

June 14, 2013

Mr. Dennis C. Richardson  
Deputy Director, Hematite  
Decommissioning Project  
Westinghouse Electric Company  
3300 State Road P  
Festus, MO 63028

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION ASSESSMENT OF WESTINGHOUSE HEMATITE'S REPORTS HDP-RPTFSS-102, *DATA SUMMARY REPORT FOR REUSE STOCKPILE 1*, AND HDP-RPTFSS-103, *DATA SUMMARY REPORT FOR REUSE STOCKPILE 3* (License No. SNM-0033, Docket No. 070-00036)

Dear Mr. Richardson:

In your letter dated February 20, 2013, HEM-13-20, Westinghouse Electric Corporation, LLC (WEC) provided to the U.S. Nuclear Regulatory Commission (NRC) the results of the radiological survey methodologies for Soil Reuse Stockpiles 1 and 3 at the Hematite Decommissioning Project (HDP). Enclosure 1 of that letter contains the report HDP-RPTFSS-102, *Data Summary Report for Reuse Stockpile 1*. Enclosure 2 of that letter contains the report HDP-RPTFSS-103, *Data Summary Report for Reuse Stockpile 3*. The objective of these reports was to document that the average radioactivity concentration (expressed as the sum contribution from all radionuclides) within the stockpiles of reuse soil does not exceed the applicable derived concentration guideline levels approved in Amendment 57 to the Hematite License (Agencywide Documents Access and Management System [ADAMS] Accession No. ML112101713).

The Hematite License includes a condition which incorporates, by reference, the Hematite Decommissioning Plan (DP), and Westinghouse's responses to the NRC's Requests for Additional Information (RAIs). DP Section 14.3.2.3 contains requirements regarding radiological survey methodologies for soil intended to be used as backfill in an excavation.

WEC requested the NRC review HDP-RPTFSS-102 and HDP-RPTFSS-103 because: (a) WEC has near term plans to use this soil to backfill excavations; and (b) this review is part of the phased approach to documenting final status surveys as discussed in DP Chapter 14. WEC considered the timely review of these reports to be important in order for it to continue its ongoing remediation work in accordance with the schedule provided in DP Chapter 1.

The NRC staff has completed its review of the above noted reports, as well as the documents and associated information regarding the Soil Reuse Piles 1 and 3 and has the following comment on the survey methodology. The staff notes that it would be beneficial for WEC to clarify the use of the alternative Conceptual Site Models (CSMs) in Section 2 of HDP-RPTFSS-102 and HDP-RPTFSS-103 so as to avoid the introduction of potential errors in the survey

approach. Use of the CSMs is appropriate as long as each area is determined to fall under either the layered approach (applying the sum of fractions rule, as appropriate) or the Uniform model. In other words, it would be inappropriate to use the sum of fractions rule to combine the Uniform CSM and any of the other CSMs.

The NRC staff considers Reuse Soil Piles 1 and 3 to be consistent with MARSSIM Class 3 and Class 1 survey units, respectively, based on the data provided in the reports HDP-RPT-FSS-102 and HDP-RPT-FSS-103. Since WEC does not plan to perform any additional surveys on reuse soils during the Final Status Survey (FSS) process and the placement of reuse soil as backfill will make future surveys difficult, the NRC staff recommends that confirmatory surveys of reuse soils be taken prior to backfill. As such, WEC should coordinate confirmatory surveys with NRC Region III prior to backfill. Nevertheless, since no minimum confirmatory survey area is required by the NRC for the Class 3 material in Pile 1 the soil can be surveyed in its current configuration. However, additional confirmatory surveys of Pile 3 may be required during soil movement, and WEC is advised to coordinate such surveys with NRC Region III. Given the radiological characteristics of Soil Reuse Piles 1 and 3, they may be utilized for backfill in an excavation as consistent with the depths and configurations approved for the applicable Uniform, Root, or Excavation DCGLs.

It should be noted by WEC that the NRC staff will still review the FSS Report once the FSS is complete. Consequently, dose assessments, survey results, and evaluations related to final status survey coverage (for accessible and inaccessible areas) will be evaluated by the staff. The NRC (or its contractor) may also choose to conduct confirmatory surveys and in-process surveys as necessary. Therefore, although the staff recognizes that Soil Piles 1 and 3 may be suitable for reuse based upon the information provided in the submitted reports, such recognition does not equate to an automatic approval of Westinghouse's FSS results. The status of Westinghouse's FSS results will be determined in the future.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

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Please contact me if you have any questions concerning the above. I can be reached at (301) 415-5928, or via email at [John.Hayes@nrc.gov](mailto:John.Hayes@nrc.gov).

Sincerely,

**/RA/**

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Docket No.: 70-36  
License No.: SNM-33

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Joseph W. Smetanka, Westinghouse

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Sincerely,

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