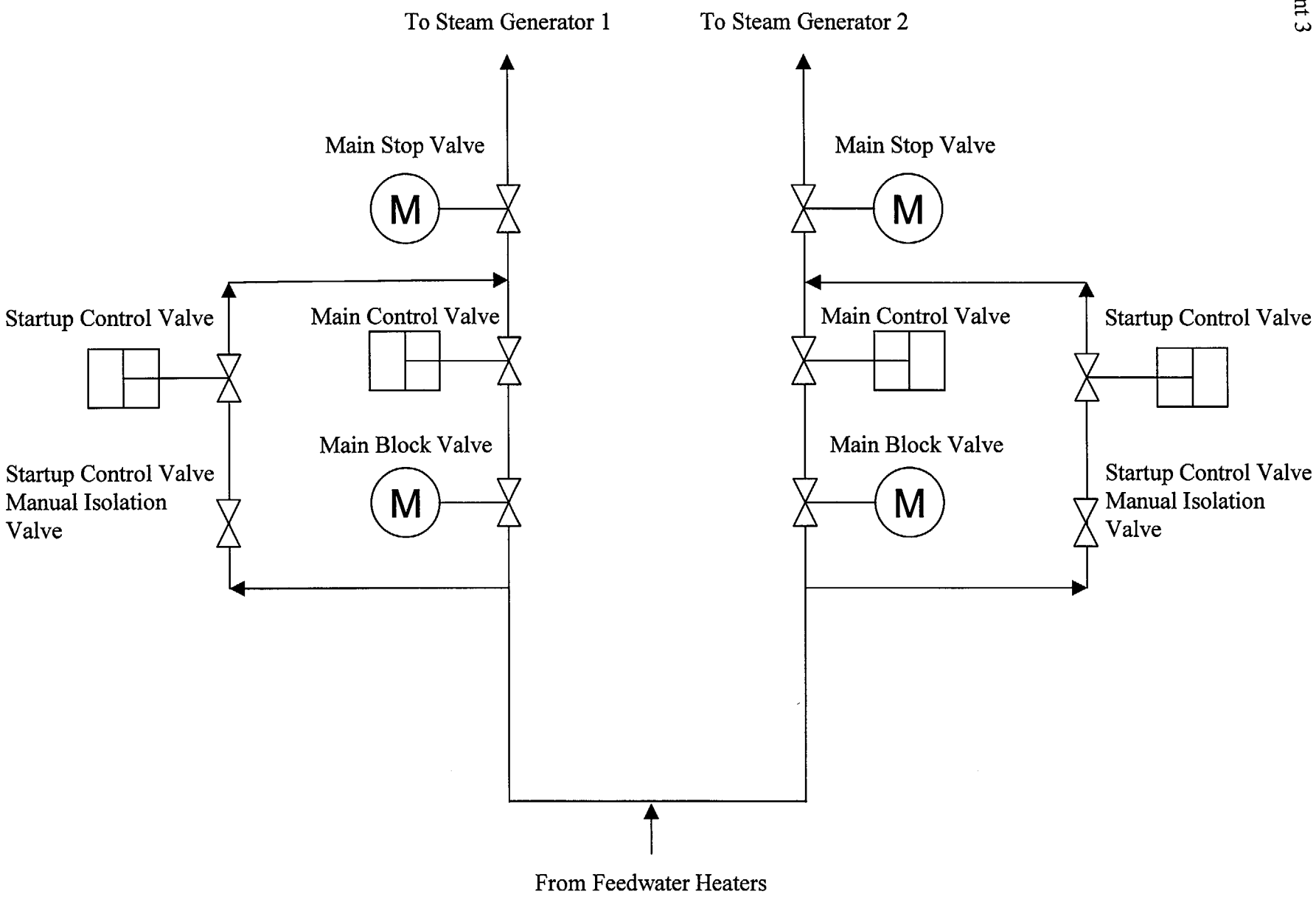
This action does not involve the use of resources not previously considered in the Final Environmental Statement Related to the Operation of the Davis-Besse Nuclear Power Station, Unit Number 1 (NUREG 75/097).

Finding of No Significant Impact

The DBNPS has reviewed the proposed license amendment against the categorical exclusion criteria of 10 CFR 51.22(c)(9) for an environmental assessment. As

demonstrated in the proposed license amendment's SASHC, the proposed changes do not involve a significant hazards consideration. In addition, the proposed changes do not increase the types or amounts of effluents that may be released offsite, and do not increase individual or cumulative occupational radiation exposures. Accordingly, the DBNPS finds that the proposed license amendment, if approved by the Nuclear Regulatory Commission, will have no significant impact on the environment and that no environmental assessment is required.

Main Feedwater System Control and Isolation Valves



Docket Number 50-346
License Number NPF-3
Serial Number 2663
Enclosure 2

COMMITMENT LIST

THE FOLLOWING LIST IDENTIFIES THOSE ACTIONS COMMITTED TO BY THE DAVIS-BESSE NUCLEAR POWER STATION (DBNPS) IN THIS DOCUMENT. ANY OTHER ACTIONS DISCUSSED IN THE SUBMITTAL REPRESENT INTENDED OR PLANNED ACTIONS BY THE DBNPS. THEY ARE DESCRIBED ONLY FOR INFORMATION AND ARE NOT REGULATORY COMMITMENTS. PLEASE NOTIFY THE MANAGER – REGULATORY AFFAIRS (419-321-8450) AT THE DBNPS OF ANY QUESTIONS REGARDING THIS DOCUMENT OR ANY ASSOCIATED REGULATORY COMMITMENTS.

COMMITMENTS	DUE DATE
None	N/A