



Consumers
Power
Company

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

June 9, 1978

Director, Nuclear Reactor Regulation
Att: Mr Dennis L Ziemann, Chief
Operating Reactors Branch No 2
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-155 - LICENSE DPR-6 -
BIG ROCK POINT PLANT -
T/S CHANGE: RADWASTE MONITOR

Transmitted herewith are three (3) original and thirty seven (37) conformed copies of a proposed change to the Technical Specifications for the Big Rock Point Plant, Docket 50-155, License DPR-6.

The purpose of this change is to provide clarification for Section 6.4.1(d) of the Big Rock Point Technical Specifications as it relates to the operation of the radioactive waste effluent monitor. Since the change is derived from the results of IE Inspection Report 78-01 (16 February 1978), has minor safety significance, and is simply a clarification of existing specifications, it is concluded that it should be exempt from any licensing fee as provided in 10 CFR 170.22.

David A Bixel
Nuclear Licensing Administrator

CC: JGKepler, USNRC

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CONSUMERS POWER COMPANY
Docket 50-155
Request for Change to the Technical Specifications
License DPR-6

For the reasons hereinafter set forth, it is requested that the Technical Specifications contained in Facility Operating License DPR-6, Docket 50-155, issued to Consumers Power Company on May 1, 1964 for the Big Rock Point Plant be changed as described in Section I below:

I. Change

A. Revise the second paragraph of Section 6.4.1(d) as follows:

"The Radioactive Waste System Effluent to Canal is used in conjunction with the liquid waste disposal system and this monitor shall provide an additional means of checking the activity of wastes being discharged. During the course of a planned release (the activity of which is analyzed in accordance with Technical Specification 6.5.2) the radioactive waste system effluent to canal monitor is considered to be in a liquid stream normally containing radioactive liquid. As such, the alarm set point shall be set in accordance with the results of the liquid waste analysis (analyzed prior to discharge as described in Section 6.5) in order to provide an additional means of checking the activity of the wastes being discharged."

NOTE: Corrected Technical Specifications page is attached.

II. Discussion

The proposed change to Section 6.4.1(d) of the Big Rock Point Technical Specifications is simply a minor clarification concerning the operation of the radwaste effluent monitor and its associated alarm.

Presently, Section 6.4.1(d) specifies the alarm settings for monitors intended to warn the operator of radioactivity in those process liquid streams that do not normally contain radioactive liquids. It identifies these monitors as the Radioactive Waste System Effluent to Canal, the Circulating Water Discharge and the Service Water Return From Reactor Enclosure. The alarms for these monitors are to be set to warn the operator when concentrations are present which exceed those listed in Column II, Table II, Appendix B, of 10 CFR 20. However, one of these three monitors, the Radioactive Waste System Effluent to Canal, is recognized to serve another purpose: It is used in conjunction with the liquid waste disposal system. Technical Specification 6.4.1(d) currently states: "...This monitor shall provide an additional means of checking the activity of wastes being discharged...." During the course of a planned release (the activity of which is analyzed in accordance with Technical Specification 6.5.2), the radioactive waste system

6.4.1 (Contd)

operator via a common annunciator when concentrations are present which exceed those listed in Column II, Table II, Appendix B of 10 CFR 20. The remaining alarms shall also annunciate on this common annunciator and shall be set to alert the operator to unexpected changes in radioactivity levels. These set points will be based on experience. The process liquid streams which shall be monitored are as follows:

- (i) Radioactive Waste System Effluent to Canal
- (ii) Reactor Enclosure Cooling Water
- (iii) Main Condensate Demineralizer Influent
- (iv) Circulating Water Discharge
- (v) Service Water Return From Reactor Enclosure

The Radioactive Waste System Effluent to Canal is used in conjunction with the liquid waste disposal system and this monitor shall provide an additional means of checking the activity of wastes being discharged. During the course of a planned release (the activity of which is analyzed in accordance with Technical Specification 6.5.2) the radioactive waste system effluent to canal monitor is considered to be in a liquid stream normally containing radioactive liquid. As such, the alarm set point shall be set in accordance with the results of the liquid waste analysis (analyzed prior to discharge as described in Section 6.5) in order to provide an additional means of checking the activity of the wastes being discharged.

The circulating water discharge monitor shall monitor the main stream of plant effluent prior to its discharge into Lake Michigan, and serve as a backup to the other liquid monitors. In addition, a continuous sample is drawn from the discharge canal for periodic analysis as specified in Section 6.4.3 (d).

6.4.2 Area Monitoring System

- (a) Nineteen fixed gamma monitors employing scintillation type detectors shall be installed throughout the plant, and each shall have the following:
 - (i) A range consistent with expected radiation levels in the area to be monitored (0.01 mR to 10 mR or 0.1 mR to 100 mR or 1 mR to 1,000 mR).
 - (ii) An output indicated and recorded in the control room.
 - (iii) An adjustable high radiation alarm which shall be annunciated in the control room. Alarm settings that shall be as indicated in Section 6.4.3 (e).

effluent to canal monitor is considered to be in a liquid stream normally containing radioactive liquid. As such, the alarm set point should be set in accordance with the results of the liquid waste analysis in order to provide an additional means of checking the activity of the wastes being discharged. In summary, historical interpretation of 6.4.1(d) has been that the radwaste monitor has two functions:

1. To monitor during periods of no release, at which times the alarm should be set at the limits from Column II, Table II, Appendix B, of 10 CFR 20, based on the previous batch results and,
2. To monitor during release of batches of radioactive liquid, at which times the alarm set point should be set to correspond to the activity of the liquid waste as determined by radioisotopic analysis. This set point would include a factor of 2 to facilitate detection of activity greater than that shown by the analysis, yet sufficiently high to preclude spurious alarming.

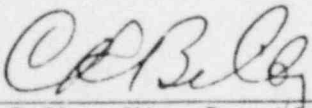
Conflict with this interpretation had not occurred prior to the issuance of IE Inspection Report 78-01 (February 16, 1978). As a result of this report, Consumers Power Company committed to submit a change to the Big Rock Point Technical Specifications which would clarify the use of the radwaste system effluent monitor. Thus, the proposed minor change to Section 6.4.1(d) is submitted to clearly identify the dual purpose of this monitor.

III. Conclusion

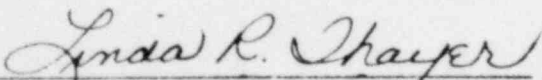
Based on the foregoing, both the Big Rock Point Plant Review Committee and the Safety and Audit Review Board have concluded that this change is acceptable from a safety standpoint.

CONSUMERS POWER COMPANY

By


C R Bilby, Vice President
Production & Transmission

Sworn and subscribed to before me this 9th day of June 1978.



Linda R Thayer, Notary Public
Jackson County, Michigan

My commission expires July 9, 1979.

C 06/13/78

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FORWARDING LIC NO DPR-6 APPL FOR AMEND: TECH SPEC PROPOSED CHANGE CONCERNING
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OF THE RADIOACTIVE WASTE EFFLUENT MONITOR. . . NOTARIZED 06/09/78.

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PAGE 22
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131-0130
LETTER
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131-0139
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