



Mixed Oxide Xchange

NRC Issues Revised Draft Safety Evaluation Report



NRC staff issued a revised Draft Safety Evaluation Report (DSER) for the proposed MOX facility on April 30, 2003. This DSER replaces the April 2002 draft in its entirety. The NRC staff found that 19 issues remain unresolved. Until these open items are closed, the NRC staff cannot conclude that the proposed MOX facility design would provide reasonable assurance of protection against potential accidents.

Most of the open items pertain to fire safety, chemical safety, and the aqueous polishing process. These include:

- red oil explosions,
- HAN/hydrazine explosions,
- fires or explosions caused by the ignition of flammable gases and vapors,
- titanium fires,
- soot loading on air filters,
- pyrophoric nature of uranium dioxide powders, and
- hazardous chemicals in the emergency control room.

NRC staff concluded that some of the analyses submitted by the applicant, Duke Cogema Stone & Webster (DCS), are incomplete and require additional information. Open items may be discussed in meetings between the NRC staff and DCS. The final safety evaluation report (SER) is scheduled to be issued in September 2003.

The revised DSER can be accessed through the NRC's Agencywide Documents Access and Management System (ADAMS):



<http://www.nrc.gov/reading-rm/adams/web-based.html>

The reference number for the document is: **ML031270081**.

NRC's Mixed Oxide Fuel Infoweb

To 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>



Meeting with PacTec Regarding Transport Package for MOX Fresh Fuel Assemblies

NRC met with Packaging Technology, Inc., (PacTec) on May 15, 2003, to discuss the transport packages that would be used for shipment of plutonium oxide and fresh MOX fuel assemblies. Current program plans include fabrication of four MOX lead test assemblies (LTAs) in Europe. PacTec described the design and analysis of two French-approved package designs that may be used to transport plutonium oxide and fresh MOX fuel assemblies between the U.S. and Europe. PacTec plans to request approval from the U.S. Department of Transportation (DOT) in fall 2003 to use the packages for these import and export shipments. If the LTAs are successfully tested in domestic reactors, and if the proposed MOX facility is built and is licensed to begin operating, the resulting fresh MOX fuel assemblies would be fabricated in the U.S. and shipped to domestic reactors authorized to use such fuel. PacTec also described the package being designed for shipments within the U.S. The package would accommodate three fuel assemblies. PacTec plans to perform full scale testing of the package in September 2003, and to submit an application for package approval to NRC in March 2004.



Update on the draft Environmental Impact Statement

The comment period on the Draft Environmental Impact Statement (DEIS) prepared by NRC to evaluate the environmental impacts of the proposed MOX facility closed on May 14, 2003. The NRC staff will address comments received from the public in the Final EIS, which is scheduled to be published in late August of 2003. Comments on the DEIS include those pertaining to how the issues of terrorism and environmental justice have been evaluated.

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ALPHABET SOUP

(commonly used acronyms in this newsletter)

ADAMS	Agencywide Document Access and Management System	HAN	Hydroxylamine Nitrate
CAR	Construction Authorization Request	LTA	Lead Test Assembly
DCS	Duke Cogema Stone & Webster	MFFF	Mixed Oxide Fuel Fabrication Facility
DEIS	Draft Environ. Impact Statement	MOX	Mixed Oxide
DOT	Dept. of Transportation	NRC	Nuclear Regulatory Commission
DSER	Draft Safety Evaluation Report	PM	Project Manager



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