



71-4909

PDR

Return

to 39655

Westinghouse  
Electric Corporation

Water Reactor  
Divisions

Box 355  
Pittsburgh Pennsylvania 15230

July 20, 1983

'83 JUL 22 A9:19

U. S. Nuclear Regulatory Commission  
Division of Fuel Cycle and Material Safety  
Washington, D. C. 20555

ATTENTION: Mr. Charles E. MacDonald, Chief  
Transportation Certification Branch

Gentlemen:

Subject: Certificate of Compliance No. 4909,  
Package Identification No. USA/4909/B()F



- References:
- 1) Westinghouse Letter dated 1/19/83 from A. J. Nardi to C. E. MacDonald.
  - 2) NRC Letter dated 2/24/83 from C. E. MacDonald to A. J. Nardi.
  - 3) Westinghouse Letter dated 5/31/83 from A. J. Nardi to C. E. MacDonald.
  - 4) NRC Letter dated 6/16/83 from C. E. MacDonald to A. J. Nardi.

The Westinghouse Electric Corporation hereby submits the attached documents to support our application for a revision to Certificate of Compliance No. 4909 to incorporate the Westinghouse design of the horizontal loading UF<sub>6</sub> Overpack (Model No. W-21PF-1). The previous information regarding this request was submitted by References No. 1 and 3. This request incorporates both the information requested by References 2 and 4 and the discussions held with Mr. R. H. Odegaarden and Mr. H. W. Lee on June 27 with Westinghouse personnel. In order to clarify the drawings previously submitted, new drawings were prepared which provide better definition of construction detail. This required expanding the drawing format to three sheets which provide additional details. This submittal is complete in itself and therefore replaces in entirety the previous submittals (References 1 and 3).

If you have any questions concerning this matter, please contact me at the above address or telephone (412) 374-4652.

Very truly yours,

A. J. Nardi, Manager  
NES License Administration

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PDR ADOCK 07104909  
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AJN/lb

Attachment

22559

ATTACHMENT TO WESTINGHOUSE LETTER DATED JULY 20, 1983

Westinghouse Electric Corporation requests an amendment to U. S. Nuclear Regulatory Commission Certificate of Compliance 4909 Revision No. 1, to accommodate minor changes to the DOT package designated 21PF-1. Westinghouse also requests registration as a user.

The proposed modifications are for the purpose of upgrading the shipping container in accordance with the objectives stated in USNRC IE Information Notice 82-24, "Water Leaking From Uranium Hexafluoride Overpacks", dated July 20, 1982. These changes represent an improvement over the existing specification container and do not change the original safety bases of the DOT 21PF-1 container. Westinghouse Drawing No. 360F05EQ01, Sheets 1, 2 and 3 and 272C045 are attached for your review.

The changes are as follows:

1. Existing specifications call for the use of carbon steel for the shipping container unless otherwise specified. The problems identified in IE Information Notice 82-24 can be attributed, in part, to the use of carbon steel. The proposed Westinghouse containers use 304 or 304L stainless steel to reduce rust, cracking, corrosion and extensive maintenance. While the strength of stainless steel is somewhat less than carbon steel, stainless steel is more ductile. Stainless steel also conducts less heat than carbon steel. Consequently, the results and conclusions of the package tests are not significantly affected by this change.
2. Existing specifications show a "step down" gasketed mating surface between the top and bottom halves. The Westinghouse container uses a "step up" stainless steel mating surface equipped with rubber "O" rings to preclude water seepage into the container cavity. The rubber "O" rings provide at least an equivalent water seal compared to a gasketed surface and, in addition, facilitate replacement of the seals when required. The stainless steel mating surfaces, and their

2. Continued

welded attachment to the container shell, preclude water seepage into the container shell. The upper shell has been modified to assure that the "O" rings are not damaged when the upper shell is removed and set down.

Consequently, the results and conclusions of the package tests are not significantly affected by this change.

3. The mounting fixtures for attaching the 21PF-1 have been modified to use standard, available size stainless steel components. Specifically, the 2" x 2" x 1/4" carbon steel "L" has been replaced by a 3-1/2" x 3-1/2" x 3/8" 304 stainless steel "L". Stainless steel plates are also welded to the mounting fixture and container rings to provide additional strength. These modifications should minimize the potential for rust, cracking, corrosion and extensive maintenance. These changes are for the purpose of increasing the strength of the mounting fixtures and would not affect the conclusion of the package tests.

4. Because of the above referenced improvements incorporated into the shipping container, the gross weight of the overpack has increased to approximately 1,950 pounds. The average weight of the UF6 plus UF6 cylinder is approximately 6,400 pounds. Using this weight, the gross weight of the package, including the inner container and contents exceeds the DOT specification weight of 8,200 pounds by approximately 150 pounds, or less than 2% . This incremental increase is more than offset by the structural improvements noted in Item 3 above.

Consequently, the results and conclusions of the package tests are not significantly affected by this change.

DOCKET NO. 71-4909  
CONTROL NO. 22559  
DATE OF DOC. 07/20/83  
DATE RCVD. 07/22/83  
FCUF \_\_\_\_\_ PDR   
FCAF \_\_\_\_\_ LPDR \_\_\_\_\_  
WM \_\_\_\_\_ I&E REF.   
WTR \_\_\_\_\_ SAFEGUARDS \_\_\_\_\_  
FOTC  OTHER \_\_\_\_\_

DESCRIPTION:

Submits the attached  
documents to support  
their application for  
a provision to  
Certificate of Compliance  
07/22/83 INITIAL CEC