



Mixed Oxide Xchange

Size of DCS MOX Facility Controlled Area Reduced

On November 3, 2003, the Department of Energy (DOE) directed its contractor, Duke Cogema Stone & Webster (DCS) to reduce the size of the controlled area surrounding the proposed mixed oxide (MOX) fuel fabrication facility. The boundary for the new controlled area is expected to largely coincide with the previously-designated boundary of the much smaller restricted area, which encompasses about 41 acres. In its original Construction Authorization Request (CAR) dated February 2001, DCS had designated most of the 310 square-mile Savannah River Site (SRS) as the controlled area.

In accordance with the November 3, 2003, DOE letter, DCS will now evaluate whether the proposed facility meets the performance requirements for accidents at the new controlled area boundary, which would, in places, be less than 100 meters from MOX facility buildings. Also, DCS has been directed to withdraw commitments to augment the existing SRS radiation protection training program and post notices in F Area.

DCS has been directed to respond to DOE within 30 days of DOE's letter with estimated costs and evaluations. Since DCS will need to revise its CAR and possibly its environmental report (ER) as well, the NRC will delay issuing the final safety evaluation report and final environmental impact statement. New issuance dates for these NRC documents will not be projected until the extent of any CAR and ER revisions is known.

ACRS/ACNW Briefing

On November 6, 2003, NRC staff made a two-hour presentation to members of the Advisory Committee on Reactor Safeguards (ACRS) and Advisory Committee on Nuclear Waste (ACNW). The presentation covered the current status of open items in the Draft Safety Evaluation Report (SER) for the MFFF. Staff covered one nuclear criticality safety open item and ten chemical safety open items. During the chemical safety portion of the meeting, staff presented both the prevailing staff view that the items should be closed in the Final SER, and a dissenting view that the applicant has not adequately addressed the open items. NRC Staff and NRC management continue to evaluate the open items.

Hearing Update

On October 31, 2003, the Atomic Safety and Licensing Board appointed to hear arguments on whether the proposed MOX facility should be constructed granted applicant Duke Cogema Stone & Webster's (DCS) motion for summary disposition on one of the contentions made by Georgians Against Nuclear Energy (GANE). GANE is the lead intervenor opposing the DCS request for authority to construct the proposed MOX facility. The October 31 order dismisses GANE's contention that DCS, in violation of the National Environmental Policy Act (NEPA), understated the impacts of the liquid high-alpha waste stream which would be generated by the production of mixed oxide (MOX) fuel at the proposed MOX facility.

With the Board's granting of GANE's motion to withdraw the controlled area boundary contention on November 26, 2003, there are three remaining contentions before the Board: (1) material control and accounting; (2) physical protection; and (3) seismic risk. DCS has filed motions for summary disposition on all three remaining contentions.

NRC Quality Review

During October and November 2003, NRC conducted an in-office review of the implementation of the MOX Quality Assurance (QA) Program by DCS. On October 29 - November 7, NRC staff reviewed DCS consortium activities at the Cogema-Mecachimie-SGN offices in La Hague and Bagnols sur Ceze, France. During the visit, DCS conducted a QA audit of its manufacturing design and software design activities. The NRC staff observed and evaluated the QA Program implementation in France and the conduct of the audit by DCS. On November 17-21, 2003, NRC staff visited the DCS project offices in Charlotte, NC, to review the implementation of the DCS MOX QA Program for the current programmatic, design, and procurement activities and verify that a QA Program is in place, or planned, to support construction of the MFFF. No significant deficiencies were found that raised a concern for the quality of the DCS MFFF activities or project document products. The reviewers concluded that the DCS MFFF QA Program was adequate and was being effectively implemented for the

activities reviewed in France and in Charlotte. The in-office review was documented in a meeting summary, ML033490081, which is available through the NRC ADAMS document system.

Support to the Russian Federation

On October 20-31, 2003, staff traveled to Moscow, Russia, to conduct a workshop with the Russian Federation Gosatomnadzor, or GAN. GAN is a Russian nuclear safety regulator with which NRC staff continues to share its experience on the review of design bases for the U.S. MOX facility. The October workshop addressed the staff's review of fire protection and chemical safety. NRC staff returned to GAN on November 19-21 to make a presentation on its experience with the preparation of its MOX Standard Review Plan, NUREG-1718. In January, staff will return again for a one-week workshop on the staff's review of the safety assessment of the design bases for the U.S. MOX facility. Staff will also discuss its review of the MOX facility radiation safety features and programs.

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: David D. Brown
Editor: Kendra Hill
Production: Linda Gross

U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards
Division of Fuel Cycle Safety and Safeguards
Mail Stop T-8A33
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. 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.