## **NUCLEAR REGULATORY COMMISSION**

### **DOCKET NO. 03003754**

NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR LICENSE AMENDMENT TO BYPRODUCT MATERIALS LICENSE NO. 06-00217-06, FOR AMENDMENT OF THE LICENSE AND UNRESTRICTED RELEASE OF A PORTION OF THE ABB, INC. FACILITY IN WINDSOR, CONNECTICUT

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Issuance of Environmental Assessment and Finding of No Significant Impact for License Amendment.

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### SUPPLEMENTARY INFORMATION:

# I. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of a license amendment to Byproduct License No. 06-00217-06. This license is held by ABB, Inc. (the Licensee), for its CE Windsor Site (the Facility), located at 2000 Day Hill Road in Windsor, Connecticut. Issuance of the amendment would authorize a partial site release of 365 contiguous acres of the 612 acre facility for unrestricted use. The Licensee requested this action in a letter dated December 27, 2007. The NRC has prepared an Environmental Assessment in support of this proposed action in accordance with the requirements of Title 10, *Code of Federal* 

Regulations (CFR), Part 51 (10 CFR Part 51). Based on the Environmental Assessment, the NRC has concluded that a Finding of No Significant Impact is appropriate with respect to the proposed action. The amendment will be issued to the Licensee following the publication of this Finding of No Significant Impact and Environmental Assessment in the Federal Register.

### II. Environmental Assessment

## **Identification of Proposed Action**

The proposed action would approve the Licensee's December 27, 2007, license amendment request, resulting in the partial site release of 365 contiguous acres of the Windsor, Connecticut facility for unrestricted use. Historical NRC-licensed activities previously conducted at the Facility included research, development, and commercial fuel fabrication and component repair. Additionally, the Facility was also used to fabricate naval fuel for the United States Government. License No. 06-00217-06 was issued in the 1960's pursuant to 10 CFR Part 30 and has been amended periodically since that time. The license currently authorizes the Licensee to possess and use unsealed byproduct material, and limited amounts of source and special nuclear material, solely for purpose of conducting decommissioning activities at the Facility.

The Facility is situated on 612 acres of which about a third is developed with buildings containing office space, fabrication shops, and laboratories. The balance of the Facility is comprised of undeveloped wooded land. The Facility is located in an industrial zone with nearby property that includes commercial, agricultural, industrial, and residential areas. Within the Facility, NRC-licensed material was confined to numerous laboratories and fabrication buildings associated with commercial nuclear activities. All of these buildings have been removed and the impacted areas remediated. Those areas of the facility that were involved with the United States Government fuel fabrication have been designated as Formally Utilized Sites Remedial Action

Program areas and have not yet been remediated. The Formally Utilized Sites Remedial Action Program areas within the Facility include two buildings having a total footprint of about 50,000 ft<sup>2</sup> along with other undeveloped areas having a total footprint of about 15 acres. Also located within the Facility boundary is a 10.6 acre plot of land previously used as a United States Navy training site which was owned by the United States Government and was previously remediated by the United States Department of Energy.

On September 13, 2007, the Licensee completed the licensed decommissioning activities for the non-Formally Utilized Sites Remedial Action Program areas of the Facility and requested that all of these areas be removed from control of NRC License No. 06-00217-06.

These activities were conducted in accordance with a decommissioning plan that was approved for use as part of Amendment 54 to License No. 06-00217-06. The Licensee conducted final status surveys of these areas of the Facility and provided information to the NRC to demonstrate that it meets the criteria in Subpart E to 10 CFR Part 20 for unrestricted release. On December 27, 2007, the Licensee requested that only 365 contiguous acres of the non-Formally Utilized Sites Remedial Action Program areas be considered for unrestricted release in order to provide buffer areas around the Formally Utilized Sites Remedial Action Program areas on the Facility that have yet to be remediated.

### **Need for the Proposed Action**

The Licensee has ceased conducting licensed activities within the areas of the Facility for which the partial site release has been requested and seeks unrestricted use of the area. License No. 06-00217-06 will remain in place for the balance of the Facility to support future Formally Utilized Sites Remedial Action Program decommissioning and eventual site release.

# **Environmental Impacts of the Proposed Action**

The historical review of licensed activities conducted at the Facility shows that such activities involved primarily uranium-234, uranium-235, uranium-238, cesium-137, and cobalt-60. Prior to performing the final status survey for the areas for which the unrestricted release has been requested, the Licensee conducted decontamination and remediation activities, as necessary, in the areas of the Facility affected by these radionuclides. The Licensee conducted final status surveys between 2005 and 2007. These surveys covered all impacted areas within the requested partial site release portion of the Facility. Notification that decommissioning activities in non-Formally Utilized Sites Remedial Action Program areas of the site were complete was provided in the Licensee's letter dated September 13, 2007. The Licensee elected to demonstrate compliance with the radiological criteria for unrestricted release as specified in 10 CFR Part 20.1402 by developing derived concentration guideline levels for its Facility. The Licensee conducted site-specific dose modeling using input parameters specific to the Facility. This dose modeling used the residential farmer scenario. The Licensee thus determined the maximum amount of residual radioactivity on building surfaces, equipment, materials, and soils that will satisfy the NRC requirements in Subpart E of 10 CFR Part 20 for unrestricted release. The NRC previously reviewed the Licensee's methodology and the proposed derived concentration guideline levels, and concluded that the proposed derived concentration guideline levels were acceptable for use as release criteria at the Facility. The NRC's approval of the Licensee's proposed derived concentration guideline levels was published in the Federal Register on June 1, 2004 (Volume 69, Number 105). The Licensee's final status survey results were below these derived concentration guideline levels, and are thus acceptable.

The Oak Ridge Institute for Science and Education and NRC staff conducted confirmatory surveys between March 24 and March 27, 2008. None of the confirmatory sample results exceeded the derived concentration guideline levels established for the Facility. Based on its

review, the staff has determined that the affected environment and any environmental impacts associated with the proposed action are bounded by the impacts evaluated by the "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities" (NUREG-1496) Volumes 1-3 (ML042310492, ML042320379, and ML042330385). The staff finds there were no significant environmental impacts from the use of radioactive material within the partial site release area of the Facility. The NRC staff reviewed the docket file records and the final status survey reports to identify any non-radiological hazards that may have impacted the environment surrounding the Facility. No such hazards or impacts to the environment were identified. The NRC has identified no other radiological or non-radiological activities in the area that could result in cumulative environmental impacts.

The NRC staff finds that the proposed release of the portion of the Facility described above for unrestricted use is in compliance with 10 CFR Part 20.1402. Although the Licensee will continue to perform licensed activities at other parts of the Facility, the Licensee must ensure that this decommissioned area does not become recontaminated. Before the license can be terminated, the Licensee will be required to show that the entire Facility, including previously-released areas, complies with the radiological criteria in 10 CFR Part 20.1402. Based on its review, the staff considered the impact of the residual radioactivity at the Facility and concluded that the proposed action will not have a significant effect on the quality of the human environment.

# **Environmental Impacts of the Alternatives to the Proposed Action**

Due to the largely administrative nature of the proposed action, its environmental impacts are small. Therefore, the only alternative the staff considered is the no-action alternative, under which the staff would leave things as they are by simply denying the amendment request. This

no-action alternative is inconsistent with 10 CFR Part 30.36(d) and 10 CFR Part 70.38(d) requiring that decommissioning of byproduct material and special nuclear material facilities be completed and approved by the NRC after licensed activities cease. The NRC's analysis of the Licensee's final status survey data confirmed that the partial site release area meets the requirements of 10 CFR Part 20.1402 for unrestricted release. Additionally, denying the amendment request would result in no change in current environmental impacts. The environmental impacts of the proposed action and the no-action alternative are therefore similar, and the no-action alternative is accordingly not considered further.

### Conclusion

The NRC staff reviewed the environmental impacts of the proposed action in accordance with the requirements of 10 CFR Part 51 and NRC's unrestricted release criteria specified in 10 CFR Part 20.1402. The NRC staff has determined that the partial site release of the ABB, Inc. site would not significantly affect the quality of the human environment. Therefore, an environmental impact statement is not warranted for the proposed action, and pursuant to 10 CFR Part 51.31, a Finding of No Significant Impact is appropriate.

### **Agencies and Persons Consulted**

On September 19, 2008, the NRC provided a draft of this Environmental Assessment to the Connecticut Department of Environmental Protection for review. On November 6, 2008, Mr. Michael Firsick of the Connecticut Department of Environmental Protection responded by e-mail. The State agreed with the conclusions of the Environmental Assessment, and otherwise had no comments.

The NRC staff has determined that the proposed action is of a procedural nature, and will not affect listed species or critical habitat. Therefore, no further consultation is required under

Section 7 of the Endangered Species Act. The NRC staff has also determined that the proposed action is not the type of activity that has the potential to cause effects on historic properties.

Therefore, no further consultation is required under Section 106 of the National Historic Preservation Act.

# III. Finding of No Significant Impact

On the basis of this Environmental Assessment, the NRC finds that there are no significant environmental impacts from the proposed partial site release action as described above. Accordingly, preparation of an environmental impact statement is not warranted and a Finding of No Significant Impact is appropriate.

## IV. Further Information

Documents related to this action, including the application for license amendment and supporting documentation, are available electronically at the NRC's Electronic Reading Room at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>. From this site, you can access the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The documents related to this action are listed below, along with their ADAMS accession numbers.

- 1. NUREG-1757, "Consolidated NMSS Decommissioning Guidance;"
- Title 10 Code of Federal Regulations, Part 20, Subpart E, "Radiological Criteria for License Termination;"
- Title 10, Code of Federal Regulations, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions;"
- NUREG-1496, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities;"

- Letter dated October 31, 2005, from ABB to NRC, "Final Status Survey Report –
   Building 2 Complex" with attachments (ADAMS Accession No. ML053320512,
   ML053320517, ML053320521, ML053320522, ML053320523, ML053320524,
   ML053320525, ML053320526, ML053320527, ML053320530, ML053320532,
   ML053320536, ML053320539, and ML053320540);
- Letter dated February 7, 2006, from ABB to NRC, "Final Status Survey Report –
  Building 17 Complex" with attachments (ADAMS Accession No. ML060670224,
  ML060670354, ML060670385, ML060670398, ML060670405, ML060670408,
  ML060670411, ML060670425, ML060670444, ML060670451, ML060670456,
  ML060670470, ML060670478, and ML060670489);
- Letter dated May 2, 2006, from ABB to NRC, "Final Status Survey Report –
   Building 5/6A Complex" with attachments (ADAMS Accession No. ML061300647, ML061600110, ML061600128, ML061600142, ML061600154, ML061600158, ML061600160, ML061600178, ML061600184, ML061600185, ML061600186, ML061600187, ML061600280, ML061600292, ML061600304, ML061600315, ML061600324, and ML061600331);
- Letter dated September 13, 2007, from ABB to NRC, "Final Status Survey Report" with attachments (ADAMS Accession No. ML072890334, ML072890351, ML072890359, ML072890361, ML072890362, ML072890533, ML072890542, ML072890545, ML072890552, ML072890556, ML072890565, ML072890572, ML072890586, ML072890590, ML072890603, ML072890611);
- Letter dated December 27, 2007, from ABB to NRC, "Partial Site Release"
   (ADAMS Accession No. ML080020357);

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10. Letter dated June 27, 2008, from ORISE to NRC, "Final Report – Confirmatory Survey for

the Partial Site Release at the ABB Inc. CE Windsor Site; Windsor, Connecticut" (ADAMS

Accession No. ML082420398); and

11. NRC Inspection Report 03000754/2008001, dated September 30, 2008,

(ADAMS Accession Nos. ML082730833 and ML082730842).

If you do not have access to ADAMS, or if there are problems in accessing the documents

located in ADAMS, contact the NRC Public Document Room Reference staff at 1-800-397-4209,

301-415-4737, or by e-mail to <a href="mailto:pdr@nrc.gov">pdr@nrc.gov</a>. These documents may also be viewed electronically

on the public computers located at the NRC's Public Document Room, O 1 F21, One White Flint

North, 11555 Rockville Pike, Rockville, MD 20852. The Public Document Room reproduction

contractor will copy documents for a fee.

Dated at King of Prussia, Pennsylvania, this 30<sup>th</sup> day of December, 2008.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Eugene Cobey, Chief Decommissioning Branch Division of Nuclear Materials Safety Region I