

SAFETY EVALUATION REPORT

DOCKET NO: 70-1257

LICENSE NO: SNM-1227

LICENSEE: Framatome Inc.
2101 Horn Rapids Road
Richland, WA 99354-0130

SUBJECT: REQUEST FOR EXEMPTION FROM 24-HOUR REPORTING
REQUIREMENT

BACKGROUND

In a letter dated August 3, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20216A611), Framatome Inc. (Framatome) submitted a request for exemption from the reporting requirement for unplanned contamination events in Title 10 of the *Code of Federal Regulations* (10 CFR), Paragraph 70.50(b)(1). By letter dated September 14, 2020, the U.S. Nuclear Regulatory Commission (NRC) staff accepted Framatome's request (ADAMS Accession No. ML20253A147). In its acceptance letter, the NRC staff requested additional information (RAI) regarding Framatome's costs and resource savings, should the exemption be granted by the NRC. By letter dated September 21, 2020 (ADAMS Accession No. ML20265A301), Framatome provided the requested information.

DISCUSSION

The relevant provisions of 10 CFR 70.50(b)(1) state that a licensee shall notify the NRC within 24 hours after the discovery of an unplanned contamination event that requires access to the contaminated area by workers or the public to be restricted for more than 24 hours by imposing additional radiological controls, or by prohibiting entry into the area. In its submittal, Framatome requested an exemption from this requirement in 10 CFR 70.50(b)(1) for situations that require the imposition of additional radiological controls for greater than 24 hours due to an unplanned contamination event inside an established contamination-controlled area. Framatome further stated that it is not seeking an exemption that would alter reporting requirements in 10 CFR 70.50(b)(1) for situations due to an unplanned contamination event outside an established contamination-controlled area (CCA). Framatome will continue to notify the NRC of an unplanned contamination event outside an established CCA that requires worker access to an area to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area, including non-controlled areas such as adjacent hallways, rooms, rooftops and outdoor areas. The exemption would not preclude reporting unplanned contamination events by other NRC requirements such as 10 CFR 20.2202 "Notification of incidents", 10 CFR 20.2203 "Reports of exposures, radiation levels and concentrations of radioactive material exceeding the constraints or limits," and Appendix A to Part 70 "Reportable Safety Events" that result in a failure to meet the performance criteria of 10 CFR 70.61 (i.e., high or intermediate consequence event).

Enclosure 1

~~OFFICIAL USE ONLY – SECURITY-RELATED INFORMATION~~

In its August 3, 2020, submittal, the licensee provided the following technical justification:

1. The CCAs are clearly posted and reside within a fenced enclosure of the site designated as the controlled access area (CAA) with access restricted to individuals that have completed site-specific training requirements or individuals that are formally escorted. At no time can members of the public access the CAA without being escorted or trained.
2. Framatome maintains and implements an effective Radiation Protection Program to keep worker exposures As Low as Reasonably Achievable (ALARA) which include engineering and other exposure control practices, such as action levels to protect workers, described in approved standard operating procedures. In addition, operations are conducted in accordance with approved procedures for routine work in CCAs that provide flexibility for upgrading and downgrading controls in response to changing radiological conditions.
3. The radiation protection personnel are trained and qualified in contamination control procedures and techniques required for responding to a contamination event, and are readily available to respond as needed. In addition, Framatome employs a staff of operations staff and Health and Safety Technicians (HSTs) on each production shift (day shift, second shift and third shift) to support and respond to radiological conditions in a CCA to ensure appropriate and timely actions are taken. The operations staff are trained and expected to decontaminate areas that become contaminated. The HSTs are trained in contamination control procedures and techniques required for responding to a contamination event and are readily available to respond as needed. In addition, Framatome employs a staff of Radiation Safety Health Physicists (HPs) to provide guidance and technical radiation safety expertise to the HSTs.
4. The CCAs are designed to control contamination in process and manufacturing areas at the facility where unencapsulated uranium is routinely handled. These controls include engineered features such as ventilated areas designed to provide airflow from areas of lesser potential contamination to areas of higher potential contamination. Activities and process equipment that could potentially generate airborne uranium are designed with ventilated containment enclosures, hoods, dust capturing exhaust ports, local exhaust systems and other devices to minimize the release of uranium in work areas. The air and gasses from fuel manufacturing processes are exhausted as appropriate through HEPA filter media prior to being recirculated back into work areas or exhausted to the environment. Routine engineered and facility control adjustments to minimize exposures and the extent of a release include shutting down equipment and closing or reducing containment hood openings.
5. Appropriate radiation surveys are performed by qualified personnel during or after an unplanned contamination event as necessary to assess radiological conditions and provide the appropriate response. The type of survey is determined by staff HPs as described in the NRC-approved license and in accordance with approved procedures. Survey results are compared to specified action guides, and when contamination levels in excess of action levels are found, appropriate actions are taken, and the affected area is decontaminated in a safe and timely manner. Survey records for contamination events are documented pursuant to 10 CFR 20.2103 and are available for review.

6. Formal nuclear safety training is required for unescorted workers entering a CCA. Visitors to a CCA are escorted by trained personnel. The training includes information about radiation and radioactive materials, precautions or procedures to minimize exposure, the purposes and functions of protective devices employed, and their responsibility to report promptly to the licensee any condition which may lead to or cause a violation of NRC regulations and licenses or unnecessary exposure to radiation and/or radioactive material. The training also includes the appropriate response to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation and/or radioactive material and nuclear criticality safety principles. Training policy requires that workers must complete nuclear safety training prior to unescorted access in the CCA. The training is typically provided using computer-based training, but may be performed by authorized instructors. Previously trained workers who are allowed unescorted access to the CCA are retrained at least every year, and includes training on contamination control. The effectiveness of the training program is evaluated by either initial training exam or re-training exam.

The licensee estimated the cost of preparing the initial evaluation per 10 CFR 70.50(b)(1), the resources required for the necessary initial event notification, and follow-up reports averages \$68,000/event and that, assuming one such event per quarter, the total labor cost of such reporting is \$272,000/year.

With regard to the level of transparency to the public of unplanned contamination events should the exemption be granted by the NRC, Framatome stated that NRC staff inspects Framatome an average of six to seven times each year, and that NRC inspectors have full access to Framatome's Corrective Action Program (CAP), where such events are documented. Framatome also noted that the NRC inspectors review the items in the CAP during their inspections, and that the NRC inspections include a specific inspection of the facility's radiological safety program at least one time each year. The results of these inspections are documented and publicly available in ADAMS.

Regulatory Requirements

Section 70.17 of 10 CFR states that the Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law, and will not endanger life or property or the common defense and security, and are otherwise in the public interest.

The exemption is authorized by law

The NRC staff has determined that granting the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or other laws and therefore is authorized by law.

The exemption will not endanger life or property or the common defense and security

During its independent evaluation of the exemption, the NRC staff considered the justification provided by the licensee and reviewed the requirements in the radiation safety program required under the license. The radiation safety program requires: (a) written radiation protection procedures and radiation work permits, (b) the use of ventilation systems, containment systems, and respirators to control exposure to airborne radioactive material, (c) the use of protective

clothing to prevent the spread of surface contamination, (d) the use of surveys and monitoring programs to document contamination levels and exposures to workers, and (e) identification of items relied on for safety and management measures to maintain those items available and reliable. In addition, the NRC staff determined that the licensee has personnel adequately trained and qualified in contamination control who would be readily available, as needed. The NRC staff also determined that the licensee has readily available equipment and facilities to control contamination.

The proposed exemption would be limited to areas controlled for contamination where multiple controls are in place to limit access to qualified individuals. The NRC staff determined that additional limitations were necessary to ensure protection of the public health and safety. Specifically, the NRC staff determined that exemption should be limited to contamination events where the release of radioactive material is under control and no contamination has spread outside the controlled area. Furthermore, the NRC determined that, in order to ensure access to operational data and information related to contaminated events, the exemption should be limited to contamination events that are documented in the licensee's Corrective Action Program. Accordingly, the exemption is limited to the following safety condition:

- S-7 Notwithstanding the requirements of 10 CFR 70.50(b)(1), the licensee is exempted from the requirement to report unplanned contamination events when the following conditions are met:
1. The event occurs in a restricted area in a building which is maintained inaccessible to the public by multiple access controls,
 2. The area was controlled for contamination before the event occurred, the release of radioactive material is under control, and no contamination has spread outside the area,
 3. Radiation safety personnel trained in contamination control are readily available,
 4. Equipment and facilities that may be needed for contamination control are readily available, and
 5. The otherwise reportable unplanned contamination event is documented in the licensee's Corrective Action Program.

Based on the limited scope of the exemption, and the access and contamination controls, training, radiation surveys and other ALARA measures described in the application, the NRC staff has determined that granting the exemption as stated above will not endanger life or property. In addition, the NRC staff has determined that the exemption does not involve information or activities that could impact the common defense and security.

The exemption is otherwise in the public interest

The NRC staff has determined that granting this exemption request is otherwise in the public interest because it promotes regulatory efficiency. The exemption relieves Framatome from a reporting requirement for unplanned contamination events that do not present a risk to public health and safety given the site-specific conditions and programs described above. Specifically, the exemption would relieve the licensee from generating reports of contamination events in controlled areas where the release of radioactive material is under control and no contamination

has spread outside the controlled area. Granting the exemption will allow the licensee to focus the resources required to fulfill the reporting requirement on other activities. In addition, it would relieve the NRC staff from receiving and processing reports which do not present a risk to public health and safety.

ENVIRONMENTAL REVIEW

The NRC approval of this exemption request is categorically excluded under 10 CFR 51.22(c)(25)(vi)(B). The NRC staff has determined that the exemption involves reporting requirements and satisfies the following criteria:

- a. There is no significant hazards consideration.
- b. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- c. There is no significant increase in individual or cumulative public or occupational radiation exposure.
- d. There is no significant construction impact, and
- e. There is no significant increase in the potential for, or consequences from, radiological accidents.

There is no significant hazards consideration because the proposed exemption involves contamination events in areas controlled for contamination. There is no significant change in effluents or public radiation exposure because the exemption is limited to events where contamination has not spread outside of controlled areas. There is no significant increase in occupational radiation exposure because the licensee will continue to monitor and control worker exposures. There is no significant construction impact because the exemption does not relate to construction. Nor is there any significant increase in the potential for or consequences from radiological accidents because the exemption will not alter any of the assumptions or limits in the facility licensee's safety analysis. Therefore, in accordance with 10 CFR 51.22(c)(25), neither an environment assessment nor an environmental impact statement need be prepared in connection with the approval of this exemption request.

Conclusion

Based on its review above, the NRC staff concludes that the exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, the NRC staff recommends approval of Framatome's exemption request.

Principal Contributor:
Osiris Siurano-Perez