



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 10, 2021

Dr. Mary Lou Dunzik-Gougar
Reactor Administrator
Professor of Nuclear Engineering
Idaho State University
921 S. 8th Avenue, MS 8060
Pocatello, ID 83209-8060

SUBJECT: IDAHO STATE UNIVERSITY - U.S. NUCLEAR REGULATORY COMMISSION
INSPECTION REPORT NO. 05000284/2021201 AND NOTICE OF VIOLATION

Dear Dr. Dunzik-Gougar:

From July 26-29, 2021, the U.S. Nuclear Regulatory Commission (NRC) staff conducted an inspection at the Idaho State University Aerojet General Nucleonics-201M Research Reactor Facility. The enclosed report documents the inspection results, which were discussed on July 29, 2021, with you, Dr. Jay Kunze, Professor Emeritus, Kermit Bunde, Reactor Safety Committee chair, Mason Jaussi, Assistant Radiation Safety Officer, and Jonathan Scott, Reactor Supervisor.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspector reviewed selected procedures and records, observed various activities, and interviewed personnel.

Based on the results of this inspection, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <https://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report. The violation is being cited in the Notice because it constitutes a failure to meet regulatory requirements that has more than minor safety significance and the licensee failed to identify the violation.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390, "Public inspections, exemptions, requests for withholding," a copy of this letter, its enclosure, and your response will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (Agencywide Documents Access and Management System (ADAMS)). ADAMS is accessible from the NRC Web site at

<http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). To the extent possible, your response should not include any personal privacy or proprietary information, so that it can be made available to the Public without redaction.

Should you have any questions concerning this inspection, please contact Craig Bassett at (240) 535-1842, or by electronic mail at Craig.Bassett@nrc.gov.

Sincerely,

Travis L. Tate, Chief
Non-Power Production and Utilization
Facility Oversight Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No. 50-284
License No. R-110

Enclosures:
As stated

cc: See next page

Idaho State University

Docket No. 50-284

cc:

Dr. Scott D. Snyder
Interim Vice President for Research
Idaho State University
Mail Stop 8130
Pocatello, ID 83209-8060

John Longley, Radiation Safety Officer
Environmental Health and Safety Office
Idaho State University
P.O. Box 8106
Pocatello, ID 83209-8106

Director
Idaho Dept. of Environmental Quality
1410 North Hilton
Boise, ID 83606

Test, Research and Training
Reactor Newsletter
Attention: Ms. Amber Johnson
Dept. of Materials Science and Engineering
University of Maryland
4418 Stadium Drive
College Park, MD 20742-2115

SUBJECT: IDAHO STATE UNIVERSITY - U. S. NUCLEAR REGULATORY COMMISSION
INSPECTION REPORT NO. 05000284/2021201 AND NOTICE OF VIOLATION
DATED: SEPTEMBER 10, 2021

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NOTICE OF VIOLATION

Idaho State University
AGN-201M Research Reactor Facility

Docket No. 50-284
License No. R-110

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted from July 26 – July 29, 2021, two examples of a violation of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 of the *Code of Federal Regulations* (10 CFR) 55.53(i) “Conditions of licenses,” requires that “the licensee [reactor operator] shall have a biennial medical examination.”

Contrary to the above, two senior reactor operator’s (licensees) did not have a biennial medical examination. Specifically, one of the facility senior reactor operators’ previous medical examination was completed April 29, 2019, while the recent medical examination was not completed until July 8, 2021. The other senior reactor operator’s medical examination was completed April 22, 2019, but the individual’s most recent medical examination was not completed until July 19, 2021. These intervals exceed the time limit of two years required by the regulations.

This has been determined to be a Severity Level IV violation (Section 6.4).

Pursuant to the provisions of 10 CFR 2.201, “Notice of violation,” Idaho State University is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, 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: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken, 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 a 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, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC’s document system (Agencywide Documents Access and Management System), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public 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 of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(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, "Protection of Safeguards Information: Performance Requirements."

In accordance with 10 CFR 19.11, "Posting of notices to workers," you may be required to post this Notice within two working days of receipt.

Dated this 10th day of September 2021

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Docket No.: 50-284

License No.: R-110

Report No.: 05000284/2021201

Licensee: Idaho State University

Facility: Aerojet General Nucleonics-201M Research Reactor Facility

Location: Pocatello, Idaho

Dates: July 26-29, 2021

Inspector: Craig Bassett

Accompanied by: Juan Arellano, Nuclear Regulator Apprenticeship Network

Approved by: Travis L. Tate, Chief
Non-Power Production and Utilization
Facility Oversight Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

Idaho State University
Aerojet General Nucleonics-201M Research Reactor Facility
Inspection Report No. 05000284/2021201

The primary focus of this routine, announced inspection included onsite review of selected aspects of Idaho State University's (ISU, the licensee's) Class II research reactor safety program including: (1) organization and staffing; (2) operations logs and records; (3) procedures; (4) requalification training; (5) surveillance and limiting conditions for operation (LCOs); (6) experiments; (7) design changes; (8) committees, audits and reviews; (9) emergency planning; (10) maintenance logs and records; and, (11) fuel handling logs and records. The U.S. Nuclear Regulatory Commission (NRC) staff determined the licensee's program was acceptably directed toward the protection of public health and safety and, with one exception, was in compliance with NRC requirements.

Organization and Staffing

- The licensee's organization and staffing remain in compliance with the requirements specified in the technical specifications (TSs).

Operations Logs and Records

- Operational logs and records were consistent with applicable TS and procedural requirements and indicated that reactor operations were conducted in accordance with TSs and applicable procedures requirements.

Procedures

- Facility procedural review, revision, control, and implementation satisfied TSs requirement.

Requalification Training

- Requirements in the Reactor Operator Requalification Program were completed.
- One violation was noted involving the 10 CFR 55.53(i) requirement that each operator receive a biennial medical examination.

Surveillance and Limiting Conditions for Operation

- The program for tracking and completing surveillance verifications and calibrations and for complying with LCOs was implemented in accordance with TS requirements.

Experiments

- Experiments were completed in accordance with licensee procedures and the irradiated material produced was controlled appropriately in accordance with the radiation protection program.

Design Changes

- Various changes were initiated and/or completed at the facility during the past 2 years. The changes were evaluated in accordance with regulatory requirements and determined that none required a license amendment.

Committees, Audits and Reviews

- Review and audit functions required by TS Section 6.4 were acceptably completed by the Reactor Safety Committee (RSC) or designated individuals.
- The composition of the RSC and the committee meeting frequency satisfied requirements stipulated in the TSs.

Emergency Planning

- Facility emergency preparedness was maintained through implementation of the Emergency Plan (E-Plan) and Implementing Procedures.

Maintenance Logs and Records

- Maintenance was completed in accordance with TSs and procedural requirements.

Fuel Handling

- The licensee performed limited fuel handling operations which only involved an annual inspection of the safety and control rods, in accordance with procedure.

REPORT DETAILS

Summary of Facility Status

The ISU Aerojet General Nucleonics-201M (AGN-201M) Research Reactor Facility, licensed to operate at a maximum steady-state thermal power of 5 watts, continued to be operated in support of operator training, surveillance, experiments, and laboratory work. During the inspection, the reactor was not operated due to on-going control rod maintenance and testing.

1. Organization and Staffing

a. Inspection Scope (Inspection Procedure (IP) 69001, Section 02.01)

The inspector reviewed the following regarding the licensee's organization and staffing to ensure that the requirements of the TS Sections 6.1 and 6.2 were met:

- organizational structure and staffing for the facility
- administrative controls and management responsibilities
- ISU AGN-201M, "General Operating Rules," Revision (Rev.) 4
- ISU AGN-201M Reactor Facility Master Logs for the period from July 2019 to the present
- reactor facility Annual Operating Report for the 2019 calendar year dated July 13, 2020, and the reactor facility Annual Operating Report for the 2020 calendar year dated July 28, 2021

b. Observations and Findings

Through interviews with licensee personnel and document review the inspector noted that no changes were made in the organization since the last operations inspection in 2019. However, a change in personnel occurred. The inspector observed that the individual who held the position of Reactor Supervisor (RS) left the facility. The inspector confirmed that a new person was appointed and is serving as the RS. The inspector noted that the TSs require that the RS be a senior reactor operator (SRO). Because the new RS was not able to take the NRC operator examination due to delays caused by the Coronavirus Disease 2019 (COVID-19) Public Health Emergency (PHE), that person is currently considered as the "administrative" RS. The Reactor Administrator (RA) continues to act as the Interim "official" RS until such time as the other person can receive an operator license. The RA is a licensed SRO at the facility.

c. Conclusion

The inspector confirmed that staffing at the facility was acceptable to support the current workload and ongoing activities. The inspector determined that the organization and staffing at the facility met the requirements specified in the TSs.

2. Operations Logs and Records

a. Inspection Scope (IP 69001, Section 02.02)

The inspector reviewed selected aspects of the following to ensure that the operations program was implemented as required in TS Sections 2.0, 3.0, and 6.0:

- ISU AGN-201M Procedure, "General Operating Rules," Rev. 4
- ISU AGN-201M Reactor Operations Log (ROL) ROL-101 forms, Rev. 5
- ISU AGN-201M Operations Procedures including Operating Procedure-1 (OP-1), "AGN-201 Operating Procedure #1," Rev. 4 and OP-2, "AGN-201 Operating Procedure #2," Rev. 4
- ISU AGN-201M Reactor Facility Master Logs for the period from July 2019 to the present

b. Observations and Findings

The inspector verified that reactor operating characteristics and other TSs and procedurally required entries were recorded on the appropriate forms and logs. The inspector was not able to observe a routine reactor startup or operations because of on-going control rod maintenance and testing. However, according to the records reviewed, the inspector noted that the reactor was operated in accordance with approved procedures. Through a review of the completed ROL forms and console logs, the inspector confirmed that those individuals required by TSs were present during reactor operations. In addition, the inspector verified that scrams were identified in the logs and were reported and resolved as required before the resumption of operations.

c. Conclusion

The inspector determined that operational logs and records were consistent with applicable TS and procedural requirements and indicated that reactor operations were conducted in accordance with TSs and applicable procedures requirements.

3. Procedures

a. Inspection Scope (IP 69001, Section 02.03)

To ensure that the requirements of TS Section 6.6 was met, the inspector reviewed the following:

- ISU AGN-201M Operating Procedures OP-1 and OP-2
- ISU AGN-201M Procedure, "General Operating Rules," Rev. 4
- selected AGN-201M experiment plans/procedures, maintenance procedures (MPs), and surveillance procedures (SPs)
- ISU Nuclear Engineering Laboratory Administrative Procedure, AP-ISU-NEL-001, "[Title 10 of the *Code of Federal Regulations*] 10 CFR 50.59 Evaluations," Rev. 1

b. Observations and Findings

The inspector confirmed that licensee procedures were established for those activities outlined in TS Section 6.6 and were appropriate for current facility operations and staffing level. The inspector verified that various existing procedures were revised, updated, and rewritten as needed or required. The inspector noted that the licensee submitted any new or revised procedures to the RSC for review and approval as required by TS.

c. Conclusion

The inspector determined that procedural review, revision, control, and implementation satisfied TS requirements.

4. Requalification Training

a. Inspection Scope (IP 69001, Section 02.04)

To determine that operator requalification activities and training were conducted and that medical examinations were completed as required by the licensee's operator requalification program, TS Section 6.3 and 10 CFR Part 55, "Operators' Licenses," the inspector reviewed:

- medical examination records for selected operators
- active license status for selected licensed operators
- documentation of training lectures, records of reactivity manipulations, console evaluations, and written examinations noted on forms entitled, "Idaho State University Nuclear Engineering Laboratory Requalification Program Progress Checklist"
- ISU AGN-201M reactor facility master logs for the period from July 2019 to the present
- "Reactor Operator Requalification Program for the Idaho State University Reactor," Rev. 2

b. Observations and Findings

(1) Operators

The inspector noted that, as of the date of the inspection, there were five SROs and one reactor operator (RO) licensed to operator the reactor at the facility. The inspector verified there were two people who were full-time university employees working at the facility as well as various part-time student operators. One of the full-time employees was the RA, an SRO, and the other was the RS who was scheduled to take an NRC operating examination in September. The inspector confirmed that all of the operators' licenses were current.

(2) Exemption due to COVID-19

With respect to the Reactor Operator Requalification Program, the inspector noted that the licensee submitted a request to the NRC by letter dated May 13, 2020, for an exemption from 10 CFR 55.53(e) regarding the minimum of four operating hours per

calendar quarter requirement for each operator. The request was made as a result of the various restrictions imposed campus-wide by ISU due to the COVID-19 PHE which prohibited most students from the reactor. As an alternate measure for quarterly operation, the licensee indicated that operators would be required to participate in monthly refresher training sessions (via Zoom) to maintain familiarity with the facility. By letter dated May 22, 2020, the NRC granted the exemption.

Through a review of facility logs and records, the inspector confirmed that training and lectures were conducted in accordance with the licensee's requalification program and the exemption granted due to the COVID-19 PHE. The inspector also noted that annual written examinations were administered to operators when they were allowed on campus. The inspector verified that activities, such as various supervisory activities, annual console evaluations, and semiannual drill participation were completed when the COVID-19 situation allowed.

(3) Biennial Medical Examination

Section 55.53(i), "Conditions of licenses," of 10 CFR requires that "the licensee [reactor operator] shall have a biennial medical examination."

Through discussions with the RS and a review of records, the inspector also verified that most operators received a biennial medical examination. However, the inspector confirmed that this requirement was not met for two SROs. Records reviewed by the inspector showed that one SRO's previous medical examination was completed April 29, 2019, and the recent medical examination was completed July 8, 2021. Another SRO's previous medical examination was completed April 22, 2019, and the recent medical completed July 19, 2021. Those time frames exceed the limit of two years required by the regulations. The licensee was informed that failure of two operators to receive a medical examination every two years was a violation (VIO) of 10 CFR 55.53(i) (VIO 05000284/2021201-01).

c. Conclusion

The inspector determined that many of the requirements stated in the Reactor Operator Requalification Program were completed. The inspector noted one violation of the requirement for each operator to receive a biennial medical examination.

5. Surveillance and Limiting Conditions for Operation

a. Inspection Scope (IP 69001, Section 02.05)

To determine that reactor surveillance activities and LCO checks, calibrations, and verifications were completed as required by TS Sections 3.0 and 4.0, the inspector reviewed:

- ISU AGN-201M Operating Procedures OP-1 and OP-2
- selected ISU AGN-201M SPs including SP-1 through SP-6 for calibrations and LCO verifications
- ISU AGN-201M reactor facility master logs for the period from July 2019 to the present

b. Observations and Findings

The inspector confirmed that selected daily, annual, biennial, and other periodic checks, tests, and/or calibrations for TSs-required surveillance and LCO activities and verifications were completed as stipulated in TSs. Surveillance and LCO verifications reviewed by the inspector were completed on schedule and in accordance with the applicable procedures. The inspector confirmed that all recorded results were within the TSs and procedurally prescribed parameters.

c. Conclusion

The inspector determined that the program for surveillance and LCO verifications was completed in accordance with the TS requirements in Sections 3.0 and 4.0

6. Experiments

a. Inspection Scope (IP 69001, Section 02.06)

To ensure that the requirements of TS Section 6.7 were met, the inspector reviewed the following:

- various ISU AGN-201M ROL-101 forms
- ISU AGN-201M Operating Procedures OP-1 and OP-2
- Approved Experiment Plans (EPs) including EP-1 through EP-22
- ISU AGN-201M Reactor, "Isotope Production and Disposition Log"
- ISU AGN-201M Reactor, "Isotope Production and Disposition Form," Rev. 1

b. Observations and Findings

The inspector noted that there were 22 experiments that were approved for use at the facility, however, only about 10 of those were routinely used. The inspector found that experiments were generally conducted for classwork and training. The inspector reviewed the EPs and no issues were identified.

The inspector noted that the operations logs appropriately recorded which experiments were performed, and that the irradiated material produced was properly controlled and maintained. A review of the Isotope Production and Disposition Forms by the inspector indicated that irradiated material was not typically transferred to another license. After irradiation, the material was analyzed and then placed in a storage vault at the facility. The inspector confirmed that material was often re-irradiated for other experiments.

c. Conclusion

The inspector determined that experiments were completed in accordance with licensee procedures and the irradiated material produced was controlled appropriately in accordance with the radiation protection plan.

7. Design Changes

a. Inspection Scope (IP 69001, Section 02.08)

In order to verify whether modifications to the facility, procedures, and experiments were consistent with 10 CFR 50.59 and TS Section 6.5, the inspector reviewed:

- RSC meeting minutes for 2019 through 2021
- reviews and audits completed by the RSC or an RSC designee for 2019 – 2021
- 10 CFR 50.59 review and evaluation entitled, ISU-50.59-2018-2, “Reactor Control Console Replacement,” and reviewed by the RSC on February 26, 2019
- The two most recent ISU AGN-201M Reactor Annual Operating Reports

b. Observations and Findings

The inspector noted that various facility changes were made or initiated since the last inspection. A review of the proposals by the inspector indicated that none have risen to the level requiring submission of an amendment to the NRC for approval. The inspector confirmed that the licensee continued to work on their Reactor Control Console replacement project. A 10 CFR 50.59 review and evaluation were performed which indicated that no license amendment would be needed prior to implementation.

c. Conclusion

The inspector determined that various changes were initiated and/or completed at the facility during the past 2 years and evaluations determined that none required a license amendment.

8. Committees, Audits and Reviews

a. Inspection Scope (IP 69001, Section 02.09)

In order to verify that the licensee conducted reviews and audits as required by TS Section 6.4, the inspector reviewed:

- RSC meeting minutes for 2019 through 2021
- reviews and audits completed by the RSC or a designee for 2019 through 2021
- The two most recent ISU AGN-201M Reactor Annual Operating Reports

b. Observations and Findings

The inspector reviewed the RSC meeting minutes from February 2019 to the present. These meeting minutes showed that the RSC met as required by the TSs and reviewed the types of topics outlined therein. Review of the committee meeting minutes by the inspector also indicated that the RSC provided guidance and direction for safe reactor operations and ensured suitable use and oversight of the reactor.

The inspector noted that the RSC, or individuals specifically designated by the committee, completed audits of the facility operations, programs, and procedures. Since the last NRC inspection, audits were completed annually in those areas outlined in the

TSs. The inspector also found that the Security Plan and the E-Plan were reviewed every 2 years as required by the TSs.

c. Conclusion

The inspector determined that the review, audit, and oversight functions required by TS Section 6.4 were acceptably completed by the RSC.

9. Emergency Planning

a. Inspection Scope (IP 69001, Section 02.10)

To ensure that the licensee was acceptably implementing the various aspects of their emergency preparedness program, as stipulated in the E-Plan for ISU dated August 5, 2016, the inspector reviewed selected aspects of:

- E-Plan implementing procedures
- E-Plan audit and audit responses
- documentation of emergency drills and critiques
- emergency response supplies, equipment, and instrumentation
- reactor facility emergency notification roster dated July 13, 2020
- memorandum of understanding (MOU) with offsite support agencies including: Portneuf Medical Center dated April 11, 2019; City of Pocatello (for Fire and Police support) dated October 9, 2019; and, Idaho State Police dated October 9, 2019

b. Observations and Findings

The inspector noted that the current version of the E-Plan approved for use at the facility was Rev. 7, dated August 5, 2016. The inspector also noted the plan and implementing/emergency procedures were audited and reviewed biennially as required. The inspector confirmed that audits were appropriate and the licensee addressed any issues identified. The inspector verified that MOU agreements with off-site response organizations were maintained and updated as required.

The inspector confirmed that supplies, instrumentation, and equipment were maintained and controlled as required in the E-Plan. Annual inspections and inventories of the equipment were required by the E-Plan. The campus Radiation Safety Officer (RSO) indicated that he was developing an inventory list but it was not yet available. The licensee was informed that the completion of an inventory list and documentation of the completed inventories would be considered by the NRC as an inspector follow-up item (IFI) and would be reviewed during a future inspection (IFI 05000284/2021201-02).

The inspector verified that emergency drills were conducted annually as required by the E-Plan, and summaries of the critiques held following the drills were issued so that any lessons learned during the exercise were documented and possible solutions to any problems identified could be developed. The inspector also found that emergency training for the reactor staff and for response organization personnel (including ISU Public Safety staff) was conducted and documented as required. This was typically done in conjunction with the annual drill.

The inspector, accompanied by the RS and the campus RSO, met with a staff member from the City of Pocatello Fire Department at Fire Station #1. The inspector noted that various topics were discussed including training, participation in drills, and support of the research reactor facility. It appeared that Fire Department personnel were well trained, properly equipped, and knowledgeable of the actions to take in case of an emergency at the reactor facility. From the visit, the inspector also noted it was apparent that there was a good working relationship between reactor staff and Fire Department personnel.

c. Conclusion

The inspector determined that the emergency preparedness program was carried out in accordance with the E-Plan.

10. Maintenance Logs and Records

a. Inspection Scope (IP 69001, Section 02.11)

To determine that reactor maintenance activities were completed as required by TS Sections 3.0 and 4.0, the inspector reviewed:

- various ISU AGN-201M ROL-101 forms
- ISU AGN-201M Operating Procedures OP-1 and OP-2
- selected maintenance forms, data sheets, and records
- ISU AGN-201M MP including MP-1, "AGN-201 Rod Maintenance," and MP-2, "Procedure To Open The AGN-201M Core Tank"
- ISU AGN-201M reactor facility master logs for the period from July 2019 to the present

b. Observations and Findings

The inspector reviewed pertinent maintenance logs and associated records and confirmed that preventive maintenance activities were conducted, as scheduled, and emergent maintenance was completed as needed. The inspector found that any problems noted, especially during reactor start-up or normal operation, were addressed in accordance with the applicable facility procedures or equipment manuals. The inspector noted that many maintenance activities involved reactor electronics as documented in the Reactor Facility Master Log. The majority of these problems involved reactor console Channel #2 and Channel #3. The inspector confirmed that the licensee was aware of the problems and was addressing them.

c. Conclusion

The inspector determined that the maintenance program satisfied TS requirements.

11. Fuel Handling Logs and Records

a. Inspection Scope (IP 69001, Section 02.12)

The inspector reviewed the following to ensure that TS Sections 4.0 and 5.0 and procedural requirements were met:

- AGN-201M fuel inventory sheets for 2017, 2018, and to date in 2019
- ISU AGN-201M MP-1, "AGN-201M Rod Maintenance," Rev. 6
- ISU AGN-201M reactor facility master logs for the period from July 2019 to the present

b. Observations and Findings

The inspector confirmed that no reactor fuel inspection or movement was completed or required in the period since the last inspection. The inspector verified that the control and safety rods, which contain a small amount of fuel, were inspected every year in accordance with licensee procedure.

c. Conclusion

The inspector determined that the safety and control rods were inspected annually in accordance with licensee procedure.

12. Follow-up On Previously Identified Items

a. Inspection Scope (IP 92701)

The inspector reviewed the licensee's actions taken in response to a previously identified Unresolved Item (URI).

b. Observation and Findings

URI 50-284/2019-202-01 – (Closed) – Follow-up on the licensee's actions to ensure that all operators engaged in the Reactor Operator Requalification Program complete all aspects and requirements of the program on a biennial basis as required.

During an inspection in July 2019, the inspector noted various issues with the Reactor Operator Requalification Program. All of the ROs at that time completed the required 4 hours per quarter performing licensed functions but other issues were noted including: 1) incomplete annual console evaluations, 2) administration of the annual written examinations by someone other than the RS or the RA, and, 3) possible lack of completion of a medical examination for each operator within the 2 year window as required by TS Section 6.3 which required compliance with American National Standards Institute/American Nuclear Society-15.4, "Selection and Training for Personnel for Research Reactors." Because these issues and deficiencies were noted toward the end of the 2-year cycle of the Operator Requalification Program, the licensee still had time to complete the items to meet the requirements of the program. Therefore, the licensee was informed that full completion of the program would be considered a URI and would be reviewed during a future inspection.

A review of the Operator Requalification Program during this inspection indicated that, as noted in Paragraph 4 above, most of the requirements of the licensee's operator requalification program were completed. Through discussions with licensed operators and a review of records, the inspector determined that two operators did not receive a

biennial medical examination within the 2 year time frame required by the regulations. Because of that issue a violation was identified and this URI is considered closed.

c. Conclusion

The inspector determined that the URI is closed.

13. Exit Meeting Summary

The inspection scope and results were summarized on July 29, 2021, with licensee representatives. The inspector discussed the findings for each area reviewed. The licensee acknowledged the results of the inspection 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

C. Crome	Reactor Operator
M. Dunzik-Gougar	Reactor Administrator and Interim Reactor Supervisor
J. Kunze	Professor Emeritus, Idaho State University and member of the RSC
J. Longley	Radiation Safety Officer, Environmental Health and Safety Office, ISU
J. Scott	Reactor Supervisor (Administrative)

Other Personnel

K. Bunde	Professional Engineer and Chairman of the Reactor Safety Committee
M. Jaussi	Assistant Radiation Safety Officer, Idaho State University
J. Longley	Campus Radiation Safety Officer, Idaho State University
C. Pope	Chair, Department of Nuclear Engineering and Radiation Safety, College of Science and Engineering, Idaho State University
C. Solomon	Fireman, City of Pocatello Fire Department, Fire Station #1

INSPECTION PROCEDURES USED

IP 69001	Class II Research and Test Reactors
IP 92701	Follow-up on Previously Identified Issues

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened:

05000284/2021201-01	VIO	Failure of two operators to receive a medical examination every two years as required by 10 CFR 55.53(i).
05000284/2021201-02	IFI	Follow-up to ensure the licensee completes an inventory list of emergency supplies and documents the completion of those inventories.

Closed:

50-284/2019-202-01	URI	Follow-up on the licensee's actions to ensure that all operators engaged in the facility Operator Requalification Program complete all aspects and requirements of the program on a biennial basis as required.
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LIST OF ACRONYMS USED

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
AGN-201M	Aerojet General Nucleonics-201M
COVID-19	Coronavirus Disease 2019
E-Plan	Emergency Plan
EP	Experiment Plan
IFI	Inspector Follow-up Item
IP	Inspection Procedure
ISU	Idaho State University
LCO	Limiting Conditions for Operation
MOU	Memorandum of Understanding
MP	Maintenance Procedure
NRC	Nuclear Regulatory Commission
OP	Operating Procedure
PHE	Public Health Emergency
RA	Reactor Administrator
Rev.	Revision
RO	Reactor Operator
ROL	Reactor Operations Log
RS	Reactor Supervisor
RSO	Radiation Safety Officer
SP	Surveillance Procedure
RSC	Reactor Safety Committee
SRO	Senior Reactor Operator
TSs	Technical Specifications
URI	Unresolved Item