



31 January 1992

Document Control Center
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir/Madam:

Enclosed you will find a copy of the Annual Operating Report for the University of Utah AGN-201M Reactor, License R-25, Docket 50-77, for the period 1 January 1991 through 31 December 1991. This report fulfills AGN Technical Specification 6.9.1.

If you have any questions concerning the report please contact the staff at the facility.

Sincerely,

Dietrich K. Gehmlich
Reactor Administrator

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**The University of Utah
AGN-201M Reactor No. 107
License R-25, Docket No. 50-72
Annual Operating Report for 1991**

A. Facility Modifications:

The U.S. Nuclear Regulatory Commission issued on 1 August 1991 an Order authorizing the University of Utah Nuclear Engineering Laboratory (UUNEL) to commence decommissioning the ACN-201M Research Reactor in accordance with the Decommissioning Plan submitted to NRC on 17 July 1990. Dismantling and surveillance of component parts is expected to be complete in late June 1992. In preparation of final decommissioning activities, the nuclear fuel was removed from the reactor core and placed in secured storage pending transfer to a U.S. Department of Energy facility and the reactor tank shielding water was drained to the sanitary sewerage system following analysis of several tank water samples. The fuel was shipped to the DGE Y-12 Plant at the Oak Ridge National Laboratory on 5 February 1991. Disposal of the tank water began on 8 October 1991 and was completed on 14 October 1991.

B. Results of Tests and Inspections:

Surveillance of the reactor has continued despite preliminary decommissioning activities. Inspections included monthly visual inspections and monitoring of radiation levels in the vicinity of the reactor and the periodic sampling and analysis of shielding water to determine the presence of any radioactive materials. These inspections showed no evidence of water leakage, excessive corrosion, leakage of fission products, or unusual radiation levels. Fuel had been removed from the reactor and was stored under lock and key in approved fuel storage pits until its transfer to the Department of Energy on 5 February 1991. Periodic inventory and surveillance of the fuel was performed while in storage. Because the AGN reactor has not been operated since February, 1985, and since we are preparing to decommission the reactor, none of the operational surveillance activities enumerated in Section 4 of the AGN Technical Specifications are required to be performed as provided in Section 4.0. However, routine surveillance for retention of radioactive materials is being performed.

Prior to the drainage and disposal of the tank shielding water, several samples of tank water and sediment were analyzed independently by the University of Utah Radiological Health Department (RHD) to confirm UUNEL findings that the water was free from reactor-induced radioactive contamination. RHD's analyses indicated that the water contained no radioactivity due to fission products or activated species. Radioactivity concentrations due to naturally occurring nuclides were found to be within normal levels for the area's water supply.

C. Corrective Maintenance:

None.

D. Energy Produced:

Since February 1985 - zero.

E. Unscheduled Shutdowns:

None.

F. Reactor Safety Committee Action:

1. The Reactor Safety Committee is currently comprised of the following members.

Dietrich K. Gehring - Reactor Administrator
Gary M. Sandquist - UUNEL Director and AGN Reactor Supervisor
Keith J. Schiager - Radiation Safety Officer
James M. Byrne
John S. Bennion
Patrick S. Sheehan
David M. Slaughter

2. Personnel radiation exposures and radiation surveys have been reviewed and approved. All exposures and surveys have been within nominal background levels.

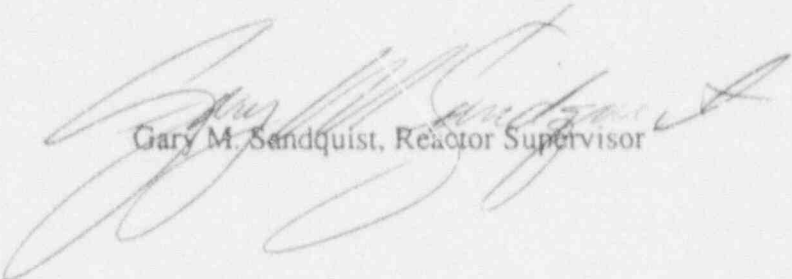
G. Summary of Changes Reportable under 10 CFR 50.59:

As provided by AGN Technical Specification 4.0, certain surveillance activities have been discontinued since the reactor is not operable. Fuel was shipped off-site on 5 February 1991. The tank shielding water was drained to the sewerage system between 8-14 October 1991. None of these activities represent unreviewed safety questions.

H. Reportable Occurrences:

None.

Report submitted by:



Gary M. Sandquist, Reactor Supervisor