



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUN 26 1980

Docket No. 50-201

New York State Energy Research and
Development Authority
ATTN: Mr. James Larocca, Chairman
Agency Building No. 2
Empire State Plaza
Albany, New York 12223

Gentlemen:

The Nuclear Regulatory Commission (NRC) staff urges that you, as co-licensee, give strong support and cooperation to a program to inspect and evaluate the condition of the high level liquid waste storage system at your Western New York Nuclear Service Center facility (the facility) in West Valley, New York. This program is being conducted by our contractor, Rockwell Hanford Operations, and is described in a program plan entitled, "Inspection and Evaluation of Nuclear Fuel Services High Level Waste Storage System," (RHO-CD-882). It is the Nuclear Regulatory Commission (NRC) staff's intention to accomplish the inspection and evaluation of your high level waste storage system in the manner described in this program plan. This inspection and evaluation will use state-of-the-art technology to, among other things, verify the integrity of the carbon steel tank (8D-2) which is the primary barrier for the nearly 600,000 gallons of neutralized high level waste in storage at the facility. The inspection and evaluation of tank 8D-2 is particularly important in view of the discovery of the defective pan under that tank.

During the period of licensed operation of your facility, there have been many improvements in the specific techniques used to inspect, monitor and evaluate the safety conditions of underground high level liquid waste storage systems. The improvements in the technology used to perform surveillance of these waste systems have been developed primarily at the major Department of Energy (DOE) sites at the Savannah River Plant (SRP) and the Hanford Reservation. These improved technologies have not yet applied to the surveillance program at your West Valley facility. In recognition of this lack of continued technological development at West Valley, the staff requested through DOE that SRP examine the safety-related information available on the West Valley high level liquid waste storage system. In addition, the staff requested that SRP report any recommended actions to improve the understanding of the safety conditions associated with your waste storage system. Based on their review, SRP provided the staff with a report and with appropriate recommendations.

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Upon receipt of SRP's report, the NRC staff recognized that implementation of most of the work recommended by SRP was beyond the capability directly available to either co-licensee. As a result, the staff made the decision to go directly to an organization with the resources and capabilities necessary to perform this work. This decision culminated in the initiation of our contract with Rockwell-Hanford Operations. At the same time, the staff recognized that some of the items recommended by SRP were within the existing onsite capability of your co-licensee, Nuclear Fuel Services, Inc. (NFS). As a result we requested that NFS perform certain evaluations. NFS responded and agreed to perform these evaluations and committed to certain tests and improvements associated with the waste storage system.

The initial results of NFS's efforts in this regard were quite disturbing. The vault liquid level instruments for vaults 8D-1 and 8D-2 were found to be improperly installed in that the levelometer probes were 12 inches shorter than required by the construction drawing. The steam supply line for the vault to pan eductor was also 12 inches shorter than required which resulted in the suction tail piece for the eductor being above its design level near the bottom of the vault. The flashing skirt around tank 8D-1 (piece 15-2 on Chicago Bridge and Iron Drawing No. V.D.-4413-8-D-12-11-3) is not installed as required by the drawing. These improper installations apparently occurred during facility construction.

Furthermore, the pan liquid level detection instrument for the on-service neutralized waste tank 8D-2 was inoperative for some indefinite period of time. As a result, that instrument was incapable of detecting any liquid level in the pan. Finally, and most importantly, the pan for the operational waste tank 8D-2 was found to be defective in that it could no longer hold water during testing. The pan for 8D-2 is unable to collect and contain liquid waste in the event tank leakage were to occur.

The follow-up action taken by NFS with respect to the above problems that could be resolved within their directly available capability was satisfactory. The problems described above with respect to the inoperative or improperly installed instruments and vault eductor have been corrected. The onsite capability for waste transfer from 8D-2 to 8D-1 was improved and upgraded. However, the most significant finding, which is the defect in pan for 8D-2, remains unresolved.

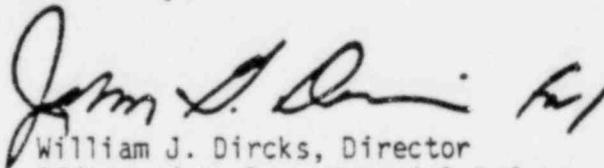
The staff recognizes that the entire safety question associated with this pan defect may not be readily resolvable. Our desire to determine the location, nature, cause, and possible repairability of this defect may remain unfulfilled, particularly if the defect is located underneath the tank. The fact that the entire question of the pan defect may not be readily resolvable makes it even more important to move ahead with a detailed assessment of tank integrity. Our only recourse is to continue to pursue the investigations originally recommended by SRP, concurred in by the NRC staff, and further developed and proposed by Rockwell. The staff concurred in and fully intended to implement these recommendations even before the defect in the pan was discovered. Its discovery further underscores the need to conduct these investigations in a deliberate, safe, and timely fashion.

Without the best information available to describe the condition of the high level liquid waste storage system at West Valley, the NRC has certain reservations concerning that condition. Because of the importance of this information, we expect continued and aggressive support, cooperation and initiative from both co-licensees in order to meet our contract schedule.

It has been brought to our attention by our contractor, Rockwell Hanford Operations, that NFS has written them stating NFS's position with respect to West Valley site activities to be conducted under this contract. In NFS's Letter to Rockwell, dated May 19, 1980, NFS stated their position that prior to granting permission to conduct these onsite activities, appropriate indemnification agreements must be developed which would include assurances that any damage discovered as a result of these activities would be presumed to be attributable to those activities unless it could be otherwise clearly proven. NFS's position in this matter effectively blocks our contractor from gathering the information required by NRC staff. This information is of paramount importance in the staff's efforts to continue the ongoing investigation and evaluation of the safety conditions associated with your high level liquid waste storage system. NFS's position creates a problem that must be resolved expeditiously. It is imperative that we meet with the co-licensees as soon as possible to resolve this problem.

If you have any problems working with our contractor, any safety concerns based on your review of Rockwell's proposed procedures, any problems meeting these schedules, or any other problems associated with implementation of the work required by this contract, I expect you to let me know promptly. I also expect that if you have any such problems, that you fully and specifically describe these problems. A member of my staff will be contacting you shortly to arrange for the meeting discussed in the paragraph above.

Sincerely,



William J. Dircks, Director
Office of Nuclear Material Safety
and Safeguards

cc: Governor Hugh T. Carey
Sidney R. Petersen, Getty Oil Company
Ralph W. Deuster, NFS