



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

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 88
License No. DPR-59

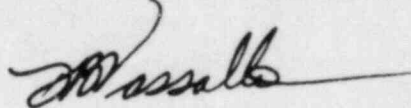
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Power Authority of the State of New York (the licensee) dated January 16, 1985, as supplemented April 8, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, 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.
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 Operating License No. DPR-59 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 88, 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



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 2, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 88

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise the Appendix "A" Technical Specifications as follows:

<u>Remove</u>	<u>Insert</u>
vii	vii
31	31
47b	47b
123	123
130	130
135d	135d
135e	135e
135f	135f
-	135i

LIST OF FIGURES

<u>FIGURE</u>	<u>TITLE</u>	<u>PAGE</u>
3.1-1	Manual Flow Control	47a
3.1-2	Operating Limit MCPR versus τ	47b
4.1-1	Graphical Aid in the Selection of an Adequate Interval Between Tests	48
4.2-1	Test Interval vs. Probability of System Unavailability	87
3.4-1	Sodium Pentaborate Solution Volume-Concentration Requirements	110
3.4-2	Saturation Temperature of Sodium Pentaborate Solution	111
3.5-6	(Deleted)	135d
3.5-7	(Deleted)	135e
3.5-8	(Deleted)	135f
3.5-9	MAPLHGR Versus Planar Average Exposure Reload 4, P8DRB284L	135g
3.5-10	MAPLHGR Versus Planar Average Exposure Reloads 4, and 5 P8DRB299	135h
3.5-11	MAPLHGR Versus Planar Average Exposure Reload 6, BP8DRB299	135i
3.6-1	Reactor Vessel Thermal Pressurization Limitations	163
4.6-1	Chloride Stress Corrosion Test Results at 500°F	164
6.1-1	Management Organization Chart	259
6.2-1	Plant Staff Organization	260

Amendment No. ~~14~~, ~~22~~, ~~43~~, ~~64~~, ~~72~~, ~~74~~ 88

JAFNPP

3.1 (CONTINUED)

MCPR Operating Limit for Incremental
Cycle Core Average Exposure

<u>At RBM Hi-trip level setting</u>	<u>BOC to EOC-2GWD/t</u>	<u>EOC-2GWD/t to EOC-1GWD/t</u>	<u>EOC-1GWD/t to EOC</u>
S = .66W + 39%	1.24	1.29	1.31
S = .66W + 40%	1.27	1.29	1.31
S = .66W + 41%	1.27	1.29	1.31
S = .66W + 42%	1.29	1.29	1.31
S = .66W + 43%	1.30	1.30	1.31
S = .66W + 44%	1.34	1.34	1.34

C. MCPR shall be determined daily during reactor power operation at $\geq 25\%$ of rated thermal power and following any change in power level or distribution that would cause operation with a limiting control rod pattern as described in the bases for Specification.3.3.B.5.

D. When it is determined that a channel has failed in the unsafe condition, the other RPS channels that monitor the same variable shall be functionally tested immediately before the trip system containing the failure is tripped. The trip system containing the unsafe failure may be placed in the untripped condition during the period in which surveillance testing is being performed on the other RPS channels.

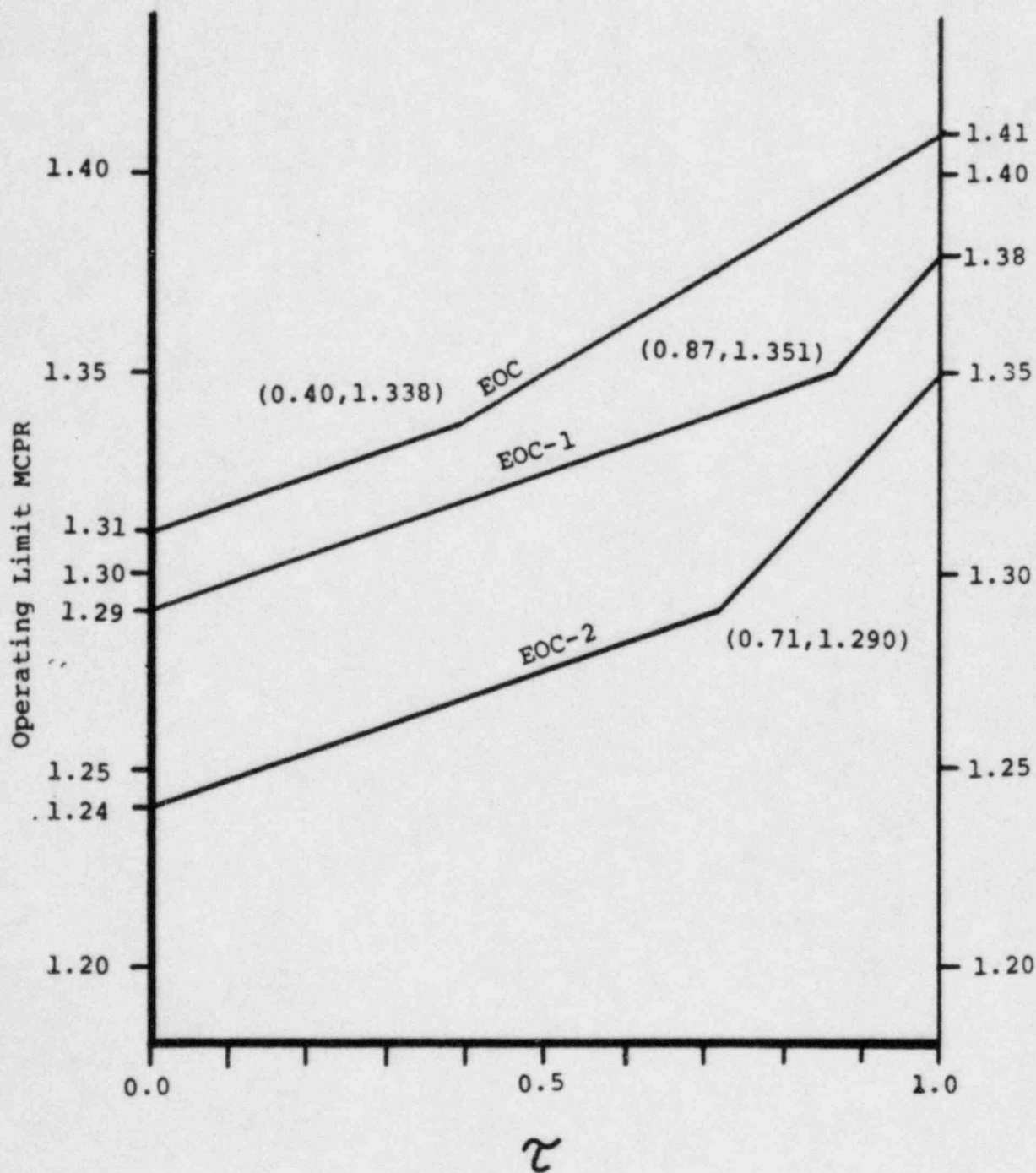
E. Verification of the limits set forth in specification 3.1.B shall be performed as follows:

1. The average scram time to notch position 38 shall be: $\tau_{AVE} \leq \tau_B$
2. The average scram time to notch position 38 is determined as follows:

$$\tau_{AVE} = \frac{\sum_{i=1}^n N_i \tau_i}{\sum_{i=1}^n N_i}$$

where: n = number of surveillance tests performed to date in the cycle, N_i = number of active rods measured in

Figure 3.1-2
Operating Limit MCPR
Versus τ (Defined in Section 3.1.B.2)
FOR ALL FUEL TYPES



JAFNPP

3.5 (cont'd)

condition, that pump shall be considered inoperable for purposes satisfying Specifications 3.5.A, 3.5.C, and 3.5.E.

H. Average Planar Linear Heat Generation Rate (APLHGR)

The APLHGR for each type of fuel as a function of average planar exposure shall not exceed the limiting value shown in Figures 3.5-9 through 3.5-11. If anytime during reactor power operation greater than 25% of rated power it is determined that the limiting value for APLHGR is being exceeded, action shall then be initiated within 15 minutes to restore operation to within the prescribed limits. If the APLHGR is not returned to within the prescribed limits within two (2) hours, an orderly reactor power reduction shall be commenced immediately. The reactor power shall be reduced to less than 25% of rated power within the next four hours, or until the APLHGR is returned to within the prescribed limits.

4.5 (cont'd)

2. Following any period where the LPCI subsystems or core spray subsystems have not been required to be operable, the discharge piping of the inoperable system shall be vented from the high point prior to the return of the system to service.
3. Whenever the HPCI, RCIC, or Core Spray System is lined up to take suction from the condensate storage tank, the discharge piping of the HPCI, RCIC, and Core Spray shall be vented from the high point of the system, and water flow observed on a monthly basis.
4. The level switches located on the Core Spray and RHR System discharge piping high points which monitor these lines to insure they are full shall be functionally tested each month.

H. Average Planar Linear Heat Generation Rate (APLHGR)

The APLHGR for each type of fuel as a function of average planar exposure shall be determined daily during reactor operation at \geq 25% rated thermal power.

3.5 BASES (cont'd)

requirements for the emergency diesel generators.

G. Maintenance of Filled Discharge Pipe

If the discharge piping of the core spay, LPCI, RCIC, and HPCI are not filled, a water hammer can develop in this piping when the pump(s) are started. To minimize damage to the discharge piping and to ensure added margin in the operation of these systems, this technical specification requires the discharge lines to be filled whenever the system is required to be operable. If a discharge pipe is not filled, the pumps that supply that line must be assumed to be inoperable for technical specification purposes. However, if a water hammer were to occur, the system would still perform its design function.

H. Average Planar Linear Heat Generation Rate (APLHGR)

This specification assures that the peak cladding temperature following the postulated design basis loss-of-coolant accident will not exceed the limit specified in 10 CFR 50 Appendix K.

The peak cladding temperature following a postulated loss-of-coolant accident is primarily a function of the average heat generation rate of all the rods of a fuel

assembly at any axial location and is only dependent secondarily on the rod to rod power distribution within an assembly. Since expected local variation in power distribution within a fuel assembly affect the calculated peak clad temperature by less than $\pm 20^\circ\text{F}$ relative to the peak temperature for a typical fuel design, the limit on the average linear heat generation rate is sufficient to assure that calculated temperatures are within the 10 CFR 50 Appendix K limit. The limiting value for APLHGR is shown in Figure 3.5-6 through 3.5-11.

I. Linear Heat Generation Rate (LHGR)

This specification assures that the linear heat generation rate in any rod is less than the design linear heat generation.

The LHGR shall be checked daily during reactor operation at $\geq 25\%$ rated thermal power to determine if fuel burnup, or control rod movement, has caused changes in power distribution. For LHGR to be a limiting value below 25% rated thermal power, the ratio of local LHGR to average LHGR would have to greater than 10 which is precluded by a considerable margin when employing any permissible control rod pattern.

JAFNPP

Figure 3.5-6

(This page intentionally blank.)

JAFNPP

Figure 3.5-7

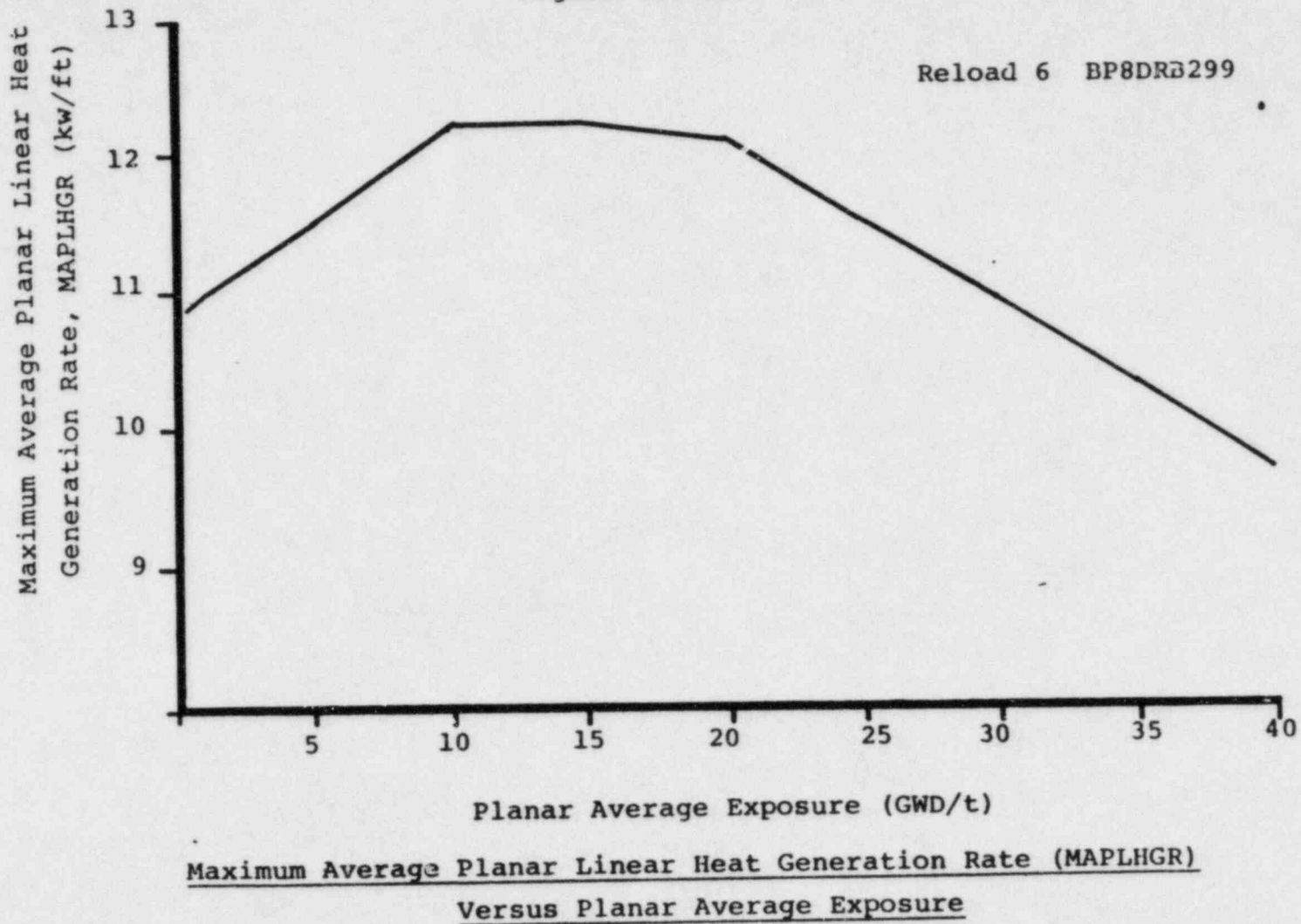
(This page intentionally blank.)

JAFNPP

Figure 3.5-8

(This page intentionally blank.)

Figure 3.5-11



Reference: NEDO-21662-2

(As Ammended

December 1984)