[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket No. 70-3098; NRC-2014-0235]

Shaw AREVA MOX Services

Mixed Oxide Fuel Fabrication Facility

AGENCY: Nuclear Regulatory Commission.

ACTION: Environmental assessment and finding of no significant impact; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering extending the expiration date for Construction Authorization (CA) CAMOX-001 issued to Shaw AREVA MOX Services for the Mixed Oxide Fuel Fabrication Facility on the Savannah River Site in Aiken, South Carolina.

ADDRESSES: Please refer to Docket ID **NRC-2014-0235** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this action by the following methods:

- **Federal Rulemaking Web site:** Go to http://www.regulations.gov and search for Docket ID **NRC-2014-0235**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.
- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly-available documents online in the NRC Library at http://www.nrc.gov/reading-rm/adams.html**.** To begin the search, select "ADAMS Public

Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. The request to extend the construction authorization expiration date, dated May 16, 2014, is available in ADAMS under Accession No. ML14132A342.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: David Tiktinsky, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission; Washington, DC 20555-0001; telephone: 301-287-9155; e-mail: David.Tiktinsky@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction.

The NRC is considering extending the CA expiration date specified in CA CAMOX-001 issued to Shaw AREVA MOX Services (MOX Services) for the Mixed Oxide Fuel Fabrication Facility. The facility is located on the Department of Energy's Savannah River Site in Aiken, South Carolina. Therefore, as required by § 51.21 of Title 10 of the *Code of Federal Regulations* (10 CFR), the NRC performed an environmental assessment. Based on the results of the environmental assessment that follows, the NRC has determined not to prepare an

environmental impact statement for the action of extending the expiration date of the construction authorization, and is issuing a finding of no significant impact.

II. Environmental Assessment.

Identification of the Proposed Action:

The proposed action would extend the expiration date of CA CAMOX-001 from March 30, 2015, to March 30, 2025. MOX Services submitted the CA extension request by letter dated May 12, 2014 (ADAMS Accession No. ML14132A342). MOX Services submitted the request to extend the CA at least 90 days before the expiration of the existing CA, therefore, in accordance with 10 CFR 2.109(a), the existing CA will remain in effect until the NRC staff has completed the review of the request.

The proposed extension will not expand the scope of any work to be performed that is not already allowed by the existing construction authorization. The extension will grant the MOX Services additional time to complete construction in accordance with the previously approved CA.

The Need for the Proposed Action:

The proposed action is necessary to give the CA holder adequate time to complete construction of the Mixed Oxide Fuel Fabrication Facility. The CA for the MFFF was originally issued on March 30, 2005, with an expiration date of March 31, 2015. MOX Services has stated in their May 12, 2014, request that various factors have contributed to the need for an extension of the CA. The factors include: (a) the MFFF is a unique first of a kind facility of this type to be licensed in the United States under 10 CFR part 70; (b) annual funding/appropriations supporting construction activities have been less that the projected funding profile for several

years; (c) requirements of nuclear procurements coupled with a shortage of qualified vendors have resulted in delayed delivery of components; (d) a shortage of qualified construction workers have resulted in longer durations for key construction activities, and (e) a 2-year delay between issuance of the CA and the start of nuclear construction.

In May 2014, MOX Services determined that in order to bound the potential completion date of the facility, with respect to the dependence of annual congressional funding, that the CA should be extended to March 31, 2025.

Environmental Impacts of the Proposed Action:

The environmental impacts associated with the construction of the facility have been previously discussed and evaluated in MOX Services Mixed Oxide Fuel Fabrication Facility Environmental Report, Revision 5, dated June 10, 2004.

The NRC staff previously evaluated the environmental impacts of construction and operation of this facility. In January 2005, the NRC staff issued NUREG-1767, "Final Environmental Impact Statement on the Construction and Operation of a Proposed Mixed Oxide Fuel Fabrication Facility at the Savannah River Site, South Carolina (Vol. 1: ML050240233; Vol. 2: ML050240250) (FEIS). The FEIS stated that after weighing the costs and benefits of the proposed action and comparing alternatives, the staff concluded that (a) the applicable environmental requirements set forth in FEIS Chapter 6, and (b) the proposed mitigation measures discussed in FEIS Chapter 5 would eliminate or substantially lessen any potential environmental impacts associated with the proposed action. The staff also concluded that the overall benefits of the proposed MOX facility outweigh its disadvantages and costs.

As part of the application for extension of the CA, MOX Services has concluded that activities conducted to date are still bounded by the MOX Services Environmental Report. MOX Services has also concluded that the extension of the CA expiration would not authorize or

result in any new activities or result in changes of significance as defined 10 CFR Part 51.60(b)(2).

Under the authorization within CAMOX-001 Rev 3, MOX Services has made substantial progress in the construction of the MFFF with overall construction status in excess of 60 percent complete. Significant progress has been made in construction of Principal Structures, Systems, and Components (PSSCs) and other non-PSSCs. For example, the MOX Fuel Fabrication Building (PSSC-036) is substantially complete, including the roof and the exterior structure, with only temporary construction openings remaining. More than 200,000 pounds of ventilation system ductwork (PSSC-004, -005, -006, -041, -050) has been installed. Seventy of 73 tanks have been installed (PSSC-003, -009, -010, -023, -041, 043, -045). Approximately 20 gloveboxes (PSSC-024) have been installed. Installation of approximately 1000 fire dampers (PSSC-021) has commenced. These PSSC activities have been completed in accordance with MOX Services' NRC-approved Quality Assurance Plan. Construction activities that are not related to PSSCs include completion of the Administration Building, Technical Support Building, Craft Support Building, and Secured Warehouse as well as the installation of more than 70,000 linear feet of non-PSSC electrical cable. In addition, MOX Services has completed in-advance testing of 27 process units.

While significant progress has been made on construction of the MFFF, additional time is required for completion of construction. Key structures remaining to be constructed include the Emergency Generator Building (PSSC-016) and the Reagents Processing Building (non-PSSC). Other key PSSC related construction activities remaining include completing installation of ventilation systems (PSSC-004, -005, -006, -041, -050), including fire dampers (PSSC-021), fire detection and suppression system (PSSC-022), diesel generator and support systems (PSSC-012, -017, -018), process units (various PSSCs), and gloveboxes (PSSC-024).

These activities are authorized under CAMOX-001 Rev. 3 and will be constructed in accordance with the MOX Project Quality Assurance Plan.

MOX Services has made substantial progress in the construction of the MOX Fuel Fabrication building and other support buildings. Most of the remaining construction activities will take place within the existing buildings. Therefore, most of the environmental impacts discussed in MOX Services' Environmental Report have occurred and the impacts are consistent with the staff's FEIS. The requested extension of the CA is for the time needed to complete construction and does not impact the scope of activities. Accordingly, the extension does not involve any additional impacts or represent a significant change to those impacts described and analyzed in the previous environmental report. Based on the foregoing, the NRC staff has concluded that the proposed action would have no significant environmental impact.

Environmental Impacts of the Alternatives to the Proposed Action:

A possible alternative to the proposed action would be to deny the request, or the no-action alternative. If the NRC denies the extension request, then MOX Services will need to cease construction activities in 2015 when the CA expires. Because most of the construction activities have already taken place, the impacts of this alternative would not be significantly different that if NRC approved the extension request.

Alternative Use of Resources:

Since the CA holder has no plans to perform any new activities that were not considered in previous environmental reviews, the spreading out of time for the construction of the remainder of the facility does not involve the use of resources not previously considered in the environmental documents for the MFFF.

Agencies and Persons Consulted:

In accordance with its stated policy, on July 29, 2014, the NRC staff consulted with officials from the South Carolina Department of Health and Environmental Control regarding the environmental impact of the proposed action. The State officials had no comments.

III. Finding of No Significant Impact.

Based on the details provided in this environmental assessment, the NRC staff concludes that the proposed action of extending the expiration date of CA from March 30, 2015, to March 30, 2025, does not involve any different impacts or a significant change to those impacts described and analyzed in the original environmental impact statement. Therefore, the NRC staff has determined that extending the CA completion date will not have a significant effect on the quality of the human environment because it does not involve any additional impacts or represent a significant change to those impacts described and analyzed in the previous environmental report and FEIS. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

This finding and documents related to this action such as the CA holder's request for extension dated May 12, 2014 (ADAMS Accession No. ML14132A342) and related environmental documents (FEIS: Vol. 1: ML050240233; Vol. 2: ML050240250) are available electronically at the NRC Library at http://www.nrc.gov/reading-rm/adams.html. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search."

Dated at Rockville, Maryland this 16 day of October 2014.

For The Nuclear Regulatory Commission.

/RA/

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Division of Fuel Cycle Safety
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