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Power

**POWERING
MICHIGAN'S PROGRESS**

Big Rock Point Nuclear Plant, 10269 US-31 North, Charlevoix, MI 49720

Patrick M Donnelly
Plant Manager

January 23, 1997

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

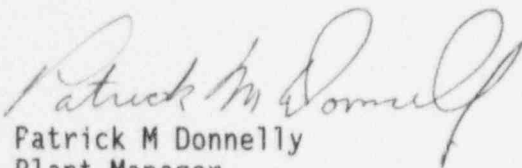
DOCKET 50-155 - LICENSE DPR-6 - BIG ROCK POINT PLANT - REPLY TO A NOTICE OF VIOLATION - NRC INSPECTION REPORT 96011.

During an NRC Radiation Protection Inspection completed on December 6, 1996, a violation of NRC requirements was identified and forwarded by letter dated January 2, 1997.

The violation concerns the resin shed, a high radiation area, that was not posted with signs bearing the radiation symbol and the words, "CAUTION, HIGH RADIATION AREA" and "CAUTION, CONTAMINATED AREA."; the labels on six boxes stored in the radwaste storage building (RWSB) indicated that dose rates on contact with the boxes were significantly lower than those actually measured. This condition existed for several years and was not identified during routine monthly radiological surveys of the RWSB; and a truck which had been released for unrestricted use subsequently had activity detected of approximately 20,000 disintegration per minute per 100 square centimeters as measured with a frisker.

Consumers Power Company agrees with the violation as stated.

Pursuant to the direction provided in the report, find attached a Reply to the Notice of Violation. The proposed corrective actions are intended to address the concerns identified by the violation, and to prevent recurrence of the violation.


Patrick M Donnelly
Plant Manager

CC: Administrator, Region III, USNRC
NRC Resident Inspector - Big Rock Point

ATTACHMENT

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A CMS ENERGY COMPANY

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ATTACHMENT

CONSUMERS POWER COMPANY
BIG ROCK POINT PLANT
DOCKET 50-155

REPLY TO A NOTICE OF VIOLATION

INSPECTION REPORT 96011

SUBMITTED JANUARY 23, 1996

VIOLATION 96011

Big Rock Point Technical Specification (TS) No. 6.11 requires that procedures for radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20, and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

Big Rock Point Procedure No. RP-30, "Establishing Area Postings" (Rev. No. 12), step 5.3.2 required that high radiation areas be conspicuously posted with a standard magenta radiation symbol on a yellow background with the words "CAUTION, HIGH RADIATION AREA," and Step 5.7.2 required that areas having contamination in excess of 1,000 disintegrations per minute per 100 square centimeters of activity (beta/gamma) be conspicuously posted with a standard magenta radiation symbol on a yellow background with the words "CAUTION, CONTAMINATED AREA."

Big Rock Point Administrative Procedure No. 5.11, "Radioactive Material Control" (Rev. No. 13), Step 5.4.3.1 required that all containers of radioactive material be labeled with a visible label bearing the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL." The label and container shall provide sufficient information to permit individuals handling, using, or working near the containers to take precautions to minimize exposure.

Big Rock Point Procedure No. RM-56, "Radiological Clearance for Off-site Removal of Material" (Rev. No. 14), Step 5.7 required that all material having "clean" status (can be released for unrestricted use) shall have no activity detected by either a direct frisk, as measured with a frisker or a pancake probe, or shall successfully pass through contamination monitors.

Contrary to the above:

- a. On December 3, 1996, the resin shed, a high radiation area with a radiation dose rate of approximately 100 millirem in one hour at 30 centimeters from the radiation source and a contaminated area with non-fixed contamination of approximately 30,000 disintegrations per minute per 100 square centimeters of activity (beta/gamma), was not posted with signs bearing the radiation symbol and the words, "CAUTION, HIGH RADIATION AREA" and "CAUTION, CONTAMINATED AREA."
- b. On December 3, 1996, the labels on 6 boxes of dry active waste stored in the radwaste storage building did not provide sufficient information to individuals handling, using, or working near the containers to take precautions to minimize exposure. Specifically, the labels indicated that contact dose rates were less than 5 millirem per hour; however, contact dose rates were actually between 20 and 40 millirem per hour on 4 boxes and between 100 and 120 millirem per hour on 2 boxes.
- c. On October 4, 1996, a truck which had been released for unrestricted use subsequently had activity detected of approximately 20,000 disintegration per minute per 100 square centimeters as measured with a frisker.

This is considered a Severity Level IV violation (Supplement IV).

Consumers Power Company's response is provided below.

1) Reason for the violation

Consumers Power Company agrees with the violation as stated.

a. Resin Shed

Grey duct tape had been used to secure a temporary high radiation area chain boundary to a wall. The tape became fatigued, and the boundary/posting fell to the floor. Plant procedures do not specify the type of posting materials that should be employed.

b. Container Labeling

In 1995, a radiation protection technician performed inadequate surveys/labeling on six boxes of ready-to-ship dry active waste containers stored in the radwaste storage building. This was not known by management at the time. During the following months, other radwaste containers of different configurations were temporarily moved into the area, blocking the six containers that were being stored. At one time, the area was even posted as a high radiation area due to radioactive filter storage. Routine surveys of the six containers were not performed due to inaccessibility, and the high radiation area posting. Over time, storage materials have been relocated, the high radiation area postings removed, and the six boxes became accessible again. Routine surveys of the six containers was not indicated because the general area dose rate was within expected levels.

c. Contaminated Truck

In early October, a Consumers Power pickup truck was used to transfer contaminated trash to the radwaste building, which is outside the protected area. Before returning to the protected area, the truck was surveyed for only contamination, and cleared. The following day, the pickup was used again to transfer a non-contaminated cooling coil outside the protected area. Prior to leaving the protected area, a more thorough survey (smear for loose contamination, and a direct frisk for fixed contamination) detected 20,000 counts per minute in the bed of the pickup. The radiation protection technician concluded that the bedliner was the source of the fixed contamination. Following further investigation, the radiation protection technicians discovered that the contamination originated from a torn trash bag hauled the day before.

The technician performing the first contamination survey used a masslinn cloth, but did not direct frisk the truck in a low background area. Due to inadequate training, he did not understand the requirements to "release" the vehicle from the Radwaste Building.

2) The corrective steps that have been taken and the results achieved.

a. Resin Shed

Metal stantions were placed in the building and the chain was hung between the stantions. This action provided a more effective barrier.

b. Container Labeling

All radiation surveys that were performed by the individual that was responsible for the inadequate survey have been reviewed. No other deficiencies were uncovered. Labels were updated.

c. Contaminated Truck

The bedliner from the pickup truck was removed and discarded as radioactive waste. The interior and exterior surfaces of the truck were then surveyed for radiation/contamination. None was discovered.

3) The corrective steps that will be taken to avoid recurrence.

a. Resin Shed

This resulting violation from NRC Inspection Report 96011, applicable Radiation Protection procedures and the applicable written posting guidance will be on the agenda and discussed with the Radiation Protection staff during a management-required stand-down meeting by February 28, 1997.

b. Container Labeling

HP-RWS-17, Quarterly Inspection of the Low Level Radioactive Waste Storage Area, will be revised to ensure that labeling and dose rates on individual packages are surveyed on a quarterly basis. This revision will be completed by February 28, 1997, and then routed to individuals in the Radiation Protection department for required reading.

c. Contaminated Truck

This event, and the policy for release of radioactive equipment to "clean areas" were reviewed with the entire Radiation Protection staff. The individual involved received additional on-the-job training.

With respect to the overall issue of radiological practices, performance expectations in the radiological area are communicated and reinforced through continued individual and group coaching sessions by the Radiological Protection Manager. The Radiological Protection Manager monitors first line supervision and radiation protection technician performance and feedback is routinely communicated and incorporated into the coaching sessions. In addition, the Radiation Protection Manager and other Plant Managers routinely perform plant walk-downs to monitor radiological control and posting practices to reinforce performance expectations for radiation protection personnel.

4) The date when the facility will be in full compliance.

The facility is currently in full compliance