

**REQUEST FOR ADDITIONAL INFORMATION  
WESTINGHOUSE ELECTRIC COMPANY, LLC  
REQUEST TO INCREASE POSSESSION LIMITS  
(TAC L33353, DOCKET 70-1107)**

IMPORTANT: The regulatory citations are abridged for the purpose of establishing the basis for the requested information. Westinghouse should refer to Title 10 of the *Code of Federal Regulations* (10 CFR) to ensure that all applicable regulatory requirements are addressed.

Annex Expansion Description

RAI 1: Describe the uranium hexafluoride (UF<sub>6</sub>) Pad Annex expansion. Give approximate dimensions of the expansion. Give approximate dimensions of the area where the additional UF<sub>6</sub> cylinders will be stored. Describe the location of the expansion in relation to landmarks of the UF<sub>6</sub> pad and annex, such as the entrance to the UF<sub>6</sub> pad, and the manufacturing building. Describe the perimeter of the proposed expansion (e.g, fencing). See also RAI 2.

Regulatory basis: Paragraph 70.22(a)(7) of 10 CFR requires a description of equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property (such as handling devices, working areas, shields, measuring and monitoring instruments, devices for the disposal of radioactive effluents and wastes, storage facilities, criticality accident alarm systems). 10 CFR 70.65 (b)(2) requires a general description of the facility with emphasis on those areas that could affect safety, including an identification of the controlled area boundaries.

RAI 2: By letter dated November 11, 2014, (Ref. 1) Westinghouse states that the purpose of this amendment is to: "increase the material possession limits of U-235,... so that Westinghouse can pursue business opportunities involving uranium hexafluoride (UF<sub>6</sub>) interim storage" and "expand its UF<sub>6</sub> storage capacity." By letter dated November 21, 2014, (Ref. 2) Westinghouse stated that: "with the additional storage, [Columbia Fuel Fabrication Facility] CFFF would only have locations for about 15 months of production. Therefore it is rare for cylinders to remain unused for more than 2 years without a specific customer request. Increasing the available storage area will also help with the logistics of stock rotation." Explain the difference in the statements made in the November 11, 2014, of using the UF<sub>6</sub> storage pad expansion for interim storage and the November 21, 2014, letter indicating storage for both production and stock rotation.

Regulatory basis: 10 CFR 70.65 (b)(2) requires a general description of the facility with emphasis on those areas that could affect safety, including an identification of the controlled area boundaries.

RAI 3: Discuss additional training for placing UF<sub>6</sub> cylinders in the annex expansion. Discuss how licensee staff know to segregate the UF<sub>6</sub> cylinders.

10 CFR 70.22(a)(6) requires, in part, the technical qualifications, including training to engage in the proposed activities.

## Radiation Safety

RAI 4: The application (Refs. 1 and 2) states that there will be no increase in the dose to workers due to the addition of 600 full 30B cylinders to the storage pad annex. A full UF<sub>6</sub> cylinder is known to emit radiation of at least 1 mrem/hr at a distance of 1 meter. Provide a sufficient description of the proposed pad annex to justify the above assertion considering self-shielding, distance, handling time, etc. Justify the assertion of no dose increase to cylinder handlers, pad construction workers (due to exposure to existing cylinders), and any other people who can come into the vicinity of the additional UF<sub>6</sub> cylinders. See also RAI 1.

Regulatory basis: 10 CFR 20.1101 requires a licensee to develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of Part 20. The licensee shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA). In addition, 10 CFR 20.1201(a) requires a licensee to control the occupational dose to individual adults to stated limits.

RAI 5: The application (Refs. 1 and 2) indicates that the licensee will implement construction on the existing storage pad. Provide a commitment to evaluate the existing dose field on the storage pad and limit exposures to construction workers below the administrative limits and ALARA.

The application indicates the material from the increased possession limit will be stored at the expanded storage pad which, according to the existing application, is located within the controlled access area. State in the amendment documentation or supplement the highest dose rate at the storage pad boundary and the distance from this location to the nearest member of the public. Provide sufficient information on the dose rate and distance to the site boundary to support the statement that the possession limit increase will result in no dose increase to a member of the public. This information is needed to demonstrate compliance with the dose limits for members of the public required by 10 CFR 20.1301.

Regulatory basis: See regulatory basis for RAI 4.

## Criticality Safety

RAI 6: Confirm that criticality accident alarm system coverage will be evaluated using existing analysis methods and, if needed, expanded in a manner that is consistent with current license commitments, to support expansion of the UF<sub>6</sub> Pad Annex.

Regulatory basis: 10 CFR 70.24(a) requires a criticality monitoring system to be provided in each area in which special nuclear material is handled, used, or stored. The information is necessary to ensure adequate protection of workers and the public in the event of a criticality accident.

## Financial Assurance For Decommissioning

RAI 7: Westinghouse stated (Ref. 2) that, "There is no time limit that a cylinder can be stored on-site." Furthermore, by Reference 3, Westinghouse states, "Because the additional UF<sub>6</sub> will be stored at the Westinghouse facility, there is no expected increase in contamination nor an increase in the production throughput. These stored cylinders are certified to ANSI NI4.1, and they are received, inspected, stored and secured in the same manner that full cylinders are handled today at the Columbia Fuel Fabrication Facility (CFFF)." Discuss measures (e.g., inspections) to ensure the integrity of UF<sub>6</sub> cylinders in storage for extended periods of storage.

Regulatory Basis: 10 CFR 70.25(a)(2) requires a decommissioning funding plan, for a specific license authorizing the possession and use of unsealed special nuclear material.

## Page Change: Change in Principal Officers

RAI 8: Discuss the training and qualifications of the licensing manager, N. Parr.

Regulatory Basis: 10 CFR 70.22(a)(6) requires the technical qualifications, including training and experience of the applicant and members of his staff to engage in the proposed activities.

## References

1. Letter from N. Parr, Westinghouse Electric Company, LLC, "Westinghouse License SNM-1107 Amendment Request (Docket 70-1151)", November 11, 2014. ADAMS accession number ML14315A078.
2. Letter from N. Parr, Westinghouse Electric Company, LLC, "Revised submittal Additional Information To Support License SNM-1107 Amendment Request (Docket 70-1151 And TAC # L33353)," November 21, 2014. ADAMS accession number ML14328A605.
3. Letter from N. Parr, Westinghouse Electric Company, LLC, "Additional Information To Support License SNM-1107 Amendment Request (Docket 70-1151 and TAC # L33353)", February 27, 2015. ADAMS accession number ML15058A271.