



Kewaunee Nuclear Power Plant  
Operated by Nuclear Management Company, LLC

MISC-2004-0004

June 17, 2004

Mr. Patrick Loudon  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

KNPP Technical Specifications Bases Revision

Dear Mr. Loudon:

Nuclear Management Company (NMC), licensee for the Kewaunee Nuclear Power Plant (KNPP), submitted a revision to the Bases for the Technical Specification (TS) 4.8, "Auxillary Feedwater System". During the review of TS Amendment 172, a TS item number was changed (TS 3.4.b.2.B to TS 3.4.b.4.B) without a change to basis page TS B4-8.1. This change corrects that error.

These changes have been evaluated pursuant to the requirements of 10 CFR 50.59 in accordance with approval KNPP procedures and were determined to be acceptable.

Please follow the instructions on the enclosed page. If you have any technical or administrative questions regarding this revision, please contact Jerry Riste at (920) 388-8424.

Sincerely,

Gerald Riste  
Regulatory Affairs Manager (Acting)

Enclosures

cc: KNPP QA Vault (w/o enclosures)

JUN 24 2004

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## TECHNICAL SPECIFICATION REVISIONS

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	CAP 017038	3/30/2004	TS B4.8-1		N/A	3/30/2004	TS B4.8-1	TS B4.8-1

## **BASIS**

The Auxiliary Feedwater System (AFW) mitigates the consequences of any event that causes a loss of normal feedwater. The design basis of the AFW System is to remove decay and residual heat by delivering the minimum required flow to at least one steam generator until the Reactor Coolant System (RCS) is cooled to the point of placing the Residual Heat Removal System into operation.

In accordance with ASME Code Section XI, Subsection IWP, an in-service test of each auxiliary feedwater pump shall be run nominally every 3 months (quarterly) during normal plant operation. It is recommended that this test frequency be maintained during shutdown periods if this can be reasonably accomplished, although this is not mandatory. If the normally scheduled test is not performed during a plant shutdown, then the motor-driven pumps shall be demonstrated OPERABLE within 1 week exceeding 350°F; and the turbine-driven pump shall be demonstrated OPERABLE within 72 hours of exceeding 350°.

Quarterly testing of the AFW pumps is used to detect degradation of the component. This type of testing may be accomplished by measuring the pump's developed head at one point of the pump characteristic curve. This verifies that the measured performance is within an acceptable tolerance of the original pump baseline performance.

TS 3.4.b requires all three AFW pumps be OPERABLE prior to heating the RCS average temperature > 350°F. It is acceptable to heat the RCS to > 350°F with the turbine-driven pump inoperable for a limited time period of 72 hours. The wording of TS 3.4.b.4.B and TS 4.8.b allows delaying the testing until the steam flow is consistent with the conditions under which the performance acceptance criteria were generated.

The discharge valves of the two motor-operated pumps are normally open, as are the suction valves from the condensate storage tanks and the two valves on a cross tie line that directs the turbine-driven pump discharge to either or both steam generators. The only valve required to function upon initiation of auxiliary feedwater flow is the steam admission valve on the turbine-driven pump. Proper opening of the steam admission valve will be demonstrated each time the turbine-driven pump is tested.