

*File
Hoover 76-820*

OCT 22 1964

MEMORANDUM FOR CHAIRMAN SEABORG
COMMISSIONER WALFREY
COMMISSIONER RAMEY
COMMISSIONER TAPE
COMMISSIONER BURTING

SUBJECT: UNITED NUCLEAR CORPORATION
WOOD RIVER JUNCTION, RHODE ISLAND

Attached for your information is a copy of a letter sent to the JCAE concerning United Nuclear Corporation's operations at Wood River Junction, Rhode Island.

Our investigation of the July 24, 1964 criticality incident disclosed several instances of noncompliance with Commission regulations and license conditions. Additionally, certain other matters were noted which appeared to have adversely affected operational safety.

Principal items of noncompliance noted and included in our correspondence to the Company were: (a) introduction of trichloroethane (TCE) wash solutions containing uranium into a non-safe vessel, contrary to the license; (b) processing of uranium without approved written operating procedures for certain operations; (c) processing of uranium in a manner not authorized by the license; (d) failure to perform plant audits on a continuing basis; (e) failure to follow prescribed emergency procedures when re-entering the facility following the criticality incident; (f) failure to conduct adequate surveys to evaluate the hazards associated with re-entry; (g) failure to perform adequate surveys to evaluate the concentrations of airborne radioactive materials released to unrestricted areas during operations performed prior to the criticality incident; (h) disposal of TCE solutions contaminated with special nuclear material in an unauthorized manner during operations performed prior to the criticality incident; and (i) failure to decontaminate the roof of the facility following a spill of uranium four days prior to the criticality incident.

Other important conditions relating to operational safety which were noted and included in our correspondence to the Company were: (1) controls over the identification and movement of special nuclear

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materials within the plant appeared to have not always functioned properly; (ii) equipment available in the emergency shed was inadequate to cope with an emergency situation requiring re-entry of employees into the plant; and (iii) uranium solutions were noted to be leaking directly on to the floor from some columns and vessels as late as September 2, 1964; safe geometry drip pans were not in all cases being utilized.

As noted in our letter to the JCAR, our letters to the Company which discuss the alleged violations and other deficiencies in the safety program are being withheld from the Commission's public records until after the Company's reply thereto has been received. However, if the Company should fail to reply within the time specified in the notice, our letters will be filed in the Public Document Room without the Company's reply, pursuant to the provisions of § 9.3(g), 10 CFR 9.

We expect to receive the Technical Review Committee's report within approximately two weeks.

We have advised United Nuclear by letter dated October 16, 1964, that we have no objection to their performing an experimental program at their plant in accordance with plans submitted by the Company in a letter dated October 14, 1964. The experimental program, which UAC estimates will be of about three weeks duration, is directed toward reducing certain metallic impurities which have heretofore appeared in unacceptable levels in the uranium dioxide produced by the plant. Only a portion of the plant will be utilized and the experimental material will be contained in a "closed loop" within which it may be recycled several times. No new raw material will be introduced into any process equipment. A project type organization has been established by UAC to carry out this experimental program. We have concluded that the management and administrative controls instituted by UAC for this program provide reasonable assurance that the operations will be conducted in a safe manner.

bcc: MMann, REG
LEJohnson, DML
Compliance Div., (HQ) (2)

(Signed) HLP

Harold L. Price
Director of Regulation

Enclosure:
Copy of letter to JCAR

cc: General Manager
Secretary (2)

OFFICE ▶	SLR	DLow	DML	OGC	REG	REG
SURNAME ▶	RGP; lrm:ERP		LEJohnson		MMann	HLPrice
DATE ▶	10-19-64					