An NRC quarterly newsletter providing licensing information on a Mixed Oxide Fuel Fabrication Facility

<u>Mixed Oxide Xchange</u>

U. S. Nuclear Regulatory Commission

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Safety Evaluation Report

In April 2004, the NRC staff closed four of the remaining open items in its April 2003, Draft Safety Evaluation Report for the proposed mixed oxide (MOX) fuel fabrication facility (MFFF). These open items pertained to margins of safety for prevention of nuclear criticality accidents, prevention of red oil explosions, the use of Temporary Emergency Exposure Limits (TEELs) in human health consequence analyses of hazardous chemical spills, and the prevention of pyrophoric reactions of uranium dioxide powders. The NRC staff is continuing its review of the seven remaining open items. The remaining open items are all in the chemical safety area. The remaining items pertain to the prevention of hydroxylamine nitrate explosions, limits on the concentration of flammable gases (4 items), control room habitability, and a metal fire hazard in the dissolution unit electrolyzers.

On June 10, 2004, the applicant, Duke Cogema Stone & Webster (DCS) submitted page changes to its MFFF Construction Authorization Request (CAR) and Environmental Report. These changes address the new controlled area boundary at the Department of Energy's Savannah River Site for the MFFF and contain more detailed information about waste management facilities. NRC staff is currently developing a revised schedule for its issuance of the final EIS and final SER, which will be posted on the NRC's website.

Cooperation with Russian Federation

A workshop on NRC's evaluation of both the safety assessment of the design bases and radiation safety commitments for the U.S. MFFF was held in Russia on May 17-21, 2004. Representatives of the Russian Federal Nuclear Regulatory Authority (FSAN), NRC, and the U.S. Department of Energy's National Nuclear Security Administration (NNSA) attended the workshop.

NRC and NNSA will conduct a workshop with FSAN in Moscow in July 2004 on NRC's development of acceptance criteria contained in NUREG-1718, the Standard Review Plan for the U.S. MFFF.

Hearing Update

On May 28, 2004, the Atomic Safety and Licensing Board Panel (ASLBP) dismissed two of the contentions filed by Georgian's Against Nuclear Energy (GANE). GANE's first contention alleged there was insufficient information in the CAR on the design features of the material control and accounting (MC&A) system for the MFFF. GANE's second contention alleged that the CAR lacked required information regarding physical protection of the MFFF. In dismissing these contentions, the ASLBP ruled that GANE had failed to file required late-filed amendments or late-filed contentions after DCS had earlier submitted a revised CAR containing new and significantly different MC&A and physical protection design basis information.

The sole remaining contention before the ASLBP pertains to whether DCS has performed a seismic hazard analysis that is both adequate in scope and adequately documented. DCS filed a motion seeking dismissal of this contention on August 22, 2003. The ASLBP has not ruled on that motion.

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.



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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. To subscribe or unsubscribe, please send an e-mail to 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.