



March 5, 2021

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

Subject: Report of NCNR safety limit exceeded

Ref: NRC Event Report 55094, Docket 50-184, Facility License TR-5

Sirs and Madams:

This is a follow up to the above referenced event report of an occurrence on February 3, 2021 in which the NCNR reported a detection of fission products upon reactor startup.

Review of in-core video footage and evaluation of samples from the primary coolant has led us to conclude that a single fuel element is damaged, that parts of that element likely exceeded the fuel safety limit of 450 °C as specified in TS 2.1, and that all consequences of this incident are well bounded by the analysis of the Maximum Hypothetical Accident in the NBSR Safety Analysis Report. Although there has been no new occurrence and reactor conditions remain quiescent, we have opted to report the safety limit conclusion to the NRC in accordance with TS 6.6.1(3). This was reported by telephone to the NRC Operations Center on March 2, 2021, and we are submitting this 14-day written report, both in accordance with TS 6.7.2(1)(b).

It should be noted that a complete evaluation of the extent of conditions in the fuel element will likely take several months. As stated in our report of February 16, 2021, during the event all reactor protection systems worked as designed. Determination of the root cause of this event remains under investigation and corrective actions will be implemented and shared with the NRC before we ask for authorization for reactor restart.

This report has been reviewed by the NCNR Safety Evaluation Committee in accordance with TS 6.6.1(3). Please feel free to contact the undersigned if you have any questions.

Respectfully submitted,

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