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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 131
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated May 27, 1992, as supplemented June 22, 1992, 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-63 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 131, 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 to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra

Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 27, 1992

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 131 TO FACILITY OPERATING LICENSE NO. DPR-63

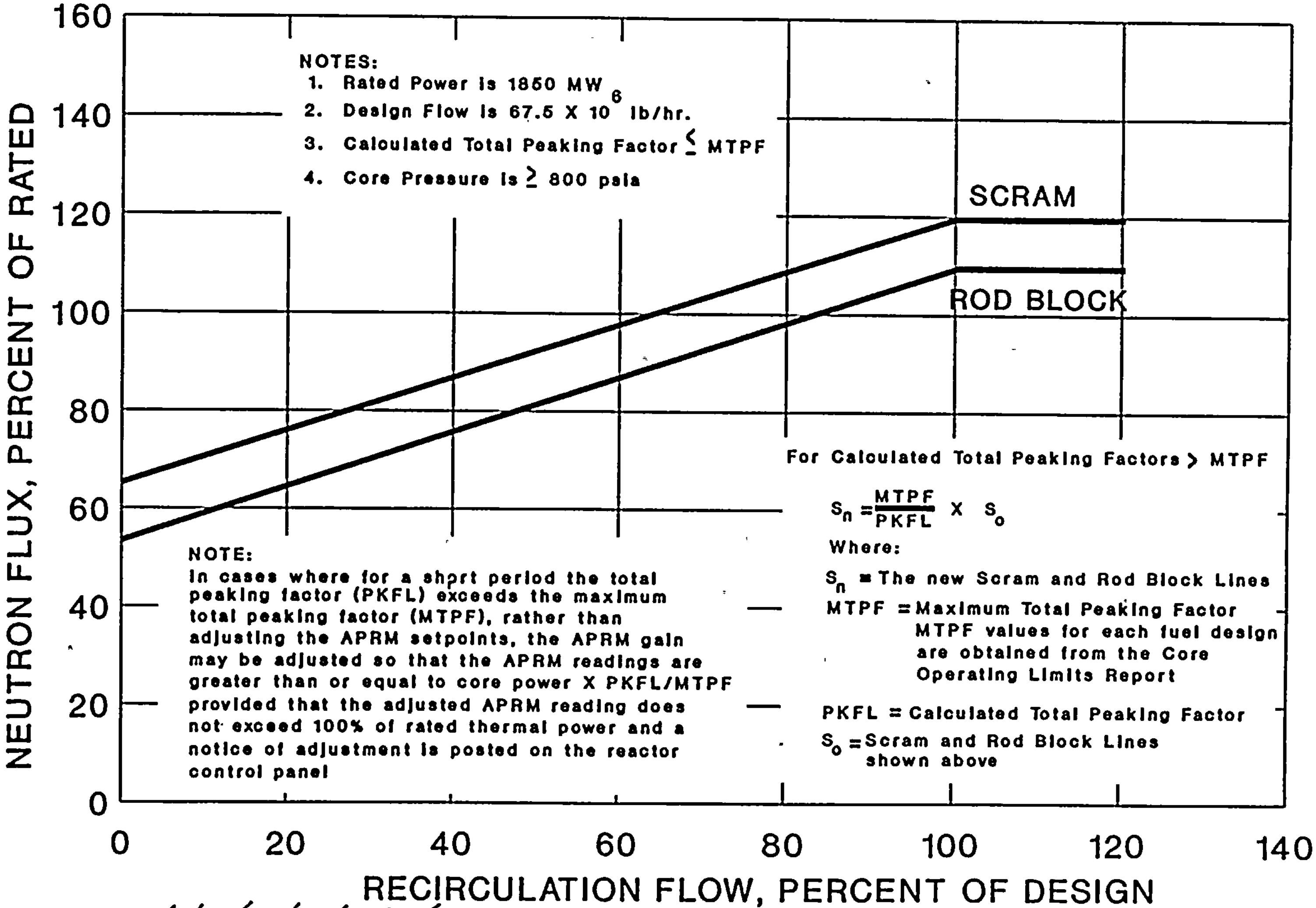
DOCKET NO. 50-220

Revise Appendix A as follows:

Remove Pages	Insert Pages
8	8
11	11
64	64
64a	64a
64b	64b
64c	64c
64e	64e
265	265
265a	265a

FIGURE 2.1.1

FLOW BIASED SCRAM AND APRM ROD BLOCK



Because the boiling transition correlation is based on a large quantity of full scale data there is a very high confidence that operation of a fuel assembly at the condition of the SLCPR would not produce boiling transition. Thus, although it is not required to establish the safety limit, additional margin exists between the safety limit and the actual occurrence of loss of cladding integrity.

However, if boiling transition were to occur, clad perforation would not be expected. Cladding temperatures would increase to approximately 1100°F which is below the perforation temperature of the cladding material. This has been verified by tests in the General Electric Test Reactor (GETR) where similar fuel operated above the critical heat flux for a significant period of time (30 minutes) without clad perforation.

If reactor pressure should ever exceed 1400 psia during normal power operating (the limit of applicability of the boiling transition correlation) it would be assumed that the fuel cladding integrity safety limit has been violated.

In addition to the boiling transition limit SLCPR, operation is constrained to a maximum LHGR as specified in the Core Operating Limits Report. At 100% power, this limit is reached at a given Maximum Total Peaking Factor (MTPF). The value of MTPF for each fuel design is contained in the Core Operating Limits Report. During steady-state operation where the Calculated Total Peaking Factor (PKFL) is above the MTPF, the equation on Figure 2.1.1 will be used to adjust the flow biased scram and APRM rod block setpoints.

At pressure equal to or below 800 psia, the core elevation pressure drop (0 power, 0 flow) is greater than 4.56 psi. At low power and all core flows, this pressure differential is maintained in the bypass region of the core. Since the pressure drop in the bypass region is essentially all elevation head, the core pressure drop at low powers and all flows will always be greater than 4.56 psi.

Analyses show that with a bundle flow of $28x10^3$ lb/hr, bundle pressure drop is nearly independent of bundle power and has a value of 3.5 psi. Therefore, due to the 4.56 psi driving head, the bundle flow will be greater than $28x10^3$ lb/hr irrespective of total core flow and independent of bundle power for the range of bundle powers of concern. Full scale ATLAS test data taken at pressures from 14.7 psia to 800 psia indicate that the fuel assembly critical power at $28x10^3$ lb/hr

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
b. <u>Linear Heat Generation Rate</u> (LHGR) During power operation, the Linear Heat Generation Rate (LHGR) of any rod in any fuel assembly at any axial location shall not exceed the limiting value specified in the Core Operating Limits Report. If at any time during power operation it is determined by normal surveillance that the limiting value for LHGR is being exceeded at any location, action shall be initiated within 15 minutes to restore operation to within the prescribed limits. If the LHGR at all locations is not returned to within the prescribed limits within two (2) hours, reactor power reductions shall be initiated at a rate not less than 10% per hour until LHGR at all locations is within the prescribed limits.	b. <u>Linear Heat Generation Rate</u> (LHGR) The LHGR as a function of core height shall be checked daily during reactor operation at $\geq$25% rated thermal power.
c. <u>Minimum Critical Power Ratio (MCPR)</u> During power operation, the MCPR for all fuel at rated power and flow shall be within the limit provided in the Core Operating Limits Report. If at any time during power operation it is determined by normal surveillance that the above limit is no longer met, action shall be initiated within 15 minutes to restore operation to within the prescribed limit. If all the operating MCPRs are not returned to within the prescribed limit within two (2) hours, reactor power reductions shall be initiated at a rate not less	c. <u>Minimum Critical Power Ratio (MCPR)</u> MCPR shall be determined daily during reactor power operation at >25% rated thermal power.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
than 10% per hour until MCPR is within the prescribed limit. For core flows other than rated, the MCPR limit shall be the limit identified above times K_f where K_f is provided in the Core Operating Limits Report.	
d. <u>Power Flow Relationship During Operation</u> The power/flow relationship shall not exceed the limiting values shown in the Core Operating Limits Report. If at any time during power operation, it is determined by normal surveillance that the limiting value for the power/flow relationship is being exceeded, action shall be initiated within 15 minutes to restore operation to within the prescribed limits. If the power/flow relationship is not returned to within the prescribed limits within two (2) hours, reactor power reductions shall be initiated at a rate not less than 10% per hour until the power/flow relationship is within the prescribed limits.	d. <u>Power Flow Relationship</u> Compliance with the power flow relationship in Section 3.1.7.d shall be determined daily during reactor operation.
e. <u>Partial Loop Operation</u> During power operation, partial loop operation is permitted provided the following conditions are met.	e. <u>Partial Loop Operation</u> Under partial loop operation, surveillance requirements 4.1.7, a,b,c and d above are applicable.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT

When operating with four recirculation loops in operation and the remaining loop unisolated, the reactor may operate at 100 percent of full licensed power level in accordance with the power/flow limits specified in the Core Operating Limits Report and an APLHGR not to exceed the applicable limiting values provided in the Core Operating Limits Report for the fuel type.

When operating with four recirculation loops in operation and one loop isolated, the reactor may operate at 100 percent of full licensed power in accordance with the power/flow limits specified in the Core Operating Limits Report and an APLHGR not to exceed the applicable limiting values provided in the Core Operating Limits Report for the fuel type, provided the following conditions are met for the isolated loop.

1. Suction valve, discharge valve and discharge bypass valve in the isolated loop shall be in the closed position and the associated motor breakers shall be locked in the open position.

2. Associated pump motor circuit breaker shall be opened and the breaker removed.

If these conditions are not met, core power shall be restricted to 90.5 percent of full licensed power.

When operating with three recirculation loops in operation and the two remaining loops isolated or unisolated, the reactor may operate at 90% of full licensed power in accordance with the power/flow limits

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
specified in the Core Operating Limits Report and an APLHGR not to exceed the applicable limiting values provided in the Core Operating Limits Report for the fuel type. During 3 loop operation, the limiting MCPR shall be adjusted as described in the Core Operating Limits Report. Power operation is not permitted with less than three recirculation loops in operation. If at any time during power operation, it is determined by normal surveillance that the limiting value for APLHGR under one and two isolated loop operation is being exceeded at any node in the core, action shall be initiated within 15 minutes to restore operation to within the prescribed limits. If the APLHGR at all nodes in the core is not returned to within the prescribed limits for one and two isolated loop operation within two (2) hours, reactor power reduction shall be initiated at a rate not less than 10 percent per hour until APLHGR at all nodes is within the prescribed limits.	

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6.9.1 Routine Reports (cont'd)

Changes to the Offsite Dose Calculation Manual (ODCM): Shall be reported to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made effective. This submittal shall contain:

a. Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the Offsite Dose Calculation Manual to be changed, together with appropriate analyses or evaluations justifying the change(s);

b. A determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

c. Documentation of the fact that the change has been reviewed and found acceptable.

f. CORE OPERATING LIMITS REPORT

.1 Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle for the following:

1) The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) for Specification 3.1.7.a and 3.1.7.e.

2) The K_f core flow adjustment factor for Specification 3.1.7.c.

3) The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.1.7.c and 3.1.7.e.

4) The Maximum Total Peaking Factor (MTPF) value for each fuel bundle design utilized for the current fuel cycle for Specifications 2.1.2 and 3.6.2.

5) The LINEAR HEAT GENERATION RATE for Specification 3.1.7.b.

6) The Power/Flow relationship for Specification 3.1.7.d and e.

and shall be documented in the CORE OPERATING LIMITS REPORT.

.2 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents.

1) NEDE-24011-P-A "GENERAL ELECTRIC STANDARD APPLICATION FOR REACTOR FUEL" (Latest approved revision).

2) NEDE-30966-P-A "SAFER MODEL FOR EVALUATION OF LOSS-OF-COOLANT ACCIDENTS FOR JET PUMP AND NON-JET PUMP PLANTS" (Latest Approved Revisions)

Vol I "SAFER LONG TERM INVENTORY MODEL FOR BWR LOSS-OF-COOLANT ACCIDENT ANALYSIS"

Vol II "SAFER APPLICATION METHODOLOGY FOR NON-JET PUMP PLANTS"

3) NEDO-20556-P-A "GENERAL ELECTRIC COMPANY ANALYTICAL MODEL FOR LOSS-OF-COOLANT ACCIDENT ANALYSIS IN ACCORDANCE WITH 10CFR50 APPENDIX K". (Latest approved revision)

.3 The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, transient analysis limits, and accident analysis limits) of the safety analysis are met.

.4 The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements shall be provided, upon issuance for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

6.9.2 Fire Protection Program Reports

a. Submit a special report in accordance with 10CFR50.4 as follows:

- Notify the Regional Administrator of the appropriate Regional Office by telephone within 24 hours.
- Confirm by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and
- Follow-up in writing within 14 days after the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to an operable status.

b. Submit a special report in accordance with 10CFR50.4 within 30 days following the event outlining the plans and procedures to be used to restore the inoperable equipment to an operable status.