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Docket No. 50-219 LS05-81-03-060

MAR 2 6 1981

Mr. I. R. Finfrock, Jr. Vice President Jersey Central Power & Light Company Oyster Creek Nuclear Generating Station Post Office Box 388 Forked River, NJ 08731

Dear Mr. Finfrock:

We are continuing our review of the scram and "spurious" triple low level that occurred on July 17, 1980 at the Oyster Creek Nuclear Generating Station and have found that additional information described in the enclosure to this letter is needed. In a telephone conversation on March 10, 1981, Mr. James Knubel of your staff indicated that General Public Utilities Nuclear Group (GPUNG) is preparing a report on this event which will be provided to the NRC when it is completed in about one month. It was indicated that most of the information requested in the enclosure could be included in the report that GPUNG is preparing. For those items that will not be addressed in the report, please provide a response within 30 days of the receipt of this letter.

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OFFICIAL RECORD

Sincerely,

Original Signed by

Dennis M. Crutchfield, Chief Operating Reactors Branch #5 Division of Licensing

Enclosure: As stated

cc w/enclosure: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D.C. 20555

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Enclosure: As stated

cc w/enclosure: See next page

Mr. I. R. Finfrock, Jr.

CC

G. F. Trowbridge, Esquire Shaw, Pittman, Potts and Trowbridge 1800 M Street, N. W. Washington, D. C. 20036

GPU Service Corporation ATTN: Mr. E. G. Wallace Licensing Manager 260 Cherry Hill Road Parsippany, New Jersey 07054

Natural Resources Defense Council 917 15th Street, N. W. Washington, D. C. 20006

Steven P. Russo, Esquire 248 Washington Street P. O. Box 1060 Toms River, New Jersey 08753

Joseph W. Ferraro, Jr., Esquire Deputy Attorney General State of New Jersey Department of Law and Public Safety 1100 Raymond Boulevard Newark, New Jersey 07012

Ocean County Library Brick Township Branch 401 Chambers Bridge Road Brick Town, New Jersey 08723

Mayor Lacey Township P. O. Box 475 Forked River, New Jersey 08731

Commissioner Department of Public Utilities State of New Jersey 101 Commerce Street Newark, New Jersey 07102 Gene Fisher Bureau Chief Bureau of Radiation Protection 380 Scotts Road. Trenton, New Jersey 38628 Commissioner New Jersey Department of Energy 101 Commerce Street Newark, New Jersey 07102 Plant Superintendent Oyster Creek Nuclear Generating Station P. O. Box 388 Forked River, New Jersey 08731 Resident Inspector c/o U. S. NRC P. O. Box 445 Forked River, New Jersey 08731 Director, Criteria and Standards Division Office of Radiation Programs (ANR-460) U. S. Environmental Protection Agency Washington, D. C. 20460 U. S. Environmertal Protection Agency Region II Office ATTN: EIS COORE, INATOR 26 Federal Plaza New York, New Yc'k 10007

QUESTIONS CONCERNING THE 7-17-20 TRIPLE LOW EVENT AT OYSTER CREEK

- Do the Recirculation Pumps have vibration trip or alarm, which may indicate pump cavitation? What do the procedures tell the operator to do? How long does he have to do required action?
- Did the Recirculation Pumps show decreased amperage when recirculation flow decreased?
- 3. Provide the feedwater flow data during the event.
- 4. Do the continuing triple alarm/indications, recirculation loop saturation condition, and apparent pump cavitation indicate basic system instability? (Between annular and core regions?) i.e., do small pertubations in the annular region cause large level swings in the core region?
- 5. Could there have been a core-annular region disconnect when recirculation flow went to zero or cavitated? If so, how long before a manual action is necessary? How is this addressed in the emergency procedures?
- 6. What do procedures tell operator for appropriate action when recirculation flow goes to zero?
- 7. Explain why Oyster Creek has had spurious triple low signals. What improvement in design or operation can be made to eliminate spurious triple low alarms?
- 8. What does the operator do if he gets a triple low alarm? Is this addressed in the emergency procedures?
- 9. What caused the recirculation flow to go to zero? Was it instrument error due to two phase mixture in instrument lines or sensing elements, or was it cavitation in the recirculation pump?
- 10. Why does the temperature increase while the pressure is decreasing during the event? Is this a connection with the feedwater flow?
- 11. What effect does operation of the recirculation pumps have on level measurement?
- 12. Provide the data from the event recorder that is used to analyze the significant events during the July 17, 1980 transient. In particular, supply the data that is used to calculate the core quality change and density change with reduced recirculation flow. Provide the data to show the natural circulation driving head in the recirculation loops during periods of minimum pump flow.

- 13. Provide assurance that the core does not 40 into film boiling during periods of minimum or degraded recirculation flow.
- 14. Provide analyses to show that a density change occurs fast enough to perturbate a 0.5 second triple low level blip on the event recorder.
- 15. Indicate whether your procedures instruct the operator to keep RBCCW available when it is beneficial for transient mitigation, if it automatically isolates during an event.