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U.S. Nuclear Regulatory Commission  
Washington, DC 20555

03 October 2007  
DCS-NRC-000209  
Response Requested: Yes  
Response Due Date: 30-Nov-07

Subject: Docket Number 070-03098  
Shaw AREVA MOX Services, LLC  
Mixed Oxide Fuel Fabrication Facility  
Request for Exemption from Definition of Commercial Grade Item

Shaw AREVA MOX Services, LLC (MOX Services) requests an exemption from 10 CFR 21.3 *commercial grade item*, as described in more detail in the attachment to this letter. The requested exemption will provide needed flexibility for procurement for construction of the Mixed Oxide Fuel Fabrication Facility (MFFF) at the Savannah River Site in a fiscally prudent and efficient manner.

The requested exemption is authorized by 10 CFR 21.7, "Exemptions," which provides for exemptions that are authorized by law, will not endanger life, property, or the common defense and security, and are otherwise in the public interest. The attachment to this letter demonstrates that the requested exemption meets each of these requirements. The attachment also identifies the specific requirements of the regulation for which an exemption is requested and provides the associated justification.

Approval of the exemption is requested by the end of November 2007 to allow procurement of long lead-time components to proceed consistent with the construction schedule for the MFFF.

If you have any questions, please feel free to contact me or Dealis W. Gwyn, Licensing and Regulatory Compliance Manager, at (803) 819-2780.

Sincerely,

A handwritten signature in black ink that reads "W. Elliott".

Walter Elliott  
Vice President, Engineering

WLE:DAY:gdh

Enclosure

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DCS-NRC-000209  
03 October 2007  
Page 2 of 2

cc:

Mostafa (Mosi) Dayani, NNSA/SRS  
Carol Elliott, NNSA/SRS  
Joseph G. Giitter, USNRC/HQ  
William Gloersen, USNRC/RII  
Dealis W. Gwyn, MOX Services  
Margaret A. Kotzalas, USNRC/HQ  
Dirk S. Leach, MOX Services  
Robert C. Pierson, USNRC/HQ  
Clay H. Ramsey, NNSA/SRS  
David H. Tiktinsky, USNRC/HQ  
Deborah Seymour, USNRC/RII  
Melvin Shannon, USNRC/SRS  
George Shell, MOX Services  
Donald J. Silverman, Esq., MOX Services  
Garrett A. Smith, NNSA/HQ  
David Stinson, MOX Services  
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## Exemption Request

### **Background**

Shaw AREVA MOX Services, LLC (MOX Services) is preparing for procurement of long lead-time components for the Mixed Oxide Fuel Fabrication Facility (MFFF) at the Savannah River Site. In accordance with 10 CFR 21.31 Procurement Documents, each procurement document for a basic component must specify that the provisions of 10 CFR Part 21 apply. Each supplier of a basic component for the MFFF subject to 10 CFR Part 21, unless it is exempted, is required by 10 CFR 21.21(a) to adopt procedures to evaluate deviations and failures to comply and notify the Commission or the purchaser of any deviations and failures to comply that are associated with a substantial safety hazard. An exemption is provided by 10 CFR 21.7 for suppliers of commercial grade items.

Because of the high cost of maintaining and implementing an Appendix B quality assurance program coupled with a relatively small demand, many of the manufacturers and suppliers of equipment necessary to construct the MFFF (some of which are foreign suppliers) neither implement quality assurance programs that meet NRC quality assurance requirements, nor the evaluation and notification procedures that satisfy the reporting requirements of Part 21. The current Part 21 definition of commercial grade item for facilities and activities licensed under Part 70 is unnecessarily restrictive. The restrictive definition of a commercial grade item for 10 CFR 70 licensed facilities greatly complicates procurement of components for the MFFF.

In 1995, in response to a petition filed on behalf of operators of nuclear power plants, the Commission determined that the definition of commercial grade item was unnecessarily restrictive, and resulted in very limited use of the commercial grade item designation. To provide added flexibility in using commercial grade items for safety-related service, the Commission adopted a new definition of commercial grade item for nuclear power plants. The amended definition added flexibility only for nuclear power plants, and did not change the requirements applicable to other facilities and activities. In response to a comment from the public that the new definition should also apply to such other facilities and activities, the Commission stated that proposed changes for nonreactor licensees are currently being considered. 60 Fed. Reg. 48,370 -371 (Sept. 19, 1995). No such changes have been adopted. Therefore, MOX Services is requesting an exemption from paragraph (2) of 10 CFR 21.3 "Commercial grade item" that is consistent with the added flexibility given to Nuclear Power Plants and to support procurement of long lead-time components for the MFFF in a fiscally prudent manner and not adversely impact the MFFF construction schedule.

### **Specific Exemption Request**

In accordance with 10 CFR 21.7, "Exemptions," MOX Services requests NRC approval of an exemption from the requirements of 10 CFR 21.3, "Definitions," *Commercial grade item*, paragraph (2). In lieu of the definition of commercial grade item for facilities and activities licensed under Part 70, MOX Services will, upon exemption approval, revise the MOX Project Quality Assurance Plan (MPQAP) to specify a different definition of commercial grade item, based on the definition applicable to nuclear power plants in 10 CFR 21.3, "Definitions," *Commercial grade item*, paragraph (1). The revised MPQAP would provide the same added flexibility in procuring commercial grade items for safety related (or IROFS) service as the Commission provided for nuclear power plant licensees when it amended the definition of commercial grade item in September 1995. MOX Services would use the following definition of commercial grade item:

*A commercial grade item means a structure, system, or component, or part thereof that affects its safety function, that was not designed and manufactured as a basic component. Commercial grade items do not include items where the design and manufacturing process require in-process inspections and verifications to ensure that defects or failures to comply are identified and corrected (i.e., one or more critical characteristics of the item cannot be verified).*

The ability to employ this proposed definition would provide MOX Services with increased flexibility to apply the commercial grade item procurement strategy for equipment procurements where the equipment would not meet the definition applicable for Part 70 licensees. This flexibility is particularly necessary in situations in which few or no suppliers are available with appropriate Appendix B QA Programs and Part 21 procedures. The proposed definition would remove unnecessary restrictions and allow MOX Services to employ an equally controlled and safe approach to item procurement that is more economical.

### **The Requested Exemption is Authorized by Law**

The NRC has the authority under the Atomic Energy Act to grant exemptions from its regulations if doing so would not violate the requirements of law. This exemption is authorized by law as is required by 10 CFR 21.7. No law exists that precludes the activities covered by this exemption request. The provisions of 10 CFR 21.3, "Definitions," *Commercial grade item*, paragraph (2) were adopted at the discretion of the Commission consistent with its statutory authority. No statute required the NRC to adopt the specific provisions from which MOX Services seeks an exemption. Rather, the NRC may determine that alternative means are adequate to provide reasonable assurance of safety.

The Requested Exemption Will Not Endanger Life, Property, or the Common Defense and Security

In adopting the revised definition of commercial grade item for nuclear power plants in 1995, the Commission determined that a commercial grade item, when properly and successfully dedicated, is deemed by the NRC to be equivalent in its safety function performance to the same or similar item designed and manufactured under a Part 50 Appendix B quality assurance program. 60 Fed Reg. 48,372 (Sept. 19, 1995). Since then, procurement of commercial grade items using the more flexible definition of commercial grade item has been successfully implemented by Part 50 licensees. As a result, implementation of a similar procurement process by MOX Services also will not endanger life, property, or the common defense and security.

The Requested Exemption is in the Public Interest

The requested exemption is in the public interest because it will allow MOX Services to implement a controlled and safe approach to item procurement that will support MOX Services' goal of constructing the MFFF in a timely and cost efficient manner. The overall result of not granting the exemption will be increased cost, delayed completion of procurement activities, and the associated economic losses, without any safety benefit. Therefore, granting the requested exemption is in the public interest.

Conclusion

As demonstrated above, the requested exemption is authorized by law, will not endanger life, property, or the common defense and security, and is otherwise in the public interest. Since the provisions of 10 CFR 21.7 are satisfied, the requested exemption should be granted.