



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

June 25, 2021

Dr. Seungjin Kim, Reactor Director  
Purdue University  
The School of Nuclear Engineering  
516 Northwestern Avenue  
West Lafayette, IN 47906

SUBJECT: PURDUE UNIVERSITY – ADDITIONAL TRAINING PERFORMED IN LIEU OF  
ANNUAL OPERATING TEST

Dear Dr. Kim:

By letter dated June 3, 2021 (Agencywide Documents Access and Management System Accession No. ML21172A156), the U.S. Nuclear Regulatory Commission (NRC) staff received your one-time request to perform additional training in lieu of passing an annual operating test for one senior reactor operator (SRO) (SOP-70830) in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 55.59, "Requalification," paragraph (b), "Additional training." In the letter, you informed the NRC staff that annual operating tests were not able to be completed as planned due to personnel changes and an extended shutdown of the Purdue University Reactor (PUR-1).

Section 55.59(a)(2) of 10 CFR requires, in part, each individually licensed operator or senior operator to pass an annual operating test. Section 55.45, "Operating test," of 10 CFR requires the operator to demonstrate an understanding of and the ability to perform the actions necessary to accomplish a comprehensive sample of items specified in 10 CFR 55.45(a)(2) through (13), as applicable to the facility.

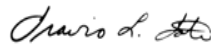
Consistent with 10 CFR 55.59(b), since the requirements of 10 CFR 55.59(a)(2) were not able to be met due to the PUR-1 extended shutdown, you certified that your SRO conducted additional training that consisted of a sample of the items that are required to be evaluated during the conduct of an annual operating test. Specifically, your SRO completed self-directed training in the areas of: 1) pre-startup procedures; 2) Safety Analysis Report (SAR) Chapter 7, "Instrumentation and Control Systems," and control console design documentation; 3) functional requirement specifications for digital instrumentation and control system upgrade and annunciators; 4) historical operation campaigns, control manipulations, and operating procedures; 5) emergency plan initiating events, mitigating actions, and notification requirements; 6) coolant processing system design and settings to meet limiting conditions of operation; 7) radiation monitoring system design and calibration frequency, campus radiation protocols, and portable survey instrumentation; 8) roles and responsibilities of senior reactor operators; and, 9) protocols for normal operators, reactor demonstrations, and other uses of the PUR-1 facilities.

The NRC staff reviewed your request and determined that the additional training performed included a representative sample of items specified in 10 CFR 55.45(a)(1) through (13). Based

on this review, the NRC staff concluded that the additional training performed is acceptable. Your licensed SRO (SOP-70830) may resume the conduct of licensed duties. This letter, along with all relevant facility documentation, should be retained in the SRO's requalification records, in accordance with 10 CFR 55.59(c)(5), "Records."

If you have any questions regarding this letter, please contact William Schuster at (301) 415-1590, or [William.Schuster@nrc.gov](mailto:William.Schuster@nrc.gov).

Sincerely,



Signed by Tate, Travis  
on 06/25/21

Travis L. Tate, Chief  
Non-Power Production and Utilization Facility  
Oversight 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

cc: See next page

Purdue University

Docket No. 50-182

cc:

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Test, Research and Training  
Reactor Newsletter  
Attention: Amber Johnson  
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SUBJECT: PURDUE UNIVERSITY – ADDITIONAL TRAINING PERFORMED IN LIEU OF  
ANNUAL OPERATING TEST DATED: JUNE 25, 2021

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