

POWER AUTHORITY OF THE STATE OF NEW YORK  
INDIAN POINT NO. 3 NUCLEAR POWER PLANT

P. O. BOX 215 BUCHANAN, N. Y. 10511

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August 23, 1979  
IP-WDH-5509

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

Boyce H. Grier, Director  
Office of Inspection and Enforcement  
Region I  
U. S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

This letter addresses Action Item 1, contained in I.E. Bulletin 79-17, which we received on July 31, 1979.

A review of safety related stainless steel piping systems has been conducted to identify systems and portions of systems which contain stagnant oxygenated borated water. These systems or portions thereof include the following:

1. Safety injection accumulator discharge piping.
2. High head safety injection system piping.
3. Containment spray system piping.
4. Residual heat removal system piping.
5. Safety injection pump suction piping from the residual heat removal system heat exchangers.
6. Containment recirculation spray header piping and low head safety injection piping from the discharge of the containment recirculation pumps.
7. Boron injection system excluding the boron injection tank and recirculation piping.
8. Spent Fuel Pool Cooling System.

Preservice inspection was performed on Class I components and piping systems from the period beginning October 1974 and ending November 1975. During this period the inspection was performed in accordance with ASME Section XI dated January 1970 by personnel meeting the qualification requirements of recommended practice No. SNT-TC-1A, 1968. Inspection procedures were standard inservice inspection procedures developed and approved by Westinghouse Electric Corporation, Water Reactor Division - Inspection Service Department. This inspection included an ultrasonic and visual examination of all butt welds and a liquid penetrant and visual examination of all socket welds within the Class I boundaries as required by Section XI of the ASME Code. Acceptance criteria used was ASME Section III for components and ANSI B31.7 for piping.

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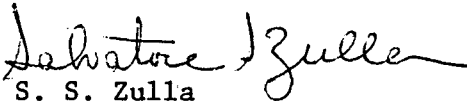
Inservice inspection was performed on Class I components and piping systems at Indian Point 3 from 6/16/78 to 8/14/78 in accordance with the requirements of ASME Section XI, January, 1970 edition. Standard Westinghouse inservice inspection procedures were used by Westinghouse personnel to perform the inspections. Items inspected during this period included all those required to satisfy the requirements of Section XI of the ASME Code for the first 3-1/3 year period. During this inspection, butt welds were inspected using ultrasonic and visual examination methods and socket welds were inspected using liquid penetrant and visual examination methods. A hydrostatic leak test was also performed on the reactor coolant system up to the first isolation valve off the reactor coolant system on August 14, 1978 in accordance with Section XI of the 1970 ASME Code. No weld or piping repairs were required as a result of the inservice inspection. This information is reported in detail in the inservice inspection report dated September, 1978, performed by Westinghouse Electric Corporation and previously transmitted to you. In addition, representative sample welds in portions of the containment spray system were volumetrically examined during the 1977 November turbine outage. This examination yielded no indications of pipe degradation. These results were previously reported to you on January 13, 1978.

Since initial plant operation, strict chemical control has been maintained over the source of supply for the safety related piping systems which contain stagnant oxygenated borated water. The following chemistry sampling program is in effect at Indian Point 3 with the following typical maximum chemical concentrations:

1. Boric Acid Storage Tank - Sampled twice a week for B (13%),  $\text{Cl}^-$  (<1 PPM) and  $\text{F}^-$  (<1 PPB) Concentration.
2. Refueling Water Storage Tank - Sampled monthly for B (2100 PPM),  $\text{Cl}^-$  (<50 PPB) and  $\text{F}^-$  (<50 PPB) Concentration.
3. Primary Water Storage Tank - Sampled monthly for B (<300 PPM),  $\text{Cl}^-$  (<50 PPB),  $\text{F}^-$  (<50 PPB) and  $\text{O}_2$  (<6 PPM).
4. Safety Injection Accumulators - Sampled monthly for B (2100 PPM) Concentration.
5. Reactor Coolant System - Sampled daily for B (2000 PPM),  $\text{Cl}^-$  (<50 PPB),  $\text{F}^-$  (<50 PPB) and  $\text{O}_2$  (<5 PPB) Concentration.
6. Spent Fuel Pool - Sampled daily for B (2100 PPM),  $\text{Cl}^-$  (<50 PPB) and  $\text{F}^-$  (<50 PPB).

The portion of the containment spray system in the vicinity of the containment spray pumps receives a flush on a regular basis during the monthly containment spray pump surveillance test. A major portion of the high head safety injection piping (including a portion inside the containment building) receives a flush on a monthly basis during the safety injection pump surveillance test. The residual heat removal system from the discharge of the residual heat removal pumps through the heat exchanger and back to the pump suction is flushed on a regular basis during the residual heat removal pump monthly surveillance test. The spent fuel pool cooling system has been recirculating borated water intermittently since the filling of the spent fuel pool with water in May, 1978.

Very truly yours,

  
S. S. Zulla  
Acting Resident Manager

WDH/rbb

cc: Director, Division of Operating Reactors  
Office of Inspection and Enforcement  
Nuclear Regulatory Commission  
Washington, D. C. 20555