September 7, 2011

Mr. Robert Shields, Chair
Ohio Sierra Club
131 North High Street, Suite 605
Columbus, OH 43215-3026

Ms. Patricia A. Marida, Chair
Ohio Sierra Club Nuclear Issues Committee
131 North High Street, Suite 605
Columbus, OH 43215-3026

SUBJECT: RESPONSE TO OHIO SIERRA CLUB LETTER DATED JULY 20, 2011

Dear Mr. Shields and Ms. Marida:

This letter responds to your letter to Dr. Steven Chu, Secretary, U.S. Department of Energy (DOE), dated July 20, 2011, which you also copied to the U. S. Nuclear Regulatory Commission's (NRC's) Chairman Gregory Jaczko. In your letter, you refer to the June 11, 2011, event during which six centrifuges at the USEC Inc. (USEC) American Centrifuge Lead Cascade (Lead Cascade) in Piketon, OH, were damaged as a result of a power failure. In your letter, you also state that further safety and evacuation evaluations of the plant are needed and that this incident increases the Sierra Club's and the public's conviction that serious problems exist with the plant's enrichment technology. Your letter also asks the NRC to investigate this situation and to implement the recommendations of NRC's Japan Task Force. Finally, you raised issues associated with USEC's request for a $2 billion loan guarantee from DOE.

On Saturday, June 11, 2011, the Lead Cascade experienced a partial power failure, which led to the failure of the six centrifuges. However, no release of radioactive materials occurred. Although under the NRC's regulations in Appendix A to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70, Reportable Safety Events, the crash of a centrifuge machine is not considered a reportable event, on June 13, 2011, USEC contacted the NRC by telephone to provide initial notification. During its investigation of the event, on July 1, 2011, USEC identified two items relied on for safety (IROFS) that were potentially impacted by the partial power failure. These IROFS are associated with the battery room, which is not directly involved with the operation of the centrifuges. USEC formally notified the NRC of this impact on that same day, pursuant to 10 CFR Part 70, Appendix A (b)(2), which requires reporting to the NRC, within 24 hours of discovery, of any event that results in the loss or degradation of any IROFS that results in failure to meet the performance requirements in 10 CFR Part 70.61 (in the description contained in the event report, USEC stated that it notified the NRC approximately 2 hours after identifying the potentially impacted IROFS). USEC intends to apply lessons learned from the operation of the Lead Cascade—a test and demonstration facility—to the American Centrifuge Plant (ACP), a full-scale, commercial facility, which remains under construction.

The NRC's Region II inspection staff has communicated with USEC and plans to conduct an inspection in September 2011, at which time, as stated by USEC, their investigation of the incident and corrective actions will be finalized and implemented. At that time, the NRC will evaluate the potential implications of the impacted IROFS, USEC's event reporting, and appropriateness of the corrective actions, among other areas. The inspectors will document the

results of the inspection in an inspection report, which will be available approximately 30 days after the inspection. The NRC will take any necessary enforcement actions at that time.

Before issuing licenses for the Lead Cascade and ACP, the NRC performed thorough safety evaluations. These reviews covered radiation protection, chemical safety, nuclear criticality safety, fire safety, environmental protection, and decommissioning funding. The reviews determined that the proposed equipment, facilities, and procedures will adequately protect public health and safety. The staff also reviewed and approved the emergency plans submitted for each facility. Before the operation of the Lead Cascade, the staff performed an operational readiness review, which inspected the construction of the facility and the safety related programs, to confirm that the facility was constructed, and can be operated safely, in accordance with its license. The NRC will do the same for the ACP, with routine inspections occurring over the lives of both facilities.

The recommendations of the NRC Near-Term Task Force, established in light of the accident at the Fukushima Dai-ichi nuclear power plant in Japan, primarily focus on safety at nuclear power reactors and are currently under review by the Commission. The agency is still exploring the applicability of the lessons learned to nonreactor facilities. The consideration of implementing supplementary requirements at nuclear fuel cycle facilities, in regard to the Task Force's recommendations, is part of a long-term plan that will involve additional technical review, regulatory analysis, and stakeholder input.

With regard to the DOE Loan Guarantee Program, it should be noted that the NRC has no involvement in this process. DOE's decision on the loan guarantee is independent from the NRC's regulatory oversight of the facility.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

If you have any questions about this letter, please contact Mr. Brian W. Smith at (301) 492-3137, or via e-mail to brian.smith@nrc.gov.

Sincerely,

/RA/

Catherine Haney, Director
Office of Nuclear Material Safety
and Safeguards

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Sincerely,
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Catherine Haney, Director
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