

**U.S. NUCLEAR REGULATORY COMMISSION
SECOND REQUEST FOR ADDITIONAL INFORMATION
URENCO USA
LICENSE AMENDMENT REQUEST 17-01**

The NRC staff reviewed the submittal dated January 9, 2017, and the response to our first round of Request for Additional Information (RAI), and determined that additional information is needed to complete a technical review. In particular, the licensee should supplement its License Amendment Request with the following information:

- 1) Accident sequence LW1-4 discusses the initiating event as involving the accumulation of sufficient uranium mass to cause criticality in a Bulk Storage Tank, Release Tank, or tote, and ascribes it a frequency index of (-1). This appears inconsistent with Items Relied on for Safety (IROFS) 55a/b, because these are meant to prevent enrichment greater than 1wt% ²³⁵U before it is placed in the tank. Clarify what the initiating event is and the basis for its frequency index.
- 2) Describe the means used to measure enrichment under IROFS 55a/b, its accuracy, and how independence of IROFS 55a and 55b is ensured, to be consistent with the double contingency principle. Discuss the potential for credible abnormal conditions leading to a higher enrichment in the slab tanks.
- 3) The change packages CC-RW-2012-0001 and -2013-0003 contain numerous changes that do not appear directly associated with the change from mass to enrichment control of the Liquid Effluent Collection and Transfer System, tanks. These include but are not limited to changes to IROFS 15, removal of IROFS 19a/d, and removal of accident sequence LW1-5. Clarify whether changes other than those associated with IROFS 55a/b in sequence LW1-4 result from changes to the criteria for tanks in Safety Analysis Report Table 5.1-2.

Enclosure