ATTACHMENT C

Summary Description of Technical Specification Changes

CDF9081.LTR

Item No.	Technical Specification	Description of Change	Reason for Change
1.	Definitions	Core Operating Limit Report defined.	Specified the Definition and purpose of the Core Operating Limits Report
2.	2.1 pages 2.1-1 2.1-4 2.1-5 2.1-6	Moved Thermal Margin/Low Pressure setpoint coefficients and the Symmetric Offset Trip Limit to the Core Operating Limits Report.	Thermal margin/low pressure coefficients and the Symmetric Offset Trip Limit are cycle-specific values.
		Removal of pages 2.1-4, 2.1-5, and 2.1-6.	Administrative
3.	2.2 page 2.2-1	Moved SAFDLs to the Core Operating Limits Reports.	SAFDLs are cycle-specific limits.
4.	3.10 pages 3.10-1	Moved the PDIL to the Core Operating Limits Report.	The PDIL is a cycle-specific limit.
	3.10-2	Moved the shutdown margin and linear heat rate limits to the Core Operating Limits Report.	Both shutdown margin and linear heat rate limits are cycle-specific

Item No.	Technical Specification	Description of Change	Reason for Change
	3.10 pages 3.10-3	Moved the following limits to the Core Operating Limits Report: a) PDIL b) Symmetric Offset LCO and Trip band c) Thermal Margin/Low Pressure Trip d) Linear Heat Rate e) Excore LOCA Monitoring f) Allowable Unrodded Radial Peaking g) Allowable Increase in Radial Peaking	All of these limits are cycle-specific.
		Revised format for clarification.	Administrative. The renumbering is to maintain format consistency throughout the specification.
	3.10-4	Moved the power reduction equation coefficients to the Core Operating Limits Report.	These coefficients are cycle-specific values.
		Moved the Excore Symmetric Offset Limits (LOCA Limiting) to the Core Operating Limits Report.	These limits are cycle-specific.
		Revised format for clarification.	Administrative.
	3.10-5	Renumbered page and revised format for clarification.	Administrative

Item No.	Technical Specification	Description of Change	Reason for Change
	3.10-6	Moved the Symmetric Offset LCO for both normal and IMPIN operation to the Core Operating Limits Report.	Both limits are cycle-specific.
		Figure 3.10-10 renumbered to Figure 3.10-1.	Admini[illegible]
		Figure 3.10-6 renumbered to Figure 3.10-2.	Administrative.
		Renumbered page.	Administrative.
	3.10-6 3.10-7 3.10-8 3.10-9	Revised the Specification Basis to reflect the movement of figures to the Core Operating Limits Report.	Administrative.
	3.10-10 3.10-11 3.10-12 3.10-13 3.10-15 3.10-16 3.10-17 3.10-19	Renumbered pages. Moved the figures on these pages to the Core Operating Limits Report.	Administrative.
	3.10-14 3.10-18	Figures on these pages have been renumbered and placed on pages 3.10-10 and 3.10-11.	Administrative.
5.	5.9 page 5.9-5	Included the Core Operating Limits Report with those reports requiring submittal to the NRC.	Defines the administrative controls associated with the reporting requirements of the Core Operating Limits Report.

Item No.	Technical Specification	Description of Change	Reason for Change
6.	5.14 pages 5.14-1 5.14-2	Description and requirements associated with the Core Operating Limits Report.	Defines the administrative controls associated with the institution of the Core Operating Limits Report.

CDF9081.LTR

ATTACHMENT D

Proposed Technical Specification Changes

TECHNICAL SPECIFICATIONS

Table of Contents
(Continued)

MISCELLANEOUS DEFINITIONS

Operable

A system, subsystem, train, component or device shall be operable or have operability when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

Operating

A system or component is operating if it is performing its safeguard or operating functions.

Control Element Assemblies

All full-length shutdown and regulating control element assemblies (CEAs).

Partial-Length Control Element Assemblies

Control element assemblies (CEA) that contain neutron absorbing material only in the lower quarter of their length.

Fire Suppression Water System

A fire suppression water system shall consist of: A water source(s); gravity tank(s) or pump(s); and distribution piping with associated sectionalizing control or isolation valves. Such valves shall include yard hydrant curb valves, and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser.

Core Operating Limits Report

The Core Operating Limits Report is the Maine Yankee specific document]
which provides the operating limits for the current operating reload cycle.]
These cycle-specific operating limits are determined for each reload cycle]
in accordance with Technical Specification 5.14. Plant operation within]
these operating limits is addressed in individual Technical Specifications.]

2.1 LIMITING SAFETY SYSTEM SETTING - REACTOR PROTECTION SYSTEM

Applicability

Applies to reactor trip settings and bypasses for the instrument channels monitoring the process variables which influence the safe operation of the plant.

Objective

To provide automatic protective action in the event that the process variables approach a safety limit.

Specification

The Reactor Protective System trip setting limits and bypasses for the required operable instrument channels shall be as follows:

2.1.1 Core Protection

a) Variable Nuclear Overpower:

Less than or equal to Q + 10, or 106.5 (whichever is smaller) for Q greater than or equal to 10 and less than or equal to 100, and less than or equal to 20 for Q less than or equal to 10.

Where

Q = percent thermal or nuclear power, whichever is larger.

b) Thermal Margin/Low Pressure:

Greater than or equal to: $A\ Q_{DNB} + BT_c + C$, or 1835 psig (whichever is larger).

Where:

T_c = cold leg temperature, °F]

$Q_{DNB} = A_1 \times QR_1$

The Thermal Margin/Low Pressure Reactor Trip coefficients A, B, C, A_1 and]
QR_1 are specified in the Core Operating Limits Report.]

This trip may be bypassed below 10% of rated power.

c) The Symmetric Offset Trip Limit shall not exceed that specified in the]
Core Operating Limits Report. This trip may be bypassed below 15% of]
rated power.

2.2 SAFETY LIMITS - REACTOR CORE

Applicability

Applies to the limiting combinations of reactor power, and Reactor Coolant System flow, temperature, and pressure during operation.

Objective

To maintain the integrity of the fuel cladding and prevent the release of significant amounts of fission products to the reactor coolant.

Specifications

A. The reactor and the Reactor Protection System shall be operated such that the following Specified Acceptable Fuel Design Limit (SAFDL) on the departure from nucleate boiling heat flux ratio (DNBR) is not exceeded during normal operation and anticipated operational occurrences.

DNBR = 1.20 using the YAEC-1 DNB heat flux correlation

B. The reactor and the Reactor Protection System shall be operated such that
the SAFDLs for prevention of fuel centerline melting as specified in the]
Core Operating Limits Report are not exceeded during normal operation and]
anticipated operational occurrences.

]

Basis

To maintain the integrity of the fuel cladding, thus preventing fission product release to the Primary System, it is necessary to prevent overheating of the cladding. This is accomplished by operating within the nucleate boiling regime of heat transfer, and with a peak linear heat rate that will not cause fuel centerline melting in any fuel rod. First, by operating within the nucleate boiling regime of heat transfer, the heat transfer coefficient is large enough so that the maximum clad surface temperature is only slightly greater than the coolant saturation temperature. The upper boundary of the nucleate boiling regime is termed "Departure from Nucleate Boiling" (DNB). At this point, there is a sharp reduction of the heat transfer coefficient, which would result in higher cladding temperature and the possibility of cladding failure.

3.10 CEA GROUP, POWER DISTRIBUTION, MODERATOR TEMPERATURE COEFFICIENT LIMITS AND COOLANT CONDITIONS

Applicability:

Applies to insertion of CEA groups and peak linear heat rate during operation.

Objective:

To ensure (1) core subcriticality after a reactor trip, (2) limited potential reactivity insertions from a hypothetical CEA ejection, and 3) an acceptable core power distribution, moderator temperature coefficient, core inlet temperature, and reactor coolant system pressure during power operation.

Specification:

A. CEA Operational Limits

1. When the reactor is critical, except for physics tests and CEA exercises, the shutdown CEAs (Groups A, B and C) shall be fully withdrawn and the regulating CEAs (Groups 1 through 5) shall be no further inserted than the Power Dependent Insertion Limits as]
specified in the Core Operating Limits Report. CEA Group 5 consists]
of two subgroups designated Subgroup 5A and 5B.

2. A CEA is considered fully withdrawn if the CEA is withdrawn to 4 steps or less from its upper electrical limit.

3. Except during physics testing, a CEA misalignment is considered to be any one of the following:

   - A CEA in Group A, B, C, 1, 2, 3, or 4 that is out of position from the remainder of the group by more than 10 steps.

   - A CEA in Subgroup 5A or 5B that is out of position from the remainder of the subgroup by more than 10 steps.

   - The indicated subgroup positions of Subgroup 5A and 5B differ by more than 15 steps.

   If a CEA misalignment is not corrected within 15 minutes, operation with a CEA misalignment is permitted for a period of 4 hours provided:

   a. Thermal power is reduced by at least 10% of rated power within one-half hour and by at least 20% of rated power within one hour of identification of the misalignment. The CEA insertion limits specified for the initial thermal power must be maintained.

   b. Within two hours after realignment, the peak linear heat rate will be shown to be within the limits specified in 3.10.C.1 and the total radial peaking factor will be shown to be within the limits specified in 3.10.C.2 using the latest unrodded radial peaking factor.

4. If the CEA deviation alarms from both the computer pulse counting system and the reed switch indication system are not available, individual CEA positions shall be logged and misalignment checked every 4 hours.

5. Operation of the CEAs in the automatic mode is not permitted.

B Shutdown Margin Limits

1. When the reactor is critical, the shutdown margin will not be less than the Required Shutdown Margin specified in the Core Operating Limits Report, except during low power physics tests when the shutdown margin will not be less than 2% in reactivity.]

2. A trippable CEA is considered inoperable if it cannot be tripped. A CEA that cannot be driven shall be assumed not able to be tripped until it is proven that it can be tripped. Operation with an inoperable CEA is permitted provided:

   a. The shutdown margin specified in 3.10.B.1 is satisfied without the reactivity associated with the inoperable CEA within 2 hours of identification of the inoperable CEA.

   b. Except for low power physics tests and CEA exercises, only one CEA is inoperable.

3. A trippable CEA is considered to be a slow CEA if the drop time from de-energizing its holding coil to reaching 90% of its full insertion exceeds 2.7 seconds at operating temperature and 3 pump flow. Operation with a slow CEA is permitted provided:

   a. The shutdown margin specified in 3.10.B.1 is satisfied without 1.5 times the reactivity associated with the slow CEA after 2.5 seconds of drop time.

C. Power Distribution Limits

1. The peak linear heat rate with appropriate consideration of normal flux peaking, measurement-calculational uncertainty (8%), engineering factor (3%), increase in linear heat rate due to axial fuel densification and thermal expansion (0.3%) and power measurement uncertainty (2%) shall not exceed the Linear Heat Generation Limit as specified in the Core Operating Limits Report.]

   Should this limit be exceeded, immediate action will be taken to restore the linear heat rate to within the appropriate limit specified in the Core Operating Limits Report.]

2. The total radial peaking factor, defined as

$$F^T_R = F^P_R \quad (1 + T_q)$$

shall be evaluated at least once a month during power operation above 50% of rated full power.

a. F^P_R is the latest available unrodded radial peak determined from the incore monitoring system for a condition where all CEAs are at or above the 100% power insertion limit. T_q is given by the following expression:

$$T_q = 2 \sqrt{\frac{(Pa-Pc)^2 + (Pb-Pd)^2}{(Pa+Pb + Pc+Pd)^2}}$$

where Pi is the relative quadrant power determined from the incore system for quadrant i, when the incore system is operable. If the incore system is not operable, the Pi are the signals from excore detector channels i.

b. If the measured value of the Total Radial Peaking (F^T_R) exceeds the value given in the Core Operating Limits Report, perform one of the following within 24 hours:

1. Reduce the allowable PDIL insertion, Excore Symmetric Offset LCO, Symmetric Offset Trip Limit, Thermal Margin/Low Pressure Trip Limit, Linear Heat Generation Rate Limit and Excore Symmetric Offset (LOCA Limiting) by a factor greater than or equal to:

   [F^T_R measured]/[F^T_R as specified in the Core Operating Limits Report]

   All of the above parameters are specified in the Core Operating Limits Report.

<u>OR</u>:

2. Reduce thermal power at a rate of at least 1%/hour to bring the combination of thermal power and Allowable Percent Increase in F^T_R to within the limits specified in the Core Operating Limits Report, while maintaining CEAs at or above the 100% power insertion limit. Reduce the Linear Heat Generation Rate Limits by the Allowable Percent Increase in F^T_R corresponding to 100% power as specified in the Core Operating Limits Report.

   The Linear Heat Generation Rate Limit and Allowable Percent Increase in F^T_R are specified in the Core Operating Limits Report.

<u>OR</u>:

3. Be in at least HOT SHUTDOWN.

3. Incore detector alarms shall be set at least weekly.

Alarms will be based on the latest power distribution obtained, so that the linear heat rate does not exceed the Linear Heat Generation] Rate Limit defined in Specification 3.10.C.1. If four or more coincident alarms are received, the validity of the alarms shall be immediately determined and, if valid, power shall be immediately decreased below the alarm setpoint.

a. If the incore monitoring system becomes inoperable, perform one of the following within 4 effective full power hours:

1. Initiate a power reduction at a rate of at least 1% per hour to a power level less than or equal to the power level given by the following expression for the limiting location:

P = [R-(CR)(S)] [LHR (limit)/ LHR (measured)]]

Where: P = % of rated power,

R = a Power Reduction Coefficient variable, defined as a function of symmetric offset and as specified in the Core Operating Limits Report.]

CR = a Power Reduction Coefficient as specified in the Core Operating Limits Report.]

S = Number of steps the CEAs deviate from the CEA position existing when the linear heat rate measurement was taken.

LHR (Limit) = Linear Heat Generation Rate Limit permitted by Specification 3.10.C.1, and]

LHR (measured) = Linear heat rate last measured corrected to 100% power.

The CEAs shall be maintained above the 100% power dependent insertion limit and symmetric offset shall be monitored once per shift to ensure that it remains within the above range.

This method may be used for up to 14 effective full power days from the time when the linear heat rate measurement was taken;

OR:

2. Comply with the appropriate Excore Symmetric Offset Limit (LOCA Limiting) as specified in the Core Operating Limits Report while restricting the CEAs above the 100% power insertion limit. If a power reduction is required, reduce power at a rate of at least 1% per hour;]

OR:]

3. Comply with the appropriate Excore Symmetric Offset Limit (LOCA Limiting) as specified in the Core Operating Limits Report. If a power reduction is required, reduce power at a rate of at least 1% per hour.]

4. The azimuthal power tilt, Tq, shall be determined prior to operation above 50% of full rated power after each refueling and at least once per day during operation above 50% of full rated power.

Tq is given by the following expression:

$$Tq = 2 \sqrt{\frac{(Da-Dc)^2 + (Db-Dd)^2}{(Da+Db + Dc+Dd)^2}}$$

where Di is the signal from excore detector channel i. If an excore channel is inoperable, Di are the relative quadrant powers determined from the incore system for all quadrants, i.

Tq shall not exceed 0.03.

a. If the measured value of Tq is greater than 0.03 but less than or equal to 0.10, or an excore channel is inoperable, assure that the total radial peaking factor (F^T_R) is within the provisions of Specification 3.10.C.2 once per shift.

b. If the measured value of T_q is greater than 0.10, operation may proceed for up to 4 hours as long as F^T_R is maintained within the provisions of Specification 3.10.C.2. Subsequent operation for the purpose of measurement and to identify the cause of the tilt is allowable provided:

1. The thermal power level is restricted to less than or equal to 20% of rated power,

<u>AND</u>

2. Operation is in accordance with Specification 3.10.C.2.b.]

5. The incore detector system shall be used to confirm power distribution, such that the peaking assumed in the safety analysis is not exceeded, after initial fuel loading and after each fuel reloading, prior to operation of the plant at 50% of rated power.

6. If the core is operating above 50% of rated power with an excore nuclear channel out of service, then the azimuthal power tilt shall be determined once per shift by at least one of the following means:

   a. Neutron detectors (at least 2 locations per quadrant).

   b. Core-exit thermocouples (at least 2 thermocouples per quadrant).

7. Whenever the reactor is operating above 20% of rated power
   the excore symmetric offset shall be within the bounds for]
   Excore Symmetric Offset LCO as specified in the Core]
   Limits Report.]

   When the turbine is operating in the IMPIN control mode, the
   excore symmetric offset shall be within the bounds for]
   Excore Symmetric Offset LCO as specified in the Core]
   Operating Limits Report.]

D. Moderator Temperature Coefficient (MTC):

Except during low power physics testing the MTC shall be less positive
than that shown in Figure 3.10-1.]

E. Coolant Conditions

1. Except for low power physics testing, the reactor coolant pressure
   and the reactor coolant temperature at the inlet to the reactor
   vessel shall be maintained within the limits of Figure 3.10-2]
   during steady-state operation whenever the reactor is critical.

2. Except for low power physics testing, the reactor coolant flow rate shall be maintained at or more than a nominal value of 360,000 gpm during steady-state operation whenever the reactor is critical.

   <u>Exception:</u> The requirements of 3.10.E.2 may be modified during initial testing to permit power levels not to exceed 10% of rated power with three loops operating on natural circulation.

Basis:

The CEA insertion limit specified in the Core Operating Limits Report] assures that the individual CEA worths used for the CEA ejection analyses are not exceeded. The CEA insertions used for the CEA withdrawal accident are also not exceeded by this insertion limit. In addition, the limit ensures that the reactor can be brought to a safe hot shutdown condition even with the highest worth CEA not inserted. This restriction provides more shutdown margin than is required at BOL, since the moderator temperature coefficient is more negative at EOL. For this regulating group insertion limit, the peak linear heat rate will be well within the design values.

The limit applies also to two loop operation, in which case the power coordinate is rescaled to 100% of the rated two loop power. This ensures that the CEA induced peaking will not lead to worse thermal conditions than for 3 loop operation since the flow to power ratio is greater for two loop operation. This CEA insertion limit may be revised on the basis of physics calculations and physics data obtained during plant startup and subsequent operation.

For a full length CEA, with misalignment up to 10 steps from the remainder of the group, the peaking factors will be well within design limits. The power level and CEA restrictions imposed for operation with a misaligned CEA assure that the assumptions used in the generation of the RPS setpoints are not violated. The 4 hour time limit restriction is short with respect to the probability of an independent incident occurring. The requirement that no more than one inoperable CEA is allowed and that the shutdown margin is maintained ensures that the reactor can be brought to a safe shutdown condition at any time.

Shutdown margin is assured within the required CEA drop time by operating in accordance with 3.10.A-1 and measuring CEA core height vs. time and CEA worths after initial loading and each refueling. The maximum CEA drop time specified is consistent with values used in the safety analysis. Should a CEA drop time be in excess of 3.10.B.3, then the core height on that CEA at 2.5 seconds would be conservatively determined. Reactivity worth of the CEA from the above core height to the bottom of the core would then be determined. Appropriate action would be taken, if necessary, during power operation to compensate for 1.5 times the above measured reactivity in order to maintain adequate shutdown margin.

Incore detector alarms are set based on the latest power distributions obtained from incore detector analyses. These techniques reflect actual radial and axial power distribution which exist in the core. Should the system become unavailable, continued operation is permitted under either the more conservative excore symmetric offset LCO envelope or at a power level consistent with maintaining an appropriate margin to the peak linear heat rate assumed in the LOCA. Both these functions ensure that operation is within the limiting peak linear heat rates assumed as initial conditions for the Loss of Coolant Accident (LOCA). Further, since rod position information is not available to this excore system, this function assumes the most limiting radial power distributions permitted at each power level.

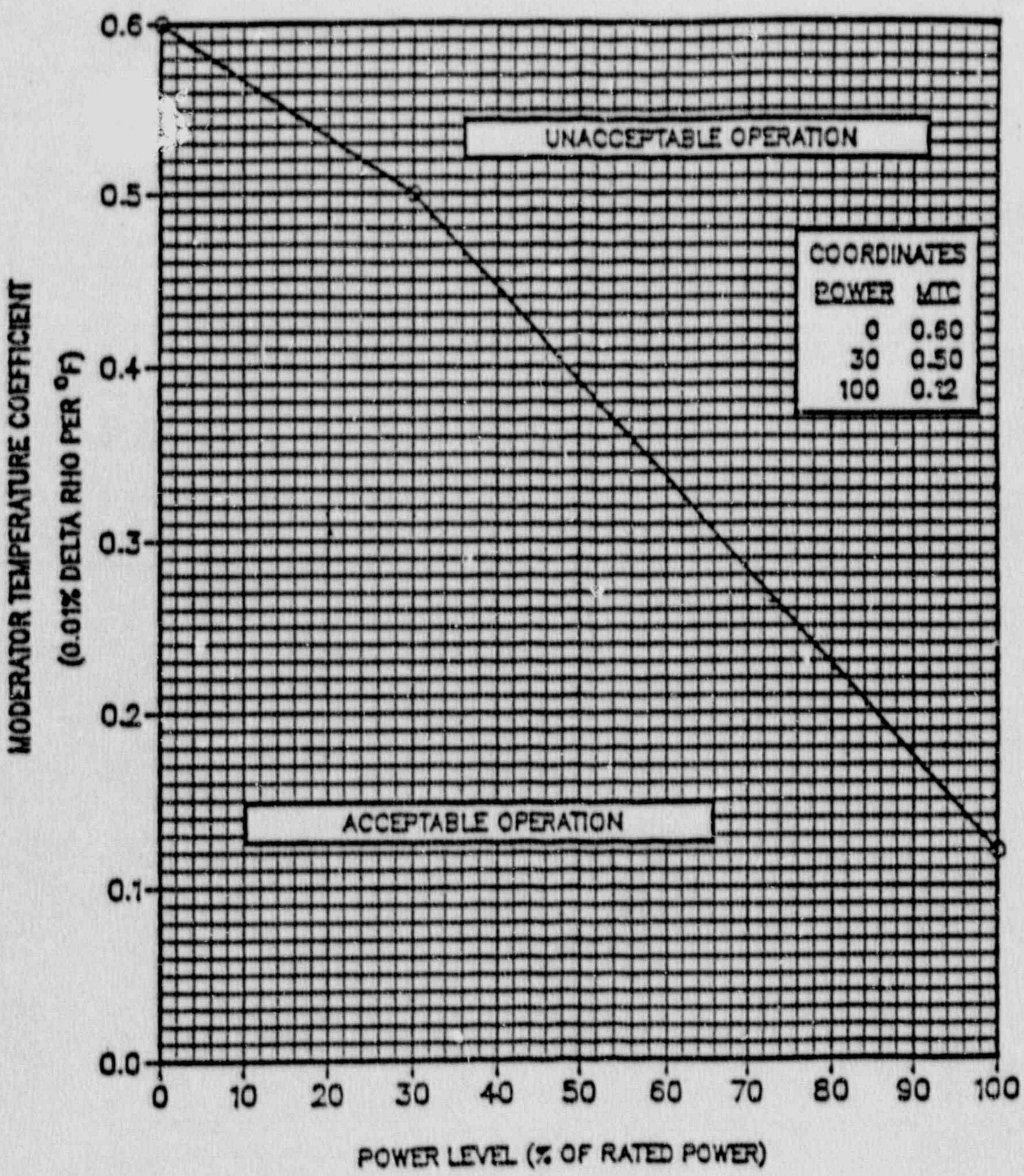
The split excore detectors monitor the axial component of the power distribution. The signal generated from the excore detectors is provided as input to both the Symmetric Offset and Thermal Margin/Low Pressure Trip Systems. Limiting Safety System Settings (LSSS) are, therefore, generated as a function of the excore detector response.

The radial component of the power distribution is monitored as a Limiting Condition of Operation (LCO) by Technical Specification 3.10.C.2. The intent of the specification is to monitor the radial component of the power distribution and to ensure that assumptions made in the generation of Reactor Protective System (RPS) LSSS remain valid. The LCO on the radial power distribution is specified in the Core Operating Limits Report in the form of a steady-state unrodded total radial peak (F^T_R) and provides indication that the core power distribution is behaving as predicted. This LCO includes 10% for calculational uncertainties. The measured steady-state value of F^T_R, augmented by 8% for measurement uncertainty, is compared to this limit on a monthly basis. Should the measured steady-state unrodded total radial peak including uncertainties exceed the limit of the maximum allowable F^T_R at any time in the cycle, specific action is to be taken to assure that the LSSS remain valid. The specific action includes a) the reduction of RPS LSSS and LCO by the ratio of [F^T_R (measured)/F^T_R (as specified in the Core Operating Limits Report)] to directly compensate for the higher radial peaks, or b) the imposition of additional restrictions on power and CEA position to assure that the assumptions made in establishing the RPS LSSS and LCO remain valid. The increase in allowable F^T_R in conjunction with restricted CEA insertion allows for an increase in the steady-state unrodded total radial peak above the limits of an unrodded F^T_R without a modification of the RPS LSSS. The allowed increase in radial peak is derived from the difference between the radial peaks assumed in the RPS setpoints for rodded conditions at reduced power and the radial peaks reflected in the CEA insertion limit at 100% power. To accommodate the increased radial peaking, LOCA linear heat generation rate limits are decreased by the allowable radial peaking increase at 100% power. This assures that the radial peaking factors vs. power assumed in the RPS LSSS remain valid.

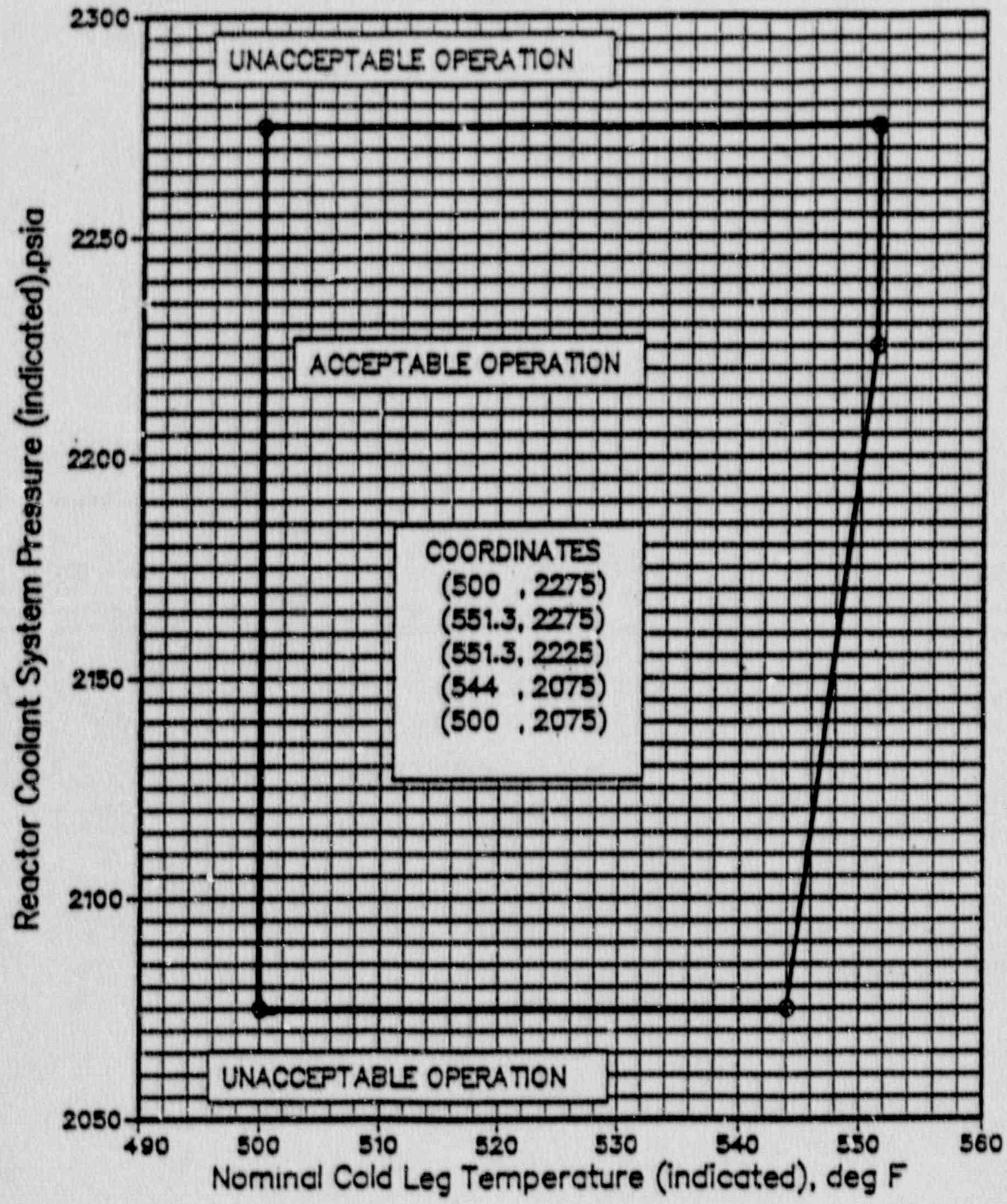
The power distribution in the core can be determined in two ways. The normal method is through analysis of the fixed and movable neutron detector signals with the on-line computer. The alternative is to determine the radial and axial peaking factors by hand. The radial peaking factor can be determined from the core exit thermocouples, the fixed incore detectors or in the movable incore detector traces. The axial peaking factor can be determined from the fixed incore detectors, the movable incore detector traces or the excore detectors. The requirement that the core power distribution be shown to be within the design limits after every refueling not only ensures that the reactor can be operated safely but will also provide reasonable verification that the core was properly loaded. The requirement for operability of incore instrumentation in the instance of an excore detector channel being out of service ensures that an unobserved quadrant power tilt will not occur.

The moderator temperature coefficient, coolant pressure, flow rate, and temperature specified are consistent with the values assumed in the safety analysis. The safety analysis assumes ranges in cold leg temperature corresponding to the allowable coolant conditions given in Figure 3.10-2. The actual values assumed in the safety analysis]
include an uncertainty on temperature measurements of ± 4°F conservatively applied to the allowable values. The exception permits testing to determine decay heat removal capabilities of the Primary System while on natural circulation, prior to operation at higher power.

Operaiion with the turbine in IMPIN mode could result in a core power increase during a CEA drop transient above the initial pre-drop power level due to automatic opening of the throttle valves combined with moderator reactivity effects. Thus, additional initial overpower margin is required to preclude violation of the SAFDLs. The modified symmetric offset LCO band provides this additional margin.



MAINE YANKEE Technical Specification	Moderator Temperature Coefficient Upper Limits Versus Power Level	Figure 3.10-1



MAINE YANKEE Technical Specification	Allowable 3 Loop Steady State Coolant Conditions 3.10-11	Figure 3.10-2

5.9.1.8 Core Operating Limits Report]

The Core Operating Limits Report (Specification 5.14), including]
any midcycle revisions or supplements, shall be submitted upon]
issuance to the NRC Document Control Desk with copies to the]
Regional Administrator and Resident Inspector.]

5.14 <u>Core Operating Limits Report</u>

5.14.1 The core operating limits shall be established and documented in the Core Operating Limits Report before each reload cycle for the following:

a. Coefficients A, B, C, A_1 and QR_1 of the Thermal Margin/Low Pressure reactor trip limit as defined in Specification 2.1.1.b.

b. The Symmetric Offset trip function as defined in Specification 2.1.1.c.

c. The Specified Acceptable Fuel Design Limit for the prevention of fuel centerline melting during normal operation and anticipated operational occurrences as defined in Specification 2.2.B.

d. The CEA insertion limits as defined in Specification 3.10.A.1.

e. The shutdown margin requirement as a function of percent power level and RCS boron concentration as defined in Specification 3.10.B.1.

f. The peak linear heat generation limits as defined in Specification 3.10.C.1.

g. The maximum allowable unrodded radial power peaking factor as defined in Specification 3.10.C.2.

h. The excore symmetric offset limits (with the incore monitors inoperable), LOCA limiting, with and without CEAs restricted to above the 100% rated power insertion limit as defined in Specification 3.10.C.2.

i. The excore symmetric offset limits (with the incore monitors inoperable), with and without turbine operation in the IMPIN mode as defined in Specification 3.10.C.2.

j. The allowable increase in the total radial peaking factor with the CEAs restricted to above the 100% rated power insertion limit as defined in Specification 3.10.C.2.

k. The coefficients R and CR as defined in Specification 3.10.C.3.

5.14.2 The analytical methods used to determine the core operating limits shall be limited to those previously reviewed and approved by the NRC as follows:

<u>Tech. Spec. 2.1</u>

1. YAEC-1110, "Maine Yankee Reactor Protection System Setpoint Methodology", dated September, 1976.
2. YAEC-1296P, "DNBR Limit Methodology and Application to the Maine Yankee Plant", dated January, 1982

Tech. Spec. 2.2

1. YAEC-1099P, "Maine Yankee Fuel Thermal Performance Evaluation Model", dated February, 1976.]
2. YAEC-1115, "Application of Yankee's Reactor Physics Methods to Maine Yankee", dated October, 1976.]
3. YAEC-1296P, "DNBR Limit Methodology and Application to the Maine Yankee Plant", dated January , 1982.]

Tech. Spec. 3.10

1. YAEC-1099P, "Maine Yankee Fuel Thermal Performance Evaluation Model", dated February, 1976.]
2. YAEC-1101, "Maine Yankee Plant Analysis Model Using GEMINI-II", dated June, 1976.]
3. YAEC-1102, "Maine Yankee Core Thermal-Hydraulic Model Using COBRA IIIC", dated June, 1976.]
4. YAEC-1103, "Maine Yankee Core Analysis Model Using CHIC-KIN," dated September, 1976.]
5. YAEC-1110, "Maine Yankee Reactor Protection System Setpoint Methodology", dated September, 1976.]
6. YAEC-1115, "Application of Yankee's Reactor Physics Methods to Maine Yankee", dated October, 1976.]
7. YAEC-1241, "Thermal Hydraulic Analysis of PWR Fuel Element Transients Using the CHIC-KIN Code", dated March, 1981.]
8. YAEC-1296P, "DNBR Limit Methodology and Application to the Maine Yankee Plant", dated January, 1982.]
9. YAEC-1447, "Application of RETRANO2 Mod 02 to the Analysis of the MSLB Accident at MYAPC", dated September, 1984.]
10. YAEC-1464, "Modified Method for CEA Ejection Analysis of Maine Yankee Plant", dated December, 1984.]
11. YAEC-1160, "Application of Yankee WREM-Based Generic PWR ECCS Evaluation Model to Maine Yankee", dated July, 1978.]
12. Letter from G. D. Whittier (MYAPC) to A. C. Thadani (USNRC), MN-86-141, dated November 10, 1986.]
13. Letter from G. D. Whittier (MYAPC) to Victor Nerses (USNRC), MN-87-59, dated May 21, 1987.]
14. YAEC 1300P, "RELAP5YA: A Computer Program for Light Water Reactor System Thermal-Hydraulic Analysis", Volumes 1, 2, 3, dated October 1982.]
15. YAEC 1363-A, "CASMO3G Validation", April 1988.]
16. YAEC 1659-A, "Simulate3 Validation and Verification," September 1988.]

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