

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

July 10, 1974

Mr. John F. O'Leary, Director Directorate of Licensing US Atomic Energy Commission Washington, DC 20545 Docket 50-155 License DPR-6 Big Rock Point

Dear Mr. O'Leary:

Consumers Power Company made several commitments to be carried out during the refueling outage that was scheduled to commence in July 1974. Due to the short cycle that occurred between the start-up in early May of 1974 and the shuidown in early June of 1974 (a core average burnup of approximately 450 MWd/T), three of these commitments are being deferred until the next refueling outage. The commitments that are being deferred involve the replacement of the initial type neutron sources (refer to our letter dated March 26, 1974 and Unusual Event Report 3-74 dated April 30, 1974) and the gamma scanning of the cobalt corner rods (refer to Unusual Event Report 4-74 dated May 7, 1974).

Consumers Power Company's letter of March 26, 1974 stated:

"It is planned to replace both neutron sources and reinstall the activated antimony pins, from the original neutron sources. The gamma source holddown device has been modified to provide a means of irradiating a new antimony pin while utilizing the new neutron sources. (GE drawings 785-012 and 785-014). One of the original antimony pins will be removed from the reactor and a new antimony pin will be inserted into the neutron source during the July-August 1974 refueling outage. The second antimony pin will be replaced during the succeeding refueling outage. This course of action will assure adequate neutron source strength throughout the changeover from the original neutron sources to the new neutron sources."

Because of the short length of the operating cycle, the antimony pin being activated in the modified gamma source holddown device did not receive sufficient radiation to obtain the minimum curie strength required to provide a sufficient number of gamma rays at start-up. Therefore, the plans of antimony pin activation have been delayed until the next refueling outage. The necessary neutron source strength might not be sufficient to allow start-up if the originally outlined plans were followed.

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The original antimony pins were visually inspected during the last refueling outage (ending May 1974) and no indication of dimensional changes or metal attack were noted. Therefore, further irradiation of the original antimony pins is not expected to jeopardize the operation of the plant.

In Unusual Event Report 3-74, the failure of the original initial type neutron source beryllium-containing cylinders was attributed to an excessive buildup of internal pressure. Under corrective action, Consumers Power Company committed to an inspection and measurement of the replacement source assemblies during each refueling outage. Due to the short length of the operating cycle, we have concluded that inspection and measurement of these source assemblies would serve no useful purpose and are, therefore, delaying the initial inspection until the next refueling outage.

Unusual Event Report 4-74 transmitted by letter dated May 7, 1974 stated as corrective action that gamma scanning of the cobalt targets would be performed during the then planned July-August 1974 refueling outage to determine if further nonuniformities were forming. Since the operating cycle was shorter than planned (approximately 450 MWd/T), gamma scanning during the present refueling outage is not required. All of the high activity corner rods containing the suspect 11C5 capsules were removed during the last refueling outage. Therefore, significant gaps in the cobalt corner rods are not expected to exist at the present time and the gamma scanning has been rescheduled for the next refueling outage.

The unusual event report further stated that metallographic examinations would be performed. These examinations have been initiated at Battelle Columbus Laboratories. Photographic records of the cobalt capsules have been taken and samples are being mounted per cobalt wire microstructure examination. The work should be completed before it is necessary to manufacture the cobalt capsules for the next refueling outage. However, no conclusive information is available at the present time.

Yours very truly,

RBS/map

Ralph B. Sewell

Nuclear Licensing Administrator

Ralph B. Swells

CC: JGKeppler, USAEC

(TEMPORARY FORM) CONTROL NO: 6310 FILE: MISC DATE REC'D DATE OF DOC LTR TWX RPT OTHER FROM: Consumers Power Company Jackson, Mich 49201 7-12-74 X 7-10-74 Mr. R.B. Sewell XXX OTHER SENT AEC PDR ORIG CC TO: XXX SENT LOCAL PDR J.F. O'Leary 1 signed DOCKET NO: INPUT NO CYS REC'D CLASS UNCLASS PROP INFO 50-155 40 XXX ENCLOSURES: DESCRIPTION: Ltr furn info concerning....the replacement of the Activated antimony pins in the neutron ACKNOWLEDGED sources.... DO NOT REMOVE Big Rock Point PLANT NAME : FOR ACTICU/INFORMATION 7-16-74 JB REGAN (E) - ZIEMANN (L) BUTLER (L) SCHWENCER (L) W/7 CYS W/ CYS W/ CYS W/ CYS DICKER (E) STOLZ (L) CLARK (L) W/ CYS CYS W/ CYS W/ CYS DADD (1) PRITCHTON /PY MACCALLES ITS W/ CYS W/ CYS W/ CYS W/ CYS PURPLE (L) YOUNGBLOOD (E) KNIEL (L) W/ CYS W/ CYS W/ CYS W/ CYS INTERNAL DISTRIBUTION REG FILE ECH REVIEW DENTON LIC ASST A/T IND AEC PDR HENDRIE GRIMES DIGGS (L) BRAITMAN OGC SCHROEDER GAMMILL GEARIN (L) SALTZMAN MACCARY MUNTZING/STAFF GOULBOURNE (L) B. HURT KASTNER KNIGHT JCASE BALLARD KREUTZER (E) GIAMBUSSO PAWLICKI SPANGLER LEE (L) PLANS SHAO MAIGRET (L) MCDONALD BOYD STELLO MOORE (L)(LWR-2) ENVIRO REED (E) CHAPMAN DEYOUNG (L)(LWR-1) HOUSTON MULLER SERVICE (L) DUBE w/input NOVAK E. COUPE SHEPPARD (L) SKOVHOLT (L) DICKER GOLLER (L) ROSS KNIGHTON SLATER (E) IPPOLITO JD. THOMPSON (2) YOUNGBLOOD SMITH (L) P. COLLINS /KLECKER √TEDESCO TEETS (L) REGAN DENISE LONG JEISENHUT REG OPR PROJECT MGR WILLIAMS (E) FILE & REGION (3) LAINAS WILSON (L) BENAROYA JMORRIS. HARLESS J STEELE VOLLMER EXTERNAL DISTRIBUTION - LOCAL PDR Charlevoir, Mich. 1-PDR-SAN/LA/NY 1 - TIC (ABERNATHY) (1)(2)(10)-NATIONAL LABS J1 - NSIC (BUCHANAN) 1-ASLBP(E/W Bldg, Rm 529) 1-BROOKHAVEN NAT LAS 1-W. PENNINGTON, Rm E-201 GT 1-G. ULRIKSON, ORML 1 - ASLB 1-B&M SWINEBROAD, Rm E-201 GT 1-AGMED (RUTH GUSSMAN) 1 - P. R. DAVIS 16 - ACRS SENT TO LIC ASST Diggs Rm B-127 GT 1-CONSULTANTS 7-16-74 1-RD. MUELLER, In F-J NEWMARK/BLUNE/AGBABIAN GT