

December 14, 2015

LICENSEE: Purdue University

FACILITY: Purdue University Research Reactor

SUBJECT: SUMMARY OF NOVEMBER 6, 2015, PUBLIC MEETING WITH  
PURDUE UNIVERSITY RE: DIGITAL INSTRUMENTATION AND CONTROL  
UPGRADE PROPOSED LICENSE AMENDMENT APPLICATION

On November 6, 2015, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of the Purdue University Research Reactor (Purdue), by teleconference at the NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of this meeting was to discuss the Purdue design concept for the proposed digital instrumentation and control upgrade. Purdue staff stated that it plans to submit the associated license amendment request in Spring 2016. The meeting notice and agenda, dated October 27, 2015, are available in the Agencywide Documents Access and Management Systems (ADAMS) at Accession No. ML15300A455. A list of attendees is provided as an enclosure.

Purdue presented three sets of slides (ADAMS Accession Nos.: ML15329A287, ML15329A288, and ML15329A289). The presentations covered a number of topics, and began with the type of research and educational activities performed at the reactor, the history and current staffing at the reactor. The design of the reactor, current nuclear instrumentation, and the technical specifications were discussed. Purdue University Research Reactor oversight consists of the Committee on Reactor Operations, which approves procedural changes and new experiments. The Purdue Radiological & Environmental Management team oversees all radiation activities on campus. Other topics covered were the current instrumentation and control console, hardware components, the reactor protection system, and digital power range monitors. The discussion also focused on the motivations for upgrading to a digital console, the logic diagram, redundancies, reactor trips, rod drop times, and access controls. The upgrade is expected to improve reactor reliability, improve data acquisition, and provide a means for interfacing with future applications. Purdue staff noted its intention to remain on a "one out of 'x'" scram logic in the interest of reducing the complexity of any changes potentially being implemented in the console upgrade. Purdue staff also noted that this strategy most closely mimics the current system and ensures the highest level of public safety.

- 2 -

Please direct any inquiries to me at 301-415-3398, or via email at [Cindy.Montgomery@nrc.gov](mailto:Cindy.Montgomery@nrc.gov).

*/RA/*

Cindy K. Montgomery, Project Manager  
Research and Test Reactors Licensing Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Enclosure:

As stated

cc: w/enclosure: See next page

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*/RA/*

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Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc: w/enclosure: See next page

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**ADAMS Accession Nos.: Pkg.: ML15300A587; Notice: ML15300A455; Summary: ML15329A290;**

**\*concurring via e-mail**

**NRC-001**

<b>OFFICE</b>	NRR/DPR/PLPB	NRR/DPR/LA*	NRR/DPR/PLPB	NRR/DPR/PLPB
<b>NAME</b>	CMontgomery	NParker	(LTran for) AAdams	CMontgomery
<b>DATE</b>	11/29/2015	11/30/2015	12/08/2015	12/14/2015

**OFFICIAL RECORD COPY**

LIST OF ATTENDEES

NOVEMBER 6, 2015

<u>Name</u>	<u>Organization</u>
Robert Bean	Purdue University
Clive Townsend	Purdue University
Robert Abboud	Purdue University
Duane Hardesty	U.S. Nuclear Regulatory Commission (NRC)
Norbert Carte	NRC
Cindy Montgomery	NRC
Eben Allen	NRC
Benjamin Schlottke	Mirion Technologies
Robert Ammon	Mirion Technologies
Ewald Liebhart	Mirion Technologies
Roy Ray	Mirion Technologies

Enclosure

Purdue University

Docket No. 50-182

cc:

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Test, Research, and Training  
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