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**To:** ["Malek, Elise"](#)  
**Subject:** Additional clarification to CFFF EIS RAIs  
**Date:** Thursday, March 18, 2021 9:37:17 AM  
**Attachments:** [Clarification Needs-Westinghouse LR EIS.docx](#)

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I have enclosed a list of clarifications related to the staff's previous RAIs on the EIS. Please provide your responses by 3/24. The clarification questions will be placed in ADAMS. Please let me know if you have any questions. Thanks.

**Environmental Impact Statement for Westinghouse Electric Company, LLC, Columbia  
Fuel Fabrication Facility License Renewal Application**

**Additional Clarifying Information Requests**

**Cultural and Historic Resources**

**RAI 4. Cultural Resource Protection Plans and Procedures**

The U.S. Nuclear Regulatory Commission (NRC) reviewed Westinghouse Electric Company, LLC's (WEC's) 2019 Phase I Remedial Investigation Work Plan (RIWP) (and referenced in the Phase II RIWP dated September 2020, ADAMS Accession No. ML20353A280). The 2019 Work Plan indicates that WEC will use a private utility location contractor to identify subsurface utilities. Based on the NRC staff's May 2019 site visit to the Columbia Fuel Fabrication Facility (see the May 2019 site visit summary at ADAMS Accession No. ML19283A811), one of the methods WEC uses prior to well installation is the use of GPR to identify both subsurface utilities and other underground anomalies. Please confirm whether WEC plans to continue to use GPR during the execution of the remedial investigations.

Additionally, in WEC's responses (dated December 18, 2020, ADAMS Accession No. ML20353A275) to the NRC's Requests for Additional Information, RAIs (dated November 3, 2020, ADAMS Accession No. ML20275A251), WEC referred to the following procedures.

1. "Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains," provided as Appendix C of the 2020 Phase II RIWP. Confirm whether WEC plans to use this procedure for all future ground disturbing activities occurring on the Columbia Fuel Fabrication Facility (CFFF) site, including remediation activities.
2. RAF-104-5, "Environmental Protection Guidelines and Checklist," and TAF-500-11, "10 CFR 70.72 Engineering Pre-Screening Checklist." Please, clarify when these procedures were put in place.
3. RAF-104-5 asks the following: "Does the change potentially impact any archaeological or historical sites on the Westinghouse property, or have provisions been made for protection or mitigation in the event of an archaeological or historical discovery onsite?" Please, describe the "provisions" that would be implemented (e.g., references to the "Procedures Guiding the Discovery of Unanticipated Cultural Resources and Human Remains").
4. TAF-500-11 asks the following: "Activity involves land/soil disturbance or removal?" Please describe the next steps if the response to this question is "Yes."
5. Please describe WEC's plans and timing for consolidating procedures related to cultural resource protection and preservation.

And, please describe training related to the unanticipated discovery of potential cultural resources provided to personnel conducting ground disturbing activities.

**RAI 5. Incinerator Process - Waste Management**

In its response to this RAI, WEC provided information on the uranium recovery process. Please describe the associated support systems (e.g., clinch columns, scrubber, HEPA filters) used in the uranium recovery process, and the resulting waste stream (e.g., HEPA filters would be deconstructed for uranium recovery).

## **RAI 15. Environmental Sampling Values**

Clarify changes to analysis equipment for lowering a minimum detection level (MDL) to achieve the change in MDL. And, clarify whether the volume samples in Tables 6.1.1 and 6.1.2 of WEC's March 2019 Environmental Report (ADAMS Accession No. ML19088A100) would be updated. Provide additional information about the detection equipment used in support of the reported analyses (e.g., alpha analysis, Tc-99).

## **RAI. 17 – Geologic Characterization of the Site**

A.2 Clarify the information and assumptions used to understand the existence of silt and clay lenses beneath Lower Sunset Lake, Gator Pond, and particularly East Lagoon since there are no wells or borehole directly penetrated the bed sediment of these surface water bodies. Also, clarify how the results of the planned soil sampling underneath the East Lagoon liner will be considered in the development of the conceptual site model.

C.1 Provide additional clarification regarding WEC's consideration of the presence of "chemical odors" in the boring log for the basal sands at L-1 on the installation of well W-95 at an elevation 50' above the bottom of the aquifer.

C.2. Provide additional information about range of thickness of the confining unit considering the new boreholes installed within that region.

C.3. Provide additional information regarding erosion of the confining unit.

## **RAI. 22 Mill Creek Sediments and Pathway Assessment**

Please provide additional clarification about the role of the RIWP, baseline risk assessment, and feasibility study in the WEC's environmental monitoring program, including biota sampling in Mill Creek and Sunset Lake.

## **RAI. 30 Exposure Pathways**

Provide additional information about the agricultural environment around Westinghouse in support of the public and occupational health impact analysis (e.g., crops grown, meat and milk production, fishing). See section 6.4.12.2.1 in NUREG-1748 Section 6.4.12.2.1, *Pathway Assessment*, which describes information that can be used to understand the pathways to the public, including water use downstream, to be used in NRCDose.

Additionally, considering the information in Tables 3-3 through 3-6 of Enclosure 19 of WEC's responses to NRC's RAIs, "Preliminary Human Health Risk Assessment-Westinghouse CFFF 5801 Bluff Road Hopkins, South Carolina" dated March 2019 (ADAMS Accession No. ML20353A296), provide the background value for gross alpha onsite or provide explanation for the difference between total uranium and gross alpha values provided in these tables.

## **RAI. 31 Air Permit**

WEC's air permit renewal application describes greenhouse emissions from the CFFF of 35,507 tons/yr. Clarify the greenhouse gas (GHG) emissions in light of U.S. Environmental Protection Agency' reporting limit of 25,000 tons/yr. Additionally, please clarify whether the values for NO<sub>x</sub> and CO<sub>2</sub> in Table 1 of the air permit renewal application are potential emissions or actual emissions.