



# Mixed Oxide Xchange

## NRC Receives Application Revisions

On June 10, 2004, Duke Cogema Stone & Webster (DCS) submitted to NRC revisions to its Environmental Report (ER) and Construction Authorization Request (CAR). The revised reports address several changes in the surplus plutonium disposition project, as directed by the U.S. Department of Energy/National Nuclear Security Administration (NNSA). During a meeting with NRC on July 14, 2004, DCS explained the major changes to the ER and CAR, which included moving the controlled area boundary (CAB) from the Savannah River Site (SRS) boundary (over 5 miles away from the proposed Mixed Oxide Fuel Fabrication Facility (MFFF)) to be coincident with the MFFF site boundary, which encompasses the 41 acre MFFF site in the Savannah River Site F-area.

Other major changes made to the ER and CAR that are not related to the CAB include: (1) replacement of the Uranium Oxide Dissolution Unit with the Uranyl Nitrate System; (2) addition of a Waste Organic Solvent Unit; (3) clarification of crane/hoist equipment requirements; (4) corrections to codes and standards; (5) updating references to the revised MFFF Site Geotechnical Report; and (6) new waste treatment and disposal functions at the NNSA Waste Solidification Building.

The NRC staff is currently reviewing the CAR and ER proposed changes. On August 17, 2004, the NRC requested additional information necessary to complete the review and issue a Final Environmental Impact Statement. Also, on September 8, 2004, NRC staff issued a request for additional information (RAI) to DCS on the revised CAR. The review of the remaining chemical safety open items is ongoing.

**MOX Project Manager: David D. Brown**  
**Phone: (301) 415-5257**  
**Email: [ddb@nrc.gov](mailto:ddb@nrc.gov)**

## NRC Continues Work with Russia

On July 19-21, 2004, staff from the Division of Fuel Cycle Safety and Safeguards (FCSS) participated in a workshop in Moscow, Russia, with staff from the U.S. Department of Energy/National Nuclear Security Administration (NNSA), the Russian Federation (RF) Gosatomnadzor (GAN), and other Russian government agencies and industry. The purpose of the workshop was to discuss the process for developing regulatory acceptance criteria for the RF Standard Review Plan (SRP) for a Mixed Oxide Fuel Fabrication Facility. During the workshop, NRC experts in radiation safety, nuclear criticality safety, and chemical safety gave short presentations (with examples) on the process for developing regulatory acceptance criteria. NRC presentations and examples were based on the development of U.S. regulatory acceptance criteria contained in NUREG-1718, "Standard Review Plan for the Review of an Application for a Mixed Oxide (MOX) Fuel Fabrication Facility."

## NRC Approves Export of Plutonium

On June 16, 2004, NRC's Office of International Programs issued a license to the U.S. Department of Energy/National Nuclear Security Administration (NNSA) to export 140 kilograms of plutonium oxide powder to France. The plutonium oxide will be used to manufacture lead test assemblies in France for possible use in Duke Power's Catawba Unit 1 reactor near Charlotte, NC. On August 4, 2004, the U.S. Department of Transportation approved the revalidation of Packaging Technology's FS-47 shipping cask that will be used to ship the plutonium oxide powder from the Los Alamos National Laboratory in New Mexico to the Cadarache facility in France.

## Meeting Summaries

### July 14, 2004

The NRC staff and DCS held a meeting open to the public to discuss the Mixed Oxide Fuel Fabrication Facility (MFFF) Construction Authorization Request (CAR) Revision dated June 10, 2004. DCS provided a summary of the revisions made to the CAR as a result of the changes to the Controlled Area Boundary.

## Upcoming Meetings

No meetings between DCS and NRC have been scheduled at this time.

**Find meeting summaries, updates related to the proposed MFFF, frequently asked questions and past issues of the *Mixed Oxide Xchange*.**

**Go to <http://www.nrc.gov/materials/fuel-cycle-fac/mox/licensing.html>.**



Lead Editor: Diana Diaz-Toro  
Design and Production: Linda C. Marshall

**U.S. Nuclear Regulatory Commission**  
Office of Nuclear Material Safety and Safeguards  
Division of Fuel Cycle Safety and Safeguards  
Mail Stop T-8F42  
Washington, D.C. 20555-0001

*Mixed Oxide Xchange* is published quarterly to highlight recent news and events associated with the NRC's licensing of a mixed oxide fuel fabrication facility. We welcome your suggestions for improvement of this newsletter. If you have comments or suggestions, you may contact us at [moxfeedback@nrc.gov](mailto:moxfeedback@nrc.gov). To subscribe or unsubscribe, please send an e-mail to [subscribe@nrc.gov](mailto:subscribe@nrc.gov). All issues will be e-mailed unless you provide your mailing address and indicate your preference to receive copies by U.S. Postal Service.