



The University of New Mexico

Chemical & Nuclear Engineering  
203 Farris Engineering Center  
Albuquerque, NM 87131-1341  
Telephone (505) 277-5431  
FAX (505) 277-5433

September 30, 2002

Marvin M. Mendoca  
Senior Project Manager  
Non-Power Reactors and Decommissioning Project Directorate  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington D.C. 20555-0001

Dear Mr. Mendoca;

Enclosed is the 2002 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

Norman F. Roderick, Ph.D.  
Reactor Administrator

cc: *Document Control Desk, USNRC*

REPORT ON FACILITY LICENSE NO. R-102

THE UNIVERSITY OF NEW MEXICO

JULY 1, 2001 - JUNE 30, 2002

The University of New Mexico's AGN-201M reactor was used for some research during the 2001-2002. This was a continuation of the research from the previous year and involved subcritical multiplication and die-away measurements at power level below 1 microWatt. There were no changes in facility design, performance characteristics, or operating procedures related to reactor safety during the reporting period. The NRC did an on-site review of the facility in October 2001 and found one violation on security alarm testing. This has been remedied.

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 2001 through June of 2002 was as follows:

Type of Use	July 01 - June 02 Hours	July 01 - June 02 Watt-hours
Class Demonstrations	0.8	2.4
Faculty Research	3.0	0.0
Graduate Student Research	0.0	0.0
Maintenance and Equipment Check	14.0	15.0
Operator Training and Requalification	8.5	22.5
Teaching	31.2	68.9
Totals for the Year	54.5	108.8

During the period, we were shutdown for security from September 11, 2001 through September 18, 2001. From that period on, we did not use the reactor until mid-November as there were no pressing experiments that needed to be run, and it was easier to maintain security with no access. In the summer of 2001, the startup source drive failed and manual insertion/removal of the source was required. A new source drive was purchased and installed in December 2001 and tested. There was no effect on reactor performance. During the annual maintenance in August 2001, the replaced aluminum can containing the detector for channel #1 was re-inspected and found to have some corrosion. The other cans appeared to be in good condition. A new can for detector #1 (not a safety channel) was fabricated from 1-inch PVC and put in the water tank. The presence of chlorine in the PVC reduced the Channel 1 startup count rate by 50%, but did not affect the performance of the reactor. All detector cans will be inspected again as part of the 2002 annual maintenance.

Other than the new Channel 1 can and the new source drive, 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.

There were no 10 CFR 50.59 issues during the reporting period. During the reporting period, there was no liquid radioactive waste released from the facility nor was there any solid waste released. There were no environmental radiation surveys performed outside the facility. All personnel exposures received 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.

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Dr. Roderick was the interim chair during this reporting period. A permanent chairman for the Department has been named and starts mid August 2002.. The current personnel assignments are:

Dean, College of Engineering	Joseph Cecchi
Interim Chairman, Department of Chemical and Nuclear Engineering	Norman F. Roderick
Reactor Administrator	Norman F. Roderick
Chief Reactor Supervisor	Robert D. Busch
USNRC-licensed Senior Reactor Operators	Robert D. Busch Ken Carpenter Gary Cooper

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The current makeup of the Reactor Safety Advisory Committee is:

James Bryson  
Robert Jefferson  
Ron Knief  
Robert Long  
Ted Schmidt  
David Summers

with no vacant position although Ted Schmidt has retired from Sandia and will soon be retiring from 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.



Norman F. Roderick  
Reactor Administrator