

August 8, 2012

Mr. Michael Jandreau, Chairman  
Lower Brule Sioux Tribe  
P.O. Box 187  
Lower Brule, SD 57548-0187

SUBJECT: INVITATION FOR FORMAL SECTION 106 CONSULTATION PURSUANT TO  
THE NATIONAL HISTORIC PRESERVATION ACT REGARDING THE  
URANIUM ONE, INC. LICENSE AMENDMENT APPLICATION FOR THE  
PROPOSED LUDEMAN PROJECT *IN-SITU* URANIUM RECOVERY  
SATELLITE FACILITY, IN CONVERSE COUNTY, WYOMING

Dear Chairman Jandreau:

On December 6, 2011, Uranium One, Inc. (Uranium One) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) to amend source materials license SUA-1341 to authorize Uranium One to construct and operate an *in-situ* uranium recovery (ISR) satellite facility at the proposed Ludeman project site in Converse County, Wyoming. The facility, if licensed, would use an ISR technology to extract uranium from the project site. The nearly 20,000-acre project site is located approximately 10 miles northeast of Glenrock, Wyoming, with access to the site from the west off State Highway 95 and from the southeast off State Highway 93. A map showing the proposed project location is enclosed (Enclosure 1), as well as a map with the major roads and rail (Enclosure 2).

The ISR process, also known as *in-situ* leach milling, is used to recover uranium from low-grade ores or deeper deposits that are not economically recoverable by conventional mining and milling techniques. In this process, a leaching agent, such as oxygen with sodium carbonate, is injected through wells into the underground ore body to dissolve the uranium. The mineral-laden solution is pumped to the surface through ion exchange columns. The uranium in the solution adheres to resin beads in the columns. The resin beads are then transported to a processing plant where the uranium is washed off the beads and dried. The resultant product, a mixture of uranium oxides also known as "yellowcake," is placed in drums prior to shipment offsite for further processing. Eventually, this processed material can be used to make fuel for nuclear power plants and other products.

The *Atomic Energy Act* of 1954, as amended (AEA), authorizes the NRC to issue licenses for the possession and use of source material and by-product material. The AEA authorizes the NRC to license facilities that meet NRC regulatory requirements designed to protect public health and safety and the environment from radiological hazards as well as non-radiological hazards associated with the processing of certain types of by-product material. ISR facilities must meet NRC's regulatory requirements in order to obtain a license to operate.

In accordance with Title 10 of the *Code of Federal Regulations* Part 51 (10 CFR Part 51), the NRC regulations that implement the National Environmental Policy Act of 1969, as amended, the NRC is preparing an environmental assessment (EA) for the proposed action to assess potential environmental impacts that may significantly affect the human environment.

In accordance with 36 CFR Part 800.8 (Coordination with the National Environmental Policy Act), the NRC staff is using this process to comply with its obligations under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). The EA will also include analyses of potential impacts to historic and cultural resources.

Accordingly, the NRC staff is identifying parties who may wish to consult with the staff on the proposed action. Through this letter, the NRC staff invites you to participate as a consulting party under Section 106 of the NHPA and assist in the identification and evaluation of historic properties that may be affected by the proposed action and development of alternatives and proposed measures that might avoid, minimize, or mitigate any adverse effects of the proposed action on historic properties.

Please indicate whether or not you wish to participate by completing the enclosed form (Enclosure 3). The NRC requests that the enclosed form be returned within 30 days of receipt of this letter. The NRC staff is collecting information to facilitate the identification of historic properties and historic and cultural resources, including those that are of religious and cultural significance that could be affected by the proposed action. You may also contact us if you want to discuss concerns about the confidentiality of information that may be provided to the NRC.

Please note that correspondence provided to the NRC, including that provided by email, may be made publicly available according to NRC's policy. Therefore, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed (e.g., personal email addresses). If Tribal officials do not wish for their personal email addresses to be made public, please use an alternate email address when corresponding with the NRC.

The NRC appreciates the opportunity to consult with you on issues within the scope of the NHPA. For the purposes of meeting with Tribal leaders, the Division of Waste Management and Environmental Protection's Division Director, Deputy Division Director, or Environmental Review Branch Chief will represent the NRC.

For additional information regarding the proposed action, Uranium One's license amendment application is publicly available from the NRC's Agency Wide Documents Access and Management System (ADAMS). You may access publicly available documents online in the NRC library at: <http://www.nrc.gov/reading-rm/adams.html>. The accession number for Uranium One's application is ML120120182, and is available online through ADAMS. Details pertaining to the project and application review schedule are available on the project's web page at <http://www.nrc.gov/materials/uranium-recovery/license-apps/ludemman.html>.

M. Jandreau

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If you have any specific questions or comments on the proposed project, or need any additional information regarding the license application and the environmental review process, please contact Ms. Kellee Jamerson of my staff by telephone at 301-415-7649, or by email at [Kellee.Jamerson@nrc.gov](mailto:Kellee.Jamerson@nrc.gov).

Sincerely,

**/RA/**

Larry W. Camper, Director  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: 40-8502

Enclosures:

1. Map of Proposed Location
2. Map of Major Roads and Rail
3. Tribal Response Form

cc: Jon Winter – Uranium One  
Clair Green

M. Jandreau

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Larry W. Camper, Director  
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cc: Jon Winter – Uranium One  
Clair Green

DISTRIBUTION: Keith McConnell J.Buckley A. Simmons

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DATE	05/17/12	05/18/12	06/04/12	07/20/12	07/24/12	07/ 27/12	08/8/12

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