

July 5, 2001

Mr. Robert Bean, Laboratory Director
1290 Nuclear Engineering Building
Department of Nuclear Engineering
Purdue University
West Lafayette, IN 47907-1290

SUBJECT: NRC INSPECTION REPORT NO. 50-182/2001-201

Dear Mr. Bean:

This letter refers to the inspection conducted on June 18-21, 2001, at the Purdue University research reactor. The enclosed report presents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concerns or noncompliance with NRC requirements were identified. No response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) <http://www.nrc.gov/NRC/ADAMS/index.html>.

Should you have any questions concerning this report, please contact Mr. Craig Bassett in Atlanta, GA at 404-562-4712.

Sincerely,

/RA/

Ledyard B. Marsh, Chief
Events Assessment, Generic Communications
and Non-Power Reactors Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-182
License No. R-87

Enclosure: NRC Inspection Report
No. 50-182/2001-201

cc w/encls: Please see next page

Purdue University

Docket No. 50-182

cc:

Mayor
City of West Lafayette
609 W. Navajo
West Lafayette, IN 47906

State Board of Health
ATTN: Director, Bureau of Engineering
1330 West Michigan Street
Indianapolis, IN 46206

Indoor and Radiologic Health
Indiana State Department of Health
2 North Meridian Street, 5th Floor
Indianapolis, IN 46204-3006

Mr. Ed Merritt
Reactor Supervisor
Department of Nuclear Engineering
Purdue University
West Lafayette, IN 47907

July 5, 2001

Mr. Robert Bean, Laboratory Director
1290 Nuclear Engineering Building
Department of Nuclear Engineering
Purdue University
West Lafayette, IN 47907-1290

SUBJECT: NRC INSPECTION REPORT NO. 50-182/2001-201

Dear Mr. Bean:

This letter refers to the inspection conducted on June 18-21, 2001, at the Purdue University research reactor. The enclosed report presents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concerns or noncompliance with NRC requirements were identified. No response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) <http://www.nrc.gov/NRC/ADAMS/index.html>.

Should you have any questions concerning this report, please contact Mr. Craig Bassett in Atlanta, GA at 404-562-4712.

Sincerely,
/RA/
Ledyard B. Marsh, Chief
Events Assessment, Generic Communications
and Non-Power Reactors Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-182
License No. R-87

Enclosure: NRC Inspection Report
No. 50-182/2001-201
cc w/encls: Please see next page

Distribution w/encl:

PUBLIC	REXB r/f	AAdams	CBassett
PDoyle	TDragoun	WEresian	FGillespie
SHolmes	EHylton	Plsaac	LMarsh
DMatthews	MMendonca	EDO (O16-E15)	
BDavis (Cover letter only) - BLD		SWong (Only for IRs with NOV's, O10-H14)	

DOCUMENT NAME: ML011780667

TEMPLATE #: NRR-056

OFFICE	REXB:RI	REXB:PM	REXB:LA	REXB:BC
NAME	CBassett:rd	MMendonca	EHylton	LMarsh
DATE	06/ 28 /2001	06/ 29 /2001	06/ 29 /2001	07/ 05 /2001

C = COVER

E = COVER & ENCLOSURE
OFFICIAL RECORD COPY

N = NO COPY

U. S. NUCLEAR REGULATORY COMMISSION

Docket No.: 50-182

License No.: R-87

Report No.: 50-182/2001-201

Licensee: Purdue University

Facility: Purdue University Research Reactor

Location: West Lafayette, Indiana

Dates: June 18-21, 2001

Inspector: Craig Bassett

Approved by: Ledyard B. Marsh, Chief
Events Assessment, Generic Communications and
Non-Power Reactors Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

Purdue University
Report No: 50-182/2001-201

This routine, announced inspection included onsite review of various aspects of the licensee's programs concerning the conduct of operations and emergency preparedness as they relate to the licensee's Class 2 non-power research reactor. The licensee's programs were directed toward the protection of public health and safety and were in compliance with NRC requirements. No safety concerns or violations of regulatory requirements were identified.

Conduct of Operations

- The organization and staffing met the requirements specified in the facility Technical Specifications (TS).
- Review and audit functions required by TS Section 6.2 were acceptably completed by the Committee on Reactor Operations.
- No significant changes had been made at the facility since the last operations inspection.
- The Operator Requalification/training Program was generally up-to-date and acceptably maintained and medical examinations were being completed as required.
- Facility procedures and document reviews satisfied requirements specified in TS Sections 6.2 and 6.4. Procedural compliance was acceptable.
- Reactor fuel movements and inspections were made and documented in accordance with procedure and the fuel elements were being inspected annually as specified by TS Section 4.4.
- The program for surveillance and Limiting Conditions of Operation confirmations and verification was being implemented in accordance with TS requirements.
- Reactor operations were conducted in accordance with TS requirement and applicable procedures. The maintenance program satisfied NRC requirements.
- The program for the control of experiments satisfied regulatory requirements and license commitments.

Emergency Preparedness

- The Emergency Plan was being reviewed annually and updated as needed and was appropriate for the size of and current operations at the facility.
- Emergency response facilities and equipment were being maintained as required and responders were knowledgeable of proper actions to take in case of an emergency.

- Off-site support was acceptable as were communications capabilities.
- Annual drills were being conducted and critiques were written as required by the Emergency Plan.
- Emergency preparedness training for staff personnel and off-site responders was being completed as required.

2.

a. **Review and Audit Functions**

- in the responsibilities of the Sub Committee on Reactor Operations (CERO) minutes
-

b.

1. **Organization and Staffing**

a.

Organization and Staffing

staffing organization responsibilities research reactor facility

REPORT DETAILS

3.

b.

a.

Design Change Functions

b.

~~issues identified by the team during the design process. The team will continue to monitor the design process and will update the design change functions as needed.~~

process and will update the design change functions as needed.

Autodesk specifies the

4.

c.

b.

a.

Operator Licenses, Requalification,

~~The Department shall accept applications for licensure from individuals who are currently licensed in another state or country and who are seeking to practice in this state. The Department shall accept applications for licensure from individuals who are currently licensed in another state or country and who are seeking to practice in this state.~~

medical professionals to perform manipulations

6.

b.

a.

Fuel Movement

~~The following information is provided for the purpose of illustrating the format of the information to be provided in the report.~~

selected basing rights master procedures

5.

b.

a.

Procedures and Pr

procedures and administrative logs

8.

a. **Operations and Maintenance**

The Inspector (B-3000) shall be responsible for the following activities:

b.

7.

a. **Surveillance Activities**

presented in the following records, and tests

9.

b.

a. **Experiments**

b.

~~and they were not able to find any other examples of this type of behavior.~~

potential for a wide range of forms

unsolved problems

requirements in the TS

11.

properly and fully. The following standards are relative to the project and do not apply to other projects.

Emergency Preparedness: The project shall have an emergency preparedness plan that includes the following:

emergency response procedures, including the identification of emergency personnel and their roles, the location of emergency equipment, and the procedures for reporting and responding to emergencies.

10.

a. **Emergency Preparedness**

no such material in inc

TS

Technical Sp