

DOCKET: 03003754

LICENSEE: ABB, Inc.

SUBJECT: SAFEGUARDS EVALUATION REPORT: ABB Inc. (ABB) SUBMITTAL OF PROPOSED WASTE MIXING AND PACKAGING PRACTICES TO DETERMINE IF THEY ARE ACCEPTABLE TO SUPPORT A SPECIFIC EXEMPTION OF SECURITY REQUIREMENTS AS ALLOWED BY 10 CFR 73.5. TAC # U01757

### **BACKGROUND:**

The Windsor site was constructed in 1956 to facilitate Combustion engineering's participation in the Atomic Energy Commission (AEC) contracts, at a time when the AEC and the United States Navy were involved in a combined effort to build a nuclear powered surface and submarine fleet.

From 1956 to 1961 the Combustion Engineering's (CE) Windsor site was used for AEC/US Navy fuel manufacturing, research and development and training activities. Between 1961 and 1993, CE Windsor was licensed by the AEC and, later, by the Nuclear Regulatory Commission (NRC) for commercial nuclear fuel manufacturing work, consisting of nuclear fuel manufacturing, reactor component testing and refurbishment, and research and development projects.

The site consists of 600 acres of clear and forested land. Many buildings have already been demolished. Extensive historical studies and characterization have been performed in the remaining impacted portions of the CE Windsor Site. Decommissioning activities will focus on the contaminated structures, contaminated soil, and contaminated systems and equipment. Characterization and previous decommissioning activities have only identified low concentration or diffuse uranium contamination.

ABB submitted a revised decommissioning plan (DP) in December 2008 to support upcoming decommissioning activities associated with the cleanup of Formally Utilized Sites Remedial Action Program areas of the CE Windsor, Connecticut, site. Along with the revised DP ABB submitted a "Justification of Application for License Amendment" documenting their plan to meet the requirements in Title 10 of the *Code of Federal Regulations* (CFR), Section 71.15 for "Exemption from classification as fissile material."

### **DISCUSSION:**

The licensee is requesting an exemption from security requirements in 10 CFR, Part 73. This request would apply to security measures related to Category I, II and III special nuclear material. As allowed by 10 CFR, Section 73.5, NRC may exempt the licensee from security measures if the material being excavated and shipped meets the requirements set forth in 10 CFR, Section 71.15 as non fissile material. Specifically, the licensee states in their revised DP on page 10-8 that they will meet 10 CFR, Section 71.15 (c) (1) in that the material being excavated and shipped will contain at least 2,000 grams of non fissile material for every gram of fissile material and that there will be no more than 180 grams of fissile material distributed within 360kgs of contiguous non fissile material.

In attachment 3 to the DP on page 6, the licensee explains in more detail how the waste will be mixed and packaged to meet the requirement in 10 CFR, Section 71.15.

Staff from NRC Region I office has suggested approving the request for exemption from security requirements related to excavated material at this site.

**CONCLUSION:**

The Office of Nuclear Security and Incident Response staff has reviewed the Revised DP and the Justification of Application for Amendment submitted by the licensee and agrees with staff from Region I that the request for exemption from security requirements in 10 CFR, Section 73 for the excavated material from the ABB site be approved.