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Docket Number 50-346

License Number NPF-3

Serial Number 2813

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United States Nuclear Regulatory Commission
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Subject: Davis-Besse Nuclear Power Station Technical Specification Bases Update

Ladies and Gentlemen:

This letter is submitted in accordance with the requirements of the Davis-Besse Nuclear Power Station (DBNPS) Unit Number 1, Operating License, Appendix A, Technical Specifications, specifically, Technical Specification (TS) 6.17, "Technical Specifications (TS) Bases Control Program." Technical Specification 6.17.d requires the FirstEnergy Nuclear Operating Company (FENOC) to submit to the NRC on a frequency consistent with 10 CFR 50.71(e), changes made to the TS Bases and implemented without NRC prior approval. This submittal reflects the two changes to the Technical Specification Bases made and implemented by FENOC without prior NRC approval through September 30, 2002. Technical Specification Bases changes issued by the NRC following adoption of the DBNPS Technical Specification Bases Control Program are not included in this submittal.

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

Very truly yours,



MAR
Enclosures

cc: J. E. Dyer, Regional Administrator, NRC Region III
J. B. Hopkins, DB-1 NRC/NRR Senior Project Manager
C. S. Thomas, DB-1 NRC Senior Resident Inspector
Utility Radiological Safety Board

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Enclosure 1

List of
Technical Specification Bases Changes
(For Information Only)

<u>LAR No.</u>	<u>Affected TS Bases Section</u>
00-0001	TS Bases 3/4.4.1, Reactor Coolant Loops; and TS Bases 3/4.4.5, Steam Generators
01-0001	TS Bases 3/4.3.1 and 3/4.3.2, Reactor Protection System and Safety System Instrumentation

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Enclosure 2

Revised Technical Specification Bases Pages
(3 pages followed)

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.

3/4.4 REACTOR COOLANT SYSTEM

BASES

3/4.4.1 REACTOR COOLANT LOOPS

The plant is designed to operate with both reactor coolant loops in operation, and maintain DNBR above the minimum allowable DNB ratio during all normal operations and anticipated transients. With one reactor coolant pump not in operation in one loop, THERMAL POWER is restricted by the Nuclear Overpower Based on RCS Flow and AXIAL POWER IMBALANCE, ensuring that the DNBR will be maintained above the minimum allowable DNB ratio at the maximum possible THERMAL POWER for the number of reactor coolant pumps in operation or the local quality at the point of minimum DNBR equal to the DNB correlation quality limit, whichever is more restrictive.

In MODE 3 when RCS pressure or temperature is higher than the decay heat removal system's design condition (i.e. 330 psig and 350°F), a single reactor coolant loop provides sufficient heat removal capability. The remainder of MODE 3 as well as in MODES 4 and 5 either a single reactor coolant loop or a DHR loop will be sufficient for decay heat removal; but single failure considerations require that at least two loops be OPERABLE. Thus, if the reactor coolant loops are not OPERABLE, this specification requires two DHR loops to be OPERABLE.

Natural circulation flow or the operation of one DHR pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capacity of operator recognition and control.

The steam generator minimum water level requirement is met by verifying the indicated steam generator level is greater than or equal to the value that corresponds to the required actual minimum level above the tubesheet.

3/4.4.2 and 3/4.4.3 SAFETY VALVES

The pressurizer code safety valves operate to prevent the RCS from being pressurized above its Safety Limit of 2750 psig. Each safety valve is designed to relieve 336,000 lbs per hour of saturated steam at the valve's setpoint.

The relief capacity of a single safety valve is adequate to relieve any overpressure condition which could occur during shutdown. In the event that no safety valves are OPERABLE, an operating DHR loop, connected to the RCS, provides overpressure relief capability and will prevent RCS overpressurization. During operation, all pressurizer code safety valves must be OPERABLE to prevent the RCS from being pressurized above its safety limit of 2750 psig. The combined relief capacity of all of these valves is greater than the maximum surge rate resulting from any transient.

The relief capacity of the decay heat removal system relief valve is adequate to relieve any overpressure condition which could occur during shutdown. In the event that this relief valve is not OPERABLE, reactor coolant system pressure, pressurizer level and make up water inventory is limited and the capability of the high pressure injection system to

REACTOR COOLANT SYSTEM

BASES (Continued)

Whenever the results of any steam generator tubing inservice inspection fall into Category C-3, these results shall be reported to the Commission prior to resumption of plant operation. Such cases will be considered by the Commission on a case-by-case basis and may result in a requirement for analysis, laboratory examinations, tests, additional eddy-current inspection, and revision of the Technical Specifications, if necessary.

The steam generator water level limits are consistent with the initial assumptions in the USAR. While in MODE 3, examples of Main Feedwater Pumps that are incapable of supplying feedwater to the Steam Generators are tripped pumps or a manual valve closed in the discharge flowpath. The reactivity requirements to ensure adequate SHUTDOWN MARGIN are provided in plant operating procedures.

The steam generator minimum water level requirement is met by verifying the indicated steam generator level is greater than or equal to the value that corresponds to the required actual minimum level above the tubesheet.

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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.

Commitment

Due Date

None

N/A