

December 2, 1999

Mr. Michael Roche  
Vice President and Director  
GPU Nuclear, Inc.  
Oyster Creek Nuclear Generating Station  
P. O. Box 388  
Forked River, NJ 08731

**SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - REQUEST FOR  
ADDITIONAL INFORMATION ON PROPOSED LICENSE AMENDMENT  
CONCERNING THREE-LOOP OPERATION (TAC NO. MA6393)**

Dear Mr. Roche:

By letter dated June 3, 1999, you proposed an amendment that would modify the Oyster Creek Nuclear Generating Station Technical Specifications to permit continued plant operation with three recirculation loops, provided certain conditions are met.

In a telephone conference on November 3, 1999, we clarified the enclosed questions and discussed the schedule for responding with your staff. The NRC staff needs additional information to complete its review. As agreed to by your staff, please respond to the enclosed request within 15 days of the date of this letter.

If you have any questions regarding this correspondence, please contact me at (301) 415-1261.

Sincerely,

Original signed by:

Helen N. Pastis, Sr. Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-219

Enclosure: Request for Additional Information

cc w/encl: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script that reads "Helen N. Pastis".

Helen N. Pastis, Sr. Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

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M. Roche  
GPU Nuclear, Inc.

cc:

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Kent Tosch, Chief  
New Jersey Department of  
Environmental Protection  
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**RAIs for Three Loop Operation of OCNGS:**

- 1) Nine Mile Point 1 (NMP1), which is the sister plant of the Oyster Creek Nuclear Generating Station (OCNGS), increased the minimal critical power ratio (MCPR) safety limit by 0.01 for 3-loop operation to account for potential increase in flow uncertainty due to back flow, uneven flow distribution, etc., during 3-loop operation. Why should the MCPR safety limit for OCNGS not be increased for 3-loop operation?**
- 2) NMP1 has baffle plates in the lower plenum to uniformly distribute the impinging water from recirculation pumps for even distribution of flow during 3-loop operation. Does OCNGS have the same design feature?**
- 3) Is there cross-connection between the loops in OCNGs? If so, what is the valve position in those lines during 3-loop operation?**
- 4) For 3-loop operation, each loop will carry a higher flow. In a loss-of-coolant accident (LOCA), this can result in faster flow coastdown and earlier boiling transition. It has been stated in the application that no credit was taken for flow coastdown during a large-break LOCA. It was also stated that for a small-break LOCA, the impact is not significant. Is this statement based on actual small-break LOCA calculation for 3-loop operation?**
- 5) Do the normal operating conditions for 3-loop operation always occur outside the unstable region of the power/flow map?**
- 6) Has GE performed the analysis for 3-loop operation of OCNGS, or was it done by the licensee in-house?**