



October 28, 1991

Certified Mail
Return Receipt Requested

Charles J. Haughney, Chief
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS
U.S. NUCLEAR REGULATORY COMMISSION
Washington, D.C. 20555

RE: License No. SUB-1010; Docket No. 40-8027
Additional Response to Amendment No. 14 dated
June 23, 1991, re: License Condition 15,
Tamper Safe UF₆ Cylinder Valves

REFERENCES: Letter from Lee R. Lacey to Charles J. Haughney
dated August 20, 1991.

Letter from John W. N. Hickey to Lee R. Lacey
dated September 20, 1991.

Sequoyah Facility Operating Procedure N-280-1,
"UF₆ Cylinder Washing, Inspecting, and
Hydrostatic Testing."

Dear Mr. Haughney:

This letter is in response to the referenced letter from your office to Sequoyah Fuels Corporation (SFC) regarding tamper safing 10-ton and 14-ton UF₆ cylinders. This letter provides supporting information showing that any foreign materials introduced into these cylinders that are not in service are to out-of-date test and inspection conditions would be effectively removed in the process of returning the out-of-date cylinders to service.

SFC has established a written procedure for washing, inspecting, and hydrostatic testing of UF₆ shipping cylinders. The procedure is based on ANSI N14.1-1987 "Uranium Hexafluoride Packaging for Transport." The procedure requires hydrostatic testing, and internal and external inspections once every five years.

The washing, testing, and inspecting efforts required by the procedure are summarized in the following text. The washing of cylinders begins by adding approximately 70 gallons of a

9111070C54 911028
PDR ADOCK 04008027
C PDR

*Cert #
P 858 894 483*

*NFOI
1/0*

Charles J. Haughney
October 28, 1991
Page Two

30 percent soda ash in water solution, heated to 140°F, to the empty cylinder. The cylinder wash is performed by rotating the cylinder for about 20 minutes. Level and tilted positions are available during rotation to enhance washing. When the washing is complete, the wash solution is drained and a rinse solution (same makeup as the wash solution) is added to the cylinder. The cylinder is rotated and tilted as described for the washing step. When rinsing is complete, the rinse solution is drained from the cylinder.

The next step is the hydrostatic test. The cylinder is filled with water. The cylinder is then internally pressured to 400 psig for 30 minutes. During this time, the cylinder is inspected externally for defects. The cylinder is then drained and purged with heated air until dry.

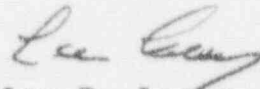
At this point, a visual inspection is made of the inside of the cylinder. A light is inserted into one end of the cylinder by removing the end plug. The cylinder valve stem is then removed allowing a visual inspection of the inside of the cylinder. If any material is found in the cylinder at this point it is removed with a portable vacuum or the cylinder may be re-washed. It is also conceivable that the cylinder would not be returned to service.

A cylinder that has been successfully washed, tested, and inspected is either immediately fitted with a tamper detection device or is transferred directly to a UF₆ fill station for filling.

SFC believes, based on the washing and inspection described above, that tamper-safing out-of-date cylinders provides negligible benefit compared to the task of maintaining them in a tamper safe condition.

Should you have any questions on this matter, please contact me at 918/489-3207.

Sincerely,



Lee R. Laeey
Vice President
Regulatory Affairs

LRL:nv

xc: L. J. Callan, NRC Region IV