

Indian Point 3  
Nuclear Power Plant  
P.O. Box 215  
Buchanan, New York 10511  
914 739.8200



January 30, 1987  
WAJ-87-007Z  
MPC-87-010B

Docket No. 50-286  
License No. DPR-64

Director of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Mr. Steven A. Varga, Director  
PWR Project Directorate No. 3  
Division of PWR Licensing - A

Subject: Indian Point 3 Nuclear Power Plant  
Relief Request for ASME Boiler  
and Pressure Vessel Code Requirements  
Regarding Component Cooling Water  
Heat Exchanger No. 31

Pursuant to the provisions of 10CFR50.55a(a)(3), the New York Power Authority hereby requests relief from the provisions of Section XI of the ASME Boiler and Pressure Vessel Code with respect to the repair of a Component Cooling Water heat exchanger at Indian Point No. 3.

Specifically, on January 28, 1987, a small leak was identified on the outlet water box of Component Cooling Water heat exchanger No. 31. The outlet water box contains Service Water which flows through the tube side of the heat exchanger and cools the Component Cooling Water System. The water box is cylindrical, extends 25 inches above the heat exchanger tube sheet, and is approximately 47 inches in diameter. The leak is a small, 3/8 inch diameter localized hole in the outlet water box. The Service Water temperature and pressure at this point in the system are less than 100°F and 50 psi, respectively.

Repairs in accordance with the ASME Code cannot be made within the time constraints of the Technical Specification limiting conditions for operation governing this component and would require a plant shutdown. As such, a temporary means to terminate the leakage has been installed until such time as a Code acceptable repair can be made. The temporary repair consists of an

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elastomer placed over the hole backed by a metal plate. The patch is approximately 7 inches by 9 inches. This patch is held in place with straps surrounding the heat exchanger circumferentially. The temporary repair is capable of accomodating the design pressure of the Service Water in the water box as confirmed by calculations. A permanent repair will be accomplished at the next refueling outage scheduled to commence in May, 1987. The heat exchanger has been determined operable with respect to the Technical Specifications.

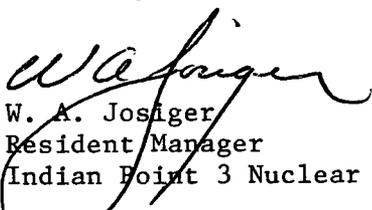
Ultrasonic inspections in the area of the leak have confirmed that the hole is localized. Additional ultrasonic examinations of the water box have not identified any other areas of localized wall thinning. All inspection results exceed the Code required minimum wall thickness. It is postulated that the leak is the result of very localized corrosion of the heat exchanger water box which occurred at a discontinuity in the corrosion inhibitor applied on the inside surface of the water box. The inhibitor was applied during the 1985 refueling outage following the removal of sacrificial anodes in the cathodic protection system.

The leak is not considered to present a safety concern with respect to a potential for loss of integrity of the heat exchanger or water box. It is of an operational concern since the leakage must be processed through the Radioactive Waste Treatment System in the Primary Auxiliary Building.

Based on the localized nature of the heat exchanger wall thinning, the operational nature of the leakage, the brief length of time the plant will operate with the temporary leak repair, and the fact that a shutdown is required to effect a Code repair, the Authority considers the requirements of the ASME Code Section XI to represent an undue hardship and unusual difficulty without a compensating increase in quality and safety.

If you have any questions regarding this matter, please call Mr. M. P. Cass of my staff.

Sincerely,

  
W. A. Josiger  
Resident Manager  
Indian Point 3 Nuclear Power Plant

WAL:MPC:lg

cc: Resident Inspector's Office  
Indian Point Unit 3  
U. S. Nuclear Regulatory Commission  
Buchanan, NY 10511

Mr. J. D. Neighbors, Sr. Project Manager  
PWR Project Directorate No. 3  
Division of PWR Licensing - A  
U. S. Nuclear Regulatory Commission  
7920 Norfolk Avenue  
Bethesda, MD 20014