

February 1, 2023

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

Subject: Docket Number 50-184 license amendment request

Dear Sirs/Madams:

The NIST Center for Neutron Research (NCNR) hereby submits a request for an exigent license amendment under 10CFR50.91(a)(6) to make specified changes to the NBSR Safety Analysis Report. We have made the decision not to reuse any fuel assemblies that were present in the core during the fuel failure event of February 3, 2021, and, as a result, must use an Alternate Fuel Management Scheme (AFMS) for the upcoming restart of the reactor. As restart preparations enter their final stages, an exigent license amendment is justified in that it is necessary to allow completion of refueling and a subsequent timely restart of the NBSR to continue NCNR's mission as one of the nation's premier neutron science centers. The proposed analysis for AFMS has been discussed at length with NRC staff and we only recently concluded that this LAR is the best path forward to clarify analysis requirements that will lead to a timely reactor restart. The proposed amendment will add SAR section 4.5.1.1.3, "Alternate Fuel Management Schemes (AFMS)".

Attached please find 1) Proposed SAR changes, 2) Finding of No Significant Hazards analysis, 3) Engineering Change Notice for the AFMS procedure, including 50.59 analysis, and 4) The Engineering Procedure for this analysis, NBSR-0018-DOC-00.

Sincere	

Robert Dimeo Director NIST Center for Neutron Research

I declare under penalty of perjury that the following is true and correct.

Executed on February 1, 2023

