



UNM SCHOOL of ENGINEERING

*Department of Nuclear Engineering*

October 12, 2017

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Enclosed is the 2017 Annual Report for the AGN-201M reactor located at the University of New Mexico - Docket 50-252.

Sincerely,

Robert D. Busch, Ph.D, P.E.  
Chief Reactor Supervisor

Gary W. Cooper, Ph.D.  
Reactor Administrator

cc: Eben Allen: [Eben.Allen@nrc.gov](mailto:Eben.Allen@nrc.gov)

ADZO  
NRR

REPORT ON FACILITY LICENSE NO. R-102

THE UNIVERSITY OF NEW MEXICO

JULY 1, 2016 - JUNE 30, 2017

The University of New Mexico's AGN-201M reactor was only used for teaching and training during 2016-2017. There were no changes in facility design, performance characteristics, or operating procedures related to reactor safety during the reporting period.

The AGN-201M Reactor Facility is an essential part of our educational program, including public education, and continues to serve us well. The use of the reactor from July of 2016 through June of 2017 was as follows:

Type of Use	July 16 - June 17 Hours	July 16 - June 17 Watt-hours
Class Demonstrations	2.7	0.3
Faculty Research	0.0	0.0
Graduate Student Research	0.0	0.0
Maintenance and Equipment Check	28.0	0.0
Operator Training and Requalification	9.6	18.0
Teaching	96.6	233.8
Totals for the Year	136.9	252.1

During the annual maintenance in August 2016, we checked the detector cans and found the poly containers for Channel 1, Channel 2, and Channel 3 to be in good condition. The poly containers appear to be holding up well in the water environment. All detector cans will be inspected again as part of the 2017 annual maintenance.

There were no changes to the facility as it is described in the application for license and amendments thereto, nor were there any changes to the procedures as described in Facility Technical Specifications. No new experiments were performed during the reporting period.

During the reporting period, construction began on the building just to the east of the Nuclear Engineering Laboratory. A 10 CFR 50.59 review was completed on the impact of those activities to the facility. It was determined that there is no 50.59 impact to the facility from the construction activities.

During the reporting period, there was no liquid radioactive waste released from the facility nor was there any solid waste released. The annual environmental radiation surveys was performed and is attached to this report. All personnel exposures during the reporting period were below 50 mrem per person with the majority of personnel receiving below 5 mrem. No facility visitors received measurable exposures.

An outside environmental survey was performed on March 2, 2017. The radiation levels were all in accordance with those from previous surveys. At 60% licensed operating power, the highest reading outside the facility was 0.21 mR/hr gamma with no detectable neutron dose.

The current personnel assignments are (as of July 1, 2017):

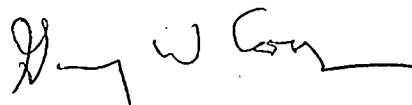
Chair, Dept. of Nuclear Engineering	Anil K. Prinja
Reactor Administrator	Gary W. Cooper
Chief Reactor Supervisor	Robert D. Busch
USNRC-licensed Senior Reactor Operators	Robert D. Busch Ken Carpenter Gary Cooper
USNRC-licensed Reactor Operators	Stephanie Brabson Jedediah Styron Nathan Toleman (inactive as of 7/1/17)
Reactor Operators (inactive)	none during reporting period

The makeup of the Reactor Safety Advisory Committee as of June 30, 2017 is:

James Bryson  
Matt Burger  
Charles Harmon II  
David Hayes  
David Hindera  
Ron Knief  
David Summers

David Hindera replaced Ted Schmidt who passed away April 2017. There are currently no vacant positions on the committee.

The University of New Mexico's AGN-201M reactor continues to be used extensively for teaching experiments as a part of our undergraduate and graduate programs. These experiments include approach-to-critical, reactor period and reactivity measurements, importance functions measurements, sample activation, control rod calibrations, and reactor power and neutron fluence measurements. The reactor is also used throughout the Fall, Spring and Summer sessions of the University. All experiments have received prior approval from our Reactor Safety Advisory Committee.



Gary W. Cooper  
Reactor Administrator