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Docket Number 50-346

License Number NPF-3

Serial Number 2671

August 24, 2000

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Subject: Implementation of License Amendment Number 241 (TAC Number MA6968)

Ladies and Gentlemen:

The purpose of this letter is to provide the documentation requested by the NRC of the planned implementation methodology for License Amendment Number 241 to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1, Operating License Number NPF-3. On May 4, 2000, the NRC issued License Amendment Number 241 (DBNPS Log Number 5660) in response to License Amendment Request (LAR) 97-0011, which was submitted on November 2, 1999 (DBNPS Serial Number 2612). The amendment revises Technical Specification (TS) Table 3.3-4, Safety Features Actuation System (SFAS) Instrumentation Trip Setpoints, to remove from TS the "Trip Setpoint" value for Instrument String Functional Unit "f", Borated Water Storage Tank (BWST) Level, and revises the "Allowable Values" entry for this same Functional Unit, consistent with updated calculations and current setpoint methodology. The amendment also increases the minimum available BWST borated water volume requirement, as specified in Limiting Condition for Operation (LCO) 3.5.4.a, to 500,100 gallons, and makes associated changes to Bases 3/4.5.4.

As stated in the LAR 97-0011 submittal, following a loss of coolant accident (LOCA), the BWST supplies suction to the emergency core cooling system (ECCS) low pressure injection (LPI) pumps, high pressure injection (HPI) pumps, and containment spray (CS) pumps. 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 must be

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constrained at both an upper and lower level. The setpoint must be low enough 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. This results in an Allowable Value range being established for the SFAS permissive setpoint, and being listed in TS Table 3.3-4 for Functional Unit "f", BWST Level.

The old range of TS Allowable Values for the BWST level setpoint, 88.3 to 101.7 inches of water, overlaps the new range, 101.6 to 115.4 inches of water, by only a small band (101.6 to 101.7 inches of water). Under the typical approach of implementing a license amendment, the new TS requirements would be implemented for all four channels simultaneously. However, since this method, in this case, would result in the setpoint being set at the low end of the new range, the DBNPS staff has determined that implementing the amendment in stages, channel-by-channel, is the preferred method for implementation in order to set the setpoint in the middle of the new range. Under this method, as the setpoint changes are completed for each channel, the amendment is declared "implemented" only for that channel. The amendment would be fully implemented once the setpoint changes are completed for all four channels. This method will allow implementation of the new conservative setpoints at this time, rather than delaying implementation until the next Mode 4 entry, which may not occur until 13RFO in the spring of 2002. The benefits of this method have been previously discussed with the NRC staff.

The DBNPS currently plans to commence amendment implementation on August 27, 2000, using the above methodology. It is estimated that a minimum of two days will be required to fully implement the amendment.

This letter provides license amendment implementation information to the NRC and requires no NRC response. However, 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,



GGC

MKL/laj

Enclosure

cc: J. E. Dyer, Regional Administrator, NRC Region III
S. P. Sands, NRC/NRR Project Manager
K. S. Zellers, NRC Region III, DB-1 Senior Resident Inspector
Utility Radiological Safety Board

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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