UNITED STATES NUCLEAR REGULATORY COMMISSION

GPU NUCLEAR CORPORATION

AND

JERSEY CENTRAL POWER AND LIGHT COMPANY

DOCKET NO. 50-219

ENVIRONMENTAL ASSESSMENT AND

FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC or the Commission) is considering issuance of an amendment to Provisional Operating License No. DPR-16 issued to GPU Nuclear Corporation, et. al. (the licensee), for operation of the Oyster Creek Nuclear Generating Station, located in Ocean County, New Jersey.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action

The proposed amendment would revise the Technical Specifications to delete Technical Specification Safety Limit 2.1.E which requires at least two recirculation loops to be fully open except when the reactor vessel head is off and vessel water level is above the main steam nozzle. This proposed amendment would also incorporate this limitation in Technical Specification 3.3.F and that limitation would be revised to require that at least one recirculation loop instead of two be fully open during applicable plant conditions. In addition the proposed change would also require that during power operations if at least four recirculation loops cannot be maintained in service, then hot shutdown or refuel conditions must be reached in 12 hours. Presently the requirement is that the unit be placed in cold shutdown conditions within 24 hours.

The proposed amendment is in accordance with GPU Nuclear Corporation's application dated March 31, 1988, as supplemented November 15, 1988 and August 23, 1989.

The Need for the Proposed Action:

The proposed changes to the Technical Specifications are needed so that requirements for recirculation loop operation are consistent with the safety limit and limiting condition for operation definitions in 10 CFR 50.36, are appropriate for different plant conditions and reflect the results of analysis performed.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revisions to Technical Specifications. The proposed revision reclassifies the requirement for unisolated recirculation loops from a safety limit to a Limiting Condition of Operation (LCO). Reducing the requirement from two unisolated loops to one unisolated loop during applicable plant conditions has been analyzed. Hydraulic analysis of the recirculation loops shows adequate hydraulic communication between the annulus and core regions. For this bounding anticipated operational occurrence water level indication is representative of the water level in the core with one unisolated recirculation loop. The primary concern regarding recirculation loop isolation is to maintain adequate hydraulic communication between the annulus and core regions. When conditions permit the reactor to be flooded to a water level above 185 inches Top of Active Fuel (TAF) or when the steam separator and dryer are removed both regions are in hydraulic communication above the core and level readings are indicative of core region level, therefore, there is no need to keep recirculation loops unisolated. The proposed changes to specifications 3.3.F.1 and 3.3.F.2 are

editorial and do not change these requirements. The proposed change to specification 3.3.F.3 ensures that the reactor is placed in a condition (i.e., power operation terminated and reactor subcritical) which does not necessitate operation of at least four recirculation loops.

Based on the above, the staff has determined that the proposed Technical Specifications do not alter any initial conditions assumed for the design basis accidents previously evaluated nor do they change operation of safety systems utilized to mitigate them. Therefore, the proposed changes (1) do not involve a significant increase in the probability or consequences of any accident previously evaluated, (2) do not create the possibility of a new or different kind of accident from any accident previously evaluated and (3) do not involve a significant reduction in the margin of safety.

Therefore, the proposed changes do not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that these proposed actions would result in no significant radiological environmental impact.

With regard to potential non-radiological impacts, the proposed changes to the Technical Specifications involve the reactor coolant system which is located within the restricted area as defined in 10 CFR Part 20. They do not affect non-radiological plant effluents and have no other environmental impacts. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Prior Hearing in connection with this action was published in the FEDERAL REGISTER on May 3, 1988 (53 FR 15756). No request for hearing or petition for leave to intervene was filed following this notice.

Alternatives to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed actions, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and the requirements for recirculation loop operation would not be consistent with the safety limit and limiting condition for operation definitions in 10 CFR 50.36.

Alternative Use of Resources:

The action would involve no use of resources not previously considered in the Final Environmental Statement (FES) for the Oyster Creek Nuclear Generating Station.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING NO SIGNIFICANT IMPACT

The staff has determined not to prepare an environmental impact statement for the proposed amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed actions will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated March 31, 1988, as supplemented November 15, 1988 and August 23, 1989 which is available for public inspection in the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C., and the Ocean County Library, Reference Department, 101 Washington Street, Toms River, New Jersey 08753

Dated at Rockville, Maryland, this December 21st, 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation