



Westinghouse Electric Company LLC  
Nuclear Fuel  
Columbia Fuel Site  
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USA

Director, Office of Nuclear Material Safety and  
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U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
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Your ref:  
Our ref: LTR-RAC-10-9  
January 22, 2010

SUBJECT: Westinghouse Columbia Fuel Fabrication Facility Decommissioning Funding Plan  
Additional Information (TAC No. L32850)

- References:
- 1) Westinghouse Letter LTR-RAC-09-74-P; Westinghouse Columbia Fuel Fabrication Facility Funding Plan Revision and RAI Responses, October 14, 2009.
  - 2) NRC Electronic Correspondence, Christopher Ryder to Gerard Couture, Clarifying Questions Regarding Responses to RAIs about the Decommissioning Funding Plan.

Westinghouse Electric Company LLC (Westinghouse) submitted a revised report of the Columbia Fuel Fabrication Facility (CFFF) decommissioning funding plan in Reference 1. Review of the revised decommissioning funding plan resulted in two additional questions regarding the responses provided which were transmitted in Reference 2. The Clarification questions are repeated below in italics, followed by the Westinghouse response.

*Clarification 1. Although the licensee's cover letter for the October 6, 2009, submission indicates that the "total increase for the revisions outlined above is \$941,374", the sum of the three changes (\$956,794) is larger than that stated amount. The difference between the previous estimated total cost of \$50,614,807 without contingency and the new estimated total cost without contingency of \$51,572,475 also is larger, amounting to \$957,668. Westinghouse should explain these differences.*

Westinghouse submitted a revised cost estimate October 14<sup>th</sup> in response to NRC Requests for Additional Information. This revision supersedes the earlier revisions and several adjustments were made to the cost estimates, primarily to address the NRC submitted RAIs. As noted in the above clarification request, errors were identified in the submission. Attachment 1 provides the corrected information.

*Clarification 2. Response 1.f does not explicitly describe the process that Westinghouse intends to follow in updating its Decommissioning Cost Estimate, but instead merely quotes the regulations at §70.25. Westinghouse should state its commitment to the process described in the regulations.*

As stated in both the initial and the October 14, 2010 transmittal, Westinghouse submitted the revision under review in accordance with an existing commitment within the SNM-1107 License Application, Chapter 11, compliance of which is required by SNM-1107 License Condition S-1.

The NRC issued Safety Evaluation Report for the most recent license renewal documents NRC acceptance of the commitment made in the SNM-1107 License Application as acceptable and compliant with the regulations. Pertinent sections from that document (ML072180276) are provided as Attachment 2.

If you have any questions, please contact me at (803) 647-2045.

Sincerely,



Gerard F. Couture, Manager  
Licensing and Regulatory Programs  
Westinghouse Columbia Fuel Fabrication Facility

Docket 70-1151 License SNM-1107

Attachment

cc: U. S. Nuclear Regulatory Commission, Region II  
Mr. Richard Gibson  
Sam Nunn, Atlanta Federal Center  
61 Forsyth Street, SW., Suite 23T85  
Atlanta, GA 30303

U. S. Nuclear Regulatory Commission  
One White Flint North  
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Rockville, Maryland 20852-2738  
Mail Stop: EBB 2C40M  
Attn: Christopher Ryder, Project Manager

**Attachment 1****Cost Estimate Revision Information Sheet**

Document Name:	Westinghouse Columbia Fuel Fabrication Facility Decommissioning Cost Estimate March 2009
Revision Date:	January 21, 2010

WBS #	Task Identification	Summary of Changes
1.1	Prerequisite Activities	<ul style="list-style-type: none"> <li>Added five D&amp;D resources to WBS Element 1.1 "Prerequisite Activities".</li> </ul> <p>The assumption was made that Westinghouse resources would perform the Inventory Disposition activities as part of the close down activities prior to decommissioning activities commencing. It was also assumed that the cost for these activities would be covered by the Westinghouse operational close down budget. These assumptions were not accepted by the NRC and therefore the five additional resources had to be added.</p> <p>The total cost impact (fully burdened including fee) for the additional resources is \$422,933.00</p>
1.7	Westinghouse Oversight	<ul style="list-style-type: none"> <li>Revised the labor rates for the Sr. Project Manager, Regulatory Affairs Manager, and Administration Assistant in WBS Element 1.7 "Westinghouse Oversight".</li> </ul> <p>The rates provided by the Columbia Controllers' department were not acceptable to the NRC because they were slightly lower than those of a third-party contractor. Therefore the rates for the resources identified above were increased to match a third-party D&amp;D contractor.</p> <p>The total cost impact (fully burdened including fee) for the revisions is \$222,869.00</p>
1.1 Thru 1.6	Global Revision	<ul style="list-style-type: none"> <li>Revised the living allowance to accommodate a seven day living allowance in lieu of a five day allowance.</li> </ul> <p>The total cost impact (fully burdened including fee) for the revisions is \$310,992.00</p>

\$422,933.00

\$222,869.00

\$310,992.00**\$956,794.00**The total increase for the revisions outlined above is **\$956,794.00**

The Revision 1 Cost Estimate Total Firm-Fixed Price remains unchanged.

**Attachment 1 (Continued)**

An error was made in summing the three items noted. Please find below the correct addition for the revised cost estimate values (as has already been indicated by the NRC).

Item 1	\$ 422,933
Item 2	\$ 222,869
Item 3	\$ 310,992
<b>Σ</b>	<b>\$ 956,794</b>

The following difference is attributable to automatic rounding of numbers in the cost estimate software.

\$ 51,572,475  
\$ 50,614,807  
**\$ 957,668**

\$ 957,668  
\$ 956,794  
**\$ 874**

The following shows the effects of the rounding in terms of percentages.

\$ 874  
÷ \$ 956,794  
**= 0.0913%**

**ATTACHMENT 2**

4 Page excerpts from Safety Evaluation Report (ML072180276)

[REDACTED]

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ML072180276

Safety Evaluation Report  
for the Renewal of SNM-1107  
Columbia Fuel Fabrication Facility  
in Columbia, South Carolina

Docket No. 70-1151  
Westinghouse Electric Company

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Manuscript Completed: August 2007

Division of Fuel Cycle Safety & Safeguards  
Office of Nuclear Material Safety & Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001



Enclosure 2

[REDACTED]



### Fire Safety

WEC committed to reasonable engineered and administrative controls to minimize the risk of fires and explosions. The items relied on for safety (IROFS) and defense-in-depth protection discussed in WEC's ISA Summary, along with safety basis assumptions and the planned programmatic commitments in the application, meet safety requirements and provide reasonable assurance that the facility is protected against fire hazards.

### Emergency Management

WEC provided an adequate Emergency Plan that meets the regulatory requirements. WEC commits to maintaining and executing an Emergency Plan for responding to the radiological and chemical hazards that would result from a potential release of radioactive or chemically hazardous materials. The requirements of the Emergency Plan are implemented through approved written procedures.

### Environmental Protection

WEC committed to adequate environmental protection measures, including, environmental and effluent monitoring, and effluent controls to maintain public doses ALARA as part of the radiation protection program. WEC's proposed controls are adequate to protect the environment and the health and safety of the public, and that comply with the regulatory requirements.

### Decommissioning

WEC provided a Decommissioning Funding Plan demonstrating that adequate funding will be available for decommissioning and decontamination of the CFFF, and can be accomplished even if the licensee is unable to meet its financial obligations. WEC will update the site-specific cost estimate at least every three years, to reflect inflation and changes in site inventories and conditions that could affect the cost of decommissioning.

### Management Measures

WEC provided information about management measures that will be applied to safety significant controls (SSCs) and IROFS. The information describes: (a) the configuration management program; (b) the maintenance program; (c) the quality assurance program; (d) procedures, training, and qualification; (e) human factors; (f) audits and assessments; (g) incident investigations; (h) corrective action process; and (i) recordkeeping and reporting. The proposed management measures are acceptable and meet the regulatory requirements in 10 CFR 70.62(d).





## 10.0 DECOMMISSIONING

The purpose of this review of WEC's Decommissioning Funding Plan (DFP) is to determine that funds will be available to decommission the facility safely and in accordance with 10 CFR 70.25.

### 10.1 REGULATORY REQUIREMENTS

The following NRC regulations require planning, financial assurance, and record-keeping for decommissioning, as well as procedures and activities to minimize waste and contamination:

10 CFR 20.1401-1406	"Radiological Criteria for License Termination" (Subpart E)
10 CFR 70.22(a)(9)	"Decommissioning Funding Plan"
10 CFR 70.25	"Financial Assurance and Recordkeeping for Decommissioning"
10 CFR 70.38	"Expiration and Termination of Licenses and Decommissioning of Sites and Separate Buildings or Outdoor Areas"

### 10.2 REGULATORY ACCEPTANCE CRITERIA

NUREG-1520 (NRC, 2002); NUREG-1757, "Consolidated NMSS Decommissioning Guidance," (NRC, 2003); and NUREG-1727 "NMSS Decommissioning Standard Review Plan" define relevant regulatory guidance and appropriate acceptance criteria for decommissioning and DFPs contained in applications.

### 10.3 STAFF REVIEW AND ANALYSIS

WEC updated the cost estimate in March 2006. The NRC reviewed the cost estimate and decommissioning financial assurance instruments and determined that adequate financial resources will be available to decommission the CFFF. 10 CFR 70.25(e) requires licensees to update the cost estimates every three years and to submit the updates for NRC review. WEC has committed to review and update the cost estimate, as needed, on a triennial basis and submit the updated cost estimate to the NRC.

### 10.4 EVALUATION FINDINGS

The NRC staff evaluated WEC's DFP in accordance with NUREG-1757. On the basis of this evaluation, the NRC staff determined that WEC's financial assurance for decommissioning continues to provide sufficient funding to ensure decommissioning and decontamination of the facility, even if the licensee is unable to meet its financial obligations, and, therefore, provides reasonable assurance of protection for workers, the public, and the environment.



## 10.5 REFERENCES

(NRC, 2002) U.S. Nuclear Regulatory Commission (NRC). NUREG-1520, "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility," 2002.

(NRC, 2002) U.S. Nuclear Regulatory Commission (NRC). NUREG-1727, "NMSS Decommissioning Standard Review," 2002.

(NRC, 2003) U.S. Nuclear Regulatory Commission (NRC). NUREG-1757, "Consolidated NMSS Decommissioning Guidance," 2003.

