



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

8005190188

CONSUMERS POWER COMPANY
DOCKET NO. 50-155
BIG ROCK POINT NUCLEAR PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated July 28, 1978, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C(2) of Facility License No. DPR-6 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 20, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 1, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 20

FACILITY OPERATING LICENSE NO. DPR-6

DOCKET NO. 50-155

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain vertical lines indicating the area of change.

REMOVE

5-13
5-14

INSERT

5-13
5-14*

*This page also contains a correction to a typographical error which occurred during the issuance of a previous license action.

Minimum Recirculation Flow Rate, lb/h (Except during Pump Trip Tests or Natural Circulation Tests as Outlined in Section 8)	6 x 10 ⁶	6 x 10 ⁶
Maximum MWd/T of Contained Uranium for an Individual Bundle	23,500	23,500

Rate-of-Change-of-Reactor Power
during Power Operation:

Control rod withdrawal during power operation shall be such that the average rate-of-change-of-reactor power is less than 50 MWt per minute when power is less than 120 MWt, less than 20 MWt per minute when power is between 120 and 200 MWt, and 10 MWt per minute when power is between 200 and 240 MWt.

5.2.2 Control Rod System

(a) Control Rod Performance

The following limits shall apply to any control rod which can be withdrawn. It shall be permissible to tag and valve out the hydraulic drive water to a fully inserted control rod which is defective or does not meet these limits provided the remaining rods do meet the limits.

The following tests shall be performed during each major refueling shutdown and at least once every six months during periods of power operation:

- (i) Withdrawal of each drive, stopping at each locking position to check latching and unlatching operations and the functioning of the position indication system.
- (ii) Scram of each drive from full withdrawn position. Maximum scram time from system trip to 90 percent of insertion shall not exceed 2.5 seconds.

The following test shall be performed at each major refueling but not less frequently than once a year:

Insertion of each drive over its entire stroke with reduced hydraulic system pressure to determine that drive friction is normal.

The following test shall be performed at each major refueling:

Continuous withdrawal and insertion of each drive over its stroke with normal hydraulic system pressure. Minimum withdrawal time shall be 23 seconds.

(b) Core Shutdown Margin Verification

The reactivity of the core loading shall be such that it is always possible to maintain k_{eff} at less than 0.997 with the most valuable reactivity-worth control blade completely withdrawn from the core. The core shutdown margin shall be verified by a demonstration that the reactor is subcritical with the most valuable reactivity worth control blade fully withdrawn, plus an immediately adjacent blade withdrawn to a position known to contribute 0.003 k_{eff} or more to the effective multiplication. In the event that the maximum reactivity condition occurs at a temperature greater than ambient, the demonstration will either be performed at that temperature or a suitable additional margin will be demonstrated at ambient.

This verification shall be performed prior to start up after any shutdown in which the system has cooled sufficiently to be opened to atmospheric pressure and any of the following situations exist:

Fuel has been added and/or repositioned in a way which is not definitely known to reduce reactivity; or

Any steel channels have been replaced by Zircaloy channels during the shutdown; or

A control rod has been changed and presence of poison has not been verified; or

35,000 MWdt have been generated by the plant since the previous margin demonstration.

During power operation, if reactivity and control rod motion data indicate a possible loss of poison from a control rod, the reactor shall be shut down and, if any corrective action is necessary, shall remain in shutdown condition until such corrective action has been taken.

(c) Control Rod Drive Temperature Limit

The limiting component of the drive is rated for duty at 380°F. The internal temperature of the control rod drives as measured by a thermocouple located in the drive position switch well normally shall be less than 350°F. It shall be permissible to continue operation of the reactor, if drive temperature instrumentation becomes defective, provided it can be established by other means that drive temperature is normal.

Dupe of 7811090071



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CONSUMERS POWER COMPANY
DOCKET NO. 50-155
BIG ROCK POINT NUCLEAR PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 21
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated May 17, 1978, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 7811090071

No. of pages: 4

Dupe of 7903050436



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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 22
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated December 27, 1978, as supplemented by letter dated January 12, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 7903050436

No. of pages: 5

Dupe of 7903210559



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CONSUMERS POWER COMPANY
DOCKET NO. 50-155
BIG ROCK POINT PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. ²³
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated February 19, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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Entire document previously entered into system under:

ANO 7903210559

No. of pages: 4



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DOCKET NO. 50-155
BIG ROCK POINT NUCLEAR PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

27
Amendment No. 3
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated January 26, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 7904090185

No. of pages: 7



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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 25
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The facility will operate in conformity with the license amendment, the provisions of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission;
 - B. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - C. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - D. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License No. DPR-6 is hereby amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by changing paragraph 2.C(2) and adding paragraph 2.C(4) to read as follows:

(2) Technical Specifications

The Technical Specifications through Amendment No. The licensee shall operate the Technical Specifications

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 7904170356

No. of pages: 4

Dupe of 7904260034



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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 26
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated March 28, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 7904260034

No. of pages: 8

Dupe of 7905150707

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CONSUMERS POWER COMPANY
DOCKET NO. 50-155
BIG ROCK POINT PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The filing by Consumers Power Company (the licensee) dated February 20, 1979, as revised March 2, 1979 and March 27, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the licensee's filing, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License No. DPR-6 is hereby amended by adding a new Paragraph 2.C(5) to read as follows:
 - (5). The licensee shall maintain in effect and fully implement all provisions of the Commission-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved security plan consists of 10 CFR 2.790(d) information, collectively titled, "Big Rock Point Plant Nuclear Power Plant Security Plan," dated February 20, 1979, as revised March 2, 1979 and March 27, 1979.
3. The provisions of this license amendment became effective on February 23, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis L. Ziemann
Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Date of Issuance: April 10, 1979

Dupe of 7908170098



UNITED STATES
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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 28
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated March 26, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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Entire document previously entered into system under:

ANO 7908170098

No. of pages: 8

Dupe of 7911020201



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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 29
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated September 7, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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Entire document previously entered into system under:

ANO 7911020201

No. of pages: 4

Dupe of 7911240249



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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 30
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated September 28, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 7911210249

No. of pages: 5

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CONSUMERS POWER COMPANY

DOCKET NO. 50-155

BIG ROCK POINT NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 31
License No. DPR-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Power Company (the licensee) dated October 23, 1979, as supplemented October 31, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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Entire document previously
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ANO 7911300075

No. of pages: 6