

Allen, William

From: Adams, Glenn D. <Glenn.Adams@xenuclear.com>
Sent: Tuesday, May 20, 2014 1:23 PM
To: Allen, William
Subject: RE: Revised Page Review

Chris,

We have reviewed the revised pages and find that they appropriately address the corrections.

We look forward to re-issuance. We understand that the reissuance will not revise the SER, but is it possible for your cover letter to acknowledge the SER errors identified in ML14077A460?

Thank you,
Glenn Adams

From: Allen, William [<mailto:William.Allen@nrc.gov>]
Sent: Monday, May 19, 2014 1:13 PM
To: Adams, Glenn D.
Subject: Revised Page Review

I have attached PDFs of the license and tech spec pages we plan to re-issue to you. Please look them over and let me know if the changes are correctly identified by 5/23. Although it is not important, I wanted to notify you ahead of time that the signature for the corrected license pages will be different from the original amendment license because my branch chief will be on rotation when the corrected pages are sent to you. Call if you have any questions or concerns.

Chris Allen

Prairie Island ISFSI Amendment 8 Technical Specification Page Changes

Remove Page

4.0-5

Insert Revised Page

4.0-5

4.0 DESIGN FEATURES

4.3.2 TN-40HT Neutron Absorbers Acceptance Testing (continued)

phase, e.g., B_4C , TiB_2 , or AlB_2 , if the mean value of all the test results less two standard deviations meets the specified thermal conductivity, no further testing of that material is required. This exemption may also be applied to the same type of material if the matrix of the material changes to a more thermally conductive alloy (e.g., from 6000 to 1000 series aluminum), or if the boron content is reduced without changing the boron phase. The thermal analysis in SAR Chapter A3.3.2.2 considers a dual plate basket construction base model with 0.125" thick neutron absorber with a 0.312" thick aluminum 1100 plate. This model gives the bounding values for the maximum component temperatures. Either a dual plate basket construction or an alternate single plate (borated aluminum or MMC) construction basket may be utilized. For the dual plate construction, the specified thickness of the neutron absorber may vary, and the thermal conductivity acceptance criterion for the neutron absorber will be based on the nominal thickness specified. In either construction type, to maintain the thermal performance of the basket, the minimum thermal conductivity shall be such that the total thermal conductance (sum of conductivity * thickness) of the neutron absorber and the aluminum 1100 plate shall at least equal the conductance assumed in the thermal analysis, 3.55 BTU/hr-deg F. Samples of the acceptance criteria for various neutron absorber thicknesses are highlighted in Table 4.3-3. The aluminum 1100 plate does not need to be tested for thermal conductivity; the material may be credited with the values published in the ASME Code Section II part D. The neutron absorber material need not be tested for thermal conductivity if the nominal thickness of the aluminum 1100 plate is 0.320 inch or greater.

c. Neutron Transmission Testing of Neutron Absorbers

Neutron Transmission acceptance testing procedures shall be subject to approval by Transnuclear. Test coupons shall be removed from the rolled or extruded production material at locations that are systematically or probabilistically distributed throughout the lot. Test coupons shall not exhibit physical defects that would not be acceptable in the finished product, or that would preclude an accurate measurement of the coupon's physical thickness. A lot is defined as all the pieces produced from a single ingot or heat or from a group of billets from the same heat. If this definition results in a lot size too small to provide a meaningful statistical analysis of results, an

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15. No spent nuclear fuel shall be allowed to be loaded until such time as the following preoperational license conditions are satisfied:
- A A training exercise (Dry Run) of all spent fuel storage cask loading and handling activities shall be held, which shall include, but not be limited to, those listed, and which need not be performed in the order listed:
 - a. Moving cask in and out of spent fuel pool area
 - b. Loading fuel assembly (using dummy assembly)
 - c. Cask drying, sealing, and cover gas backfilling operations
 - d. Moving cask to, and placing it on, the storage pad
 - e. Returning the cask to the auxiliary building
 - f. Unloading the cask
 - g. Decontaminating the cask
 - h. All dry-run activities shall be done using written procedures
 - i. The activities listed above shall be performed or modified and performed to show that each activity can be successfully executed before actual fuel loading.
 - B The Prairie Island Nuclear Generating Plant Emergency Plan shall be reviewed and modified, as required, to include the ISFSI.
 - C A training module shall be developed for the Prairie Island Nuclear Generating Plant Training Program, establishing an ISFSI Training and Certification Program that will include the following:
 - a. Cask Design (overview)
 - b. ISFSI Facility Design (overview)
 - c. ISFSI Safety Analysis (overview)
 - d. Fuel loading and cask handling procedures and off-normal procedures
 - e. ISFSI License (overview).
 - D The Prairie Island Nuclear Generating Plant Radiation Protection Procedures shall be reviewed and modified, as required, to include the ISFSI.
 - E The Prairie Island Nuclear Generating Plant Administrative Procedures shall be reviewed and modified, as required, to include the ISFSI.

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- F A procedure shall be developed and implemented for the documentation of the characterizations performed to select spent fuel to be stored in the casks. Such procedure shall include independent verification of fuel assembly selection by an individual other than the original individual making the selection.
 - G A procedure shall be developed and implemented for two independent determinations (two samples analyzed by different individuals) of the boron concentration in the water used to fill the cask cavity for fuel loading and unloading activities.
 - H Written procedures shall be implemented to describe actions to be taken during operation, off-normal, and emergency conditions.
16. The design, construction, and operation of the ISFSI shall be accomplished in accordance with the U.S. Nuclear Regulatory Commission Regulations specified in Title 10 of the U.S. Code of Federal Regulations. All commitments to the applicable NRC regulatory guides and to engineering and construction codes shall be carried out.
 17. Fuel and cask movement and handling activities that are to be performed in the Prairie Island Nuclear Generating Plant Auxiliary Building will be governed by the requirements of the Prairie Island Nuclear Generating Plant Facility Operating Licenses (DRP-42 and -60) and associated Technical Specifications.
 18. The TN-40HT confinement boundary base material and associated welds shall be helium leak tested at the fabricator in accordance with ANSI N 14.5 to "leaktight" criteria. The TN-40 confinement boundary base material and associated welds shall be helium leak tested at the fabricator in accordance with ANSI N14.5 to "leaktight" criteria, if fabricated after the date of Amendment No. 7 approval.
 19. This license is effective as of the date of issuance shown below.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

DRAFT

Michele Sampson, Chief
 Licensing Branch
 Division of Spent Fuel Storage and Transportation
 Office of Nuclear Material Safety
 and Safeguards
 Washington, DC 20555

Date of Issuance: October 19, 1993

As amended by
 Amendment No. 8 dated March , 2014