February 15, 2001

Dr. Joseph Cecchi
Chair, Chemical and Nuclear Engineering Department
University of New Mexico
Albuquerque, NM 87131-1341

SUBJECT: NRC INSPECTION REPORT NO. 50-252/2000-202
AND NOTICE OF VIOLATION

Dear Dr. Cecchi:

This letter refers to the inspection conducted on January 22-24, 2001, at your AGN Research Reactor Facility. The inspection included a review of activities authorized for your facility. The enclosed report presents the results of that inspection.

Various aspects of your safety program were inspected including selective examinations of procedures and representative records, and interviews with personnel. Based on the results of this inspection, the NRC has identified two apparent violations of NRC requirements. The apparent violations are cited in the enclosed Notice of Violation (Notice). The circumstances surrounding these issues are described in detail in the subject inspection report. The apparent violations are of concern because they would suggest a lack of compliance with the requirements stipulated in your Emergency Plan and a failure to take corrective actions on previously identified inspector follow-up items.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response in accordance with its policies to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

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 letter, please contact Mr. Craig Bassett 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. 50-252
License No. R-102

Enclosures: 1. Notice of Violation
2. NRC Inspection Report No. 50-252/2000-202

cc w/encls:
Please see next page

cc:

City Manager
City of Albuquerque
City Hall
Albuquerque, NM 87101

Dr. Robert D. Busch, Chief Reactor Supervisor
University of New Mexico
Albuquerque, NM 87131-1341

Dr. Norman Roderick, Reactor Administrator
University of New Mexico
Albuquerque, NM 87131-1341

Mr. James DeZetter, Radiation Safety Officer
Radiation Control Program Director,
State of New Mexico
University of New Mexico
Albuquerque, NM 87131-1341

TRTR Newsletter
202 Nuclear Reactor Building
Department of Nuclear Engineering Sciences
University of Florida
Gainesville, FL 32611

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ENCLOSURE 1

NOTICE OF VIOLATION

University of New Mexico
AGN Research Reactor Facility

Docket No.: 50-252
License No.: R-102

During an NRC inspection conducted on January 22-24, 2001, two apparent violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

TS Section 6.6 states that there shall be written procedures that cover implementation of the Security Plan and Emergency Plan (E-Plan).

A. The E-Plan Section 8.3.1 stipulates that, among other items, first aid supplies shall be available in Room 081 of the Nuclear Engineering (NE) Laboratory Building.

Contrary to the above, no first aid supplies were in Room 081 of the NE Laboratory Building.

This is a Severity Level IV violation (Supplement IV).

B. Section 10.2.2 of the E-Plan states that emergency drills shall be conducted annually, with intervals not to exceed 15 months.

Contrary to the above, an emergency drill had been documented during 1998 and another drill was conducted on November 9, 2000, but no documentation existed to indicate that a drill had been conducted in 1999.

This is a Severity Level IV violation (Supplement IV).

Pursuant to the provisions of 10 CFR 2.201, the University of New Mexico is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the responsible inspector, U.S. Nuclear Regulatory Commission, Region II, 61 Forsyth St. S. W., Suite 23T85, Atlanta, GA 30303, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be placed in the NRC Public Document room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure or information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated at Rockville, Maryland
this 15th day of February 2001.

U. S. NUCLEAR REGULATORY COMMISSION

Docket No:	50-252
License No:	R-102
Report No:	50-252/2000-202
Licensee:	University of New Mexico
Facility:	AGN-201M Reactor
Location:	Albuquerque, New Mexico
Dates	January 22-24, 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

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 five watt Class II research reactor. Two apparent violations of regulatory requirements were identified.

Conduct of Operations

- Staffing, reporting, and record keeping met requirements specified in Technical Specifications (TS) Chapter 6.
- The Reactor Safety Advisory Committee acceptably completed review and oversight functions required by TS Section 6.4. No design changes had been initiated since the last NRC operations inspection.
- The Requalification Program was being completed as required and records were being maintained. The operators were maintaining their licenses in an active status. Medical examinations were being completed as required.
- Facility procedures and document reviews satisfied TS Section 6.6 requirements.
- Fuel movement was acceptable in accordance with a well-established experiment.
- The program for surveillance and LCO confirmations was being implemented in accordance with TS requirements.
- Experiments were being conducted in accordance with properly reviewed and approved procedures and were satisfactorily documented in the operations log.

Emergency Preparedness

- The emergency preparedness program was generally conducted in accordance with the Emergency Plan, but two apparent violations were identified.

Report Details

Summary of Plant Status

Although the licensee's non-power reactor (NPR) was not operated during this inspection, a review of the applicable records indicated that the reactor continued to be operated at various power levels up to the maximum authorized level of five watts in support of research, physics experiments, and operator training.

1. Organization, Operations, and Maintenance Activities (IP 69001)

   a. Inspection Scope

      To verify staffing, reporting, and record keeping requirements specified in Technical Specifications (TS) Sections 6.1, 6.9, and 6.10 were being met, the inspector reviewed:

      - organization and staffing for the facility
      - administrative controls
      - reactor operations and maintenance logs
      - annual reports

   b. Observations and Findings

      The licensee's current operational organization structure and assignment of responsibilities were consistent with that specified in the TS 6.1. No changes had occurred in the organization since the last NRC inspection in February of 2000.

      A review of the reactor operations and maintenance logs showed that they were being kept as required in TS Section 6.10 and problems were being documented. The annual reports summarized the required information and were issued at the frequency specified in the TS 6.9.

   c. Conclusions

      Staffing, reporting, and record keeping met the requirements specified in TS Chapter 6.

2. Committee Audits and Reviews and Design Change Functions (IP 69001)

   a. Inspection Scope

      In order to verify that the licensee had established and conducted reviews and audits as required in TS Section 6.4 and to determine whether modifications to the facility, if any, were consistent with 10 CFR 50.59, the inspector reviewed:

      - Reactor Safety Advisory Committee meeting minutes
      - audits and reviews
      - design change records

b. Observations and Findings

The minutes of the Reactor Safety Advisory Committee (RSAC) meetings held during 1999 and 2000 were reviewed. The RSAC minutes showed that the committee met more frequently than required by TS and that a quorum was present. The topics considered during the meetings were appropriate and as stipulated in TS 6.4. The RSAC conducted audits and reviews as required and the results were reviewed with the licensee. Problems noted during audits were discussed and recommendations for improvement were made. The licensee implemented the improvements as needed.

Through review of applicable records and interviews with licensee personnel, the inspector determined that no design changes had been initiated since the last NRC operations inspection. Thus, the licensee had conducted no 10 CFR 50.59 reviews since they needed none.

c. Conclusions

The RSAC acceptably completed review and oversight functions required by TS Section 6.4. No design changes had been initiated since the last NRC operations inspection.

3. Operator Licenses, Requalification, and Medical Activities (69001)

a. Inspection Scope

To determine that operator requalification activities and training were conducted as required and that medical requirements were met, the inspector reviewed:

- active license status
- logs and records of reactivity manipulations and maintenance
- written examinations and training records
- medical examination records

b. Observations and Findings

The facility has three qualified, licensed senior reactor operators (SROs). Two other individuals are in training to become reactor operators (ROs).

A review of the training records indicated that training had been conducted in the areas outlined in the licensee's "Operator and Senior Operator Requalification Program for the University of New Mexico." Written and operational examinations were also being administered as required. The inspector noted that the licensee was tracking and documenting hours to ensure that the operators met the requirements stipulated in 10 CFR 55.53(e) to maintain operating licenses in an active status. In order to comply with the requirement for actively performing the functions of a senior operator for a minimum of four hours per calendar quarter, the licensee included time spent on the reactor console, supervisory functions, and maintenance. This was consistent with the duties defined for SROs in TS 6.1.13.b. The inspector also noted that the operators were receiving the required medical examinations at the frequency specified.

c. Conclusions

The Requalification Program was being completed as required and records were being maintained. The operators were maintaining their licenses in an active status. Medical examinations were being completed as required.

4. Procedures (69001)

a. Inspection Scope

To determine whether facility procedures met TS requirements, the inspector reviewed:

- operating procedures
- administrative records
- procedural reviews and updates

b. Observations and Findings

Operating procedures were acceptable for the facility and the current staffing level. Documents were being reviewed as required and updated as needed. The inspector noted that the Operations and Maintenance Procedures were last revised in January 1997. No operations were conducted during this inspection but adherence to procedure was determined through a review of logs and other related records.

c. Conclusions

Facility procedures and document reviews satisfied TS 6.6 requirements.

5. Fuel Movement (69001)

a. Inspection Scope

In order to verify adherence to fuel handling and inspection requirements, the inspector reviewed:

- fuel handling procedures
- applicable logs and records

The inspector also observed preparations for an “Approach to Critical Experiment” for a nuclear engineering (NE) class.

b. Observations and Findings

The inspector determined that, except for the well established “Approach to Critical Experiment,” reactor fuel had not been handled in the period since the last inspection. Through records review and on-site observation, it was verified that acceptable radiological and criticality controls were established for the experiment and were implemented as required. No fuel inspection was required nor done.

c. Conclusions

Fuel movement was acceptable.

6. Surveillance (69001)

a. Inspection Scope

To determine that surveillances and Limiting Conditions for Operations verifications were being completed as required by TS 4.0, the inspector reviewed:

- surveillance and maintenance procedures
- selected surveillance data and records

b. Observations and Findings

The inspector noted that selected daily and other periodic checks, tests, verifications, and calibrations for required surveillances and Limiting Conditions for Operations (LCOs) were completed. The surveillances and LCO verifications reviewed were generally completed on schedule as required and in accordance with licensee procedures. All the recorded results were within the TS and procedural prescribed parameters. The records and logs reviewed were generally accurate, complete, and maintained as required.

c. Conclusions

The program for surveillance and LCO confirmations was being carried out in accordance with TS requirements.

7. Experiments (69001)

a. Inspection Scope

In order to verify that experiments were being conducted within approved guidelines, the inspector reviewed:

- review and approval process for experiments
- potential hazards identification

b. Observations and Findings

The inspector noted that all the experiments conducted, except one, were well-established procedures that had been in place for many years. The one new experiment had been developed, reviewed, and approved as required by TS. All experiments that were done were conducted under the cognizance of the Chief Reactor Supervisor as required. The results of the experiments were documented in the reactor operations log book.

c. Conclusions

Experiments were being conducted in accordance with properly reviewed and approved procedures and were satisfactorily documented in the operations log.

8. Emergency Preparedness (IP 69001)

a. Inspection Scope

The inspector reviewed selected aspects of:

- the Emergency Plan and implementing procedure
- emergency response facilities, supplies, equipment and instrumentation
- training records
- offsite support and letters of agreement
- emergency drills and exercises

b. Observations and Findings

The Emergency Plan (E-Plan) in use at the reactor and emergency facilities was the same as the version most recently submitted to the NRC. A revision to the current version has been developed but is awaiting final sign-off by all members of the RSAC. It will then be submitted to the NRC. The E-Plan was audited and reviewed by the RSAC as required.

Through records review, and interviews with licensee personnel, the inspector determined that emergency responders were knowledgeable of the proper actions to take in case of an emergency. Agreements with outside response organizations had been updated and maintained as necessary. Communications capabilities were acceptable with these support groups and the licensee indicated that they had been tested as stipulated in the E-Plan.

Emergency preparedness and response training for off-site and reactor staff personnel was conducted and documented as required by the E-Plan.

TS Section 6.6 states that there shall be written procedures that cover implementation of the Security Plan and Emergency Plan.

The E-Plan Section 8.3.1 stipulates that, among other items, first aid supplies shall be available in Room 081 of the Nuclear Engineering (NE) Laboratory Building.

The inspector verified that the other items stipulated in Section 8.3.1 were available for use in Room 081 of the NE Laboratory Building. However, there were no first aid supplies in Room 081 or any other rooms of the NE Laboratory Building. The licensee was informed that failure to have first aid supplies available in Room 081 of the NE Lab Building was an apparent violation of TS 6.6 and the E-Plan 8.3.1 (VIO 50-252/2000-202-01).

Section 10.2.2 of the E-Plan requires that emergency drills shall be conducted annually, with intervals not to exceed 15 months.

The inspector reviewed documentation of the latest emergency drills. An emergency drill had been conducted as required by the E-Plan on November 9, 2000, but no documentation existed to indicate that a drill had been conducted in 1999. The documented drill previous to the one in 2000 was a drill in 1998. The licensee was informed that failure to complete an emergency drill annually was another example of an apparent violation of TS 6.6 and the E-Plan 10.2.2 (VIO 50-252/2000-202-02).

However, the inspector did note that drill participation by support organizations was as required by the E-Plan. A critique was written following the 2000 drill as required which discussed the strengths and weaknesses exemplified during the exercise.

c. Conclusions

Two apparent violations were identified for failure to follow procedure by not having first aid supplies available for use in Room 081 of the NE Laboratory Building and by not conducting an emergency drill during 1999 as required by the Emergency Plan.

9. Follow-up on Previously Identified Inspector Follow-up Items

a. Inspection Scope

The inspector followed up on two Inspector Follow-up Items (IFIs) as identified and documented in Inspection Report No. 50-252/98-202. The inspector reviewed these issues with the licensee to determine what actions, if any, had been taken.

b. Observations and Findings

1) IFI 50-252/98-202-01 (Open): Follow-up on the resolution of the apparent discrepancies between Section V of the AGN Operations Manual and Section 7.3.2 of the E-Plan concerning the conditions requiring evacuation of the NE Laboratory Building.

Through discussions with the licensee and reviews of the Operations Manual and the E-Plan, inspector determined that no actions had been taken to resolve this apparent inconsistency. The licensee indicated that this issue would be addressed and that the Operations Manual would be changed to be consistent with the requirements of the E-Plan. This IFI will remain open and the NRC will continue to follow this issue.

2) IFI 50-252/98-202-02 (Closed): Follow-up on the lack of the required first aid supplies in the NE Laboratory Building and the acquisition of the supplies.

The inspector verified that the licensee had not taken any actions to obtain the first aid supplies required to be present in the NE Laboratory Building. The licensee was informed that failure to have the first aid supplies available was a violation of the

TS Section 6.6. (See Paragraph 8 above.) This IFI is considered closed.

c. Conclusions

Two IFIs identified during a previous inspection were reviewed and one was closed during this inspection.

10. Exit Interview

The inspection scope and results were summarized on January 24, 2001, with licensee representatives. The inspector discussed the findings for each area reviewed. The licensee acknowledged the findings and did not identify as proprietary any of the material provided to or reviewed by the inspector during the inspection.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Busch, Chief Reactor Supervisor
K. Carpenter, Reactor Supervisor

Other Personnel

R. Becker, Assistant Radiation Safety Officer, University of New Mexico (UNM) Safety, Health, & Environmental Affairs (SHEA) Department
J. De Zetter, Radiation Safety Officer (RSO), and Manager, Radiation Safety, UNM SHEA Department

INSPECTION PROCEDURE USED

IP 69001: Class II Non-Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-252/2000-202-01	VIO	Failure to follow procedure by not having first aid supplies available for use in Room 081 of the NE Laboratory Building.
50-252/2000-202-02	VIO	Failure to follow procedure by not conducting an emergency drill during 1999 as required by the Emergency Plan.

Closed

50-252/98-202-02	IFI	Follow-up on the lack of the required first aid supplies in the NE Laboratory Building and the acquisition of the supplies.

Discussed

50-252/98-202-01	IFI	Follow-up on the resolution of the apparent discrepancies between the AGN Operations Manual and the E-Plan concerning the conditions requiring evacuation of the NE Laboratory Building.

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
AGN	Aerojet-General Nucleonics
CFR	Code of Federal Regulations
IFI	Inspector Follow-up Item
IP	Inspection Procedure
LCO	Limiting Condition for Operations
NE	Nuclear Engineering
NPR	Non-Power Reactor
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
RO	Reactor operator
RSAC	Reactor Safety Advisory Committee
RSO	Radiation Safety Officer
SHEA	Safety, Health, & Environmental Affairs
SRO	Senior reactor operator
TS	Technical Specifications
TRTR	Test, Research, and Training Reactor
UNM	University of New Mexico
VIO	Violation