### U.S. NUCLEAR REGULATORY COMMISSION MIXED OXIDE FUEL FABRICATION FACILITY DOCKET NUMBER: 70-3098 EXEMPTION

# 1.0 BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to an October 31, 2018, request from CB&I AREVA MOX SERVICES (MOX Services) for an exemption from certain requirements in Title 10 of the Code of Federal Regulation (10 CFR) Part 70, "Domestic Licensing of Special Nuclear Material." (Agencywide Documents Access Management System (ADAMS) Accession Number ML18304A439) Specifically, MOX Services requested an exemption from the reporting requirements in section 70.72(d)(2)-(3) for the period of time until the NRC takes action on its request to terminate the Construction Authorization for the Mixed Oxide Fuel Fabrication Facility (MFFF) In the termination request, submitted in a separate filing on November 1, 2018, MOX Services stated that it had ceased NRC regulated construction activities as of October 12, 2018, following receipt of a notice of termination, dated October 10, 2018, from the U.S. Department of Energy, National Nuclear Security Administration (DOE/NNSA) of the contract between DOE/NNSA and MOX Services to design, build, and operate the MFFF (ADAMS Accession Number ML18305A356). MOX Services further stated that no nuclear fuel or special nuclear material is present at the construction site, all classified and safeguards information is now under DOE/NNSA control, and there are no ongoing activities associated with NRC regulated design or construction.

# 2.0 REQUEST/ACTION

MOX Services is seeking an exemption from the following portions of 10 CFR Part 70:

10 CFR 70.72(d)(2) which states "[f]or changes that do not require pre-approval under § 70.72, the licensee shall submit to NRC annually, within 30 days after the end of the calendar year during which the changes occurred, a brief summary of all changes to the records required by § 70.62(a)(2) of this subpart."

10 CFR 70.72(d)(3) which states "[f]or all changes that affect the integrated safety analysis summary, the licensee shall submit to NRC annually, within 30 days after the end of the calendar year during which the changes occurred, revised integrated safety analysis summary pages." MOX Services has previously provided annual updates to its integrated safety analysis (ISA) summary with a summary of changes on an annual basis as per regulatory requirements.

# 3.0 DISCUSSION

The NRC licensing process for the MFFF was conducted in two steps: (1) construction authorization and (2) license to possess special nuclear material. In the first phase, the NRC issued a CA for the facility in 2005 (ADAMS Accession Number ML050660392). Construction of the MFFF commenced in 2007 and remained ongoing until October 2018, when MOX Services received a notice of termination from the DOE/NNSA of the contract between DOE/NNSA and MOX Services to design, build, and operate the MFFF.

With respect to the second licensing phase, MOX Services submitted a license application to possess and use byproduct and special nuclear material at the MFFF pursuant to 10 CFR 70.23(b). In December 2010, the NRC published the "Final Safety Evaluation Report for the License Application to Possess and Use Radioactive Material at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC" ("FSER") (ADAMS Accession Number ML103430615). The SER concluded that the applicant's descriptions, specifications, commitments, and analyses provide an adequate basis for safety and safeguards of facility operations and that operation of the facility does not pose an undue risk to worker and public health and safety. Title 10 CFR Paragraph 70.23(a)(8) states that approval of a license for a plutonium processing and fuel fabrication plant requires that construction has been completed in accordance with the application, issuance of a license was deferred until that determination was made. To date, the NRC has not issued a possession and use license for special nuclear material.

MOX Services had been contracted by the DOE/NNSA to design, build, and operate the MFFF at the Savannah River Site, near Aiken, South Carolina. The purpose of the MFFF was to convert surplus nuclear weapons-grade plutonium into safe, stable MOX fuel for civilian nuclear power generation. The MFFF is owned by the DOE/NNSA. The facility has been under construction since 2007 and is partially completed. The construction that had commenced included the building structure and a portion of the equipment that would have been needed to operate the facility. However, since facility construction was not completed and NRC did not issue a license to possess special nuclear material, the facility was never operated and did not possess any special nuclear material.

MOX Services, in a letter dated November 1, 2018 (ADAMS Accession Number ML18305A356) requested termination of the CA because construction activities had ceased in October 2018. , following DOE/NNSA's termination of MOX Services' contract to design, build, and operate the MFFF at the Savannah River Site, near Aiken, South Carolina. DOE/NNSA issued a notice of termination to MOX Services on October 10, 2018 stating that as of that date, MOX Services was to perform only those activities included in the contract termination letter statement of work. The authorized activities include those necessary to preserve the site in a safe and secure manner and inventory all materials and design documents for the DOE/NNSA. The NRC's review of the termination request is pending.

MOX Services is requesting an exemption from the reporting requirements in 10 CFR 70.72(d)(2)-(3). Those regulatory provisions require licensees to submit to the NRC a summary of facility changes for which the licensee is not required to obtain pre-approval by the NRC under 10 CFR 70.72. The annual reports are required to be filed within 30 days after the end of the calendar year in which the changes occurred. MOX has requested the proposed exemption until such time as the CA is terminated by the NRC. The NRC has not, however, made a decision on MOX's termination request.

#### Authorized by Law

Pursuant to 10 CFR 70.17(a), the Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of 10 CFR Part 70 as it determines are authorized by law and will not endanger life or property of the common defense and security and are otherwise in the public interest. The provisions of 10 CFR 70.72 require licensees to evaluate, implement and track each change to the site, structures, processes, systems, equipment, components, computer programs and activities of personnel. MOX is seeking an exemption only from the requirement that an annual report must be filed summarizing the changes from the previous year that did not require pre-approval by the NRC under the criteria of 10 CFR 70.72(c). In all other respects, MOX will continue to comply with the facility change requirements in the regulations. While MOX has requested the exemption until its license is terminated, MOX's license termination request is still pending. For that reason, the NRC is granting the exemption, as described further below, until the NRC acts on the termination request. In the event that the NRC does not terminate the license MOX will be required to file 10 CFR 70.72(d)(2)-(3) annual reports. Therefore, the exemption is authorized by law.

### Will Not Endanger Life or Property or the Common Defense and Security

The exemption only applies to the annual reports required under 10 CFR 70.72(d)(2)-(3) until the NRC takes action on the termination request. Under those provisions of the regulations, absent an exemption, MOX Services would be required to file an annual report, by January 30, 2019, briefly summarizing all facility changes in 2018 that did not require pre-approval by the NRC. Notwithstanding this exemption, MOX would continue to be required to analyze and document all facility changes under other provisions of 10 CFR 70.72, which require the establishment and documentation of a configuration management system to evaluate, implement, and track each change to the site, structures, processes, systems, equipment, components, computer programs and activities of personnel. Further, the exemption is only effective until the NRC takes action on a pending termination request. In the event that the termination request is denied, MOX Services will be required to file the annual report for 2018.

For these reasons, the NRC staff has determined that the exemption will not have any impact on safety at the MOX construction site or security of protected information. Therefore, the exemption from 10 CFR 70.72(d)(2)-(3), will not endanger life, property or the common defense and security.

## Otherwise in the Public Interest

MOX Services ceased NRC regulated construction activities on the MFFF in accordance with the Notice of Termination of the contract from DOE/NNSA. It was this contract that supported the initial issuance of the CA. The MFFF is owned by the DOE/NNSA and is under the control of DOE/NNSA. MOX Services' work now involves activities to preserve the site in a safe and secure manner and inventory materials and design documents for the DOE/NNSA. The requested exemption is in the public interest because it promotes resource and regulatory efficiency, without impacting safety, during this interim period until the NRC makes a decision on MOX Services' termination request. Accordingly, the NRC staff has determined that this exemption is otherwise in the public interest.

## 4.0 ENVIRONMENTAL CONSIDERATIONS

The NRC staff has determined that, pursuant to 10 CFR 51.22(c)(25), the exemption request will not result in any significant: (1) hazards; (2) change in the types or significant increase in the amounts of any effluents that may be released offsite; (3) increase in individual or cumulative public or occupational radiation exposure; (4) construction impact; or (5) increase in the potential for or consequences from radiological accidents. The exemption request concerns the annual submittal of a summary of changes, i.e., reporting requirements, Therefore, the NRC staff has determined that granting the exemption meets the requirements for a categorical

exclusion under 10 CFR 51.22(c)(25)(vi)(B). Accordingly, pursuant to 10 CFR 51.22(b), no environmental assessment or an environmental impact statement needs be prepared in connection with the approval of this exemption request.

# 5.0 <u>CONCLUSION</u>

Accordingly, the NRC has determined that, pursuant to 10 CFR 70.17(a), the exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, the NRC hereby grants MOX Services an exemption from the requirements of 10 CFR 70.72 (d)(2) and (d)(3) until the NRC takes action on MOXs request to terminate the CA.

This exemption is effective upon issuance.