

Patrick M Donnelly Plant Manager

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

April 18, 1994

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 94-005; RADIATION PROTECTION AND RADIOACTIVE WASTE SAFETY INSPECTION.

During the period March 7, 1994 through March 11, 1994, Mr. N. Shah of your office conducted a routine safety inspection at the Big Rock Point facility. NRC Inspection Report 50-155/94005 concluded that certain of Big Rock Point's activities appeared to be in violation of NRC requirements.

The violation concerns material with measurable levels of contamination being discovered outside the radiological restricted area.

Pursuant to the direction required by the report, find attached a Reply to the Notice of Violation.

Patrick M Donnelly Plant Manager

CC: Administrator, Region III, USNRC

NRC Resident Inspector - Big Rock Point

ATTACHMENT

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## ATTACHMENT

CONSUMERS POWER COMPANY BIG ROCK POINT PLANT DOCKET 50-155

REPLY TO A NOTICE OF VIOLATION INSPECTION REPORT 94005

April 18, 1994

REPLY TO A NOTICE OF VIOLATION - NRC INSPECTION REPORT 94-005; RADIATION PROTECTION AND RADIOACTIVE WASTE SAFETY INSPECTION

## VIOLATION 94005

During an NRC inspection conducted on March 7-11, 1994, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1993), the violation is listed below:

Technical Specification 6.11 requires that procedures for personnel radiation protection be prepared consistent with the requirements of 10 CFR Part 20, and be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

Station procedure RM-56 "Radiological Clearance for Off-Site Removal of Material" states that all material receiving "clean" status shall have no activity as detected via a direct frisk prior to release for unrestricted use.

Contrary to the above on July 22, 1993, September 20, 1993, and February 16, 1994, material with measurable levels of contamination was found outside the radiological restricted area.

Consumers Power Company's reply is provided below.

1) Reason for the violation.

Consumers Power Company agrees with the violation as stated. The following root causes have been identified with respect to the events that occurred on July 22, 1993, September 20, 1993, and February 16, 1994.

July 22, 1993 and February 16, 1994 events. Radioactive/contaminated items found in the new maintenance building within the protected area.

- a) Procedural compliance\personnel performance: Failure to follow RM-56 "Radiological Clearance for Off-Site Removal of Material"
- b) Procedure less than adequate: Inadequate instructions in Maintenance procedure(s) for removing equipment from the radiation controlled area

September 20, 1993 event. Radioactive material discovered in a regional General Electric Tool Facility.

The evaluation of the root causes identified that the General Electric (GE) workers and the station radiation protection technicians contributed to this event. The only common cause between the two groups was that supervisory methods were less than adequate in that schedule was emphasized more than doing a good job.

## GE Personnel

 a) Job standards and expectations for tool control were neither clear nor understood.

The method used to brief the workers on this type of expectation was the Contractor brief. During the briefing CPCO did not emphasize tool control to the extent needed. Prior to cleanup, CPCO did not hold a worker briefing to describe the process.

REPLY TO A NOTICE OF VIOLATION - NRC INSPECTION REPORT 94-005: RADIATION PROTECTION AND RADIOACTIVE WASTE SAFETY INSPECTION b) The large volume of tools taken into the Radiological Controlled Area (RCA) and subsequently coming out of the RCA required additional time and effort by the GE workers. The push to get the job done led to insufficient time allotted to do the task. The workers were being rushed to complete the activity. Station Radiation Protection Technicians a) The technicians had many concurrent tasks to perform, and were frequently shuffled between activities. This led to inadequate turnovers, and little time for log entries. The technicians were left in a situation where they were still providing job coverage and expected to survey tools as well. The survey/release work required a more dedicated effort. b) Technician documentation of survey results was less than adequate. There was no clear quidance on where to document Material Release surveys. As a result, no surveys were documented for GE material leaving the site. c) The area that was designated to survey the tools had a high background count, making it less than adequate. There was also no area designated for material to be staged after release from the RCA prior to going off-site. This arrangement for release did not ensure that a final inspection and survey was performed on the tool box prior to leaving the site.

- 2) The corrective steps that have been taken and the results achieved.
- a) The new maintenance building has been surveyed by radiation protection, and no other items of non-compliance were discovered.
- b) With regards to the material that was discovered by the General Electric Tool Facility, the following steps were taken:
  - When Big Rock Point (BRP) received the call from GE about the discovery on 9/20/93, the Tool Facility manager was directed by the Chemistry/Health Physics manager to isolate the BRP tool boxes and boundary off the area.
  - The BRP Radiation Protection supervisor was dispatched immediately to the GE facility to perform surveys, and to educate the GE work force about the risk associated with handling radioactive material.
  - Items had also been shipped to other facilities. The Radiation Protection supervisor worked with the GE Facilities manager to determine if any other contaminated tools were present. No other items with detectable levels of contamination were encountered at the GE facilities or work sites, except for one nuclear facility. The nuclear facility performed a survey, and discovered some minor amounts (150 ccpm) of fixed contamination on chainfalls after they had been placed in one of their contaminated areas for about 8 hours.
  - On 9/24/93, based on survey results, the small number of tools involved and conversations between the NRC and GE, radiological surveys were not conducted at the other facilities.

REPLY TO A NOTICE OF VIOLATION - NRC INSPECTION REPORT 94-005; RADIATION PROTECTION AND RADIOACTIVE WASTE SAFETY INSPECTION - On 9/24/93, GE also discovered a ruler that had a radioactive material label that read "100 cpm". The Radiation Protection supervisor was again immediately dispatched to the GE facility. A survey of the item yielded < 100 cpm, and the sticker was removed. The ruler was missed during the initial survey because it had been pushed under the metal edge of the tool box drawer and could not be seen. When the drawer was removed, it fell out. c) The Chemistry/Health Physics manager has reviewed both events with the Radiation Protection staff. 3) The corrective steps that will be taken to avoid further violations. a) A radiological survey of BRP tools/equipment will be performed in facilities outside of the Radiological Controlled Area, but within the restricted area. THIS ACTION WILL BE COMPLETED MAY 1, 1994. b) Implement a tool control program for the Radiological Controlled Area. THIS ACTION WILL BE COMPLETED JUNE 30, 1994 c) Update the Contractor Briefing book and outage handbook to include expectations for moving tools and equipment from the Radiological Controlled Area. THIS ACTION WILL BE COMPLETED JUNE 1, 1994. 4) The date when full compliance will be achieved. The facility is currently in full compliance with NRC requirements. SUPPLEMENTARY INFORMATION On February 14, 1994, a related event occurred with regards to the release of contaminated materials offsite. An improper frisk resulted in shipment of a contaminated Thermoluminescent Dosimeter (TLD) to the Consumers Power Company TLD processing lab. The contamination (300 ncpm) was discovered by TLD Lab personnel while performing their TLD receipt inspection. Corrective actions include adding a requirement for a C/HP technician frisk of extremity and multiple whole body dosimetry after leaving a contaminated area; and evaluating the TLD results and assigning the appropriate dose to the person involved.