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

13 December 2019

**Subject: Reportable Occurrence on December 4, 2019 at the Kansas State University
TRIGA Mark II Nuclear Reactor Facility**

To Whom It May Concern:

On December 5, 2019, I notified the NRC of a reportable occurrence involving discovery of a surveillance requirement violation on December 4, 2019. The surveillance requirement for fuel inspection was identified as not being met for four elements. According to Technical Specifications (TS), surveillance requirements must be met to consider equipment/components operable. Failure to perform a surveillance within the required time interval shall result in the component being inoperable. Due to an inspection tracking sheet sorting error, four fuel elements were not marked to be inspected and were subsequently identified as being outside of the required surveillance frequency.

This letter documents the reportable occurrence in accordance with reporting requirements.

Background

The relevant surveillance requirement is TS 4.7.3: B, C, D, E, and F RING elements comprising approximately 1/3 of the core SHALL be visually inspected annually for corrosion and mechanical damage such that the entire core SHALL be inspected at 3-year intervals, but not to exceed 38 months.

Review of fuel element inspection and tracking records revealed a discrepancy in last inspection dates between multiple documents.

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NRR

Reportable Occurrence Description

On December 4, 2019 at approximately 11:45 AM CST the Reactor Supervisor notified the Reactor Manager of a possible surveillance deficiency involving fuel element inspections. At the time of notification, no operations were occurring, and a quick review of inspection records was conducted. The initial review of records presented two documents indicating different inspection dates for the same fuel elements. At approximately 12:18 PM CST, the Reactor Manager provided verbal notification to the Reactor Supervisor of operations suspension to conduct a comprehensive review of fuel inspection records. The comprehensive review was completed at approximately 6:00 PM CST and discovered a surveillance deficiency for four fuel elements. The deficiency was the result of mismatch in fuel element serial number with last inspection date in an inspection tracking spreadsheet document. The mismatch occurred because of user error in properly sorting the records by inspection date. Following the review and identification of four elements not meeting surveillance requirements, a reportable occurrence was declared and logged in the operations logbook indicating operations suspension until review and approval for restart by the Reactor Safeguards Committee (RSC).

Immediate Corrective Action and Efficacy

Upon declaration of the reportable occurrence, operations were administratively suspended at approximately 6:00 PM CDT on December 4, 2019. At the time of declaration, the reportable occurrence was communicated to the Reactor Supervisor. Other members of the reactor staff were notified and provided a description of the reportable occurrence by email on December 4, 2019 at approximately 6:18 PM CST. Immediately following notification of the NRC, the RSC was emailed on December 5, 2019 at 10:15 AM CDT with a description of the occurrence and planned additional corrective actions. The suspension of operations was effective in preventing further TS violations.

Summary of Findings

The main cause of the reportable occurrence was an error in tracking fuel inspection dates and determining which elements required inspection.

Additional Corrective Actions

The following actions were taken:

1. Reactor staff review of the reportable occurrence on 12/6/2019.
2. Four elements not meeting the surveillance frequency requirement were inspected on 12/6/2019.
3. Complete review of fuel inspection records including gauging records finished on 12/11/19.
4. Revised fuel inspection tracking document on 12/13/19.

Please contact me if additional information is required. Resumption of operations will only occur following RSC approval based on review of the reportable occurrence including corrective actions taken.

I swear under penalty of perjury that the foregoing is true and correct.

Regards,



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