

UNITED STATES NUCLEAR REGULATORY COMMISSIONGPU NUCLEAR CORPORATION AND  
JERSEY CENTRAL POWER AND LIGHT COMPANYDOCKET NO. 50-219NOTICE OF ENVIRONMENTAL ASSESSMENT AND FINDING OF  
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of a schedular exemption from the requirements of 10 CFR 50.44(c)(3)(iii) to GPU Nuclear Corporation and Jersey Central Power and Light Company (the licensees) for the Oyster Creek Nuclear Generating Station located in Ocean County, New Jersey.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: The exemption would grant the licensees a schedular deferment from the requirements to provide isolation condenser high point vents during the current Cycle 10 refueling outage to the Cycle 11 refueling outage. The proposed schedular exemption is in accordance with the licensees' request for exemption dated August 2, 1982.

The Need for the Proposed Action: 10 CFR 50.44(c)(3)(iii) requires a licensee authorized to operate a nuclear power reactor to provide improved operational capability to maintain adequate core cooling following an accident by the end of the first scheduled outage beginning after July 1, 1982 of sufficient duration to permit required modifications. Each light-water reactor shall be provided with high point vents for the reactor coolant system, reactor vessel head, and for other systems required to maintain adequate core cooling if the accumulation of noncondensable gases would cause the loss of function of these systems.

- 2 -

The licensees' letter of August 2, 1982 as supplemented December 15, 1982 March 27, and May 8, 1984 requested a schedular exemption for the installation of high point vents on the isolation condenser. The licensees' requested that the vents be installed during the Cycle 11 refueling (1985) outage, stating that the plant's overall margin of safety would not be reduced by this deferral.

Even though the current outage has been extended, the licensee does not have the capability to install new isolation condenser vents within the currently projected outage schedule. Portions of the engineering remain to be completed and additional equipment, including Class IE electrical switches, remain to be procured. The licensees plan to resume the engineering and procurement activities on a schedule consistent with installation of this modification during the Cycle 11 refueling outage.

In addition, the level of modification work associated with the current outage does not permit significant additional work to be added to the outage work scope without delaying restart of the plant. It should be noted that the extension of the present outage has been caused by additional work scope which was developed during the outage and thus does not represent an opportunity to add still more work. Some of the additional work scope was in response to NRC requirements, such as post-accident sampling and masonry block wall modifications which GPUN had earlier proposed to defer.

Environmental Impacts of the Proposed Action: The proposed exemption would provide schedular relief for the installation of isolation condenser high point vents. In the present configuration, Oyster Creek has the capability to vent the isolation condensers to the main steam header

- 3 -

downstream of the main isolation valves. This is done to prevent the accumulation of noncondensable gases during startup and normal plant operation. An accumulation could result in a blockage such that steam from the reactor coolant system will not be able to pass through the isolation condenser. However, in an accident situation this vent path is isolated. Therefore, the concern is that in a situation where sufficient noncondensibles are produced, the isolation condensers may become unavailable for achieving pressure reduction. To produce this amount of noncondensibles, the core would have to be degraded beyond what is calculated for the design basis events.

In order to degrade the core, water level would have to be lost. Recent studies have shown that significant hydrogen generation will not begin until the two phase level has dropped so as to uncover at least half the core. Along the way, all ECCS setpoints would have been passed and emergency procedures would be in force. The importance of this is that:

- o The isolation condensers will be functional from the point of their initiation (low-low level-7'2" above the top of the active fuel) to the point where half the core is uncovered.
- o The Automatic Depressurization System (ADS) will automatically open the five safety-related emergency relief valves (ERV) on low-low-low level (4'8" above the top of the active fuel) as long as other coincident signals are present. This is to ensure depressurization of the RCS.
- o By procedure, the operators are instructed to manually open the ERVs from the control room if level has dropped to the top of the active fuel and if they are not already open.

- 4 -

In the case of a large break LOCA, where level will be lost very quickly, depressurization is not a concern since it is the event itself that depressurizes the vessel. Thus, there are methods, other than using the isolation condensers, available to achieve depressurization prior to, and in the event of core degradation, that do not affect the risk of facility accidents. Therefore, the Commission concludes that there are no significant radiological or non-radiological environmental impacts associated with the proposed exemption. Since we have concluded that there is no measureable environmental impact associated with the proposed exemption, any alternative will either have no environmental impact or greater environmental impact. The principal alternative to the schedular exemption would be to require literal compliance with 10 CFR 50.44(c)(3)(iii). Such an action would not enhance the protection of the environment and would result in extending the current refueling/maintenance outage.

Alternative Use of Resources: The proposed exemption involves no use of resources not previously considered in the Oyster Creek Final Environmental Statement dated December 1974.

Agencies and Person Consulted: The NRC staff has reviewed the licensee's request as discussed above. The NRC staff did not consult any other agencies or persons.

#### FINDINGS OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemption.

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




- 5 -

For further details with respect to this action, see the request for exemption dated August 2, 1982 and supplemental submittals dated March 27, and May 8, 1984, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555, and at the Oyster Creek Local Public Document Room, 101 Washington Street, Toms River, New Jersey 08753.

Dated at Bethesda, Maryland, this 2 day of August 1984.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation