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Docket No. 50-309

Mr. John H. Garrity, Senior Director  
 Nuclear Engineering and Licensing  
 Maine Yankee Atomic Power Company  
 83 Edison Drive  
 Augusta, Maine 04336

Dear Mr. Garrity:

SUBJECT: DEGRADED GRID VOLTAGE FOR CLASS 1E POWER SYSTEMS FOR MAINE  
 YANKEE

We have reviewed your submittals on degraded grid voltage for the Maine Yankee Atomic Power Station as discussed in the Enclosed Safety Evaluation.

We find the proposed design for degraded grid protection at Maine Yankee incorporates features that require coincident undervoltage and a safety injection signal (SIS) in order to actuate the undervoltage protection circuitry. This approach provides protection to the Class 1E equipment needed to mitigate the consequences of an accident and is acceptable.

However, for an undervoltage condition without an SIS, the protection circuitry will alarm only and require operator action to be taken to restore the grid to an acceptable level. Acceptability of this alternate approach requires demonstration by the licensee that adequate safety systems will be available to enable safe shutdown of the reactor for these conditions and that appropriate plant operating procedures are developed and available to the operator for the required operator action.

In order to have this approach found acceptable, Maine Yankee must:

- o Provide the plant operating procedures for NRC/NRR review.
- o Provide design details on how load shedding will be bypassed while the diesel generators are supplying the Class 1E buses.
- o Provide technical specifications to cover relay setpoint, time delay and tolerances, the limiting conditions for operation, and surveillance requirements. This includes tests to verify that load shedding and sequencing are reinstated if the diesel generator breaker is tripped.

Please respond within 120 days of receipt of this letter with the above requested material.

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 PDR ADOCK 05000309  
 P PDR

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
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Mr. John H. Garrity

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The information requested in this letter affects fewer than 10 respondents; therefore, OMB clearance is not required under P.L. 96-511.

A copy of our Safety Evaluation with the attached Technical Evaluation Report is enclosed.

Sincerely,

Original signed by  
Robert A. Clark

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

Enclosure:  
Safety Evaluation

cc: See next page

*RFA*

*[Signature]*

OFFICE	ORB#3:DL	ORB#3:DL	ORB#5:DL	ORB#3:DL		
SURNAME	PMKreutzer	KHeitner/pn	RDudley	RACla		
DATE	11/5/82	11/5/82	11/10/82	11/17/82		

Maine Yankee Atomic Power Company

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