

September 1, 2004

MEMORANDUM TO: Robert C. Pierson, Director
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

THRU: Melanie A. Galloway, Section Chief **/RA/**
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SUBJECT: NUCLEAR CRITICALITY SAFETY CONTRACT ISSUE:
INADVERTENT SHEDDING OF 200K

During the Division of Fuel Cycle Safety and Safeguards (FCSS) Management Retreat in January 2004, the Criticality Contract Support line item was decreased by the entire amount allocated of \$200K to \$0K for FY05. Apparently, the \$200K corresponded to a User Need Memo (UNM) to the Office of Nuclear Regulatory Research (RES) for criticality benchmarks greater than 5% enrichment. However, FCSS had never planned to provide money to RES because, as shown in the June 11, 2001, RES response to the NMSS UNM, RES would provide funding for the work. Therefore, because these eliminated funds are from the FCSS budget, this will adversely affect FCSS' ability to continue the current nuclear criticality safety (NCS) contract with Oak Ridge National Laboratory (ORNL) under Job Code Number (JCN) J5443, "Technical Support for Criticality Safety Analysis."

The following table provides a summary of the three Technical Support Group (TSG) NCS contracts planned for FY05 as well as the RES contract for the NMSS UNM:

JCN	Contractor	Title	FY05 (\$K) needed	FY05 (\$K) allocated
J5443	DOE-ORNL	"Technical Support for Criticality Safety Analyses" <i>(signed through FY07, expected continuous 5-year renewals)</i>	205	195
J5488	DOE-LANL	"Preservation of Historical Criticality Safety Information and Update to LA-10860 Report" <i>(not awarded yet, expected to last two years)</i>	60	60
J5489	Commercial	"Technical Evaluation to Determine Crucial Nuclear Criticality Safety Aspects of Using Uranium Enriched up to 10 Wt.%" <i>(not awarded yet, expected to last 1 year followed up with a different Commercial contract to last 1 year)</i>	53	53
N/A	DOE-ORNL	"Criticality Benchmarks Greater Than 5% Enrichment" <i>(canceled RES contract for NMSS, per UNM)</i>	0*	N/A

*Incorrectly assumed to be a \$200K need for FCSS

The misunderstanding occurred because there was a lapse in FCSS internal communications during the budget process and because budget designations were not clear. There was not a clear description of the contract, so there was uncertainty about what the funds tied to the Criticality Contract Support line item were for, and the most knowledgeable individual was not involved in providing budget clarification. There may have also been confusion because the NCS contract activities are currently listed under the Fuel Manufacturing Section (FMS) budget.

To prevent this from future misunderstanding, the following two corrective actions are recommended:

1. Consistently refer to contract activities by title with the JCN in parentheses; and
2. Transfer the budget designation of the NCS contracts to match the technical and project management responsibility (i.e., from FMS to TSG). The current allocation of the criticality support work to FMS appears to be a carryover of assignment of this work to SPIB (with both licensing and criticality responsibility). With the reorganization of FCSS, it appears that the work was retained with the licensing organization. Moving it to the technical organization will ensure that the cognizant individuals are involved.

To find solutions to the NCS contract funding issues in FY05, the following actions have been or are expected to be taken:

1. For the ORNL contract, "Technical Support for Criticality Safety Analyses" (J5443), PMDA provided \$50K in excess FY04 funds to J5443. FCSS requested that PMDA transfer \$60K in FY04 funds from J5488 to J5443. FY05 funds of \$85K have also been allocated, which leaves a need of only \$10K in FY05 for J5443.
2. For the LANL contract, "Preservation of Historical Criticality Safety Information and Update to LA-10860 Report" (J5488), FY05 funds of \$60K have been allocated.
3. For the commercial contract, "Technical Evaluation to Determine Crucial Nuclear Criticality Safety Aspects of Using Uranium Enriched up to 10 Wt.%" (J5489), a technically acceptable offeror was not found in FY04. However, the Division of Contracts agreed to keep the JCN open so that the \$53K that was committed in FY04 will be carried over to FY05. The commercial procurement will be reinitiated.

cc: D. Hoadley, FCSS

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5. For the LANL contract, "Preservation of Historical Criticality Safety Information and Update to LA-10860 Report" (J5488), FY05 funds of \$60K have been allocated.
6. For the commercial contract, "Technical Evaluation to Determine Crucial Nuclear Criticality Safety Aspects of Using Uranium Enriched up to 10 Wt.%" (J5489), a technically acceptable offeror was not found in FY04. However, the Division of Contracts agreed to keep the JCN open so that the \$53K that was committed in FY04 will be carried over to FY05. The commercial procurement will be reinitiated.

cc: D. Hoadley, FCSS

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