



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

November 27, 2020

Dr. Robert Bean, Director
Purdue University Radiation Laboratory
School of Nuclear Engineering
400 Central Drive
West Lafayette, IN 47907-2017

SUBJECT: PURDUE UNIVERSITY – ACCEPTANCE OF THE APPLICATION FOR A
LICENSE AMENDMENT RE: MODIFICATION OF TECHNICAL
SPECIFICATIONS TO ALLOW STARTUP OF THE PURDUE UNIVERSITY
REACTOR TO CALIBRATE NUCLEAR INSTRUMENTATION
(EPID A11010/L-2020-PPM-0000)

Dear Dr. Bean:

By letter dated November 24, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20329A493), and enclosures (ADAMS Accession Nos. ML20329A494 and ML20329A495), Purdue University applied for an amendment to Facility Operating License No. R-87 for the Purdue University Research Reactor. The license amendment request (LAR) proposes technical specification (TS) changes to TS 4.2.a.2 and TS 4.2.g to allow reactor operation to calibrate the nuclear instruments by foil activation. Consistent with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.90, "Application for amendment of license, construction permit, or early site permit," an application to amend the license (including the TSs) must fully describe the changes desired and follow, as far as applicable, the form prescribed for original applications. The requirements in 10 CFR 50.34, "Contents of applications; technical information," cover the technical information to be included in the application and stipulate that it address design and operating characteristics, unusual or novel design features, and principal safety considerations.

The U.S. Nuclear Regulatory Commission (NRC) staff performed an acceptance review of the LAR and concluded that it includes sufficient information for the NRC staff to begin its detailed technical review. Notwithstanding the acceptance review, the NRC staff may require additional information to complete the detailed technical review. If needed, the NRC staff will request this information by separate correspondence within approximately five days of the date of this letter.

Based on the acceptance review and discussions during the virtual pre-licensing meetings on November 5, 2020, and November 16, 2020, the NRC staff expects to complete its review and make a final determination on the LAR by December 14, 2020. This date could change due to several factors, including requests for additional information, unanticipated changes to the

scope of the review, unsolicited supplements to the LAR, and others. 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.

If you have any questions, please contact your project manager at (301) 415-3398, or by electronic mail at Cindy.Montgomery@nrc.gov.

Sincerely,

/RA/

Duane A. Hardesty, Senior 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. 50-182
License No. R-87

Enclosures:

1. Technical Specification Change
Evaluation
2. PUR-1 Technical Specifications
Proposed No. 16

cc: See next page

Purdue University

Docket No. 50-182

cc:

Mark Lundstrom, Dean of Engineering
Purdue University
School of Nuclear Engineering
400 Central Drive
West Lafayette, IN 47907

Mayor
City of West Lafayette
1200 N. Salisbury Street
West Lafayette, IN 47906

John H. Ruyack, Manager
Epidemiology Res Center/Indoor &
Radiological Health
Indiana Department of Health
2525 N. Shadeland Avenue, Suite E3
Indianapolis, IN 46219

Howard W. Cundiff, P.E., Director
Consumer Protection
Indiana State Department of Health
2 North Meridian Street, 5D
Indianapolis, IN 46204

Clive Townsend, Reactor Supervisor
Purdue University
School of Nuclear Engineering
400 Central Drive
West Lafayette, IN 47907

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

SUBJECT: PURDUE UNIVERSITY – ACCEPTANCE OF THE APPLICATION FOR A LICENSE AMENDMENT RE: MODIFICATION OF TECHNICAL SPECIFICATION TO ALLOW STARTUP OF THE PURDUE UNIVERSITY REACTOR TO CALIBRATE NUCLEAR INSTRUMENTATION (EPID A11010/L-2020-PPM-0000) DATED: November 27, 2020

DISTRIBUTION:

PUBLIC

GCasto, NRR

NParker, NRR

CMontgomery, NRR

DHardesty, NRR

PO'Bryan, NRR

BSmith, NRR

ADAMS Accession No. ML20330A231

*concurrent via email

NRR-106

OFFICE	NRR/DANU/UNPL/PM*	NRR/DANU/UNPL/LA*	NRR/DANU/UNPL/BC*	NRR/DANU/UNPL/PM*
NAME	CMontgomery	NParker	GCasto (PO'Bryan for)	DHardesty
DATE	11/25/2020	11/25/2020	11/27/2020	11/27/2020

OFFICIAL RECORD COPY