Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Site
P.O. Drawer R
Columbia, South Carolina 29250
USA

Direct tel: 803-647-3451
Direct fax: 803-695-3964
e-mail: mcdonasg@westinghouse

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C.
20555-0001

Your ref:
Our ref: LTR-RAC-03-44-Rev 1

Date: October 9, 2003

Subject: Westinghouse Proprietary Class 2

Dear Sir:

We inadvertently left Westinghouse Proprietary Class 2 on our letter in reference to Hunt Valves. We are re-submitting this letter without this statement on it.

Samuel G. McDonald
Manager, Environment Health and Safety

cc:
U.S. Nuclear Regulatory Commission
Director, Office of Nuclear Material Safety and Safeguards
Washington DC
20555

U.S. Nuclear Regulatory Commission
Material Licensing / Inspection Branch
ATTN: U.S. NRC Region II Administrator
Atlanta Federal Center,
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA

Attachment = 3 pages
Total Document Pages = 4

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Date:September 29, 2003

Dear Sir:

In accordance with the requirements of NRC Bulletin 2003-03, Potentially Defective 1 inch Valves for Uranium Hexafluoride Cylinders, Westinghouse Electric Company provides the following information:

Requested Action, Item A
Westinghouse Electric Company currently possesses approximately forty (40) Hunt valves installed in full uranium hexafluoride (UF_6) 30B cylinders that were received from a UF_6 supplier.
Westinghouse Electric Company currently possesses approximately two hundred fifty (250) Hunt valves in empty 30B UF_6 cylinders, that are staged for return to a UF6 supplier.

Requested Action, Item B
Westinghouse Electric Company does not possess Hunt valves for installation on 30B cylinders, and Hunt is not a qualified supplier of valves for Westinghouse Electric Company.

Requested Action, Item C
Westinghouse Electric Company does not possess cylinders containing depleted UF_6 that are not transported offsite or subjected to further processing.

Requested Action, Item D
A general description of the Westinghouse Electric Company standard operating procedures pertaining to the handling of UF_6 cylinders is as follows: Overpacks containing 30B cylinders filled with UF_6 are received at the Westinghouse Electric Company, Columbia Plant. Upon arrival the vehicle conveying the overpacks is surveyed for radiation and contamination. Following acceptable results, the transport vehicle is moved to the UF_6 receiving area, a controlled storage pad outside the main processing area. The overpacks are visually inspected for damage, and tamper seals are examined to ensure that they are intact and that they match the shipper's packing list. UF_6 cylinders are then removed from the overpacks for storage in the UF_6 cylinder storage area. Each 30B cylinder is inspected for cracks, gouges and distortion. The valve stem is inspected to ensure it is not broken, bent or twisted, and the valve packing nut is checked for cracks. Hunt valves receive additional attention since valves from this manufacturer

have been previously identified as having deficiencies within specific lots. Each cylinder is inspected to ensure that the nameplate certifies that it was manufactured in accordance with ANSI Standard N14.1. Each cylinder is subjected to quality assurance and safeguards verifications to ensure weight, enrichment and impurities are as expected and within established parameters. Any deficiencies result in a "HOLD" being placed on the affected cylinder and notification of Environment Health and Safety (EH&S) and Process Engineering personnel. Full cylinders remain at the UF_6 storage area until they are scheduled to be processed. At that time, they are moved into the main plant UF_6 bay vaporization area. Additional visual inspections are conducted on the cylinder and valve. Following successful inspections, the UF_6 cylinder is placed in a vaporizer. As the cylinder is heated, the UF_6 is vaporized and processed to form uranium dioxide powder (UO_2). Care is exercised to ensure that the packing nut is not turned as the valve is manipulated (anti rotation devices are built into the vaporizers), and torque limits are proceduralized to ensure valve stems are not damaged. Following vaporization, the now empty UF_6 cylinder (heel) is educted, and the valve is closed. After a period of time (typically 1 to 3 days), the cylinder is tested to verify that it remains under a negative pressure, the valve is again closed and the cylinder is moved to the UF_6 cylinder storage area for return to a UF_6 supplier. All processing, from receipt of full 30B cylinders to final shipment of empty cylinders, is conducted in accordance with documented procedures. These procedures contain much more detailed information than the general summary that has been provided in this section.

Requested Action, Item D.1.a
Westinghouse does not physically ensure at the time of valve installation that the cylinder and valve were successfully subjected to the 100 psig air test in the ANSI N14.1 Standard since valve installation is not performed by Westinghouse Electric Company.

Requested Action, Item D.1.b
Following processing of each UF_6 cylinder, the cylinder is educted, and the valve is closed. This removes most of the UF_6 that remained following processing of the cylinder, and it creates a negative pressure within the cylinder. The cylinder is allowed to cool and is tested to ensure that a negative pressure remains. This procedure ensures that the valve is performing its intended function and maintaining negative pressure. Following this verification, the empty UF_6 cylinder is surveyed to ensure that it meets contamination control requirements, the valve is covered with a metal valve guard and the cylinder is moved to an empty cylinder storage area pending shipment to a UF_6 supplier. No measurable verification is performed on the torque applied to the packing nut of a UF6 cylinder valve prior to shipment. Westinghouse does not apply torque to the packing nut because we believe it could degrade performance of the valve and increase the likelihood of unexpected leakage.
Each Hunt valve receives a thorough visual check prior to processing, and Hunt valves within specific lots are viewed more closely to ensure that the packing nuts have indications that they are free from cracks or similar defects. During processing, all cylinders are protected from the application of torque to the packing nut by use of an anti rotation device applied to the packing nut when the valve stem is rotated. We believe that the visual inspections and the care in the handling of the valve, combined with verifications that the valve is maintaining a negative pressure within the cylinder, are sufficient to ensure that an acceptable margin of safety is maintained. The risk is further reduced by the fact that Westinghouse Electric Company typically ships only empty (less than 12 kilograms UF_6) 30B cylinders.

Requested Action Item, D.1.c
Effective September 29, 2003, Westinghouse Electric Company has initiated a procedure to ensure that a full cylinder with a Hunt valve installed is capable of maintaining a negative pressure without substantial leakage. This is demonstrated by verifying the negative pressure within the full cylinder prior to processing. Since the 30B cylinder was shipped with a negative pressure, verification of a negative pressure prior to processing is indicative that there has been no substantial leakage.

Requested Action Item D.2
Documentation of actions taken and responses to requests for information will be maintained.

Westinghouse Electric Company will be able to demonstrate within twelve months from August 29, 2003 that all valves on UF_6 cylinders will be compliant with the ANSI N14.1 Standard. This will be accomplished in one of two ways:

- It is our desire that within 12 months, we will not receive 30B cylinders with Hunt valves installed in them and that empty 30B cylinders with installed Hunt valves will have been returned to our supplier. Only one of our UF_6 suppliers uses Hunt UF_6 valves, and at this time we have not received a commitment from them that they will have eliminated Hunt valves from their inventory within 12 months.
- If 30B cylinders with Hunt installed valves are still in use after August 29, 2004, Westinghouse Electric Company will require that our UF_6 supplier provide all information necessary to demonstrate compliance with applicable regulations, including an acceptable quality assurance program.

If you have any questions or need any additional information, please contact Jim Heath at (803) 647-3415 or Dr. Sam McDonald (803) 647-3451.

Samuel G. McDonald
Manager, Environment Health and Safety

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