

Docket Number 50-346  
License Number NPF-3  
Serial Number 2612  
Enclosure 1  
Page 1

APPLICATION FOR AMENDMENT  
TO  
FACILITY OPERATING LICENSE NUMBER NPF-3  
DAVIS-BESSE NUCLEAR POWER STATION  
UNIT NUMBER 1

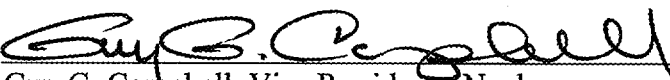
Attached are the requested changes to the Davis-Besse Nuclear Power Station, Unit Number 1 Facility Operating License Number NPF-3. Also included is the Safety Assessment and Significant Hazards Consideration.

The proposed changes (submitted under cover letter Serial Number 2612) concern:

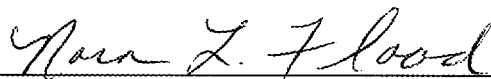
Appendix A, Technical Specifications:

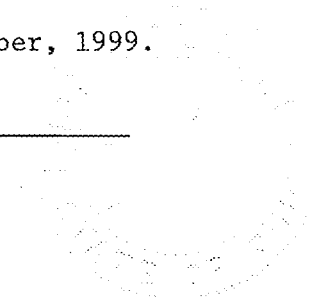
- 3/4.1.2.9            Reactivity Control Systems – Borated Water Sources – Operating
- 3/4.3.2.1            Safety Features Actuation System Instrumentation
- 3/4.5.4              Emergency Core Cooling Systems – Borated Water Storage Tank
- Bases 3/4.1.2        Boration Systems
- Bases 3/4.3.1        Reactor Protection System and Safety System Instrumentation  
and 3/4.3.2
- Bases 3/4.5.4        Borated Water Storage Tank

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, Vice President - Nuclear

Affirmed and subscribed before me this 2nd day of November, 1999.

  
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 Specification (TS) 3/4.1.2.9, Reactivity Control Systems – Borated Water Sources – Operating; TS 3/4.3.2.1, Safety Features Actuation System Instrumentation; TS 3/4.5.4, Emergency Core Cooling Systems – Borated Water Storage Tank; and TS Bases 3/4.1.2, Boration Systems, Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation, and Bases 3/4.5.4, Borated Water Storage Tank:

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 97-0011):

The proposed changes to TS 3/4.3.2.1 would revise Table 3.3-4, Safety Features Actuation System Instrumentation Trip Setpoints, to remove the “Trip Setpoint” values for Instrument String Functional Unit “f”, Borated Water Storage Tank (BWST) Level, and also modify the “Allowable Values” entry for this same Functional Unit, consistent with updated calculations using current setpoint methodology. The proposed changes would also revise Limiting Condition for Operation (LCO) 3.3.2.1, and Bases 3/4.3.1 and 3/4.3.2 to reflect the removal of the “Trip Setpoint” values for this Functional Unit. Associated with these changes, the minimum available BWST borated water volume requirement as specified in LCO 3.1.2.9.b.1 and LCO 3.5.4.a, and as referenced in Bases 3/4.1.2, is proposed to be increased.

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

Docket Number 50-346  
License Number NPF-3  
Serial Number 2612  
Attachment

**SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION  
FOR  
LICENSE AMENDMENT REQUEST NUMBER 97-0011**

(29 pages follow)

**SAFETY ASSESSMENT AND SIGNIFICANT HAZARDS CONSIDERATION  
FOR  
LICENSE AMENDMENT REQUEST NUMBER 97-0011**

**TITLE:**

Proposed Modification to the Davis-Besse Nuclear Power Station Unit Number 1 (DBNPS), Facility Operating License NPF-3, Appendix A - Technical Specifications, to Revise Technical Specification (TS) 3/4.1.2.9, Reactivity Control Systems – Borated Water Sources – Operating; TS 3/4.3.2.1, Safety Features Actuation System Instrumentation; TS 3/4.5.4, Emergency Core Cooling Systems – Borated Water Storage Tank; and TS Bases 3/4.1.2, Boration Systems, Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation, and Bases 3/4.5.4, Borated Water Storage Tank.

**DESCRIPTION:**

The proposed TS changes would revise the DBNPS Safety Features Actuation System (SFAS) Borated Water Storage Tank (BWST) level instrumentation setpoints consistent with updated calculations using current setpoint methodology, increase the minimum available BWST borated water volume requirement, and make other related changes. The following specific changes are proposed:

Table 3.3-4, Safety Features Actuation System Instrumentation Trip Setpoints

The “Trip Setpoint” values for Instrument String Functional Unit “f”, BWST Level are proposed to be removed from TS Table 3.3-4. Consistent with NUREG-1430, “Standard Technical Specifications - Babcock and Wilcox Plants,” Revision 1, only the “Allowable Value” would be specified in the TS for this Functional Unit. The nominal trip setpoint values are specified in the setpoint analysis and will be listed in the “Instrument Index,” a DBNPS-controlled document, for reference. The trip setpoints will also be listed in the DBNPS Updated Safety Analysis Report (USAR) no later than the implementation of the requested license amendment. Future changes to these trip setpoints will be under the regulatory controls of 10 CFR 50.59, “Changes, Tests, and Experiments.” These changes will be submitted to the NRC in accordance with the USAR revision requirements of 10 CFR 50.71(e) and the safety evaluation summary report requirements of 10 CFR 50.59(b).

The “Allowable Value” for Instrument String Functional Unit “f”, BWST Level, is proposed to be changed from “ $\geq 88.3$  and  $\leq 101.7$  in. H<sub>2</sub>O” to “ $\geq 101.6$  and  $\leq 115.4$  in. H<sub>2</sub>O”.

In addition, it is proposed to apply the current footnote “##” to the Allowable Values for Functional Unit “F”. This footnote signifies that the Allowable Values apply to the Channel Functional Test. The current footnote, “#”, which signifies that the Allowable Values apply to both the Channel Functional Test and the Channel Calibration, would no longer apply to Functional Unit “F”.

Limiting Condition for Operation (LCO) 3.3.2.1

The LCO is proposed to be revised to include SFAS Table 3.3-4 Instrument String Functional Unit “F” in the listing of Functional Units for which only the Allowable Value is specified in the TS.

Bases 3/4.3.1 and 3/4.3.2

The Bases is proposed to be revised to include SFAS Table 3.3-4 Instrument String Functional Unit “F” in the discussion of instrumentation for which only the Allowable Value is specified in the TS.

LCO 3.1.2.9.b.1 and LCO 3.5.4.a

The allowable minimum available borated water volume in the BWST is proposed to be increased from 482,778 gallons to 500,100 gallons.

Bases 3/4.1.2

The discussion of the bases for the requirement for a minimum available volume of 482,778 gallons of borated water in the BWST is proposed to be revised to reference the new requirement of 500,100 gallons, which was conservatively rounded up from the calculated value of 500,051 gallons.

Bases 3/4.5.4

A reference to the value for the BWST minimum volume is proposed to be added.

The proposed changes are shown on the attached marked-up Operating License pages.

With respect to the proposed changes to TS LCO 3.1.2.9.b.1 and associated Bases 3/4.1.2, it is of note that an additional license amendment application, License Amendment Request (LAR) 97-0003, also affects TS 3/4.1.2.9 and Bases 3/4.1.2. Since the TS 3/4.1.2.9 requirements applicable to the BWST are duplicated by TS 3/4.5.4, LAR 97-0003 proposes that the portion of TS 3/4.1.2.9 applicable to the BWST, and the associated discussion in Bases 3/4.1.2, be deleted. Should LAR 97-0003 be approved by the NRC prior to approval of LAR 97-0011, the changes to TS 3/4.1.2.9 and Bases 3/4.1.2 proposed by LAR 97-0011 would no longer be necessary.

**SYSTEMS, COMPONENTS, AND ACTIVITIES AFFECTED:**

The Safety Features Actuation System (SFAS) instrumentation trip setpoints and allowable values used to determine the operability of the "BWST Level" channel are affected. The allowable minimum available borated water volume in the BWST is also affected.

**FUNCTIONS OF THE AFFECTED SYSTEMS, COMPONENTS, AND ACTIVITIES:**

The BWST is described in Section 6.3.2.6, "ECCS Coolant Storage," and Section 9.3.5, "Decay Heat Removal System," of the USAR. The BWST is one of the sources of borated water which is available for reactivity control during each mode of facility operation, for injection into the Reactor Coolant System (RCS). In addition to its boration system function, the BWST supplies borated water for the emergency core cooling system (ECCS) low pressure injection (LPI), high pressure injection (HPI), and containment spray pumps. The ECCS is described in USAR Section 6.3, "Emergency Core Cooling System." The BWST is also used for filling the refueling canal during refueling, as a source of makeup water to the spent fuel pool cooling system, and can serve as a water source for the makeup pumps.

As described in USAR Section 7.3, "Safety Features Actuation System (SFAS)," the function of the SFAS is to automatically prevent or limit fission product and energy release from the core, to isolate the containment vessel, and to initiate operation of the Engineered Safety Features (ESF) equipment in the event of a Loss-Of-Coolant Accident (LOCA). The SFAS consists of four redundant sensing channels and two redundant actuation channels.

The BWST level is one of the station variables monitored by SFAS. There are four BWST level transmitters, one for each SFAS sensing channel. The SFAS also monitors Reactor Coolant (RC) pressure and containment vessel pressure.

The equipment actuated by SFAS depends upon the severity of the accident, as indicated by the sensor channels. The actuated equipment is separated into five Incident Levels. A brief description of the five SFAS Incident Levels follows. Note that the listings of the actuated equipment are a summary. A complete listing is provided in USAR Figures 7.3-3 through 7.3-8, "SFAS Actuated Equipment Tabulation."

An Incident Level 1 actuation will occur when the RC Pressure – Low or Containment Pressure – High setpoints are reached. The containment purge and containment sampling systems are isolated, the emergency ventilation system is actuated, and the control room ventilation system is isolated.

An Incident Level 2 actuation also occurs when the RC Pressure – Low or Containment Pressure – High setpoints are reached. High pressure injection is initiated, the component cooling water system, service water system, containment air coolers, and emergency diesel generators are started, various containment isolation valves are closed, and the containment spray valves are opened (although containment spray pumps are not started).

An Incident Level 3 actuation occurs when the RC Pressure – Low-Low or Containment Pressure – High setpoints are reached. Low pressure injection is initiated and additional containment isolation valves are closed.

An Incident Level 4 actuation occurs when the Containment Pressure – High-High setpoint is reached. The containment spray system is started and additional containment isolation valves are closed.

An Incident Level 5 actuation occurs when the BWST level setpoint is reached, indicating that the BWST has been nearly depleted. A permissive is generated to allow a manual transfer to the containment emergency sump.

Following a LOCA, the BWST supplies suction to the ECCS low pressure injection (LPI) pumps, high pressure injection (HPI) pumps, and containment spray (CS) pumps. As noted above, when the BWST is nearly depleted, an SFAS permissive is generated to allow the suction of the pumps to be manually transferred to the containment emergency sump. A minimum of 360,000 gallons of borated water from the BWST must be injected in order to provide for sufficient net positive suction head for the pumps when drawing suction from the containment emergency sump. In addition, suction must be manually transferred to the containment emergency sump prior to the BWST reaching a level where pump cavitation (due to lack of net positive suction head when drawing suction from the BWST) or pump air entrainment (due to vortexing) would be of concern. Thus, the SFAS BWST level trip setpoint is constrained in both directions. The setpoint must be low enough, also taking into account the TS allowable minimum available borated water volume in the BWST, that instrument errors and uncertainties will not preclude the required volume of borated water from being delivered from the BWST to the ECCS. The setpoint must be high enough that the manual transfer can be made with sufficient time margin to protect the pumps from cavitation or vortexing.

BWST outlet valves DH7A and DH7B are open during normal plant operation. These valves are deenergized during Modes 1 through 4 to preclude postulated inadvertent closure of the valves in the event of a fire, which could result in a loss of the availability of the BWST. Containment emergency sump recirculation valves DH9A and DH9B are closed during normal plant operation. These valves are also deenergized during Modes 1 through 4 to preclude postulated inadvertent opening of the valves in the event of a fire, which could result in draining the BWST to the containment emergency sump and the loss of this water source for normal plant shutdown. These two sets of valves are interlocked to preclude the simultaneous opening of one or both sets of valves, which

could cause the draining of the BWST to the containment emergency sump. Valves DH9A and DH9B receive an SFAS signal (Incident Level 2) to ensure closure (for containment isolation) on low RCS pressure or high containment pressure following a LOCA and, at the same time, valves DH7A and DH7B receive an SFAS signal (Incident Level 2) to ensure opening and BWST alignment for safety injection. The SFAS permissive mentioned above (Incident Level 5) allows the blocking of the SFAS signal to these valves, so that a manual opening of valves DH9A and/or DH9B can be accomplished in conjunction with the simultaneous closing of valves DH7A and/or DH7B to effect the recirculation mode of safety injection. The BWST outlet valves close automatically when the sump valves open.

### **EFFECTS ON SAFETY:**

#### Table 3.3-4, Safety Features Actuation System Instrumentation Trip Setpoints

The current Trip Setpoints and Allowable Values for the SFAS BWST Level Instrument String were established by License Amendment Number 58 dated May 5, 1983 (DBNPS Log Number 1279), which was issued in response to a license amendment application dated October 14, 1982 (DBNPS Serial Number 862). The license amendment application noted that the proposed change was necessary since the existing setpoint range did not permit adequate margin for errors inherent in the instrumentation.

NRC Inspection Report 50-346/97-201, dated September 4, 1997 (DBNPS Log Number 5122), noted the need to resolve inconsistencies between various documents for the BWST setpoints, and also noted the need for a formal calculation to document certain design basis information. Follow-up NRC Inspection Report 50-346/98-003, dated March 10, 1998 (DBNPS Log Number 1-3949), noted that a new calculation, C-NSA-049.01-004, Revision 0, "Vortex Formation with ECCS Pump Suction From the BWST," had been performed to verify the minimum BWST level where the transfer of the ECCS suction should be initiated by operators. The Inspection Report also noted that calculation C-ICE-48.01-004, Revision 4, "SFAS BWST Low Level Setpoint," had been completed, and noted that an additional revision to this calculation was pending. NRC Inspection Report 50-346/98-011, dated September 3, 1998 (DBNPS Log Number 1-4003), documented completion of NRC review of Revision 5 to calculation C-ICE-48.01-004, and closed associated Inspection Follow-up Item 50-346/97-201-09.

Above-mentioned calculation C-NSA-049.01-004, Rev. 0, determined that with the transfer of ECCS pump suction from the BWST to the containment emergency sump initiated within 2 minutes after the low level permissive is received at 75", air entrainment would be sufficiently low such that vortexing would not be of concern. The BWST low level permissive would be acted upon quickly, since it would be anticipated by operators as the BWST is depleted.



The BWST Level setpoint analysis presented in Revision 5 to calculation C-ICE-48.01-004, "SFAS BWST Low Level Setpoint," is in accordance with ISA-S67.04, "Setpoints for Nuclear Safety Related Instrumentation," September 1994, and ISA-RP67.04, Part II, "Methodologies for the Determination of Setpoints for Nuclear Safety-Related Instrumentation," September 1994. The calculation used an analytical limit of 87 inches to determine the trip setpoint and Allowable Values. This analytical limit was based on the calculation C-NSA-049.01-004 value of 75 inches (which, as noted above, assumed a 2 minute operator response time) plus an additional 12 inch margin to allow an additional minute for operator response time, for a total of approximately 3 minutes. Considering instrument string uncertainty, including drift, a low trip setpoint of 108.5 inches and a low TS Allowable Value for Channel Functional Testing of 101.6 inches were calculated. The high TS Allowable Value for Channel Functional Testing of 115.4 inches was conservatively set to be the same amount from the trip setpoint as the low value. As described below, a new TS value for allowable minimum available borated water volume in the BWST was determined considering the requirement to inject a minimum of 360,000 gallons of borated water from the BWST.

The proposed changes to the SFAS BWST Level Allowable Values will make the Technical Specifications consistent with updated calculations using current setpoint methodology. Therefore, these changes will have no adverse effect on nuclear safety.

The application of the proposed Allowable Values to only the Channel Functional Test and not the Channel Calibration is consistent with the methodology of NUREG-1430, "Standard Technical Specifications - Babcock and Wilcox Plants," Revision 1, wherein the sensor is calibrated separately from the rest of the instrument string. The proposed removal of trip setpoint values for BWST level instrument string is also consistent with NUREG-1430. Nominal trip setpoints are specified in the setpoint analysis and will be listed in the "Instrument Index," a DBNPS-controlled document, for reference. The trip setpoints will also be listed in the USAR and subject to evaluation under the regulatory requirements of 10 CFR 50.59 prior to changing their values in the future. These are administrative changes and will have no adverse effects on nuclear safety.

#### LCO 3.3.2.1

The proposed LCO change is associated with the changes to TS Table 3.3-4, and is an administrative change that will have no adverse effect on nuclear safety.

#### Bases 3/4.3.1 and 3/4.3.2

The proposed Bases change is associated with the changes to TS Table 3.3-4, and is an administrative change that will have no adverse effect on nuclear safety.

LCO 3.1.2.9.b.1 and LCO 3.5.4.a

These LCOs include the requirements for the minimum available borated water volume in the BWST. Based on the revised SFAS BWST Level trip setpoint, a new value for allowable minimum available borated water volume in the BWST of 500,051 gallons was calculated, conservatively rounded to a TS value of 500,100 gallons. This value accounts for the injection of a minimum of 360,000 gallons of borated water from the BWST, ensuring that there will be sufficient net positive suction head for the ECCS pumps when drawing suction from the containment emergency sump. This value also maintains a suitable tolerance between maximum and minimum tank levels. Since the proposed revised requirement for minimum available borated water volume in the BWST is consistent with the revised SFAS BWST Level setpoint calculations and preserves the existing design basis with respect to the amount of water to be injected from the BWST prior to switchover to the containment emergency sump, there will be no adverse effect on nuclear safety.

Bases 3/4.1.2

The proposed Bases change is associated with the changes to LCO 3.1.2.9.b.1, and is an administrative change that will have no adverse effect on nuclear safety.

Bases 3/4.5.4

The proposed Bases change adds a reference to the value for the BWST minimum volume. This change is consistent with the change to LCO 3.5.4.a, and is an administrative change that will have no adverse effect on nuclear safety.

Operator Action Considerations

The current DBNPS Emergency Procedure DB-OP-02000, "RPS, SFAS, SFRCS Trip, or SG Tube Rupture," provides instructions to the operator for transferring LPI suction to the containment emergency sump, once BWST level decreases to a predetermined value.

As previously discussed, valves DH7A, DH7B, DH9A and DH9B are deenergized in Modes 1 through 4 to preclude an inadvertent change of position in the event of a fire. Valve HP31, HPI Pump 2 Recirculation Valve, is also deenergized during normal operation to prevent spurious operation in the event of a fire. The operator is directed to reenergize these valves shortly after it is identified that a LOCA has occurred. These actions would be completed well before the switchover is required.

The DB-OP-02000 instructions regarding transfer of the suction to the containment emergency sump are as follows:

- Determine if HPI can be stopped.

- If HPI can be stopped, then stop both HPI pumps.
- If HPI can not be stopped, then piggyback LPI to HPI suction by opening valves DH63 and DH 64 and closing valves HP32 and HP31.
- Verify both Makeup (MU) Pumps are stopped.
- Transfer both MU Pump Suctions to the MU Tank.
- Verify actions to close the breakers for valves DH7A, DH7B, DH9A, DH9B and HP31 is complete.
- Block SFAS incident level 2 for valves DH7A, DH9A, DH7B and DH9B.
- Open valves DH9A and DH9B using the handswitches.
- Check that valves DH7A and DH7B start to close as valves DH9A and DH9B start to open.
- Verify that the transfer is complete by checking the indicating lights on valves DH9A, DH9B, DH7A and DH7B and by checking that the low pressure injection flow was not significantly changed.

The DBNPS was originally licensed to require an automatic switchover from the BWST to the containment emergency sump during a LOCA after the BWST reaches a low level. However, on January 5, 1981, the DBNPS submitted a license amendment application (DBNPS Serial Number 675) proposing the conversion to manual switchover of the BWST to the containment emergency sump in lieu of automatic switchover. The intent of this change was to preclude potential damage due to inadvertent or premature alignment of ECCS to recirculation modes of operation. A supplemental letter submitted on January 15, 1981 (DBNPS Serial Number 678) noted that the minimum level requirements of the BWST would be met if the transfer is initiated within 4 minutes after the indicated BWST level drops to 8 feet.

On January 24, 1981, the NRC approved the license amendment via issuance of License Amendment Number 36 (DBNPS Log Number 651). Section 3.0 of the associated NRC Safety Evaluation Report (SER) states that the volume of water available in the BWST "is sufficient to provide the operator about 4 ½ minutes to *complete* the switchover procedures from the time he is alerted to commence." Since the NRC was assuming a valve stroke time of 90 seconds, this allowed 3 minutes to pass prior to *initiation* of operator action. Section 4.1 of the SER states: "With the assignment of a dedicated operator, the proximity of indicators and controls, and the procedurally required operator actions, there has been enough time allowed for operator actions, specifically, greater than three minutes for two operator actions necessary to transfer one train of the ECCS system."

On October 14, 1982, the DBNPS submitted a license amendment application (DBNPS Serial Number 862) proposing changes to the trip setpoints for BWST level to account for instrument error. The submittal stated that with the proposed changes, "the minimum level requirements of BWST will be met if the transfer is initiated within about 4 minutes after the indicated BWST level drops to the interlock setpoint." On May 5, 1983, the NRC approved the license amendment via issuance of License Amendment Number 58 (DBNPS Log Number 1279).

As described above, the proposed TS changes are based on calculations which assume that the transfer of ECCS pump suction from the BWST to the containment emergency sump is *initiated* within 3 minutes after the SFAS BWST low level permissive is received (completed within 4 ½ minutes). This allotted time for the operator action is the same as the value acceptable to the NRC when the manual switchover was originally licensed, however the scope of the required operator actions has changed. At the time License Amendment Number 36 was approved, there were essentially two required operator actions considered following receipt of the transfer permissive: blocking SFAS and opening valves DH9A and DH9B. As described above, the current DBNPS Emergency Procedure includes additional actions that precede the actual transfer: termination or piggybacking of HPI, and the transfer of MU Pump suctions to the MU Tank. In April, 1997, a simulator exercise was conducted in order to determine operator response time for effecting the transfer following a LOCA. The operating crew had no knowledge of the purpose of this exercise. The results indicated that the HPI Pumps were shutdown within the first minute and the transfer *completed* in 2.1 minutes. This exercise affirmed the conservatism of the calculations. Additionally, it is noted that the proposed change includes a more conservative design basis, i.e., retention of sufficient inventory to preclude significant air entrainment through vortex formation. This was not factored into the original design basis. Based on these considerations, the proposed TS changes will have no adverse effect on nuclear 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 the proposed changes do not change any accident initiator, initiating condition, or assumption.

The proposed changes would revise Technical Specification (TS) Table 3.3-4, Safety Features Actuation System Instrumentation Trip Setpoints, to administratively remove from TS the "Trip Setpoint" values for Instrument String Functional Unit "f", Borated Water Storage Tank (BWST) Level, and also modify

the TS "Allowable Values" entry for this same Functional Unit, consistent with updated calculations using current setpoint methodology. The Trip Setpoint values removed from TS will be maintained in DBNPS-controlled documents. The proposed changes to Limiting Condition for Operation (LCO) 3.3.2.1 and Bases 3/4.3.1 and 3/4.3.2 are associated with these changes.

Associated with the above changes, TS 3/4.1.2.9 and TS 3/4.5.4 are proposed to be revised to increase the minimum available BWST borated water volume requirement as specified in LCO 3.1.2.9.b.1 and LCO 3.5.4.a. The proposed changes to Bases 3/4.1.2 and Bases 3/4.5.4 are associated with these changes. These changes are consistent with the revised setpoint analyses.

- 1b. Not involve a significant increase in the consequences of an accident previously evaluated because the proposed changes do not invalidate assumptions used in evaluating the radiological consequences of an accident, do not alter the source term or containment isolation, and do not provide a new radiation release path.
2. Not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed changes do not introduce a new or different accident initiator or introduce a new or different equipment failure mode or mechanism.
3. Not involve a significant reduction in a margin of safety because the proposed changes establish an error analysis that has been shown to adequately preserve the margin of safety, and the trip setpoint values removed from the TS will be maintained in the DBNPS Updated Safety Analysis Report, with proposed changes subject to the regulatory requirements of 10 CFR 50.59.

#### **CONCLUSION:**

On the basis of the above, the Davis-Besse Nuclear Power Station 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 233.
2. DBNPS Updated Safety Analysis Report through Revision 21.
3. NUREG 1430, "Standard Technical Specifications - Babcock and Wilcox Plants," Revision 1, April 1995.
4. DBNPS Calculation C-ICE-48.01-004, "SFAS BWST Low Level Setpoint," Revision 5.
5. DBNPS Calculation C-NSA-049.01-004, "Vortex Formation With ECCS Pump Suction From the BWST," Revision 0.
6. Instrument Society of America Standards:  
  
ISA-S67.04, "Setpoints for Nuclear Safety Related Instrumentation," September 1994.  
  
ISA-RP67.04, Part II, "Methodologies for the Determination of Setpoints for Nuclear Safety-Related Instrumentation," September 1994.
7. DBNPS letter to NRC dated January 5, 1981 (DBNPS Serial Number 675).
8. DBNPS letter to NRC dated January 15, 1981 (DBNPS Serial Number 678).
9. NRC letter to DBNPS dated January 24, 1981, License Amendment Number 36 (DBNPS Log Number 651).
10. DBNPS letter to NRC dated October 14, 1982 (DBNPS Serial Number 862).
11. NRC letter to DBNPS dated May 5, 1983, License Amendment Number 58 (DBNPS Log Number 1279).
12. NRC Inspection Report 50-346/97-201 dated September 4, 1997 (DBNPS Log Number 5122).
13. NRC Inspection Report 50-346/98003 dated March 10, 1998 (DBNPS Log Number 1-3949).
14. NRC Inspection Report 50-346/98011 dated September 3, 1998 (DBNPS Log Number 1-4003).
15. DBNPS Emergency Procedure DB-OP-02000, "RPS, SFAS, SFRCS Trip, or SG Tube Rupture."