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URENCO

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Attn: Document Control Desk  
Director  
Office of Nuclear Material Safety and Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Louisiana Energy Services, LLC  
NRC Docket Number: 70-3103

Subject: Retraction of Event Notification 51776

Reference:

1. Event Notification 51776, submitted by URENCO USA, to Nuclear Regulatory Commission Operations Center, on March 7, 2016
2. Letter from Jay Laughlin, URENCO USA, to Nuclear Regulatory Commission "60 Day Written Follow-up Report for Event Notification 51776", dated May 2, 2016
3. Letter from Stephen Cowne, URENCO USA, to Nuclear Regulatory Commission "First Supplement 60 Day Written Follow-up Report for Event Notification 51776", dated May 31, 2016
4. Letter from Stephen Cowne, URENCO USA, to Nuclear Regulatory Commission "Second Supplement to 60 Day Written Follow-up Report for Event Notification 51776", dated June 16, 2016.

On March 7, 2016, 24-hour event notification report 51776 was submitted by Louisiana Energy Services, LLC dba URENCO USA (UUSA), to the NRC Operations Center in accordance with 10 CFR 70.74(a), Enclosure 1. On April 13, 2016, an update to event notification report 51776 was submitted, Enclosure 2. In References 2, 3, and 4, and as required by 10 CFR 70 Appendix A (b), UUSA provided updates and ultimately a 60 day written follow-up to the initial report.

UUSA has conducted reviews of existing Nuclear Criticality Safety Analysis and has determined that the event described in Enclosure 2 of Reference 2, Update to Event Notification 51776, is bounded. As such, the movement event is not credible and would not exceed the performance requirements of 10 CFR 70.61. Enclosure 1 of this letter provides the technical justification. UUSA hereby submits the retraction to Reference 2.

If you have any questions, please contact Salem Thyne, Licensing and Performance Assessment Manager, at 575-394-5252.

Respectfully,



Stephen R. Cowne for  
Jay Laughlin,  
Chief Nuclear Officer and Head of Operations

NM5524  
IE72

Enclosure: 1. Basis for Retraction of Event Notification 51776 Update Dated April 13, 2016

cc:

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## ENCLOSURE 1

### Event Notification 51776 Update Dated April 13, 2016 Basis for Retraction

The containers moved on March 7, 2016 were 11.5 liter drums containing yet to be characterized spill cleanup materials; for conservatism, an uncharacterized container is assumed to contain enriched material. The applicability of IROFS14a, as stated in the Operation Requirements Manual, specifies the use of an approved transfer-frame cart for movement of enriched uranic waste in non-designated areas within the CRDB Bunker. This cart ensures a proximity limit between the material being moved and other fissile material in those areas.

Existing NCS analysis (NCS-CSA-006) demonstrates that an 18 liter drum is safe when placed next to a full product vent trap pump set (PVPTS). The PVPTS model includes a D40B pump, an oil filter, (3) type A chemical traps, an  $\text{Al}_2\text{O}_3$  oil trap, and a full vacuum cleaner (7 liters). The PVPTS components are calculated with assumptions of 6 weight percent enrichment, a chemical form of  $\text{UO}_2\text{F}_2$ , an Hydrogen:Uranium (H/U) ratio = 7 (worst credible), and all components fully filled with maximum dimensions for components (i.e., maximize the fissile material contained in all components). The vacuum cleaner and the 18 liter drum are calculated with the same assumptions with the exception of the H/U ratio which are at the optimal value. The overall PVPTS model includes a concrete floor, spurious reflection (2.5cm of water around all components including vacuum and 18L drum) with flooding up to 60cm, and various mist conditions. This model demonstrates that the system does not exceed an Upper Safety Limit of 0.95 for  $k_{\text{eff}}$ .

The analyzed configuration, as described above, represents a configuration beyond what is credible for this event in the CRDB Bunker spaces. As such, this analyzed configuration bounds the one-at-a-time, hand-carry movement of the 11.5 liter drums that were moved on the date above in the CRDB Bunker spaces.