JUN 25 2008

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10 CFR 50.90

U S Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant Units 1 and 2
Dockets 50-282 and 50-306
License Nos. DPR-42 and DPR-60

Supplement to License Amendment Request (LAR) Adopting Provisions of Regulatory Guide (RG) 1.52, Revision 3

Reference: 1. License Amendment Request (LAR) Adopting Provisions of Regulatory Guide (RG) 1.52, Revision 3, dated July 19, 2007, Accession Number ML072010452.

In Reference 1, Nuclear Management Company, LLC (NMC) submitted an LAR for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2 to revise TS 3.6.9, "Shield Building Ventilation System (SBVS)," TS 3.7.12, "Auxiliary Building Special Ventilation System (ABSVS)," TS 3.7.13, "Spent Fuel Pool Special Ventilation System (SFPSVS)," and TS 5.5.9, Ventilation Filter Testing Program (VFTP)," to incorporate system and filter testing changes consistent with RG 1.52, "Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants", Revision 3.

Pursuant to requests from the NRC Staff, this supplement provides proposed Bases pages B 3.6.9-2, B 3.7.12-1, B 3.7.12-2, and B 3.7.13-1 (for information only) which have been revised as shown in the Enclosure to this letter. The enclosed Bases page B 3.6.9-2 supersedes the page submitted in Reference 1; the other Bases pages in the Enclosure were not previously submitted. NMC submits this supplement in accordance with the provisions of 10 CFR 50.90.

The supplemental information provided in this letter does not impact the conclusions of the Determination of No Significant Hazards Consideration and Environmental Assessment presented in the July 19, 2007 submittal.

In accordance with 10 CFR 50.91, NMC is notifying the State of Minnesota of this LAR supplement by transmitting a copy of this letter and enclosure to the designated State Official.

If there are any questions or if additional information is needed, please contact Mr. Dale Vincent, P.E., at 1-651-388-1121.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on JUN 25 2008

Michael D. Wadley
Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2
Nuclear Management Company, LLC

Enclosures (1)

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNRC
State of Minnesota

ENCLOSURE

Bases Pages (Markup)

(For Information Only)

B 3.6.9-2
B 3.7.12-1
B 3.7.12-2
B 3.7.13-1

4 pages follow

BASES

BACKGROUND (continued)

system initiates and maintains a negative air pressure in the shield building by means of filtered exhaust ventilation of the shield building following receipt of a safety injection (SI) signal. The system is described in Reference 2.

The prefilters remove large particles in the air, and the moisture separators remove entrained water droplets present, to prevent excessive loading of the HEPA filters and charcoal adsorbers. The h~~H~~eaters are designed to dry incoming air at 100% saturation by increasing the temperature of the air entering the charcoal bed. The air is then dry enough to support the charcoal adsorber iodine removal efficiency requirements~~included to reduce the relative humidity of the airstream~~. ~~Continuous operation of each train, for at least 10 hours per month, with heaters on, reduces moisture buildup on their HEPA filters and adsorbers.~~

The SBVS reduces the radioactive content in the shield building atmosphere following a DBA. Loss of the SBVS could cause site boundary doses, in the event of a DBA, to exceed the values given in the licensing basis.

APPLICABLE SAFETY ANALYSES

The SBVS design basis is established by the consequences of the limiting DBA, which is a LOCA. The accident analysis (Ref. 3) assumes that only one train of the SBVS is functional due to a single failure that disables the other train. The accident analysis accounts for the reduction in airborne radioactive material provided by the remaining one train of this filtration system. The amount of fission products available for release from containment is determined for a LOCA.

The modeled SBVS actuation in the safety analyses is based upon a worst case response time following an SI initiated at the limiting setpoint. The total response time, from accident initiation to attaining a negative pressure in the shield building, is less than 4.5 minutes. This response time bounds the signal delay, diesel generator startup and sequencing time, system startup time, and time for the system to attain the required pressure after starting.

B 3.7 PLANT SYSTEMS

B 3.7.12 Auxiliary Building Special Ventilation System (ABSVS)

BASES

BACKGROUND

The ABSVS is a standby ventilation system, common to the two units, that is designed to collect and filter air from the Auxiliary Building Special Ventilation (ABSV) boundary following a loss of coolant accident (LOCA). The ABSV boundary contains those areas within the auxiliary building which have the potential for collecting significant containment leakage that could bypass the shield building and leakage from systems which could recirculate primary coolant during LOCA mitigation.

The ABSVS consists of two independent and redundant trains. Each train consists of a heater, a prefilter, a high efficiency particulate air (HEPA) filter, an activated charcoal adsorber section for removal of gaseous activity (principally iodines), and a fan.

Ductwork, dampers, and instrumentation also form part of the system. The system initiates filtered ventilation of the ABSV boundary following receipt of a safety injection (SI) signal, high radiation signal or manual initiation. The radiation signal is not credited in the USAR for accident mitigation.

The exhaust from the main condenser air ejector is directed to the ABSVS for filtering prior to exhausting from the plant via the shield building stack to mitigate steam generator tube leakage.

When the ABSVS actuates, the normal nonsafeguards supply and exhaust dampers close automatically, and the Auxiliary Building Normal Ventilation System supply and exhaust fans trip. The prefilters remove any large particles in the air, and with the heaters, reduce the level of entrained water droplets present, to prevent excessive loading of the HEPA filters and charcoal adsorbers. The ~~primary purpose of the~~ heaters are designed to dry incoming air at 100% saturation by increasing the temperature of the air entering the charcoal bed. The air is then dry enough to support the charcoal

adsorber iodine removal efficiency requirements~~is to maintain the relative humidity at an acceptable level~~.

BASES

BACKGROUND (continued)

The ABSVS would typically only be used for post accident atmospheric cleanup functions. The ABSVS and ABSV boundary are discussed in the USAR (References 1, 2 and 3).

APPLICABLE SAFETY ANALYSES

The design basis of the ABSVS is established by the large break LOCA. The potential leakage paths from the containment to the auxiliary building are discussed in Reference 1. The system evaluation assumes a passive failure of the ECCS outside containment, such as an RHR pump seal failure, during the recirculation mode (Ref. 4). In such a case, the system limits radioactive release to within the 10 CFR 100 (Ref. 5) limits. The analysis of the effects and consequences of a large break LOCA is presented in References 3 and 4. The ABSVS also actuates following a small break LOCA, in those cases where the ECCS goes into the recirculation mode of long term cooling, to clean up releases of smaller leaks, such as from valve stem packing.

The ABSVS satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii).

LCO

Two independent and redundant trains of the ABSVS are required to be OPERABLE to ensure that at least one is available, assuming that a single failure disables the other train.

This OPERABILITY requirement ensures that the atmospheric releases, in the event of a Design Basis Accident (DBA) in containment, from ECCS pump leakage and containment leakage which bypasses the shield building would not result in doses exceeding 10 CFR 100 limits (Ref. 5).

In order for the ABSVS to be OPERABLE, the Turbine Building roof exhauster fans must be capable of being de-energized within 30 minutes following a loss of coolant accident.

B 3.7 PLANT SYSTEMS

B 3.7.13 Spent Fuel Pool Special Ventilation System (SFPSVS)

BASES

BACKGROUND

In this Specification, the spent fuel pool enclosure refers to the concrete building that contains the racks and storage pool used to store new and spent fuel.

SFPSVS refers to that portion of the Spent Fuel Special and Containment Inservice Purge system that provides the spent fuel pool enclosure air cleanup function.

The SFPSVS filters airborne radioactive particulates from the area of the spent fuel pool following a fuel handling accident in that area.

The Spent Fuel Pool Special Ventilation fans exhaust air to prefilter-absolute-charcoal (PAC) filters, then to the associated Shield Building vent stack (Unit 1 for Train A; Unit 2 for Train B).

The SFPSVS consists of two independent and redundant trains, each capable of meeting the design requirements.

Each train consists of a heater, a prefilter, a high efficiency particulate air (HEPA) filter, an activated charcoal adsorber section for removal of gaseous activity (principally iodines), and a fan.

Ductwork, dampers, and instrumentation also form part of the system. The h~~H~~eaters are designed to dry incoming air at 100% saturation by increasing the temperature of the air entering the charcoal bed. The air is then dry enough to support the charcoal adsorber iodine removal efficiency requirements~~function to reduce the relative humidity of the airstream~~.

The system initiates filtered ventilation of the spent fuel pool enclosure following receipt of a high radiation signal from a radiation detector located in the exhaust ducting of the spent fuel pool normal ventilation system. One detector actuates Train A equipment; the other actuates Train B equipment.