



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

February 23, 2021

Dr. Wei Ji, Facility Director
Rensselaer Polytechnic Institute
110 8th Street, JEC Room 5040
Troy, NY 12180-3590

SUBJECT: RENSSELAER POLYTECHNIC INSTITUTE – REQUEST FOR ADDITIONAL INFORMATION RE: LICENSE AMENDMENT REQUEST FOR MODIFICATION TO THE RESTRICTED AND EXCLUSION AREAS FOR THE RENEWED FACILITY OPERATING LICENSE NO. CX-22 (EPID: L-2019-LLA-0254)

Dear Dr. Ji:

By letter dated July 11, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19205A066), as supplemented by letters dated February 20, 2020, and August 24, 2020 (ADAMS Accession Nos. ML20057D420, and ML20238B853, respectively), the Rensselaer Polytechnic Institute (RPI) submitted a license amendment request (LAR) for the RPI Critical Experiments Facility. The proposed LAR would modify the RPI's technical specifications regarding its restricted and exclusion areas.

The U.S. Nuclear Regulatory Commission (NRC) staff identified additional information still needed to continue its review of the LAR, as described in the enclosed request for additional information (RAI). As discussed by teleconference on January 14, 2021, and on February 16, 2021, provide a response to the RAI within sixty (60) days of this letter. Following receipt of the complete response to the RAI, the NRC staff will continue its review of the LAR.

The response to the RAI must be submitted in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.4, "Written communications," and pursuant to 10 CFR 50.30(b), "Oath or affirmation," be executed in a signed original document under oath or affirmation. Information included in the response that you consider sensitive or proprietary, and seek to have withheld from public disclosure, must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Any information related to safeguards should be submitted in accordance with 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

Based on the response date provided above, the NRC staff expects to complete its review and make a final determination on the LAR by September 30, 2021. This date could change due to several factors including a need for further RAIs, unanticipated changes to the scope of the review, unsolicited supplements to the application for amendment, and others. This date can also be reduced by providing prompt response to RAIs.

If the forecasted date changes, the NRC staff will notify you in writing of the new date and an explanation of the reason for the change. In the case that the NRC staff requires additional information beyond that provided in the response to this RAI, the NRC staff will request that information by separate correspondence.

If you have any questions, please contact me at (301) 415-1404, or by electronic mail at Xiaosong.Yin@nrc.gov.

Sincerely,

Xiaosong Yin, Project Manager
Non-Power Production and Utilization Facility
Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No. 50-225
License No. CX-22

Enclosure:
As stated

cc: See next page

Rensselaer Polytechnic Institute

Docket No. 50-225

cc:

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Test, Research and Training
Reactor Newsletter
Attention: Ms. Amber Johnson
Dept of Materials Science and Engineering
University of Maryland
4418 Stadium Drive
College Park, MD 20742-2115

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 DATED: FEBRUARY 23, 2021

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NRR-088

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REQUEST FOR ADDITIONAL INFORMATION

REGARDING AMENDMENT TO RENEWAL OF

FACILITY OPERATING LICENSE NO. CX-22

RENSELAER POLYTECHNIC INSTITUTE

CRITICAL EXPERIMENTS FACILITY

DOCKET NO. 50-225

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the license amendment request (LAR) and the responses to NRC's request for additional information, for compliance with the appropriate regulations in Title 10 of the *Code of Federal Regulations* (10 CFR). Based on its review, the NRC staff requires the following additional information to continue its review of the LAR.

In the LAR, Rensselaer Polytechnic Institute did not provide information used to justify the release of land previously contained within the restricted area of the facility. The NRC staff needs further information to determine if the release of land from licensee control was properly evaluated, authorized or appropriate.

Applicable Regulatory Requirements:

The regulation in 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning," paragraph (g)(4), states, in part:

- (i) The licensed site area, as originally licensed, which must include a site map and any acquisition or use of property outside the originally licensed site area for the purpose of receiving, possessing, or using licensed materials;
- (ii) The licensed activities carried out on the acquired or used property; and
- (iii) The release and final disposition of any property recorded in paragraph (g)(4)(i) of this section, the historical site assessment performed for the release, radiation surveys performed to support release of the property and the methods employed to ensure that the property met the radiological criteria of 10 CFR Part 20, Subpart E, at the time the property was released.

Additional Information Needed:

Provide the analysis performed to evaluate the acceptability of the release of land from licensee control including:

- the historical site assessments of the released property,
- the determination of the property to be radiologically impacted or non-impacted,
- the radiological surveys of the released property,

Enclosure

- the results of any 10 CFR 50.59, "Changes, tests and experiments," evaluation for release of the property,
- the evaluation of the environmental impact of the release, and
- the previous correspondence with the NRC staff regarding the release of the property.

If information above is not available, or was not performed, confirm what was performed including the following:

- Specific reference of prior reports and documents any radiological releases, or documentation of non-releases to the land that was released for unrestricted use beyond the restricted area boundary,
- Radiological surveys documenting results for activation, corrosion, and fission products at and beyond the restricted area boundary to demonstrate releasability of land.