



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 143

TO PROVISIONAL OPERATING LICENSE NO. DPR-16

GPU NUCLEAR CORPORATION AND  
JERSEY CENTRAL POWER & LIGHT COMPANY

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

INTRODUCTION

By letter dated September 21, 1990, GPU Nuclear Corporation (licensee) submitted an application for a license amendment to Provisional Operating License No. DPR-16, Condition 2.C.(7) to accommodate implementation of a 21 month operating cycle with a 3 month outage, or a 24 month plant refueling cycle for core spray spargers surveillance intervals. The current surveillance intervals will expire prior to the currently scheduled 13R refueling outage (1st quarter 1991). The remainder of the September 21, 1990 application will be acted upon at a later date.

DISCUSSION

The licensee's request dated September 21, 1990, "Inspection of Core Spray Sparger" has been reviewed by the staff and it has found that License Condition 2.C.(7) currently requires that inspections of all accessible surfaces and welds of both core spray spargers and repair assemblies be performed at each refueling outage, which is presently defined as an interval not to exceed 20 months. The proposed change will extend inspections of all accessible surfaces and welds of both core spray spargers and repair assemblies from each refueling outage to at least once per 24 months.

During the Oyster Creek Nuclear Generating Station (OCNGS) 1978 refueling outage inservice inspection of the reactor internals, the licensee identified a crack in the upper sparger at azimuth 208 degrees. Although evaluations indicated that the cracked sparger was adequate for continued operation, an additional mechanical support was installed. During the 1980 refueling outage the mechanical support was inspected and the licensee found it remained as installed in 1978. Furthermore, during the 1980 refueling outage, inspection of the remaining spargers and annulus piping identified 21 visual and 16 ultrasonic indications. To repair the spargers the licensee added seven clamp assemblies (similar to the 1978 mechanical supports) to the upper sparger and

two clamp assemblies to the lower sparger. The core spray spargers and annulus piping were inspected during refueling outages in 1983, 1986, and 1988 and no new cracks in the core spray spargers were identified.

The licensee stated that the proposed change of the refueling outage interval from 20 months to 24 months will have no effect on the assurance of structural integrity of the core spargers and annulus piping since the results of the 1983, 1986, and 1988 inspections confirm that the propagation of existing cracks and the initiation of new cracks has been alleviated by the installation of the mechanical support and clamp assemblies. Thus, the licensee concluded that the proposed change has no effect on the safety function of the core spray spargers.

Based on the licensee's operating and inspection experience, and inspection results during 1983, 1986, and 1988, the staff finds that the License Condition 2.C.(7) change as discussed above is acceptable. The staff also concludes that the proposed change will not effect the safety functions of the core spray spargers and repair assemblies at the Oyster Creek Nuclear Generating Station.

#### ENVIRONMENTAL CONSIDERATIONS

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register on December 26, 1990 (55 FR 53087). Accordingly, based upon the environmental assessment, we have determined that the issuance of the amendment will not have a significant effect on the quality of the human environment.

#### CONCLUSION

The staff has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security nor to the health and safety of the public.

Dated: December 27, 1990

Principal Contributor: T. McLellan