



Consumers  
Power

**POWERING  
MICHIGAN'S PROGRESS**

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

William L Beckman  
Plant Manager

March 4, 1993

Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

**DOCKET 50-155 - LICENSE DPR-6 - BIG ROCK POINT PLANT -  
TECHNICAL SPECIFICATION CHANGE REQUEST - ADMINISTRATIVE CONTROL 10 CFR PART 20**

Consumers Power Company has implemented the revised 10 CFR 20 (20.1001-20.2401) at Big Rock Point Plant as of January 1, 1993. All changes are administrative in nature with all but one of the requested revisions to align Big Rock Point's Technical Specifications with the wording of the revised Part 20. The remaining change is due to a separation of Chemistry and Radiation Protection responsibilities. Since these changes to the guidelines are conservative, Consumers Power Company has implemented them pending NRC review and approval.

Attachment 1 contains proposed new Technical Specification pages (with "slashes" in the right hand margin indicating the revision) and Attachment 2 contains existing Technical Specification pages marked up to show the proposed changes.

William L Beckman  
Plant Manager

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

ATTACHMENTS

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A CMS ENERGY COMPANY

ADD 1

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 the 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. CHANGES

The specific Technical Specifications changes are:

- A. Revise 6.3.2 of the Administrative Controls section from Chemistry and Radiation Protection Supervisor to Radiation Protection Supervisor. This reflects a change of title due to a separation of Chemistry and Radiation Protection responsibilities (Tech Spec Page 74).
- B. Change the reference in 6.12.1 from paragraph "20.203(c)(2)" to "20.1601(a)." Also change 6.12.1 and 6.12.2 from "1000 mR/h at 45 cm (18 in)" to "1000 mrem/h at 30 cm (12 in)" and "1000 mR/h" to "1000 mrem/h" (Tech Spec Pages 89 and 90).
- C. Change 13.1.2.1 from "Table II" to "Table 2" and from " $2 \times 10^4$ " to " $1.4 \times 10^4$ ". Also change the bases for 13.1.2.1 to agree with the new 10 CFR 20 (Tech Spec Page 133).
- D. Change the bases for 13.1.3.1 to agree with the new 10 CFR 20 (Tech Spec Pages 134 and 135).
- E. Change the reference in the action section of 13.1.6.1 from "20.405c" to "20.2203(4)". Also change the reference in the bases for 13.1.6.1 from "20.405c" to "20.2203(4)" (Tech Spec Pages 142 and 143).

II. Discussion

The Technical Specification changes proposed are in conjunction with the scheduled January 1, 1993 implementation of the revised 10 CFR 20 (20.1001 - 20.2401) at the Big Rock Point Plant.

III. Analysis of No Significant Hazards Consideration

A. High Radiation Area

In the revised 10 CFR 20, the definition of a high radiation area was changed to specify that the dose of 100 mrem in one hour was at "30 centimeters from the radiation source or from any surface that

III. Analysis of No Significant Hazards Consideration (continued)

the radiation penetrates." The Big Rock Point Technical Specifications specify a distance of "45 cm from the radiation source or from any source or from any surface which the radiation penetrates." The change to 30 centimeters (12 inches) is more conservative, providing a higher degree of protection for occupationally exposed workers.

The change from mR/h to mrem/h is only a change in terminology since the revised 10 CFR 20 does not recognize or define the "Roentgen" as a unit of radiation.

These changes are administrative in nature and do not involve a significant increase in the probability or consequences of an accident previously evaluated, and does not create the possibility of a new or different kind of accident from any previously evaluated.

B. Liquid Effluents Concentration

This section and the associated bases is changed to agree with the revised 10 CFR 20. Maximum Permissible Concentration (MPC) terminology has been replaced with Effluent Concentration. Most of the effluent concentrations have changed to reflect new scientific information and a change in the public dose limit from 500 mrem to 50 mrem.

The limit for dissolved and entrained noble gases was changed from  $2 \times 10^4$  to  $1.4 \times 10^4$  microcuries/ml simply by rationing the old MPC for Xenon-135 and the new effluent concentration for Xenon-135 since this is the controlling radioisotope as explained in the bases.

Effluent alarm setpoints were reviewed to determine any necessary changes and were found to be set appropriately. No change will be necessary.

The above changes reflect lower effluent concentrations and therefore result in a greater degree of protection to the general public. Annual permissible doses to the public from plant effluents are actually based on 10 CFR 50, Appendix I Limits, which have not changed.

The proposed liquid effluent concentration changes do not involve a significant increase in the probability or consequences of an accident nor create the possibility of a new or different kind of accident from any previously evaluated.

III. Analysis of No Significant Hazards Consideration (continued)

C. Gaseous Effluents Dose Rate

The actual instantaneous dose rate limits of this section have not changed. However, the bases section has changed. Under the former 10 CFR 20, these dose rates corresponded roughly to the maximum permissible concentrations and dose(s) received by the maximum exposed member of the public if allowed to continue for an entire year. These limits are used more as instantaneous limits (dose rates above which are not allowed to continue for more than one hour at a time) so as to provide assurance not to exceed 10 CFR 50, Appendix I limits. The first set of Questions and Answers on the new Part 20 published by the NRC supports the bases in which they state, "The instantaneous release rate limits for airborne releases will not be changed because they are imposed on licensees as a control to ensure that licensees meet Appendix I requirements."

Alarm setpoints for these dose rate limits may change slightly due to changes in scientific data and will be reviewed and changed as appropriate prior to implementation.

Since the dose rate limits have not changed there is no significant increase in the probability or consequences of an accident nor does it create the possibility of a new or different kind of accident from any previously evaluated.

D. Total Dose

Only reference changes have been made to this section and the bases for this section.

E. Plant Staff Qualifications

The change only reflects a title change from the Chemistry and Radiation Protection Supervisor to Radiation Protection Supervisor.

IV. Conclusion

The Big Rock Point Plant Review Committee has reviewed this Technical Specification Change Request and has determined this change does not involve an unreviewed safety question and, therefore, involves no significant hazards consideration. This change has been reviewed by the Nuclear Performance Assessment Department. A copy of this Technical Specification Change Request has been sent to the State of Michigan official designated to receive such Amendments to the Operating License.

NUCLEAR REGULATORY COMMISSION  
BIG ROCK POINT PLANT  
TECH SPEC CHANGE REQUEST - 10 CFR 20  
March 4, 1993

CONSUMERS POWER COMPANY

To the best of my knowledge, information and belief, the contents of this  
submittal are truthful and complete.

By *David P. Hoffinan*  
David P Hoffinan, Vice President  
Nuclear Operations

Sworn and subscribed to before me this 4th day of March 1993.

*Beverly A. Avery*  
Notary Public  
Jackson County, Michigan

My commission expires

BEVERLY A AVERY  
NOTARY PUBLIC STATE OF MICHIGAN  
JACKSON COUNTY  
MY COMMISSION EXP. DEC. 3, 1996

[SEAL]