CLEAR REGUL

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555 October 2, 1980

Docket No. 50-309

Mr. Robert H. Groce Senior Engineer - Licensing Maine Yankee Atomic Power Company 25 Research Drive Westboro, Massachusetts 05181

Dear Mr. Groce:

We have reviewed your letters dated July 18, 1977 and July 2, 1980 concerning degraded grid voltage protection and we find that the Maine Yankee Atomic Power Station is not in full compliance with our requirements.

Enclosed are four staff positions for which we require your response within 30 days after receipt of this letter.

Sincerely,

TERA

Robert A. Clark, Chief Operating Reactors Branch #3 Division of Licensing

cc: See next page

Maine Yankee Atomic Power Company

CC:

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State Planning Officer Executive Department State of Maine 189 State Street Augusta, Maine 04330 STAFF POSITIONS ON DEGRADED GRID VOLTAGE PROTECTION DOCKET NO. 50-29, 50-271, 50-309

REFERENCES

- (a) USNRC Letter, dated June 3, 1977
- (b) MYAPC Letter, dated July 18, 1977
- (c) YAEC Letter, dated July 24, 1980
- Staff Position 1 of reference (a) requires coincident logic in the voltage protection scheme to preclude spurious trips of the off-site power source. The proposed logic in reference (c) does not preclude spurious trip of off-site source in all cases and therefore the required coincident logic should be provided in accordance with Table 3.3-3 in enclosure 2 of reference (a).
- 2. Staff Position 1 of reference (a) also required Technical Specification changes including limiting conditions for operation, surveillance, trip setpoints with minimum and maximum limits, and allowable values for second level voltage protection monitors. The required changes to the Technical Specifications should be submitted in accordance with Tables 3.3-3, 3.3-4 and 4.3-2 in enclosure 2 of reference (a).
- 3. Staff Position 2 of reference (a) requires that load shedding on the emergency buses be prevented from occurring when the diesel generator is supplying power to all the sequenced loads and that the load shedding feature be reinstated automatically when the diesel generator circuit breaker is tripped. Reference (b) indicates that there is an automatic bypass of the load shedding feature when the diesel generator circuit breaker is closed, however the reinstatement of the feature is not provided. The bypassing of a protective function (i.e. load shedding) should meet the requirements of IEEE 279-1971 paragraph 4.12 by removing the bypass automatically whenever the permissive condition (i.e. diesel generator breaker closed) is not met. The licensee should revise its design to meet these requirements.
- 4. Staff Position 3(b) of reference (a) requires that the diesel generators operate for at least five minutes while loaded with the emergency loads. The proposed Technical Specification section 4.5.A.2 of reference (b) does not meet this requirement. The licensee should submit Technical Specification changes to include this requirement.