



# Mixed Oxide Xchange

## NRC Temporarily Suspends On-Line Library

On October 25, 2004, the Nuclear Regulatory Commission (NRC) initiated an additional security review, by agency experts, of publicly available documents to ensure that potentially sensitive information is removed from the agency Web site. During this review, certain documents in ADAMS, the NRC's on-line document library, will be temporarily unavailable to the public. No classified or safeguards material is now or has ever been permitted on the NRC Web site. In its latest review, the NRC is widening its review to remove additional information that could potentially be of use to a terrorist. This action, when complete, is intended to ensure that documents which might provide assistance to terrorists will be inaccessible while maintaining public access to information regarding NRC activities.

## NRC Reviews Amendment Request: Use of MOX Lead Test Assemblies

On April 5, May 5, and July 27, 2004, the NRC staff issued a safety evaluation and two supplements, respectively, regarding the Duke Power Company's application dated February 27, 2003 to revise the Technical Specifications for the Catawba Nuclear Station to allow use of four MOX lead test assemblies (LTAs). On July 14-15, 2004, an Atomic Safety and Licensing Board (ASLB) held a hearing on a contention by the Blue Ridge Environmental Defense League regarding the loss-of-coolant-accident analyses for MOX fuel. In a December 22, 2004, decision, the ASLB concluded that the four LTAs would not endanger public health and safety through the irradiation process. The ASLB is also considering a security related contention.

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## Status of the MOX Safety and Environmental Review

By letter dated December 2, 2004, NRC staff provided a draft Final Safety Evaluation Report (FSER) to Duke Cogema Stone & Webster (DCS) and asked DCS to provide NRC with comments on the technical accuracy of the draft FSER. Due to the ongoing reviews of potentially sensitive information on the NRC ADAMS document management system (see **NRC Temporarily Suspends On-Line Library**), the draft FSER is not publicly available, but may be made available pending outcome of the security review. The draft FSER documents the staff's evaluation of the Construction Authorization Request (CAR, and reflects the staff's resolution of the remaining open items from the April 2003 Draft Safety Evaluation Report (DSER). All previously-open items are now closed. The staff has also forwarded the draft FSER to the Advisory Committee on Reactor Safeguards (ACRS) in advance of the December 15-16, 2004, meeting with the ACRS Subcommittee on Reactor Fuels. The purpose of the Subcommittee meeting was to discuss the staff's findings, and, ultimately, to seek endorsement by the ACRS of the staff's evaluation.

In addition, the staff is in the process of completing the Final Environmental Impact Statement (FEIS), evaluating the potential environmental consequences of constructing and operating the proposed mixed oxide fuel fabrication facility.

**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>.**

## Support to the Russian Federation on the Mixed-Oxide Fuel (MOX) Program

On October 11-14, 2004, the NRC staff participated in a U.S./Russian Federation bilateral meeting at the headquarters of the Nuclear, Industrial, and Environmental Regulatory Authority (Rostekhnadzor) in Moscow, Russia. The purpose of the meeting was to discuss the status of the surplus weapons-grade plutonium disposition program. During the meeting, representatives of Rostekhnadzor briefed the U.S. representatives (from the Department of Energy/National Nuclear Security Agency, and the NRC) on the status of their development of a regulatory infrastructure for the project and the construction of their MOX fuel fabrication facility. Also, the NRC representatives provided an update on the status of licensing the U.S. facility.

## Export of Plutonium Oxide

In September 2004, the U.S. Department of Energy (DOE)/National Nuclear Security Administration (NNSA) informed the NRC that the ships transporting plutonium oxide powder to France had left Charleston, South Carolina. The plutonium oxide was transported to the Cadarache facility in France to manufacture MOX lead test assemblies. If NRC grants the Duke Power license amendment requests (see **NRC Reviews Amendment Request: Use of MOX Lead Test Assemblies**), then the lead test assemblies would be returned to the U.S. for use in Duke Power's Catawba Unit 1 reactor near Charlotte, North Carolina.

## Meeting Summaries

### August 11, 2004

The NRC and DCS staff held a telephone conference call to discuss the status of the MOX Quality Assurance (QA) Program.

### August 19, 25 & 30, 2004, and September 2, 2004

The NRC staff held several teleconference calls with DCS to discuss and request clarification of the information provided on the June 10, 2004, revised Construction Authorization Request. The discussions pertain to chemical process safety, organization and administration, and Heating Ventilation and Air Conditioning (HVAC) systems and confinements.

### October 22, 2004

The NRC staff met with DCS representatives, in a closed meeting, to discuss the applicant's material control and accounting (MC&A) program.

### December 15-16, 2004

The NRC staff met with the Advisory Committee on Reactor Safeguards (ACRS), Subcommittee on Reactor Fuels, to discuss the staff's draft Final Safety Evaluation Report.

## Upcoming Meetings

### February 2005

The NRC staff will meet with the Advisory Committee on Reactor Safeguards (ACRS) to discuss the staff's Final Safety Evaluation Report..



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*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.