

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001



SAFETY EVALUATION REPORT
PRAIRIE ISLAND NUCLEAR GENERATING COMPANY
DOCKET NO. 72-10
LICENSE NO. SNM-2506

Summary

This safety evaluation report (SER) documents the U.S. Nuclear Regulatory Commission (NRC) staff's review and evaluation of an email request (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17324B332) from Prairie Island personnel to reconcile potential inconsistencies in NRC Materials License No. SNM-2506. The NRC staff issued the renewal of SNM-2506 on December 9, 2015 (ADAMS Accession No. ML15336A101).

EVALUATION

While preparing revised procedures to implement the renewed license, Prairie Island personnel requested the NRC to evaluate two potential inconsistencies in the license:

1. License condition 22(a) sets inspection intervals that are to be "not less than" those in the American Concrete Institute (ACI) Code when the NRC clearly intended the intervals "not to exceed" those in the ACI Code.
2. The renewed license SER (ADAMS Accession No. ML15336A230) provides acceptance criteria that may conflict with those required by the renewed SNM-2506 license.

For Item 1, the NRC staff evaluated License Condition 22(a) and concluded that the language requiring inspection intervals to be "not less than" those in the ACI Code (i.e., 5 years) was included in error. As Section 3.5.1.3 of the SER for the SNM-2506 license renewal makes clear, the NRC staff expects visual inspections of accessible areas of the concrete pads to be performed at intervals "not to exceed" 5 years. Accordingly, the NRC staff had intended to use the phrase "not to exceed" instead of "not less than" in License Condition 22(a). Further, the SER states that the staff determined that the specific inspection intervals and areas of inspection coverage in the Aging Management Program (AMP) for concrete pads are appropriate based upon the technical references pertinent to age related degradation of concrete in similar environments, including American Concrete Institute guides (ACI) 349.3R-02 (ACI, 2002), ACI 201.1R-08 (ACI, 2008), American National Standards Institute/American Society of Civil Engineers guidelines (ANSI/ASCE) 11-99 (ASCE, 2000), and reactor renewal guidance provided in NUREG-1801 (NRC, 2010b). Because the license condition, as written, appears to prevent inspections from taking place unless 5 years has elapsed since the last inspection, the NRC staff determined that the license should be amended to correct the apparent error and to clarify that visual inspections must be performed, at a minimum, every five years.

For Item 2, Prairie Island staff provided the NRC staff their "Position Paper for ISFSI Renewed License (SNM-2506) Disposition of Acceptance Criteria for Neutron Monitoring Program" (ML17324B334) for review. License Condition 24 describes neutron shield requirements as "no upward trending of measured dose rate." This is a comprehensive requirement that demonstrates the cask meets the requirements of 10 CFR 72.104(a), (b), and (c). The SER for

the renewed license includes the NRC staff's evaluations of the AMP parameters in Section 3.5.1.2. Prairie Island's position paper argued, among other things, that the additional criteria in the SER "should be treated as supplemental, and may be used to help determine if there is a loss of intended function." The NRC staff agrees. The NRC staff intended these discussions on the acceptance criteria to serve as information for Prairie Island to consider when implementing the AMP, not as regulatory requirements. The NRC staff acknowledges that there may exist multiple ways to implement the AMP and the detailed procedures to implement the AMP are to be developed when the ISFSI enters the period of extended operation under the renewed license. The licensee can use any approach that can demonstrate the independent spent fuel storage installation meets the requirements of 10 CFR 72.104. The additional criteria in the SER regarding the AMP are consistent with the regulatory requirement and the Generic Aging Lessons Learned (GALL) report for reactor license renewal. Therefore, no change to the license is required.

CONDITIONS

The NRC is amending License Condition 22(a) of Materials License No. SNM-2506 to replace "not less than" with "not to exceed." The amended License Condition 22(a) now reads:

"The licensee shall perform visual inspections of all accessible concrete pad areas at intervals not to exceed those specified in ACI 349.3R-96."

CONCLUSION

Based on the statements and representations in the licensee's request, the NRC staff will amend SNM-2506 to correct an apparent error and concludes that the amendment is consistent with the Atomic Energy Act of 1954, as amended, and NRC's regulations in 10 CFR Part 72.