Attachment 1

Description of Proposed Changes to Technical Specifications

Section/Location	Change	Reason for Change
1) Table 3.11-2, p. 180-01	Change MCPR operating limits per attached changed page.	Per licensing analysis results using Vermont Yankee methods.
2) Bases 3.11.C.1, p. 180-h	Replace current wording with the following: "The MCPR Operating Limit is a cycle dependent parameter which can be determined for a number of different combinations of operating modes, initial conditions, and cycle exposures in order to provide reasonable assurance against exceeding the fuel cladding integrity safety limit (FCISL) for potential abnormal occurrences. The MCPR Operating Limits are presented in Appendix A of the current cycle's Core Performance Analysis report.	The current words refer to a GE licensing topical report. The proposed wording is a more general description of the basis for determining the MCPR operating limit, and thus does not conflict with the use of VY methods to determine the limit.
3) L.C.O. 3.3C, pp. 72, 72a and 73	Reduce control rod scram times.	To provide additional MCPR margin to limits under EOC operating condtions where the MCPR operating limit is set by the limiting overpressurization transient.
4) Bases 3.3B.4, p. 76	Remove reference to NEDE-24011P-A and replace with reference to Vermont Yankee Core Performance Analysis report.	Consistent with change to Vermont Yankee methods and documentation of analysis results.

3.3 LIMITING CONDITIONS FOR OPERATION

C. Scram Insertion Times

1.1 The average scram time, based on the de-energization of the scram pilot valve solenoids of all operable control rods in the reactor power operation condition shall be no greater than:

Drop-Out of Position	%Inserted From Fully Withdrawn	Avg. Scram Insertion Time (sec)
46	4.51	0.358
36	25.34	0.912
26	46.18	1.468
06	87.84	2.686

The average of the scram insertion times for the three fastest control rods of all groups of four control rods in a two by two array shall be no greater than:

Drop-Out of Position	%Inserted From Fully Withdrawn	Avg. Scram Insertion Time (sec)
46	4.51	0.379
36	25.34	0.967
26	46.18	1.556
06	87.84	2.848

4.3 SURVEILLANCE REQUIREMENTS

C. Scram Insertion Times

1. After refueling outage and prior to operation above 30% power with reactor pressure above 800 psig all control rods shall be subject to scram-time measurements from the fully withdrawn position. The scram times for single rod scram testing shall be measured without reliance on the control rod drive pumps.

2. During or following a controlled shutdown of the reactor, but not more frequently than 16 weeks nor less frequently than 32 weeks intervals, 50% control rod drives in each quadrant of the reactor core shall be measured for scram times specified in Specification 3.3.C. All control rod drives shall have experienced scram-time measurements each year. Whenever 50% of the control rod drives scram times have been measured, an evaluation shall be made to provide reasonable assurance that proper control rod drives performance is being maintained. The results of measurements performed on the control rod drives shall be submitted in the **start up test report.**

3.3 LIMITING CONDITIONS FOR OPERATION

4.3 SURVEILLANCE REQUIREMENTS

1.2 If Specification 3.3.C.1.1 cannot be met, the average scram time, based on the de-energization of the scram pilot valve solenoids of all operable control rods in the reactor power operation condition shall be no greater than:

Drop-Out of Position	%Inserted From Fully Withdrawn	Avg. Scram Insertion Time (sec)
46	4.51	.358
36	25.34	1.096
26	46.18	1.860
06	87.84	3.419

The average of the scram insertion times for the three fastest control rods of all groups of four control rods in a two by two array shall be no greater than:

Drop-Out of Position	%Inserted From Fully Withdrawn	Avg. Scram Insertion Time (sec)
46	4.51	.379
36	25.34	1.164
26	46.18	1.971
06	87.84	3.624

2. The maximum scram insertion time for 90% insertion of any operable control rod shall not exceed 7.00 seconds.

3.3 LIMITING CONDITIONS FOR OPERATION

3. If Specification 3.3.C.1.2 cannot be met, the reactor shall not be made supercritical; if operating, the reactor shall be shut down immediately upon determination that average scram time is deficient.

4. If Specification 3.3.C.2 cannot be met, the deficient control rod shall be considered inoperable, fully inserted into the core, and electrically disarmed.

D. Control Rod Accumulators

At all reactor operating pressures, a rod accumulator may be inoperable provided that no other control rod in the nine-rod square array around this rod has a:

4.3 SURVEILLANCE REQUIREMENTS

D. Control Rod Accumulators

Once a shift check the status of the pressure and level alarms for each accumulator.

3.3 (cont'd)

B. Control Rods

1. Control rod dropout accidents as discussed in the FSAR can lead to signifcant core damage. If coupling integrity is maintained, the possiblity of a rod dropout accident is eliminated. The overtravel position feature provides a positive check as only uncoupled drives may reach this position. Neutron instrumentation response to rod movement provides a verification that the rod is following its drive.

2. The control rod housing support restricts the outward movement of a control rod to less than 3 inches in the extremely remote event of a housing failure. The amount of reactivity which could be added by this small amount of rod withdrawal, which is less than a normal single withdrawal increment, will not contribute to any damage of the primary coolant system. The design basis ven in Subsection 3.5.2 of the FSAR, and the design evaluation is given in Subsection 3.5.4. This su is not required if the reactor coolant system is at atmospheric pressure since there would then be no driving force to rapidly eject a drive housing.

3. In the course of performing normal startup and shutdown procedures, a pre-specified sequence for the withdrawal or insertion o control rods is followed. Control rod dropout accidents which might lead to significant core damage, ca not occur if this sequence of rod withdrawals or insertions is followed. The Rod Worth Minimizer restricts withdrawals and insertions to those listed in the pre-specified sequence and provides an additional check that the reactor operator is following prescribed sequence. Although beginning a reactor startup without having the RWM operable would entail unnecessary risk, continuing to withdraw rods RWM fails subsequently if a second licensed operator verifies the withdrawal sequence. Continuing the startup increases core power, reduces the rod worth and reduces the consequences of dropping any rod. Withdrawal of rods for testing is permitted with the RWM inoperable, if the reactor is subcritical and all other rods are fully inserted. Above 20% power, the RWM is not needed since even with a single error an operator cannot withdraw a rod with sufficient worth, which if dropped, would result in anything but minor consequences.

4. Refer to the Vermont Yankee Core Performance Analysis report.

VYNPS

Table 3.11-2

MCPR Operating Limits

Value of "N" in RBM Equation(1)	Average Control Rod Scram Time	Cycle Exposure Range	MCPR Operating Limit for Fuel Type(2) 8X8	8X8R	P8X8R
42%	Equal or better	BOC to EOC-2 GWD/T	1.29	1.29	1.29
	than L.C.O.	EOC-2 GWD/T to EOC-1 GWD/T	1.29	1.29	1.29
	3.3 C.1.1	EOC-1 GWD/T to EOC	1.29	1.29	1.29
	Equal or better	BOC to EOC-2 GWD/T	1.29	1.29	1.29
	than L.C.O.	EOC-2 GWD/T to EOC-1 GWD/T	1.30	1.30	1.30
	3.3 C.1.2	EOC-1 GWD/T to EOC	1.33	1.32	1.32
41%	Equal or better	BOC to EOC-2 GWD/T	1.25	1.25	1.25
	than L.C.O.	EOC-2 GWD/T to EOC-1 GWD/T	1.25	1.25	1.25
	3.3 C.1.1	EOC-1 GWD/T to EOC	1.27	1.27	1.27
	Equal or better	BOC to EOC-2 GWD/T	1.25	1.25	1.25
	than L.C.O.	EOC-2 GWD/T to EOC-1 GWD/T	1.30	1.30	1.30
	3.3 C.1.2	EOC-1 GWD/T to EOC	1.33	1.32	1.32
≤40%	Equal or better	BOC to EOC-2 GWD/T	1.24	1.24	1.24
	than L.C.O.	EOC-2 GWD/T to EOC-1 GWD/T	1.24	1.23	1.23
	3.3 C.1.1	EOC-1 GWD/T to EOC	1.27	1.27	1.27
	Equal or better	BOC to EOC-2 GWD/T	1.24	1.24	1.24
	than L.C.O.	EOC-2 GWD/T to EOC-1 GWD/T	1.30	1.30	1.30
	3.3 C.1.2	EOC-1 GWD/T to EOC	1.33	1.32	1.32
75%	Special Testing at Natural Circulation (Note 3, 4)		1.30	1.31	1.31

(1) The Rod Block Monitor (RBM) trip setpoints are determined by the equation shown in Table 3.2.5 of the Technical Specifications.

(2) The current analyses for MCPR Operating Limits do not include 7x7 fuel. On this basis further evaluation of MCPR operating limits is required before 7x7 fuel can be used in Reactor Power Operation.

(3) For the duration of pump trip and stability testing.

(4) K_f factors are not applied during the pump trip and stability testing.

Bases:

3.11C Minimum Critical Power Ratio (MCPR)

Operating Limit MCPR

1. The MCPR Operating Limit is a cycle dependent parameter which can be determined for a number of different combinations of operating modes, initial conditions, and cycle exposures in order to provede reasonable assurance against exceeding the fuel cladding integrity safety limit (FCISL) for potential abnormal occurences. The MCPR operating limits are presented in Appendix A of the current cycle's Core Performance Analysis report.

2. In order to counteract the postulated thermal margin degradation for the worst-case Fuel Loading Error accident, a higher MCPR operating limit is applied to the event air ejector off-gas radiation exceeds levels that could be associated with a mis-load fuel assembly.