# NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

# INSERVICE INSPECTION PROGRAM SECOND TEN-YEAR INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

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## INTRODUCTION AND BACKGROUND

#### INTRODUCTION

The Indian Point Unit No. 3 Nuclear Power Plant's Weld and Support Inservice Inspection (ISI) Plan is prepared for the Second Ten-Year Inspection Interval from August 30, 1986 thru August 30, 1996.

The Weld and Support ISI Plan encompasses the Indian Point Unit No. 3 ISI Class 1, 2, 3 and Augmented Inspections for Components, Piping and Supports which are idenified by the System Boundaries (Table 3.0). This ISI plan is developed by giving due consideration to the following documents and applicable relief requests (Table 4.0).

- 1.0 Code of Federal Regulations 10CFR50.55A
- 2.0 ASME Boiler and Pressure Vessel Code Section V-1983 Edition thru Summer 1983 Addenda.
- 3.0 ASME Boiler and Pressure Vessel Code Section XI 1983 Edition thru Summer 1983 Addenda.
- 4.0 ASME Boiler and Pressure Vessel Code Section XI 1974 Edition thru Summer 1975 Addenda.
- 5.0 United States Nuclear Regulatory Commission Regulatory Guides
  - 5.1 Regulatory Guide 1.14 Rev. 1
  - 5.2 Regulatory Guide 1.16 Rev. 4
  - 5.3 Regulatory Guide 1.26 Rev. 2 Draft
  - 5.4 Regulatory Guide 1.83 Rev. 1
  - 5.5 Regulatory Guide 1.147 Rev. 3
  - 5.6 Regulatory Guide 1.150 Rev. 1
- 6.0 Indian Point Unit No. 3 FSAR
- 7.0 Indian Point Unit No. 3 Technical Specification
- 8.0 Indian Point Unit No. 3 Preservice Inspection Plan
- 9.0 Indian Point Unit No. 3 1st Ten-Year Inservice Inspection Plan

This plan outlines the ISI requirements for the Indian Point Unit No. 3 Second Ten-Year Interval which started August 30, 1986 and ends August 30, 1996. This interval will be divided into three periods of three years, four years and three years for the first, second and third periods respectively. The ISI Class 1, Class 2 and Class 3 Components, Piping and their Supports will meet the standards in the ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda...except for applicable Relief Requests.

Due to United States Regulatory Commission Implementation, Optional Owner Upgrades, Plant Modidifications, reverification of existing components, piping and supports, this Inservice Inspection Program is subject to change. Changes will be effected by Relief Requests or document revisions. The Indian Point Unit No. 3 Inservice Inspection Program will be updated as required to reflect changes as previously noted.

In certain cases, strict compliance with ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda has been determined to be impractical for Indian Point Unit No. 3. It is stated in 10 CFR50.55 a(g) (iii) that:

"If the licensee has determined that conformance with certain code requirements is impractical for his facility, the licensee shall notify the Commission and submit information to support his determinations.

Relief from the examination requirements of ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda for ISI Class 1, Class 2 and Class 3 components, piping and supports at Indian Point Unit No. 3 are discussed and referenced in Tables 3 and 4. Relief from the examination requirements is requested based upon the justification and alternative examination methods provided.

The Inservice Inspection Program has been developed from an engineering review of the systems, components and supports at Indian Point Unit No. 3. A provision in 10 CFR 50.55 a(g) allows for taking exception to examination of components in the event that unforseen difficulties are encountered. When an examination is determined to be impractical during the process of performing inspections or test, the exception will be identified in the Inservice Inspection Outage Report and relief will be requested by revision to the Inservice Inspection Program.

The following items that are to be examined under ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda and are not included in this plan will be controlled and covered under the Indian Point Unit No. 3 Technical Specifications.

- 1.0 Steam Generator Tubing IWB-2500-1 Category B-Q Item No. B16.20 are to be examined by eddy current in accordance with the requirements of Technical Specification 4.9 per Section XI-Subarticle IWB-2413.
- 2.0 System leakage and Hydrostatic Pressure Tests are scheduled and controlled under specific Indian Point Unit No. 3 procedures. Reports of test results will be included in each Inservice Inspection Summary Report.
- 3.0 Performance Testing of Snubbers will be scheduled and controlled under specific Indian Point Unit No. 3 procedures and technical specifications.

- 4.0 Inservice Testing of Component Supports IWF-2500-1-VT4 Paragraph B examinations will be scheduled and controlled under specific Indian Point Unit No. 3 procedures.
- 5.0 Inservice Testing of Pumps and Valves Subsections IWP and IWV will be scheduled and controlled under specific Indian Point Unit No. 3 Pump and Valve Testing Program.
- 6.0 Repairs, modifications, replacements and alterations to pressure retaining components will be made in accordance with ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda Subsections IWA-4000, IWB-4000, IWC-4000, IWD-4000, IWF-4000, IWA-7000, IWB-7000, IWC-7000, IWD-7000, and IWF-7000, as applicable.

#### BACKGROUND

The Preservice Inspection (completed 1976) and First 3 1/3 year Inservice Inspection Period (August 1976 thru December 1979) were conducted in accordance with ASME Boiler and Pressure Vessel Code Section XI-January 1970 and to the requirements of Indian Point Unit No. 3 Technical Specification 4.2.1.

The Second and Third periods of the 1st Ten-year Inservice inspection Plan (January 1980 thru August 1987) were conducted in accordance with ASME Boiler and Pressure Vessel Code Section XI-1974 Edition thru Summer 1975 Addenda.

#### CALIBRATION BLOCKS

Calibration blocks for the Second Ten-Year Inservice Inspection Program will be those used during the 1st Ten-Year Interval - 2nd and 3rd Periods.

Existing calibration blocks used during the 1st Ten-Year Interval - 2nd and 3rd periods were reviewed by Westinghouse NSID in August 1987 to compare to those recommended by ASME Boiler and Pressure Vessel Code Section V and XI-1983 Edition thru Summer 1983 Addenda. Calibration blocks that deviated from the intent of Section V and XI-1983 Edition thru Summer 1983 Addenda were recommended to be replaced by Indian Point No. 3. Additional calibration blocks will be supplied as required.

Reference Westinghouse Nuclear Services Integration Division -- Inspection Services Report: Indian Point Unit No. 3 Calibration Blocks for Inservice Examination -- August 1987.

#### ADMINISTRATIVE CONTROL

- 1.0 The Indian Point Unit No. 3 Inservice Inspection Program 2nd Ten Year Interval August 30, 1986 thru August 30, 1996 as required by ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda as required for ISI Class 1, 2 and 3 Components, Piping and Supports has been prepared and reviewed by:
  - 1.1 New York Power Authority
  - 1.2 Westinghouse Nuclear Services Division Inspection Services
- 2.0 The status of this 2nd Ten Year Inspection Program is to be maintained in a current condition. This program shall be revised, if required, following the performance of each on-site examinations to reflect any changes to scope, methods or procedures found necessary.
- 3.0 New York Power Authority shall be responsible for advising Westinghouse NSID Inspection Service of any changes to the plant installed condition due to maintenance, repair or replacement or of any changes in program scope or applicability due to changes in commitments to USNRC Regulatory Guide requirements.
- 4.0 New York Power Authority shall be responsible for supplying the Authorized Inspection Agency for all ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda examinations.
- 5.0 Westinghouse NSID Inspection Services as subcontractor to New York Power Authority shall be responsible for maintaining the original copy of the program plan for the 2nd Ten-Year Interval in a current condition and ensuring that all copies of all revisions are sent to New York Power Authority representative for insertion in the controlled copies.
- 6.0 All items to be examined during a given period are to be scheduled for completion by the end of the applicable period. A summary Inservice Inspection report as required by ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda IWA-6000 for ISI Class 1, 2 and 3 components, piping and their supports shall be filed within 90 days after completion of the Inservice Inspection, with the Enforcement and Regulatory Authority having jurisdiction at the plant. The summary Inservice Inspection Report will be prepared jointly by Westinghouse Nuclear Service Integration Division and New York Power Authority and reviewed by New York Power Authority and their Authorized Inspection Agency for final acceptance.

#### SYSTEM BOUNDARIES

- 1.0 Inservice Inspection for the 2nd Interval of ISI Class 1, 2 and 3 Components, Piping and Supports for Indian Point Unit No. 3 are required to meet the standards in ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda with the exception of Table IWB-2500-1 Category B-J and Table IWC-2500-1 Category C-F, which will meet the selection criteria identified in ASME Boiler and Pressure Vessel Code Section XI-1974 Edition thru Summer 1975 Addenda.
  - 1.1 Class 1 Components and Piping have been scheduled for examination in accordance with the Inspection Program outlined in Paragraphs IWB-2412 (Inspection Program B), IWB-2420 and IWB-2430. Table 4.0 presents the summary of these examinations for the Second Ten-Year Interval.
  - 1.2 Class 2 Components and Piping have been scheduled for examination in accordance with the Inspection Program outlined in Paragraphs IWC-2412 (Inspection Program B), IWC-2420 and IWC-2430. Table 4.0 presents the summary of these examinations for the Second Ten-Year Interval.
  - 1.3 Class 3 Components and Piping have been scheduled for examination in accordance with the Inspection Program outlined in IWD-2400. Table 4.0 presents the summary of these examinations for the Second Ten-Year Interval.
  - 1.4 Class 1, 2 and 3 Component Supports have been scheduled for examination in accordance with the Inspection Program outlined in IWF-2400. Table 4.0 presents the summary of these examinations for the Second Ten-Year Interval.
- 2.0 Inservice Inspection of ISI Class 1, 2 and 3 System Boundaries for Indian Point Unit No. 3 - 2nd Ten Year Interval are identified on the following Drawings.

<u>System</u> New	York Power Authority Drawing No.
Reactor Coolant System Sheet No. 1 Reactor Coolant System Sheet No. 2 Auxiliary Coolant System Sheet No. 1 Auxiliary Coolant System Sheet No. 2 Safety Injection System Sheet No. 1 Safety Injection System Sheet No. 2 Chemical & Volume Control System Sheet No. 1 Main Steam Steam Generator Blowdown System Boiler Feedwater Sampling System	ISI-27383 ISI-27473 ISI-27203 ISI-27513 ISI-27353 ISI-27503

System	New	York	Power Authority Drawing No.
Isolation Valve Seal Water System			ISI-27463
Service Water System Nuclear Steam Suppl	y P1	ant	ISI-27223
Condensate & Boiler Feed Pump Suction			ISI-20183
Waste Disposal System Sheet No. 1			ISI-27193
Auxiliary Steam Supply and Condensate Re System	turr	1	ISI-40573
Primary Make-Up Water System Nuclear Ste Supply Plant	am		ISI-27243
Instrument Air			ISI-20363
Station Air			ISI-20353
Hydrogen Recombiner System			ISI-27533
Nitrogen to Nuclear Equipment			ISI-27233
Penetration and Liner Weld Joint Channel Pressurization System			ISI-27263
Post Accident Containment Sampling Syste	m		ISI-26533
Post Accident Containment Venting System			ISI-40793

# CLASS 1 COMPONENTS AND PIPING

3.0 Class 1 Components and Piping, with the exception of Category B-J components and piping, have been scheduled in accordance with the regular Inspection Program outlined in ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda, Paragraphs IWB-2412, IWB-2420 and IWB-2430. Because the application for a construction permit for the Indian Point Unit No. 3 Nuclear Power Plant was ". . . docketed prior to July 1, 1978, the extent of examination for Code Class I pipe welds may be determined by the requirements of Tables IWB-2500 and IWB-2600 Category B-J of ASME Boiler and Pressure Vessel Code Section XI-1974 Edition thru Summer 1975 Addenda . . . " per 10 CFR 55a(b) (2)(ii). With the exception of items covered under Category B-J, the extent of examination for all Class 1 Components was determined by the requirements of Table IWB-2500-1 of the ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda. Table 4.0 lists and quantifies these requirements. Acceptance standards for flaw indications, repair procedures, system pressure tests and replacements are defined in Paragraphs IWB-3000, IWB-4000, IWB-5000 and IMB-7000, respectively.

Sections 4.1 and 4.2 is a listing of Class 1 components and piping to be examined and Section 4.3 is a listing of those Class 1 Components and Piping which have been exempted from examination under the provisions of ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda.

The Class 1 Components and Piping requiring examination at the Indian Point Unit No. 3 Nuclear Power Plant are:

- 3.1 Reactor Vessel
- 3.2 Pressurizer
- 3.3 Steam Generators 31, 32, 33 and 34 3.4 Piping Pressure Boundary
- 3.5 Reactor Coolant Pumps 31, 32, 33 and 34
- 3.6 Valve Pressure Boundary

Refer to Section 4.2.6 for augmented examinations to be performed at Indian Point Unit No. 3 in excess of ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda requirements.

4.0 Class 1 System Boundaries

The Systems listed below include those Class 1 Systems which have been included in the Indian Point Unit No. 3 Inservice Inspection Program.

<u>System</u>	v York Power Authority Drawing No.
Reactor Coolant System Sheet No. 1	ISI-27383
Reactor Coolant System Sheet No. 2	ISI-27473
Auxiliary Coolant System Sheet No. 1	ISI-27203
Safety Injection System Sheet No. 1	ISI-27353
Chemical and Volume Control System Sheet No	o. 1 ISI-27363
Sampling System	ISI-27453

- 4.1 Class 1 Components which require Volumetric, Surface or Visual examination are:
  - 4.1.1 Reactor Vessel
  - 4.1.2 Pressurizer
  - 4.1.3 Steam Generators 31, 32, 33 & 34
  - 4.1.4 Reactor Coolant Pumps 31, 32, 33 and 34
- 4.2 Class 1 Piping Pressure Boundary

Portions of the Piping Systems in the Reactor Coolant System, Auxiliary Coolant System, Safety Injection System, Chemical and Volume Control System and Sampling System are Class 1. Class 1 Piping Pressure Boundaries which require Volumetric, Surface or Visual examination under Category B-J are:

#### 4.2.1 Loop 31

- 4.2.1.1 Reactor Coolant Pipe 10" Accumulator Discharge Line 351 to Check 4.2.1.2 Valve 895A
- 4.2.1.3 6" RHR Line 355 to Check Valve 838A

	4.2.1.4 4.2.1.5	10" Plocap to 2" SIS Line 843 to Check Valve
	4.2.1.6	857P 3" Letdown Line 79 and 2" Drain Line 81 to
	4.2.1.7	Valves LCV460 and Valve 508B 3" RTD Return Line 775 to 2" RTD Hotleg Line
	4.2.1.8 4.2.1.9	2" & 1 1/2" SIS Coldleg Line 753 to Check
	4.2.1.10	Valve 857L 2" & 1 1/2" Seal Injection Line 41 to Check Valve 251J
1.2.2	Loop 32	
		Reactor Coolant Pipe 14" RHR Line 10 to Valve 730 10" Accumulator Discharge Line 352 to Check Valve 895B
		6" RHR Line 356 to Check Valve 838B 2" SIS Line 845 to Check Valve 857S 10" Plocap
	4.2.2.7	3" RTD Return Line 777 to 2" RTD Hotleg Line 778 and 2" RTD Coldleg Line 777
	4.2.2.8 4.2.2.9 4.2.2.10	3" Charging Line 80 to Check Valve 210A 2" and 1 1/2" SIS Line 16A to Check Valve 857K 2" & 1 1/2" Seal Injection Line 42 to Check
		Valve 251K 2" Drain Line 82 to Valve 505B
1.2.3	L∞p 33	
	4.2.3.1 4.2.3.2	
	4.2.3.3 4.2.3.4	6" RHR Line 358 to Check Valve 838C
	4.2.3.5	10" Plocap to 2" SIS Line 56 to Check Valve 857H
	4.2.3.6	3" RTD Line 788 to 2" RTD Hotleg Line 789 to 2" RTD Coldleg Line 788
	4.2.3.7 4.2.3.8	2" & 1 1/2" SIS Line 754 to Check Valve 857M 2" & 1 1/2" Seal Injection Line 43 to Check
	4.2.3.9	Valve 251L 2" Drain Line 83 to Valve 511B
1.2.4	Loop 34	
	4.2.4.1 4.2.4.2	Reactor Coolant Pipe 10" Accumulator Discharge Line 350 to Check Valve 895D
	4.2.4.3	6" RHR Line 361 to Check Valve 838D

- 4.2.4.4 2" SIS Line 846 to Check Valve 857U
- 4.2.4.5 10" Plocap
- 4.2.4.6 3" RTD Line 790 to 2" RTD Hotleg Line 791 and 2" RTD Coldleg Line 790
- 4.2.4.7 2" & 1 1/2" SIS Line 16 to Check Valve 857J
- 4.2.4.8 2" & 1 1/2" Seal Injection Line 44 to Check Valve 251M
- 4.2.4.9 2" Drain Line 84 to Valve 515B

### 4.2.5 Pressurizer

- 4.2.5.1 14" Pressurizer Surge Line 63
- 4.2.5.2 6" Pressurizer Safety Line 342 to Valve PCV 464
- 4.2.5.3 6" Pressurizer Safety Line 343 to Valve PCV 466
- 4.2.5.4 6" Pressurizer Safety Line 344 to Valve PCV 468
- 4.2.5.5 4" & 3" Pressurizer Spray Line 61 and Line 62
- 4.2.5.6 4" & 3" Pressurizer Relief Line 70 to Valves PCV 455C and PCV 456
- 4.2.5.7 2" Auxiliary Spray Line 64 to Valve 212

### 4.2.6 Augmented Examinations

- 4.2.6.1 Reactor Vessel United States Nuclear Regulatory Commission Regulatory Guide 1.150 Rev. 1
- 4.2.6.2 Reactor Coolant Pumps 31, 32, 33 & 34 United States Nuclear Regulatory Commission Regulatory Guide 1.14.

### 4.3 Class 1 Exempt Components and Piping

The following Class 1 Components and Piping or parts of components and piping for Indian Point Unit No. 3 are exempted from volumetric and surface examination by ASME Boiler and Pressure Vessel Code - Section XI - 1983 Edition thru Summer 1983 Addenda Paragraph IWB-1220 according to the following criteria:

- (a) Components that are connected to the reactor coolant system and part of the reactor coolant pressure boundary and that are of such a size and shape so that upon postulated rupture the resulting flow of coolant from the reactor coolant system under normal plant operating conditions is within the capacity of makeup systems which are operable from on-site emergency power.
- (b) (1) piping of 1 in. nominal pipe size and smaller, except for steam generator tubing
  - (2) components and their connections in piping of 1 in. nominal pipe size and smaller

(c) Reactor vessel head connections and associated piping, 2 in: nominal pipe size and smaller, made inaccessible by control rod drive penetrations

Class 1 Components and Piping and supports exempted under these guidelines will be visually examined during system leakage and hydrostatic tests as required by Table IWB-2500-1 Category B-P Item No. B15.10, B15.11, B15.20, B15.21, B15.30, B15.31, B15.50, B15.51, B15.60, B15.61, B15.70 and B15.71

- 4.3.1 Class 1 Piping and components which are exempt from volumetric and surface examinations by IWB-1220(b) are:
  - 4.3.1.1 Reactor Coolant System 3/4" Flow Temperature Lines to Valves 503, 506, 509, 513, 504A, 504B, 504C, 507A, 507B, 507C, 510A, 510B, 510C, 514A, 514B and 514C
  - 4.3.1.2 Reactor Coolant System RTD Loop 3/4" Lines to Valves 572A, 573A, 572B, 573B, 572C, 573C, 572D and 573D
  - 4.3.1.3 Reactor Coolant System RTD Temperature Element Lines to TE410A, TE410B, TE411A, TE411B, TE & TW413A, TE & TW413B, TE420A, TE420B, TE421A, TE421B, TE & TW423A, TE & TW423B, TE430A, TE430B, TE431A, TE431B, TE & TW 433A, TE & TW433B, TE440A, TE440B, TE441A, TE441B, TE & TW443A and TE & TW443B
  - 4.3.1.4 Reactor Coolant System 1" Sampling Line 59A to Valve 955A and 1" Sampling Line 59 to Valve 955B
  - 4.3.1.5 Reactor Coolant System 1" Hotleg Take-Off Lines
  - 4.3.1.6 Reactor Coolant System 3/8" Line 447 to Valve 540
  - 4.3.1.7 Reactor Coolant System 3/4" Line to Valve 512
  - 4.3.1.8 Reactor Vessel 3/4" Line 522 to Valve 657
  - 4.3.1.9 Reactor Vessel 3/4" Line 340 and Line 445 to Valves 502 and 501
  - 4.3.1.10 Excess Letdown 1" Line 97 to Valve 213B
  - 4.3.1.11 Reactor Vessel 1" Line 3031 to Valves RCS-SOV-653 and RCS-SOV-655

- 4.3.1.12 Pressurizer 3/4" Lines to Valves 527, 531, 532, 533, 534, 537, 538, 574A, 574B, 574C, RC-524, RC-525, RC593 and RC596
- 4.3.1.13 Pressurizer Sampling System 3/4" Lines 25 and 26 to Valves 951 and 953
- 4.3.1.14 Safety Injection System 3/4" Lines to Valves 110, 112, 113, 119, 120, 123, 124, 130, 139, 153, 156, 157, 159, 160 and 163
- 4.3.1.15 Safety Injection System 3/4" Line 31 to Valve 839H, Line 605 to Valve 839D, Line 606 to Valve 839F and Line 607 to Valve 839B
- 4.3.1.16 Reactor Coolant Pump 3/4" Seal By Pass to Flow Orifices Lines 75, 76, 77 & 78
- 4.3.1.17 Reactor Coolant Pump 3/4" Lines to Valves 141, 143, 144, 145, 252A, 253A, 254A, 255A, 260A, 252B, 253B, 254B, 255B, 260B, 252C, 253C, 254C, 255C, 260C, 252D, 253D, 254D, 255D and 260D.

#### CLASS 2 COMPONENTS AND PIPING

- 5.0 Class 2 Components and Piping, with the exception of Category C-F Components and Piping, have been scheduled in accordance with the regular Inspection Program outlined in ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda Paragraphs IWC-2412, IWC-2420, IWC-2430 and IWC-2500. Because the application for a construction permit for the Indian Point Unit No. 3 Nuclear Power Plant was ". . . docketed prior to July 1, 1978, the extent of examination for Code Class 2 pipe welds may be determined by the requirements of Paragraph IWC-1220, Table IWC-2520, Category C-F and C-G and Paragraph IWC-2411 in the ASME Boiler and Pressure Vessel Code Section XI-1974 Edition thru Summer 1975 Addenda . . . " per 10 CFR 50.55a(b)(iv)(B). The actual welds selected for the Second Ten-Year Interval include 100% of the welds done during the 1st Ten-Year Interval 2nd and 3rd periods plus additional welds necessary to meet the 1st period and additional welds evaluated as necessary to meet the requirements of IWC-2430. Table 4.0 lists and quantifies these requirements. Acceptance standards for flaw indications, repair procedures, system pressure tests and replacements are defined in IWC-3000 (in course of preparation, rules of IWB-3000 may be used), IWC-4000, IWC-5000 and IWC-7000. respectively.
  - Section 6.1 and 6.2 is a listing of Class 2 Components and Piping to be examined and Section 6.3 is a listing of those Class 2 Components and Piping which have been exempted from examination under the provisions of ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda.

The Class 2 Components and Piping requiring examination at the Indian Point Unit No. 3 Nuclear Power Plant are:

- 5.1 Steam Generators 31, 32, 33 & 34
- 5.2 Residual Heat Exchangers 31 & 32
- 5.3 Regenerative Heat Exchanger
- 5.4 Seal Water Heat Exchanger
- 5.5 Non-Regenerative Letdown Heat Exchanger
- 5.6 Excess Letdown Heat Exchanger
- 5.7 Volume Control Tank
- 5.8 Accumulator Tanks 31, 32, 33 & 34
- 5.9 Boron Injection Tank
- 5.10 Seal Water Injection Filters 31 & 32
- 5.11 Reactor Coolant Filter
- 5.12 Seal Water Return Filter5.13 Piping Pressure Boundary
- 5.14 Residual Heat Removal Pumps 31 & 32
- 5.15 Safety Injection Pumps 31, 32 & 33
- 5.16 Charging Pumps 31, 32 & 33
- 5.17 Valve Pressure Boundary

### 6.0 Class 2 System Boundaries

The Systems listed below include those Class 2 Systems which have been included in the Indian Point Unit No. 3 Inservice Inspection Program.

System	New	York	Power Authority Drawing No.
Reactor Coolant System Sheet No. 1		•	ISI-27383
Reactor Coolant System Sheet No. 2			ISI-27473
Auxiliary Coolant System Sheet No. 1			ISI-27203 ISI-27513
Auxiliary Coolant System Sheet No. 2 Chemical and Volume Control System Sheet	No	1	ISI-27363
Safety Injection System Sheet No. 1	110	•	ISI-27353
Safety Injection System Sheet No. 2		•	ISI-27503
Main Steam			ISI-20173
Steam Generator Blowdown System			ISI-27293
Boiler Feedwater			ISI-20193
Sampling System Isolation Valve Seal Water System			ISI-27453 ISI-27463
130 lation valve Seal Mater System			131-51403

- 6.1 Class 2 Components which require Volumetric, Surface or Visual examinations are:
  - 6.1.1 Steam Generators 31, 32, 33 and 34
  - 6.1.2 Residual Heat Exchangers 31 & 32
  - 6.1.3 Regenerative Heat Exchanger
  - 6.1.4 Seal Water Heat Exchanger
  - 6.1.5 Non-Regenerative Letdown Heat Exchanger
  - 6.1.6 Excess Letdown Heat Exchanger
  - 6.1.7 Volume Control Tank

- Accumulator Tanks 31, 32, 33 & 34 6.1.8
- 6.1.9 Boron Injection Tank
- 6.1.10 Seal Water Injection Filters 31 & 32
- 6.1.11 Reactor Coolant Filter
- 6.1.12 Seal Water Return Filter6.1.13 Residual Heat Removal Pumps 31 & 32
- 6.1.14 Safety Injection Pumps 31, 32 and 33
- 6.2 Class 2 Piping Pressure Boundary

Portions of the Piping Systems in the Reactor Coolant. Auxiliary Coolant, Safety Injection, Main Steam, Steam Generator Blowdown, Boiler Feedwater, Sampling and Isolation Valve Seal Water are Class 2. Class 2 Piping Pressure Boundaries which require Volumetric, Surface or Visual examination under Category C-F are:

- 6.2.1 Loop 31 Mainsteam: 31" and 28" Line 2 from Steam Generator to Check Valve MS2; 12" & 8" Lines to Relief Valves MS45, MS46, MS47, MS48 and MS49; 12" Line to Cap and 12" & 6" Line 1020 to Safety Relief Valve PCV1134
- 6.2.2 Loop 32 Mainsteam: 31" and 28" Line 1 from Steam Generator to Check Valve MS2; 12" & 8" Lines to Relief Valves MS45, MS46, MS47, MS48 and MS49; 12" Line to Cap and 12" and 6" Line 1018 to Safety Relief Valve PCV1135
- Loop 33 Mainsteam: 31" and 28" Line 3 from Steam 6.2.3 Generator to Check Valve MS2; 12" & 8" Lines to Relief Valves MS45, MS46, MS47, MS48 and MS49; 12" Line to Cap and 12" and 6" Line 1022 to Safety Relief Valve PCV1136
- Loop 34 Mainsteam: 31" and 28" Line 4 from Steam 6.2.4 Generator to Check Valve MS2; 12" and 8" Lines to Relief Valves MS45, MS46, MS47, MS48 and MS49; 12" Line to Cap and 12" and 6" Line 1024 to Safety Relief Valve PCV1137
- Loop 31 18" Feedwater Line 6 to Check Valve BFD6 6.2.5
- 6.2.6 Loop 32 18" Feedwater Line 5 to Check Valve BFD6
- 6.2.7 Loop 33 18" Feedwater Line 7 to Check Valve BFD6
- 6.2.8 Loop 34 18" Feedwater Line 8 to Check Valve BFD6
- 6.2.9 14" RHR Line 10, 14" RHR Line 653, 14" RHR Line 57 and 12" RHR Line 155 from RHR Pump 31 and RHR Pump 32 to Valves 882, 885B and 730

- 6.2.10 12" & 8" RHR Line 9 from RHR Heat Exchanger 31 to Valve 883; and 8" RHR Line 9 and 8" RHR Line 654 to RHR Pump 31 and RHR Pump 32 and 8" RHR Line 9 to RHR Heat Exchanger 32
- 6.2.11 10" & 8" RHR Line 293 from RHR Heat Exchanger 32 to Valve 1802A and Valve 1802B
- 6.2.12 10" Accumulator Discharge Line 351 from Accumulator Tank 31 to Check Valve 895A
- 6.2.13 10" Accumulator Discharge Line 352 from Accumulator Tank 32 to Check Valve 895B
- 6.2.14 10" Accumulator Discharge Line 353 from Accumulator Tank 33 to Check Valve 895C
- 6.2.15 10" Accumulator Discharge Line 350 from Accumulator Tank 34 to Check Valve 895D
- 6.2.16 8" RHR Line 93 from RHR Heat Exchanger 32 to Valve 889A; 8" RHR Line 94 from RHR Heat Exchanger 31 to Valve 889B and 6" RHR Line 89 from 8" RHR Line 93 and 8" RHR Line 94 to 8" RHR Line 60. 8" RHR Line 60 to Valve 888A and Valve 888B.
- 6.2.17 8" RHR Line 355 from 8" RHR Line 94 to 6" RHR Line 356 and 6" RHR Line 355 from 8" RHR Line 355 to Check Valve 838A
- 6.2.18 8" & 6" RHR Line 358 from 8" RHR Line 93 to Check Valve 838C
- 6.2.19 8" RHR Line 359 from 8" RHR Line 355 to 8" RHR Line 358
- 6.2.20 6" RHR Line 356 from 8" RHR Line 355 to Check Valve 838B
- 6.2.21 6" RHR Line 361 from 8" RHR Line 358 to Check Valve 838D
- 6.2.22 6" SIS Line 56 from 6" x 2" Reducer to 6" x 4" Reducer
- 6.2.23 6" SIS Line 550 from Boron Injection Tank to 6" x 4"
  Reducing Elbow & 6" x 6" x 4" Reducing Tee
- 6.3 Class 2 Exempt Components

The following Class 2 components and piping or parts of components and piping for Indian Point Unit No. 3 are exempted from Volumetric and Surface examination by ASME Boiler and Pressure Vessel Code-Section XI-1983 Edition thru Summer 1983 Addenda Paragraph IWC-1220 according to the following criteria:

- (A) Components of systems or portions of systems that during normal plant operating conditions are not required to operate or perform a system function but remain flooded under static conditions at a pressure of at least 80% of the pressure that the component or system will be subjected to when required to operate.
- (B) Components of systems or portions of systems other than Residual Heat Removal Systems and Emergency Core Cooling Systems that are not required to operate above a pressure of 275 psig or above a temperature of 200°F.
- (C) Component connections (including nozzles in vessels and pumps), piping and associated valves, and vessels and their attachments that are 4 in. nominal pipe size and smaller.
- 6.3.1 Although the CVC System is not considered essential to safety in accordance with General Design Criteria No. 1 of 10CFR50, Specific portions of this system will be examined to ASME Boiler and Pressure Vessel Code Section XI-1983 Edition up to and including Summer 1983 Addenda. This is done to satisfy a request of the NRC Regulatory Commission ISI Reviewing Staff to examine the CVC System. This request was made based on NRC's April 1-2, 1980 Review of the 1st Ten Year Interval Inservice Inspection Program and a conference call with the NRC Reviewing Staff on October 2, 1980. During this call, it was agreed that the scope of this Inspection will be limited to Visual and/or Surface examination of selected portions of the CVC System.
- 6.4 Class 2 Piping and Components which are exempted from Volumetric and Surface examinations by IWC-1220 (B) are:
  - 6.4.1 Safety Injection System Sheet No. 1 Drawing No. ISI-27353
    - 6.4.1.1 8" Containment Spray Line 93 from Valve 889A to Spray Header and 8" Containment Spray Line 94 from Valve 889B to Spray Header have an operating pressure of 210 psig and operating temperature of 140°F.
    - 6.4.1.2 8" Containment Spray Line 15 from Containment Spray Pump 32 to Spray Header and 8" Containment Spray Line 51 from Containment Spray Pump 31 to Spray Header have an operating pressure of 210 psig and operating temperature of 68°.

- 6.4.1.3 12", 10" and 8" Recirculation Spray Line 91 from Recirculation Pump 32 to Valve 1802B and 12", 10" & 8" Recirculation Spray Line 293 from Recirculation Spray Pump 31 to Valve 1802A and to 8" Line 91 have an operating Pressure of 150 psig and operating temperature of less than 200°F.
- 6.4.1.4 Recirculation Spray Pumps 31 and 32 have an operating pressure of 150 psig and an operating temperature of less than 200°F.
- 6.4.2 Safety Injection System Sheet No. 2 Drawing No. ISI-27503
  - 6.4.2.1 12" & 10" Line 181 from Refueling Water
    Storage Tank to Containment Spray Pump 32 has
    a design pressure of 240 psig and design
    temperature of 200°F.
  - 6.4.2.2 10" Line 314 from 12" Line 181 to Containment Spray Pump 31 has a design pressure of 240 psig and design temperature of 200°F.
  - 6.4.2.3 16", 14" and 12" Line 155 from Refueling Water Storage Tank to Valve 882 has a design pressure of 240 psig and design temperature of 200°F.
  - 6.4.2.4 8" Line 190 from 12" Line 155 to Valve 883 has a design pressure of 240 psig and design temperature of 200°F.
  - 6.4.2.5 8" Line 189 from 16" Line 155 to 6" Line 277 has a design pressure of 240 psig and design temperature of 200°F.
  - 6.4.2.6 8" Line 60 from Valves 888A and 888B to 6"Lines 60, 277 and 278 has a design pressure of 240 psig and design temperature of 200°F.
  - 6.4.2.7 6" Line 60 from 8" Line 60 to Safety Injection Pump 33, 6" Line 277 from 8" Line 60 to Safety Injection Pump 32 and 6" Line 278 from 8" Line 60 to Safety Injection Pump 31 have a design pressure of 240 psig and design temperature of 200°F.
  - 6.4.2.8 18" and 14" Line 57 from Containment Sump to Valve 885A has a design pressure of 240 psig and design temperature of 200°F.

- 6.4.2.9 6" Line 518 from 12" Line 155 to 6" Line 277 has a design pressure of 240 psig and design temperature of 200°F.
- 6.4.2.10 Refueling Water Storage Tank has an atmospheric operating pressure and operating temperature of 68°F.
- 6.4.2.11 Containment Spray Pumps 31 and 32 have an operating pressure of 210 psig and operating temperature of 140°F.
- 6.5 Class 2 Piping and Components which are exempted from volumetric and surface examinations by IWC-1220(c) are:
  - 6.5.1 Reactor Coolant System Sheet No. 2 Drawing No. ISI-27473:
    - 6.5.1.1 All piping not identified in 6.2 and located on ISI-27473 is 4" nominal pipe size and smaller.
  - 6.5.2 Chemical and Volume Control System Sheet No. 1 Drawing No. ISI-27363:
    - 6.5.2.1 All piping not identified in 6.2 and located on ISI-27363 is 4" nominal pipe size and smaller.
  - 6.5.3 Auxiliary Coolant System Sheet No. 1 Drawing No. ISI-27203:
    - 6.5.3.1 All Piping not identified in 6.2 and located on ISI-27203 is 4" nominal pipe size and smaller.
  - 6.5.4 Auxiliary Coolant System Sheet No. 2 Drawing No. ISI-27513
    - 6.5.4.1 All Piping not identified in 6.2 and located on ISI-27513 is 4" nominal pipe size and smaller.
  - 6.5.5 Safety Inspection System Sheet No. 1 Drawing No. ISI-27353
    - 6.5.5.1 All piping not identified in 6.2 or 6.4 and located on ISI-27353 is 4" nominal pipe size and smaller.
  - 6.5.6 Safety Inspection System Sheet No. 2 Drawing No. ISI-27503

- 6.5.6.1 All piping not identified in 6.2 or 6.4 and located on ISI-27503 is 4" nominal pipe size and smaller.
- 6.5.7 Main Steam Drawing No. ISI-20173
  - 6.5.7.1 All Piping not identified in 6.2 and located on ISI-20173 is 4" nominal pipe size and smaller.
- 6.5.8 Steam Generator Blowdown System Drawing No. ISI-27293
  - 6.5.8.1 All piping located on ISI-27293 is 4" nominal pipe size and smaller
- 6.5.9 Boiler Feedwater Drawing No. ISI-20193
  - 6.5.9.1 All piping not identified in 6.2 and located on ISI-20193 is 4" nominal pipe size and smaller
- 6.5.10 Sampling System Drawing No. ISI-27453
  - 6.5.10.1 All piping located on ISI-27453 is 4" nominal pipe size and smaller.
- 6.5.11 Isolation Valve Seal Water System Drawing No. ISI-27463
  - 6.5.11.1 All piping located on ISI-27463 is 4" nominal pipe size and smaller.

#### CLASS 3 COMPONENTS AND PIPING

7.0 Class 3 Components and Piping have been scheduled for examination in accordance with the regular Inservice Inspection Program outlined in ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda Paragraph IWD-2400. Acceptance standards for flaw indications, repair procedures, system pressure tests and replacements are defined in IWD-3000 (in course of preparation, rules of IWB-3000 may be used), IWD-4000, IWD-5000 and IWD-7000, respectively.

Sections 8.1 and 8.2 are a listing of Class 3 Components and Piping to be examined and Section 8.3 is a listing of those Class 3 components and piping which have been exempted from examination under the provisions of ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda.

The Class 3 Components and Piping requiring examination at the Indian Point Unit No. 3 Nuclear Power Plant are:

- 7.1 Systems in Support of Reactor Vessel Shutdown Function
- 7.2 Systems in Support of Emergency Core Cooling, Containment Heat Removal, Atmosphere Cleanup and Reactor Residual Heat Removal
- 7.3 Systems in Support of Residual Heat Removal from Spent Fuel Storage Pool
- 8.0 Class 3 System Boundaries

The Systems below include those Class 3 Systems which have been included in the Indian Point Unit 3 Inservice Inspection Program.

<u>System</u>	New York Power Authority Drawing No.
Auxiliary Coolant System Sheet No. 1	ISI-27203
Auxiliary Coolant System Sheet No. 2	ISI-27513
Safety Injection System Sheet No. 2	ISI-27503
Chemical & Volume Control System Sheet N	lo. 1 ISI-27363

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٠		<u>System</u>	New York	Power Authority Drawing No.
Stea Boil Isol Serv Cond	er Feed ation V ice Wat ensate	ator Blowdown System water alve Seal Water System er System Nuclear Steam Suppl and Boiler Feed Pump Suction sal System No. 1	y Plant	ISI-20173 ISI-27293 ISI-20193 ISI-27463 ISI-27223 ISI-20183 ISI-27193
8.1	Class ; are:	3 Components which require vi	sual exa	mination of supports
	8.1.1	Residual Heat Exchangers 31	<b>&amp;</b> 32	
	8.1.2	Spent Fuel Pool Heat Exchang	er 31	
	8.1.3	Component Cooling Heat Excha	ngers 31	& 32
	8.1.4	Component Cooling Surge Tank	.s 31 & 32	2

- 8.1.6 Auxiliary Component Cooling Pumps 31, 32, 33 and 34
- 8.1.7 Safety Injection Pumps 31, 32 & 33 Oil Coolers
- 8.1.8 Component Cooling Pumps 31, 32 and 33
- 8.1.9 Reactor Coolant Pumps 31, 32, 33 and 34 Lube Oil Coolers

Residual Heat Removal Pumps 31 & 32 Seal Heat Exchangers

- 8.1.10 Recirculation Spray Pumps 31 and 32 Motor Coolers
- 8.1.11 Spray Additive Tank 31
- 8.1.12 Auxiliary Feedwater Turbine Driven Pump 32
- 8.1.13 Auxiliary Feedwater Motor Driven Pumps 31 & 33
- 8.1.14 Nuclear Service Water Pumps 34, 35 and 36
- 8.1.15 Nuclear Service Water Pumps 34, 35 and 36 Strainers
- 8.1.16 Conventional Service Water Pumps 31, 32 and 33
- 8.1.17 Conventional Service Water Pumps 31, 32 and 33 Strainers
- 8.1.18 Diesel Generators 31, 32 and 33 Jacket Water Coolers
- 8.1.19 Diesel Generators 31, 32 and 33 Lube Oil Coolers

- 8.1.20 Cooling Water Heat Exchangers 31 and 32
- 8.1.21 Recirculation Fan Coolers 31, 32, 33, 34 and 35
- 8.1.22 Condensate Storage Tank
- 8 1.23 Spent Fuel Pit Pumps 31 and 32
- 8.1.24 Spent Fuel Pit Strainer
- 8.1.25 Non-Regenerative Letdown Heat Exchanger 31
- 8.1.26 Seal Water Heat Exchanger 31
- 8.1.27 Excess Letdown Heat Exchanger 31
- 8.1.28 Charging Pumps 31, 32 and 33 Fluid Drive Cooleers
- 8.1.29 Boric Acid Tanks 31 & 32
- 8.1.30 Boric Acid Filter 31
- 8.1.31 Boric Acid Blender
- 8.1.32 Boric Acid Transfer Pumps 31 & 32
- 8.2 Class 3 Piping Pressure Boundary

Portions of the Piping Systems in the Auxiliary Coolant, Safety Injection, Mainsteam, Boiler Feedwater, Isolation Valve Seal Water System, Service Water System and Condensate and Boiler Feedpump Suction are Class 3. Class 3 Piping Pressure Boundaries which require visual examination of supports under Categories D-A, D-B and D-C are:

- 8.2.1 14" Service Water Lines 1081, 1082 and 1083 from Conventional Service Water Pumps 31, 32 and 33 to 24" Service Water Line 409
- 8.2.2 24" Service Water Line 409 from 14" Service Water Lines 1081, 1082 and 1083 to 8" Valve SWN4, Valve SWN100-4, 20" Line 407 and 18" Line 409
- 8.2.3 10" Service Water Line 1221 from 24" Line 409 to Valve SWN-7
- 8.2.4 16" Service Water Line 1219 from 24" Line 409 to Valve SWN112
- 8.2.5 14" Service Water Lines 1084, 1085 and 1086 from Nuclear Service Water Pumps 34, 35 and 36 to 24" Service Water Line 408

- 8.2.6 24" Service Water Line 408 from 14" Lines 1084, 1085 and 1086 to 8" Valve SWN-5, Valve SWN100-3, 20" Line 411 and 18" Line 408
- 8.2.7 10" Service Water Line 1222 from 24" Line 408 to Valve SWN-6
- 8.2.8 16"Service Water Line 1220 from 24" Line 408 to Valve SWN-111
- 8.2.9 18" Service Water Line 408 from 24" Line 408 to 10" Service Water Lines 11A, 11B, 11C and 14" Line 408
- 8.2.10 14" Service Water Line 408 to 10" Service Water Lines 11D and 11E
- 8.2.11 10" Service Water Line 11E from 14" Line 408 to Recirculation Fan 35
- 8.2.12 10" Service Water Line 11D from 14" Line 408 to Recirculation Fan 32
- 8.2.13 10" Service Water Line 11A from 18" Line 408 to Recirculation Fan 31
- 8.2.14 10" Service Water Line 11B from 18" Line 408 to Recirculation Fan 33
- 8.2.15 10" Service Water Line 11C from 18" Line 408 to Recirculation Fan 34
- 8.2.16 20" Service Water Line 411 from 24" Line 408 to Component Cooling Water Heat Exchanger 31 and Valve SWN 33-1
- 8.2.17 20" Service Water Line 407 from 24" Line 409 to Valve SWN33-1 and 18" Service Water Line 407
- 8.2.18 18" Service Water Line 407 to Component Cooling Water Heat Exchanger 32
- 8.2.19 18" Service Water Line 409 from 24" Line 409 to 18" Line 408
- 8.2.20 24" & 18" Service Water Lines 405 & 509 from Component Cooling Heat Exchangers 31 and 32 to 24" Service Water Line 405
- 8.2.21 24" Service Water Line 405 to 14" Vent and Discharge Canal

- 8.2.22 10" Service Water Line 12B from Recirculation Fan 31 to 18" Line 406
- 8.2.23 10" Service Water Line 12D from Recirculation Fan 32 to 14" Line 406
- 8.2.24 10" Service Water Line 12A from Recirculation Fan 33 to 18" Line 406
- 8.2.25 10" Service Water Line 12C from Recirculation Fan 34 to 18" Line 406
- 8.2.26 10" Service Water Line 12E from Recirculation Fan 35 to 14" Line 406
- 8.2.27 18" & 14" Service Water Line 406 from 10" Lines 12A, 12B, 12C, 12D and 12E to 18" Line 408, 10" & 8" Line 408 and 24" Line 405
- 8.2.28 18" Line 408 to 18" Line 406
- 8.2.29 6" Service Water Lines 1096, 1097 and 1098 from Diesel Generator Jacket Water Coolers 31, 32 and 33 (6" x 4" Red.) to 10" Line 1096
- 8.2.30 6" Steam Generator Blowdown Line 390 from 24" Line 405 to Valve SWN-53
- 8.2.31 10" Service Water Line 1096 to 24" Service Water Line 405
- 8.2.32 6" Service Water Line 1301 from 24" Line 409 to 6"  $\times$  4" Red.
- 8.2.33 6" Service Water Line 1303 from 24" Line 409 to Valve SWN137
- 8.2.34 6" Service Water Lines 1093 and 1099 from Diesel Generator 31 Lube Oil Cooler (6" x 4" Red.) to 10" Service Water Lines 1093 and 1099
- 8.2.35 6" Service Water Lines 1094 and 1100 from Diesel Generator 32 Lube Oil Cooler (6" x 4" Red.) to 10" Service Water Lines 1093 and 1099
- 8.2.36 6" Service Water Lines 1095 and 1101 from Diesel Generator 33 Lube Oil Cooler (6" x 4" Red.) to 10" Service Water Line 1093 and 1099
- 8.2.37 10" Service Water Lines 1099 from 6" Lines 1099, 1100 and 1101 to 24" Line 408

- 8.2.38 10" Service Water Line 1093 from 6" Lines 1093, 1094 and 1095 to 24" Line 409
- 8.2.39 14" Component Cooling Water Line 53 from Component Cooling Water Heat Exchanger 32 to 16" Component Cooling Water Line 53A
- 8.2.40 16" Component Cooling Water Line 53A to 12" Line 53A to Valve 766C and 10" Line 148 and 14" Line 53A
- 8.2.41 10" Component Cooling Water Line 148 from 16" Line 53A to 6" Line 148 and Non-Regenerative Letdown Heat Exchanger 31 and to 8" Line 515
- 8.2.42 8" Component Cooling Water Line 515 from 10" Line 148 to 6" Line 515 and Valve 823B
- 8.2.43 14" Component Cooling Water Line 53A from 16" Line 53A to 12" Line 53A to Residual Heat Exchanger 32
- 8.2.44 6" Component Cooling Water Line 13 from 14" Line 53A to 6" x 4" Reducer
- 8.2.45 16" & 14" Component Cooling Water Line 53 from Component Cooling Water Heat Exchanger 31 to 8" Line 167 and 14" Line 53
- 8.2.46 8" Component Cooling Water Line 167 from 16" Line 53 to 6" Line 321 to Valve 823A
- 8.2.47 14" Component Cooling Water Line 53 from 16" Line 53 to 12" Line 53 to Residual Heat Exchanger 31
- 8.2.48 12" Component Cooling Water Line 52A from Component Cooling Pumps 32 and 33 to 16" Line 52A and 12" Line 52
- 8.2.49 12" Component Cooling Water Line 52 from Component Cooling Water Pump 31 to 16" Line 52A
- 8.2.50 16" Component Cooling Water Line 52 from 16" Line 52A to 14" Line 52 and 8" Line 168
- 8.2.51 16" Component Cooling Water Line 52A from 12" Line 52A to 14" Line 52A and 10" Line 149
- 8.2.52 14" Component Cooling Water Line 52A from 16" Line 52A to 12" Line 52A to Residual Heat Exchanger 32
- 8.2.53 14" Component Cooling Water line 52 from 16" Line 52 to 12" Line 52 to Residual Heat Exchanger 31

- 8.2.54 8" Component Cooling Water Line 168 from 16" Line 52 to 16" Line 168 to 6" Line 322 and Valve 1817A and to 6" x 4" Reducer
- 8.2.55 10" Component Cooling Water Line 149 from 16" Line 52A to 6" Line 149 and Non-Regenerative Letdown Heat Exchanger 31 and to 8" Line 516
- 8.2.56 8" Component Cooling Water Line 516 from 6" Line 149 to 6" Line 516 to 6" x 4" Reducer and to 6" Line 647 and Valve 1871D
- 8.2.57 10" Component Cooling Water Line 199 from Component Cooling Pump 31 to 14" Line 211
- 8.2.58 10" Component Cooling Water Line 209 from Component Cooling Pump 32 to 14" Line 211
- 8.2.59 10" Component Cooling Water Line 211 from Component Cooling Pump 33 to 14" Line 211
- 8.2.60 14" Component Cooling Water Line 211 from 10" Lines 199, 209 and 211 to 14" Line 199 and Component Cooling Heat Exchanger 32
- 8.2.61 14" Component Cooling Water Line 199 from 14" Line 211 to Component Cooling Heat Exchanger 31
- 8.2.62 8" Component Cooling Water Line 325 from Spent Fuel Pit Heat Exchanger 31 to 14" Line 52
- 8.2.63 8" Component Cooling Water Line 326 from Spent Fuel Pit Heat Exchanger 31 to 14" Line 53
- 8.2.64 6" Component Cooling Water Line 14 from 14" Line 52A to 6" x 4" Reducer
- 8.2.65 10" Spent Fuel Pit Line 329 from Spent Fuel Pit Pumps 31 and 32 to Spent Fuel Pit
- 8.2.66 8" Spent Fuel Pit Line 327 from Spent Fuel Pit Pumps 31 & 32 to Spent Fuel Pit Heat Exchanger 31 and 8" Cap
- 8.2.67 8" Spent Fuel Pit Line 328 from Spent Fuel Pit Heat Exchanger 31 to Spent Fuel Pit, 8" Cap and 8" x 3" Reducer
- 8.2.68 12" Auxiliary Feedpump Line 1017 from Turbine Driven Auxiliary Feed Pump 32 to Vent
- 8.2.69 10" & 6" Auxiliary Feedpump 32 Turbine Driven Line 1016 from 4" Valve 52 to Vent

- 8.2.70 8" Auxiliary Feed Pump Line 1071 from Turbine Driven Auxiliary Feed Pump 32 to 8" Line 1076 and Valve CT28 and 12" Line 1070
- 8.2.71 12" Auxiliary Feed Pump Line 1070 from 8" Line 1071 to Valve LCV 1158 and Condensate Storage Tank
- 8.2.72 6" Auxiliary Feed Pump Line 1072 from Motor Driven Auxiliary Feedwater Pump 33 to 6" Line 1074 and Valve CT31 and to 8" Line 1071
- 8.2.73 6" Auxiliary Feed Pump Line 1073 from Motor Driven Auxiliary Feedwater Pump 31 to 6" Line 1075 and Valve CT25 and to 8" Line 1071
- 8.2.74 6" Auxiliary Feed Pump Line 1005 from Turbine Driven Auxiliary Feed Pump 32 to 6" Cap
- 8.2.75 4" & 3" Auxiliary Feedwater Line 1001 from Valve 70 to Motor Driven Auxiliary Feedwater Pump 33 and to 3" Line 1007
- 8.2.76 3" Auxiliary Feedwater Line 1007 from 4" Line 1001 to 6" Line 1005
- 8.2.77 4" & 3" Auxiliary Feedwater Line 1002 from Valve 69 to 4" Line 1001 and 3" Line 1008
- 8.2.78 3" Auxiliary Feedwater Line 1008 from 4" Line 1002 to 6" Line 1005
- 8.2.79 4" & 3" Auxiliary Feedwater Line 1003 from Valve 68 to Motor Driven Auxiliary Feedwater Pump 31 and 3" Line 1005
- 8.2.80 3" Auxiliary Feedwater Line 1005 from 4" Line 1003 to 6" Line 1005
- 8.2.81 4" & 3" Auxiliary Feedwater Line 1004 from Valve 67 to 4" Line 1003 and 3" Line 1006
- 8.2.82 3" Auxiliary Feedwater Line 1006 from 4" Line 1004 to 6" Line 1005

# 8.3 Class 3 Exempt Components

The following Class 3 Components and Piping or parts of Components and Piping for Indian Point Unit No. 3 are exempt from Visual examination of Supports by ASME Boiler and Pressure Vessel Code - Section XI - 1983 Edition thru Summer 1983 Addenda Paragraph IWD-1220 according to the following criteria:

IWD-1220.1 Integral attachments of supports and restraints to components that are 4 in. nominal pipe size and smaller within the system boundaries of Examination Categories D-A, D-B and D-C of Table IWD-2500-1 shall be exempt from the visual examination VT-3, except for PWR Auxiliary Feedwater Systems.

IWD-1220.2 Integral attachments of supports and restraints to components exceeding 4 in. nominal pipe size may be exempted from the visual examination VT-3 of Table IWD-2500-1 provided:

- (a) the components are located in systems (or portions of systems) whose function is not required in support of reactor residual heat removal, containment heat removal and emergency core cooling; and
- (b) the components operate at a pressure of 275 psig or less and at a temperature of 200°F or less.
- 8.4 Class 3 Piping which are exempted from Visual examinations of Supports by IWD-1220.1 are:
  - 8.4.1 Auxiliary Coolant System Sheet No. 1 Drawing No. ISI-27203
    - 8.4.1.1 All piping not identified in Paragraph 8.2 and located on ISI-27203 is 4 in. nominal pipe size and smaller
  - 8.4.2 Auxiliary Coolant System Sheet No. 2 Drawing No. ISI-27513
    - 8.4.2.1 All piping not identified in Paragraph 8.2 and located on ISI-27513 is 4 in. nominal pipe size and smaller
  - 8.4.3 Safety Injection System Sheet No. 2 Drawing No. ISI-27503
    - 8.4.3.1 All piping located on ISI-27503 is 4 in nominal pipe size and smaller
  - 8.4.4 Chemical & Volume Control System Sheet No. 1 Drawing No. ISI-27363
    - 8.4.4.1 All piping located on ISI-27363 is 4 in. nominal pipe size and smaller.
  - 8.4.5 Main Steam Drawing No. ISI-20173
    - 8.4.5.1 All piping not identified in Paragraph 8.2 and located on ISI-20173 is 4 in. nominal pipe size and smaller

- 8.4.6 Steam Generator Blowdown System Drawing No. ISI-27293:
  - 8.4.6.1 All piping not identified in Paragraph 8.2 and located on ISI-27293 is 4 in. nominal pipe size and smaller.
- 8.4.7 Boiler Feedwater Drawing No. ISI-20193
  - 8.4.7.1 All piping not identified in Paragraph 8.2 and located on ISI-20193 is 4 in. nominal pipe size and smaller
- 8.4.8 Isolation Valve Seal Water System Drawing No. ISI-27463
  - 8.4.8.1 All Piping located on ISI-27463 is 4 in. nominal pipe size and smaller
- 8.4.9 Service Water System Nuclear Steam Supply Plant Drawing No. ISI-27223
  - 8.4.9.1 All piping not identified in Paragraph 8.2 and located on ISI-27223 is 4 in. nominal pipe size and smaller
- 8.4.10 Condensate and Boiler Feed Pump Suction Drawing No. ISI-20183
  - 8.4.10.1 All piping not identified in Paragraph 8.2 and located on ISI-20183 is 4 in. nominal pipe size and smaller
- 8.4.11 Waste Disposal System Sheet No. 1 Drawing No. ISI-27193
  - 8.4.11.1 All piping located on ISI-27193 is 4 in.nominal pipe size and smaller

# CLASS 1, 2 and 3 COMPONENT AND PIPING SUPPORTS

9.0 Class 1, 2 and 3 Component and Piping Supports have been scheduled for examination in accordance with the regular Inservice Inspection Program outlined in ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda Paragraph IWF-1200. Acceptance standards for examination evaluations, repair procedures, inservice test requirements, and replacements are defined in Paragraphs IWF-3000, IWF-4000, IWF-5000 and IWF-7000, respectively.

Class 1, 2 and 3 System requiring visual examinations of Component and Piping Supports at the Indian Point Unit No. 3 Nuclear Power Plant are:

- 9.1 Class 1 Reference Section 4.1 and 4.2
- 9.2 Class 2 Reference Section 6.1 and 6.2
- 9.3 Class 3 Reference Section 8.1 and 8.2

ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addena Paragraph IWF-1230 "Supports Exempt from Examination and Test" is in the course of preparation, Exemptions listed are based on exempt components for IWB-2500-1, IWC-2500-1 and IWD-2500-1.

Class 1, 2 and 3 Systems which are exempt from visual examinations of Component and Piping Supports at the Indian Point Unit No. 3 Nuclear Power Plant are:

- 9.4 Class 1 Reference Section 4.3.1
- 9.5 Class 2 Reference Section 6.4 and 6.5
- 9.6 Class 3 Reference Section 8.4



# **NEW YORK POWER AUTHORITY** INDIAN POINT UNIT NO. 3

#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Reactor Vessel RCPCR-V1

CODE CLASS: 1

				EXTENT OF EXAMINATION			
ITEM NO.	EXAM.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B1.10	B-A	Shell Welds					
B1.11	B-A	Circumferential (2)	Volumetric			1 Beltline Region Weld	Relief Request No. 1
B1.12	B-A	Longitudinal (9)	Volumetric			1 Beltline Region Weld	Relief Request No. 1
B1.20	B-A	Head Welds					
B1.21	B-A	Circumferential (3)	Volumetric			Accessible Length of 1 Weld	Relief Request No. 1 and No. 2
B1.22	B-A	Meridional (12)	Volumetric			Accessible Length of 1 Weld	Relief Request No. 1 and No. 3
B1.30	B-A	Shell to Flange Weld (1)	Volumetric	50% of Weld		50% of Weld	Relief Request No. 1 and No. 4
B1.40	B-A	Head to Flange Weld (1)	Volumetric and Surface	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 1 and No. 5
B1.50	B-A	Repair Welds					
B1.51	B-A	Beltline Region	Not Applicable				Note No. 1
B3.90	B-D	Nozzle to Vessel Welds (8)	Volumetric	4 Nozzles		4 Nozzies	Relief Request No. 1
B3.100	B-D	Nozzle Inside Radius Section (8)	Volumetric	4 Nozzles		4 Nozzles	Relief Request No. 1
B4. 10	B-E	Partial Penetration Welds					
B4.11	B-E	Vessel Nozzles	Not Applicable	•			Note No. 2

TABLE NO. 4

# NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

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#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Reactor Vessel RCPCR-V1

CODE CLASS: 1

			•	EXTENT OF EXAMINATION			_
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B4.12	B-E	Control Rod Drive Nozzles (78)	Visual, VT-2			20 Nozzles	
B4.13	В-Е	Instrumentation Nozzles (58)	Visual, VT-2	·		15 Nozzles	
B5.10	B-F.	Nominal pipe size equal to or greater than 4 in. nozzle to safe end butt welds	Volumetric and Surface	4 Nozzles		4 Nozzles	Relief Request No. 6
85.20	B-F	Nominal pipe size less than 4 in. nozzle to safe end butt welds	Not Applicable				Note No. 3
<b>B5.30</b>	B-F	Nozzle to Safe End Socket Welds	Not Applicable				Note No. 4
B6.10	B-G-1	Closure Head Nuts (54)	Surface	18 Nuts ,	18 Nuts	18 Nuts	•
B6.20	B-G-1	Closure Studs, in place	Not Applicable	÷		•	Note No. 5
B6.30	B-G-1	Closure Studs, when removed (54)	Volumetric and Surface	18 Studs	18 Studs	18 Studs	
B6.,40	B-G-1	Threads in Flange (54)	Volumetric	27 Stud Holes	er.	27 Stud Holes	Relief Request No. 7
86.50	B-G-1	Closure Washers, Bushings (54)	Visual, VI-1	18 Washers	18 Washers	18 Washers	
<b>07</b> .10	B-G-2	Bolts, Studs and Nuts	Not Applicable		• •		Note No. 6
87.80	B-G-2	CRD Housings, Bolts, Studs and Nuts (5)	Visual, VI-1	1 Conoseal	2 Conoseals	2 Conoseals	
B8.10	в-н	Integrally Welded Attachments	Not Applicable				Note No. 7





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# NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Reactor Vessel RCPCR-V1

CODE CLASS: 1.

			*********	EXTENT OF EXAMINATION			
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B13.10	B-N-1	Vessel Interior	Visual, VI-3	Accessible Areas	Accessible Areas	Accessible Areas	
B13.50	B-N-2	Interior Attachments within Beltline Region	Visual, VI-1			Accessible Areas	
B13.60	B-N-2	Interior Attachments Beyond Beltline Region	Visual, VT-3			Accessible Areas	
B13.70	B-N-3	Core Support Structures	Visual, VI-3			Accessible Areas	
B14.10	8-0	Welds in CRD Housing (78) (33 Peripheral)	Volumetric or Surface			4 Control Rod Drive Housings	
B15.10	B-P	Pressure Retaining Boundary	Visual, VI-2	Each Refueling Outage	Each Refueling Outage	Each Refueling Outage	Relief Request No. 19
B15.11	. <b>B-P</b> .	Pressure Retaining Boundary	Visual, VT-2			1 Test	Relief Request No. 19

TABLE NO. 4

# NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

## INSERVICE INSPECTION PROGRAM.

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Pressurizer RCPCPR1

CODE CLASS: 1

CODE TABLE: IWB-2500-1

		•	APT T1 100 OF	EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B2.10	. B-B	Shell to Head Welds					•
B2.11	B-B	Circumferential (2)	Volumetric	33.3% One Weld	33.3% One Weld	33.3% One Weld	Refief Request No. 5 and No. 8
B2.12	B-B	Longitudinal (2)	Volumetric	4" One Weld	4" One Weld	4" One Weld	Relief Request No. 5 and No. 8
B2.20	B-B	Head Welds		,			
B2.21	B-B	Circumferential	Not Applicable			•	Note No. 8
B2.22	B-B	Meridional	Not Applicable				Note No. 9
B3.110	B-D	Nozzle to Vessel Welds	Not Applicable				Note No. 10
B3.120	8-D	Nozzie Inside Radius Section (6)	Volumetric		<i>2</i>		Relief Request No. 9
B4.20	в-Е	Heater Penetration Welds (78)	Visual, VI-2			78 Welds	
85.40	В-F	Nominal pipe size equal to or greater than 4 in. nozzle to safe end butt welds (6)	Volumetric and Surface	2 Nozzies	2 Nozzles	2 Nozzies	
<b>B</b> 5.50	B-F	Nominal pipe size less than 4 in. nozzle to safe end butt welds	Not Applicable				Note No. 3
<b>B5</b> .60	B-F	Nozzle to Safe End Socket Welds	Not Applicable				Note No. 4
86.60	B-G-1	Bolts and Studs	Not Applicable				Note No. 11

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TABLE NO. 4

# NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Pressurizer RCPCPR1

CODE CLASS: 1

ITEM NO.	EXAM.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EXTENT OF EXAMINATION			
				1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B6.70	B-G-1	Flange Surface, when Connection Disassembled	Not Applicable	•			Note No. 11
B6.80	B-G-1	Nuts, Bushings and Washers	Not Applicable	<b>!</b>			Note No. 11
B7.20	B-G-2	Bolts, Studs and Nuts (16)	Visual, VI-1	5 Bolts	5 Bolts	6 Bolts	
88.20	8-H	Integrally Welded Attachments (2)	Volumetric or Surface	33.3% of Each Weld	33.3% of Each Weld	33.3% of Each Weld	Relief Request No. 5
B15.20	B-P	Pressure Retaining Boundary	Visual, VT-2	Each Refueling Outage	Each Refueling Outage	Each Refueling Outage	Relief Request No. 19
B15.21	B-P	Pressure Retaining Boundary	Visual, VT-2		•	One Test	Relief Request



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# INDIAN POINT UNIT NO. 3

#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Steam Generators RCPCSG1-31, RCPCSG2-32, RCPCSG3-33 and RCPCSG4-34

CODE CLASS: 1

ITEM NO.	EXAM. _CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EXTENT OF EXAMINATION			•
				1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B2.30	B-B	Head Welds					
B2.31	B-B.	Circumferential	Not Applicable				Note No. 8
B2.32	B-B	Meridional	Not Applicable				Note No. 9
B2.40	B-B	Tubesheet to Shell Welds (4)	Volumetric	33.3% One Weld	33.3% <sup>-</sup> One Weld	33.3% One Weld	Relief Request No. 5
B3.130	B-D	Nozzle to Vessel Weld	Not Applicable				Note No. 10
B3.140	B-D	Nozzle Inside Radius Sections (8)	Volumetric				Relief Request No. 5
B5.70	B-F	Nominal pipe size equal to or greater than 4 in nozzle to safe end butt welds (8)	Volumetric and Surface	2 Nozzles	3 Nozzles	3 Nozzles	Relief Request No. 5
B5.80	B-F	Nominal pipe size less than 4 in. nozzle to safe end butt welds	Not Applicable				Note No. 3
B5.90	8-F	Nozzle to Safe End Socket Welds	Not Applicable				Note No. 4
B6.90	B-G-1	Bolts and Studs	Not Applicable	·			Note No. 11
B6.100	B-G-1	Flange Surface, when Connection, Disassembled	Not Applicable				Note No. 11
B6.110	B-G-1	Nuts. Bushings, and Washers	Not Applicable		÷	•	Note No. 11



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## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Steam Generators\_RCPCSG1-31, RCPCSG2-32, RCPCSG3-33 and RCPCSG4-34

CODE CLASS: 1

		COMPONENT IDENTIFICATION	METHOD OF EXAMINATION		•		
ITEM NO.	EXAM. CAT.			1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B7.30	BG-2	Bolts, Studs, and Nuts 32 Studs, 32 Nuts and 64 Washers Each Steam Generator	Visual, VT-1	32 Studs 32 Nuts 64 Washers	48 Studs 48 Nuts 96 Washers	48 Studs 48 Nuts 96 Washers	
B8.30	B-H	Integrally Welded Attach- ments	Not Applicable				Note No. 7
B15.30	B-P	Pressure Retaining Boundary	Visual, VI-2	Each Refueling Outage	Each Refueling Outage	Each Refueling Outage	Relief Request No. 19
B15.31	8-P	Pressure Retaining Boundary	Visual, VT-2			One Test	Relief Request No. 19
B16.20	B-Q	Steam Generator Tubing in U-Tube Design	Volumetric				Reference INT Technical Specification 4.9



#### NEW YORK POWER AUTHORITY

INDIAN POINT UNIT NO. 3

### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION: XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

**COMPONENT:** Heat Exchangers

CODE CLASS: 1

			METAKON AS	EXTENT OF EXAMINATION				
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS	
B2.50	B-B	Head Welds	•					
B2.51	B-B	Circumferential	Not Applicable			•	Note No. 12	
B2.52	B-B	Meridional	Not Applicable				Note No. 12	
82.60	B-B	Tubesheet to Head Welds	Not Applicable				Note No. 12	
B2.70	B-B	Longitudinal Welds	Not Applicable			•	Note No. 12	
B2.80	B-B	Tubesheet to Shell Welds	Not Applicable				Note No. 12	
B3.150	B-D	Nozzle to Vessel Welds	Not Applicable				Note No. 12	
B3.160	B-D	Nozzle Inside Radius Section	Not Applicable	•			Note No. 12	
B5.100	B-F	Nominal pipe size equal to or greater than 4 in nozzle to safe end butt welds	Not Applicable	,			Note No. 12	
85.110	B-F	Nominal pipe size less than 4 in. nozzle to safe end butt welds.	Not Applicable				Note No. 12	
B5. 120	B-F	Nozzle to Safe End Socket Welds	Not Applicable			• .	Note No. 12	
B6.120	B-G-1	Bolts and Studs	Not Applicable				Note No. 12	
B6.130	B-G-1	Flange Surface, when Connection Disassembled	Not Applicable				Note No. 12	





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## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

**COMPONENT:** Heat Exchangers

CODE CLASS: 1

or Grass.

				EXT		
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD 3RD PERIOD	REMARKS
B6.140	B-G-1	Nuts, Bushings, and Washers	Not Applicable			Note No. 12
B7.40	B-G-2	Bolts, Studs and Nuts	Not Applicable			Note No. 12
B8.40	В-Н	Integrally Welded Attach- ments	Not Applicable			Note No. 12
B15.40	B-b	Pressure Retaining Boundary	Not Applicable			Note No. 12
` B15.41	B-P	Pressure Retaining Boundary	Not Applicable			Note No. 12

## NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

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#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Piping

CODE CLASS: 1

		·	METION OF	EX	EXTENT OF EXAMINATION		
ITEM NO.	EXAM. Cat.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B5.130	B-F	Nominal pipe size equal to or greater than 4 in. dissimilar metal butt welds	Not Applicable			e e	Note No. 13
B5.140	B-F	Nominal pipe size less than 4 in. dissimilar metal butt welds	Not Applicable				Note No. 14
B5.150	B-F	Dissimilar Metal Socket Welds	Not Applicable				Note No. 15
B6.150	B-G-1	Bolts and Studs	Not Applicable				Note No. 11
B6.160	B-G-1	Flange Surface, when . Connection Dissassembled	Not Applicable				Note No. 11
B6.170	B-G-1	Nuts, Bushings and Washers	Not Applicable	•			Note No. 11
B7.50	B-G-2	Bolts, Studs and Nuts (136)	Visual, VI-1	44 Bolts	44 Bolts	48 Bolts	
B9.10	B-J	Nominal pipe size equal to or greater than 4 in.		•			
B9.11	B-J	Circumferential Welds (170)	Surface and Volumetric	15 Welds	15 Welds	15 Welds	Relief Request No. 5 & No. 10
B9.12	B-J	Longitudinal Welds (16)	Surface and Volumetric	2 Welds		2 Welds	Relief Request No. 5 & No. 11
B9.20	B-J	Nominal Pipe Size	•				



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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Piping

CODE CLASS: 1

				EXTENT OF EXAMINATION				
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS	
B9.21	B-J	Circumferential Welds (129)	Surface .	11 Welds	11 Welds	11 Welds	Relief Request No. 5	
B9.22	B-J	Longitudinal Welds	Not Applicable	•			Note No. 16	
B9.30	B-J	Branch Pipe Connection Welds						
B9.31	B-J	Nominal pipe size equal to or greater than 4 in. (10)	Surface and Volumetric	1 Weld :	1 Weld	1 Weld	Relief Request No. 5	
B9.32	B-J	Nominal pipe size less than 4 in. (27)	Surface	2 Welds	2 Welds	3 Welds	Relief Request No. 5	
B9 . 40	B-J	Socket Welds (443)	Surface	37 Welds	37 Welds	37 Welds	Relief Request No. 5	
B10.10	B-K-1	Integrally Welded Attachments (18)	Volumetric or Surface	6 Welded Attachments	6 Welded Attachments	6 Welded Attachments	Relief Request No. 5	
B15.50	B-Þ	Pressure Retaining Boundary	Visual, VT-2	Each Refueling Outage	Each Refueling Outage	Each Refueling Outage	Relief Request No. 19	
B15.51	В-Р	Pressure Retaining Boundary	Visual, VT-2			One Test	Relief Request No. 19	

## NEW YORK POWER AUTHORITY

INDIAN POINT UNIT NO. 3

#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Reactor Coolant Pumps RCPCP1-31, RCPCP1-32, RCPCP1-33 and RCPCP1-34

CODE CLASS: 1

				EXT			
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	' 3RD PERIOD	REMARKS
B6. 180	B-G-1	Bolts and Studs - 96 (24 Each Pump)	Volumetric	24 Bolts	24 Bolts	48 Bolts	•
B6.190	B-G-1	Flange Surface, when Connection Disassembled	Visual, VT-1	1 Pump	1 Pump	2 Pumps	
B6.200	B-G-1	Nuts, Bushings and Washers	Visual, VT-1	24 Bolts	24 Bolts	48 Bolts	
B7.60	B-G-2	Bolts, Studs and Nuts 72 (18 each pump)	Visual, VI-1	18 Bolts	18 Bolts	36 Bolts	
B10.20	B-K-1	Integrally Welded Attachments-12 (3 each pump)	Volumetric or Surface	3 Welded Attachments	3 Welded Attachments	6 Welded Attachments	Relief Request No. 5
B12.10	8-L-1	Pump Casing Welds-12 (3 each pump)	Volumetric			3 Welds	Relief Request No. 12
B12.20	B-L-2	Pump Casing - 4 (1 each pump)	Visual, VT-3			1 Pump	Relief Request No. 12
B15.60	B-P	Pressure Retaining Boundary	Visual, VT-2	Each Refueling Outage	Each Refueling Outage	Each Refueling Outage	Relief Request No. 19
B15.61	-B-b	Pressure Retaining Boundary	Visual, VT-2			One Test	Relief Request No. 19
,		Flywheels	Volumetric and Surface	1 Flywheel	1 Flywheel	2 Flywheels	Relief Request





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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Valves

CODE CLASS: 1

	EXAM.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EXT	N .		
ITEM NO.				1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
B6.210	B-G-1	Bolts and Studs	Not Applicable				Note No. 11
B6.220	B-G-1	Flange Surface, when Connection Disassembled	Not Applicable		·		Note No. 11
B6.230	B-G-1	Nuts, Bushings and Washers	Not Applicable				Note No. 11
B7.70	B-G-2	Bolts, Studs and Nuts (390)	Visual, VI-1	130 Bolts	130 Bolts	130 Bolts	
B10.30	B-K-1	Integrally Welded Attachments	Not Applicable	-			Note No. 7
B12.30	B-M-1	Valves, nominal pipe size less than 4 in. valve body welds.	Not Applicable				Note No. 17
B12.40	B-M-1	Valves, nominal pipe size equal to or greater than 4 in valve body welds	Not Applicable		·		Note No. 18
B12.50	B-M-2	Valve body, exceeding 4 in. nominal pipe size (17)	Visual, VT-3			4 Valves	Relief Request No. 14
B15.70	B-P	Pressure Retaining Boundary	Visual, VT-2	Each Refueling Outage	Each Refueling Outage	Each Refueling Outage	Relief Request No. 19
B15.71	B-P	Pressure Retaining Boundary	Visual, VT-2			One Test	Relief Request No. 19



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## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Steam Generators RCPCSG1-31, RCPCSG2-32, RCPCSG3-33 and RCPCSG4-34

CODE CLASS: 2

			METION OF	EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Welds 12 (3 each Steam Generator)	Volumetric	33.3% each of 3 Welds	33.3% each of 3 Welds	33.3% each of 3 Welds	Relief Request
C1.20	C-A	Head Circumferential Welds 4 (1 each Steam Generator)	Volumetric	33.3% each of 1 Weld	33.3% each of 1 Weld	33.3% each of 1 Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds 4 (1 each Steam Generator)	Volumetric	33.3% each of 1 Weld	33.3% each of 1 Weld	33.3% each of 1 Weld	Relief Request No. 15
C2.10	С-В	Nozzle in vessels equal to or less than 1/2 in nominal thickness					,
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable			·	Note No. 19
C2.20	C-B	Nozzles without reinforcing plate in vessels greater than 1/2 in nominal thickness		•			
C2.21	C-B	Nozzle to Shell (or head) Welds 8 (2 each Steam Generator)	Surface and Volumetric		2 Nozzies		Relief Request No. 15
C2.22	C-B	Nozzle Inside Radius Sections 8 (2 each Steam	Volumetric		2 Nozzles	•	Relief Requesi No. 15 & No. 16



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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Steam Generators RCPCSG1-31, RCPCSG2-32, RCPCSG3-33 and RCPCSG4-34

CODE CLASS: 2

				EX1			
ITEM.NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	· · 3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable			\$ 	Note No. 21
C2.33	C-B	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable				Note No. 22
C3.10	C-C	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.10	C-D	Bolts and Studs	Not Applicable			·	Note No. 11
C7.10	C-H	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	C-H	Pressure Retaining Components	Visual, VT-2	•		One Test	Relief Request No. 19

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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Regenerative Heat Exchanger CSAHRG1-31

CODE CLASS: 2

				EXT	·		
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERTOD	. · 3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Welds	Not Applicable				Note No. 23
C1.20	C-V	Head Circumferential Welds (6)	Volumetric	1 Weld		1 Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds (6)	Volumetric	1 Weld		1 Weld	Relief Request No. 15
C2.10	С-В	Nozzle in vessels equal to or less than 1/2 in. nominal thickness		·			
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable			•	Note No. 19
C2.20	С-В	Nozzles without reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable	* ,	•		Note No. 24
C2.22	C-B	Nozzie Inside Radius Section	Not Applicable				Note No. 25

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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA COMPONENT: Regenerative Heat Exchanger CSAHRG1-31

CODE CLASS: 2

				EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C2.30	C-B	Nozzles with reinforcing plate in vessels greater than 1/2 in nominal thickness					•
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	С-В	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable	1			Note No. 21
C2.33	C-B	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable				Note No. 22
C3.10	c-c	Integrally Welded Attachments	Not Applicable				Note No. 7
C410	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7. 10	С-Н	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request No. 19

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### INDIAN POINT UNIT NO. 3

## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Residual Heat Exchangers ACAHRS1-31 and ACAHRS2-32

CODE CLASS: 2

			,	EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C1.10	C-V	Shell Circumferential Welds 2 (One each Heat Exchanger)	Volumetric	.33.3% One Weld	33.3% One Weld	33.3% One Weld	Relief Request No. 15
C1.20	C-A	Head Circumferential Welds 2 (One each Heat Exchanger)	Volumetric	33.3% One Weld	33.3% One Weld	33.3% One Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable				Note No. 26
C2.10	C-B	Nozzle in vessels equal to or less than 1/2 in. nominal thickness		· .			
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable	<b>!</b>			Note No. 19
C2.20	С-В	Nozzles without reinforcing plate in vessels greater than 1/2 in nominal thickness		-	,		
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable	•			Note No. 24
C2.22	C-B	Nozzle Inside Radius	Not Applicable	•			Note No. 25



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#### INDIAN POINT UNIT NO. 3

### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Residual Heat Exchangers ACAHRS1-31 and ACAHRS2-32

CODE CLASS: 2

			METHOD OF EXAMINATION	EXT			
	EXAM. CAT.			1ST PERIOD	2ND PERIOD	'3RD PERIOD	REMARKS
C2.30	C-B	Nozzles with reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel - 4 (2 each Heat Exchanger)	Surface	1 Nozzle	•	1 Nozzle	Relief Request No. 15
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	C-B	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible - 4 (2 each Heat Exchanger)	Visual, VT-2	1 Nozzle		1 Nozzle	
C3.10	c-c	Integrally Welded Attachments - 4 (2 each Heat Exchanger)	Surface	1 Welded Attachment		1 Welded Attachment	Relief Request No. 15
C4.10	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7.10	С-Н	Pressure Retaining Components	Visual₁, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request No. 19

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#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA COMPONENT: Seal Water Heat Exchanger CSAHSW1-31

CODE CLASS: 2

			*******	EX	•		
ITEM NO.	EXAM. _CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15 & No. 17
C1.20	C-A	Head Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15 & No. 17
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable				Note No. 26
C2.10	C-B	Nozzle in vessels equal to or less than 1/2 in nominal thickness					
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable	,			Note No. 19
C2.20	С-В	Nozzles without reinforcing plate in vessels greater than 1/2 in nominal thickness					. <del>-</del>
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable			,	Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicable				Note No. 25



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## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Seal Water Heat Exchanger CSAHSW1-31

CODE CLASS: 2

			_	EXT	,		
ITEM NO.	EXAM.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST_PERIOD	2ND PERIOD	· 3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in nominal thickness	. •				
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable			,	Note No. 20
C2.32	С-В	Nozzie to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	С-В	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable				Note No. 22
C3.10	c-c	Integrally Welded Attachments	Not Applicable		· .		Note No. 7
C4.10	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7.10	C-H	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request No. 19







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INDIAN POINT UNIT NO. 3

#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Non Regenerative Letdown Heat Exchanger CSAHNRT-31

CODE CLASS: 2

			EXTENT OF EXAMINATION				
ITEM NO.	EXAM.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND_PERIOD	· · 3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15
C1.20	Ċ-A	Head Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld .	33.3% of Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable	•			Note No. 26
C2.10	C-8	Nozzle in vessels equal to or less than 1/2 in. nominal thickness					
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable	•			Note No. 19
C2.20	C-B	Nozzies without reinforcing plate in vessels greater than 1/2 in nominal thickness	·				
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable		•		Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicable	•			Note No. 25

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## INDIAN POINT UNIT NO. 3

### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Non Regenerative Letdown Heat Exchanger CSAHNRT-31

CODE CLASS: 2

	•			EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C2.30	C-B	Nozzles with reinforcing plate in vessels greater than 1/2 in nominal thickness					
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	С-В	Nozzie to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable	·.			Note No. 22
C3.10	c-c	Integrally Welded Attachments	Not Applicable				Note No. 7
C4. 10	C-D	Bolts and Studs	Not Applicable			• •	Note No. 11
C7.10	С-Н	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7 . 20	С-Н	Pressure Retaining Components	Visual, VI-2	•	:	One Test	Relief Request No. 19

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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA COMPONENT: Excess Letdown Heat Exchanger CSAHEL1-31

CODE CLASS: 2

•				EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15
C1.20	C-A	Head Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable	,			Note No. 26
C2.10	С-В	Nozzle in vessels equal to or less than 1/2 in. nominal thickness					
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable	•		·	Note No. 19
C2.20	С-В	Nozzles without reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable	•		·	Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicable	•			Note No. 25





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## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Excess Letdown Heat Exchanger CSAHEL1-31

CODE CLASS: 2

				EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	- 3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in. nominal thickness			*. *		
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	C-B	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable				Note No. 22
C3.10	c-c	Integrally Welded Attachments	Not Applicable			·	Note No. 7
C4.10	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7. 10	С-Н	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	C-H	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request No. 19



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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Volume Control Tank CSATVC1-31

CODE CLASS: 2

		COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EX			
ITEM NO.	EXAM. Cat.			1ST PERIOD	2ND PERIOD	· 3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Weld	Not Applicable				Note No. 23
C1.20	C-A	Head Circumferential Weld (2)	Volumetric	33.3% of each Weld	33.3% of each Weld	33.3% of each Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable				Note No. 26
C2.10	C-B	Nozzle in vessels equal to or less than 1/2 in. nominal thickness		·			
C2.11	С-В	Nozzle to shell (or head) Weld	Not Applicable				Note No. 19
C2.20	C-B	Nozzles without reinforcing plate in vessels greater than 1/2 in nominal thickness		•	·		
C2.21	С-В	Nozzle to Shell (or head) Weld	Not Applicable				Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicable		•		Note No. 25

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## INDIAN POINT UNIT NO. 3

## INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Volume Control Tank CSATVC1-31

CODE CLASS: 2

				<u> </u>			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable	!			Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable	•			Note No. 21
C2.33	C-B	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable	•			Note No. 22
C3.10	c-c	Integrally Welded Attachments (4)	Surface	One Welded Attachment	One Welded Attachment	2 Welded Attachments	Relief Request No. 15
C4.10	C-D	Bolts and Studs	Not Applicable	•			Note No. 11
C7.10	С-Н	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	C-H	Pressure Retaining Components	Visual, VI-2			One Test	Relief Request No. 19



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#### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Accumulator Tanks INTSIATAT1-31, INTSIATAT2-32, INTSIATAT3-33 and INTSIATAT4-34

CODE CLASS: 2

		•		EX	,		
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	· 3RD PERIOD	REMARKS
C1.10	.C-A	Shell Circumferential Welds 4 (1 each Accumulator)	Volumetric	33.3% of 1 Weld	33.3% of 1 Weld	33.3% of 1 Weld	Relief Request No. 15
C1.20	C-A	Head Circumferential Welds 8 (2 each Accumulator)	Volumetric	33.3% each of 2 Welds	33.3% each of 2 Welds	33.3% each of 2 Welds	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable				Note No. 26
C2.10	C-B	Nozzle in vessels equal to or less than 1/2 in. nominal thickness					
C2.11	C-8	Nozzle to shell (or head) Weld	Not Applicable	•		· .	Note No. 19
C2.20	С-В	Nozzles without reinforcing plate in vessels greater than 1/2 in nominal thickness					
C2.21	С-В	Nozzle to Shell (or head) Weld	Not Applicable	•		•	Note No. 24
C2.22	C-B	Nozzle Inside Radius	Not Applicable	•			Note No. 25

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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Accumulator Tanks INTSIATAT1-31, INTSIATAT2-32, INTSIATAT3-33 and INTSIATAT4-34

CODE CLASS: 2

•		COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EXT	•		
ITEM NO.	EXAM. CAT.			1ST PERIOD	2ND PERIOD	- 3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in, nominal thickness	·	· ·			
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzie to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	С-В	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable	•			Note No. 22
C3.10	c-c	Integrally Welded Attachments	Not Applicable				Note No. 7
C4. 10	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7.10	C-H	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request No. 19





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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Boron Injection Tank INTSTATSI

CODE CLASS: 2

			******	EX			
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	· 3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Welds	Not Applicable	•			Note No. 23
C1.20	C-A	Head Circumferential Welds (2)	Volumetric	33.3% each of 2 Welds	33.3% each of 2 Welds	33.3% each of 2 Welds	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable	•			Note No. 26
C2.10	С-В	Nozzle in vessels equal to or less than 1/2 in. nominal thickness					
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable				Note No. 19
C2.20	С-В	Nozzies without reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.21	C-B	Nozzie to Shell (or head) Weld	Not Applicable			·	Note No. 24
C2.22	С-В	Nozzle Inside Radius	Not Applicable				Note No. 25



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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Boron Injection Tank INTSIATSI

CODE CLASS: 2

				EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in nominal thickness		·			
C2.31	С-В	Reinforcing Plate Welds to Nozzle and Vessel (2)	Surface	1 Nozzle		1 Nozzle	Relief Request No. 15
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable	• .	•		Note No. 21
C2.33	С-В	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Visual, VT-2	1 Nozzle		1 Nozzle	
C3.10	C-C	Integrally Welded Attachments	Not Applicable				Note No. 7
C4. 10	C-D	Bolts and Studs	Not Applicable	•			Note No. 11
C7.10	С-Н	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	C-H	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request



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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Seal Water Injection Filters CSFLS1-31 and CSFLS1-32

CODE CLASS: 2

			•	EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND_PERIOD_	. 3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Welds 2 (One each Filter)	Volumetric	33.3% One Weld	33.3% One Weld	33.3% One Weld	Relief Request No. 15
C1.20	C-A	Head Circumferential Welds 2 (One each Filter)	Volumetric	33.3% One Weld	33.3% One Weld	33.3% One Weld	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable			·	Note No. 26
C2.10	C-B	Nozzle in vessels equal to or less than 1/2 in nominal thickness					•
C2.11	C-B	Nozzle to shell (or head) weld	Not Applicable				Note No. 19
C2.20	C-B	Nozzles without reinforcing plate in vessels greater than 1/2 in. nominal thickness			•		
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable		•		Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicable	!		· .	Note No. 25



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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Seal Water Injection Filters CSFLS1-31 and CSFLS1-32

CODE CLASS: 2

	***	ı		EXT	ENT OF EXAMINATION	DN	
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PER100	REMARKS
C2.30	C-B	Nozzles with reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	С-В	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable		• .		Note No. 22
C3. 10	c-c	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.10	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7.10	С-Н	Pressure Retaining Components	Visuai, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request



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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Reactor Coolant Filter CSFLRC1-31

CODE CLASS: 2

		,	METHOD OF	EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C1.10	C-A	Shell Circumferential Weld (1)	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15
C1.20	C-A	Head Circumferential Welds (2)	Volumetric	33:3% of 2 Welds	33.3% of 2 2 Welds	33.3% of 2 Welds	Relief Request No. 15
C1.30	C-A	Tubesheet to Shell Welds	Not Applicabl	e			Note No. 26
C2.10	. C-B	Nozzle in vessels equal to or less than 1/2 in. nominal thickness					
C2.11	C-B	Nozzle to shell (or head). Weld	Not Applicabl	e			Note No. 19
C2.20	C-B	Nozzles without reinforcing plate in vessels greater than 1/2 in. nominal thickness					*
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicabl	<b>e</b>			Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicabl	e			Note No. 25

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### INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Reactor Coolant Filter CSFLRC1-31

CODE CLASS: 2

		,	METHOD OF	EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C2.30	С-В	Nozzles with reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.31	C-B	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable	·			Note No. 21
C2.33	C-B	Nozzle to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable				Note No. 22
C3.10	C-C	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.10	C-D	Bolts and Studs	Not Applicable				Note No. 11
C7. 10	С-Н	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7.20	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request No. 19



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## INSERVICE INSPECTION PROGRAM

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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Seal Water Return Filter CSFLSW1-31

CODE CLASS: 2

		•	metion of	EX			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C1.10	C-V	Shell Circumferential Weld	Volumetric	33.3% of Weld	33.3% of Weld	33.3% of Weld	Relief Request No. 15 & No. 18
C1.20	C-V	Head Circumferential Welds (2)	Volumetric	33.3% of 2 Welds	33.3% of 2 Welds	33.3% of 2 Welds	Relief Request No. 15 & No. 18
C1.30	C-A	Tubesheet to Shell Welds	Not Applicable	•			Note No. 26
C2.10	С-В	Nozzle in vessels equal to or less than 1/2 in. nominal thickness					
C2.11	C-B	Nozzle to shell (or head) Weld	Not Applicable				Note No. 19
C2.20	С-В	Nozzles without reinforcing plate in vessels greater than 1/2 in. nominal thickness					
C2.21	C-B	Nozzle to Shell (or head) Weld	Not Applicable	· •	,		Note No. 24
C2.22	C-B	Nozzle Inside Radius Section	Not Applicable				Note No. 25

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COMPONENT: Seal Water Return Filter CSFLSW1-31

CODE CLASS: 2

				EXT			
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST_PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C2.30	C-B	Nozzles with reinforcing plate in vessels greater than 1/2 in nominal thickness					
C2.31	С-В	Reinforcing Plate Welds to Nozzle and Vessel	Not Applicable				Note No. 20
C2.32	C-B	Nozzle to Shell (or Head) Welds when inside of Vessel is Accessible	Not Applicable				Note No. 21
C2.33	C-B	Nozzie to Shell (or Head) when inside of Vessel is Inaccessible	Not Applicable		*		Note No. 22
C3.10	c-c	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.10	C-D	Bolts and Studs	Not Applicable	. /			Note No. 11
C7.10	С-Н	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Rellef Request No. 19
C7.20	C-H	Pressure Retaining Components	Visual, VI-2			One Test	Relief Request No. 19





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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Piping

CODE CLASS: 2

4589R/249R881017:50

		•		EX	IENI OF EXAMINATION	ON	
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C3.20	C-C	Integrally Welded Attach- ments (80)	Surface	26 Welded Attachments	27 Welded Attachments	27 Welded Attachments	Relief Request No. 15
C4.20	C-D	Bolts and Studs	Not Applicable		•		Note No. 11
C5.10	C-F	Piping Welds equal to or less than 1/2 in nominal thickness				*.	
C5.11	C-F	Circumferential Welds (387)	Surface	27 Welds	27 Welds	27 Welds	Relief Request No. 15
C5.12	C-F	Longitudinal Welds (24)	Surface	2 Welds	2 Welds	2 Welds	Relief Request No. 15
C5.20	C-F	Piping Welds greater than 1/2 in. nominal wall thickness		•			
C5.21	C-F	Circumferential Welds (348)	Surface and Volumetric	22 Welds	22 Welds	22 Welds	Relief Request No. 15
C5.22	C-F	Longitudinal Welds (6)	Surface and Volumetric	1 Weld	1 Weld	1 Weld	Relief Request No. 15
C5.30	C-F	Pipe Branch Connections greater than 4 in. nominal branch pipe size					
C5.31	C-F	Circumferential Welds (28)	Surface	2 Welds (	2 Welds	3 Welds	Relief Request No. 15
C5.32	C-F	Longitudinal Weld	Not Applicable	•			Note No. 27
C7.30	С-Н	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7 . 40 4589R/249R88	C-H 81017:50	Pressure Retaining Components	Visual, VT-2	•		One Test	Relief Request No. 19



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Residual Heat Removal Pumps ACAPRH1-31 and ACRPRH2-32

CODE CLASS: 2

				EXTENT OF EXAMINATION			•
ITEM NO.	EXAM. Cat.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	" 3RD PERIOD	REMARKS
C3.30	C-C	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.30	C-D	Bolts and Studs	Not Applicable				Note No. 11
C6.10	C-G	Pump Casing Welds	Not Applicable				Note No. 28
C7.50	С-Н	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7.60	С-Н	Pressure Retaining Components	Visual, VT-2			One Test	Relief Request







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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Charging Pumps CSAPCH1-31, CSAPCH2-32 and CSAPCH3-33

CODE CLASS: 2

				EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
C3.30	C-C	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.30	C-D	Bolts and Studs	Not Applicable				Note No. 11
C6.10	C-G	Pump Casing	Not Applicable				Note No. 28
C7.50	C-H	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.60	С-Н	Pressure Retaining	Visual, VT-2			One Test	Relief Request No. 19



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Safety Injection Pumps INTSTAPS11-31, INTSTAPS12-32 and INTSTAPS13-33

CODE CLASS: 2

				EX	EXTENT OF EXAMINATION		
ITEM NO.	EXAM. Cat.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	" 3RD PERIOD	REMARKS
C3.30	C-C	Integrally Welded Attachments	Not Applicable				Note No. 7
C4.30	C-D	Bolts and Studs - 24 (8 each Pump)	Volumetric	2 Bolts	3 Bolts	3 Bolts	
C6. 10	C-G	Pump Casing	Not Applicable				Note No. 28
C7.50	С-Н	Pressure Retaining Components	Visual, VT-2	One Test	One Test	One Test	Relief Request No. 19
C7.60	C-H	Pressure Retaining Components	Visual, VT-2	•		One Test	Relief Request No. 19

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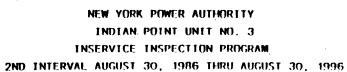
SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Valves

CODE CLASS: 2

				EXT	DN		
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	"_ 3RD PERIOD_	REMARKS
C3.40	C-C	Integrally Welded Attachments	Not Applicable			•	Note No. 7
C4.40	C-D	Bolts and Studs	Not Applicable		•		Note No. 11
C6.20	C-G	Valve Body Welds	Not Applicable				Note No. 29
C7.70	С-Н	Pressure Retaining Components	Visual, VI-2	One Test	One Test	One Test	Relief Request No. 19
C7.80	С-Н	Pressure Retaining Components	Visual, VI-2		. *	One Test	Relief Request No. 19





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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Systems in Support of Reactor Shutdown Function

CODE CLASS: 3

				EXTE			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
D1.10	D-A	Pressure Retaining Components	Visual, VI-2	System Pressure Test	System Pressure Test	System Hydrostatic Test	Relief Request No. 19
D1.20	D-A	Integral Attachment – Component Supports and Restraints (3)	Visual, VI-3	1 Attachment	1 Attachment	1 Attachment	
D1.30	D-A	Integral Attachment - Mechanical and Hydraulic Snubbers	Not Applicable		•	·	Note No. 30
D1.40	D-A	Integral Attachment - Spring Type Supports	Not Applicable				Note No. 30
D1.50	D-A	Integral Attachment - ' Constant Load Type Supports	Not Applicable				Note No. 30
D1.60	D-A	Integral Attachment - Shock Absorbers	Not Applicable				Note No. 30





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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Systems in Support of Emergency Core Cooling, Containment Heat Removal, Atmosphere Cleanup and Reactor Residual

Heat Removal

CODE CLASS: 3

			METHOD OF EXAMINATION	EXTE			
ITEM NO.	CAT.			1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
D2.10	D-B	Pressure Retaining Components	Visual, VT-2	System Pressure Test	System Pressure Test	System Hydro- static Test	Relief Request No. 19
D2.20	D-8	Integral Attachment - Component Supports and Restraints (144)	Visual, VT-3	51 Supports	47 Supports	46 Supports	
D2.30	D-B	Integral Attachment - Mechanical and Hydraulic Snubbers (1)	Visual, VT-3	1 Support			
D2.40	D-B	Integral Attachment ~ Spring Type Supports (6)	Visual, VI-3	2 Supports	2 Supports	2 Supports	
D2.50	D-B	Integral Attachment - Constant Load Type Supports	Not Applicable		·		Note No. 30
D2.60	D-B	Integral Attachment - Shock Absorbers	Not Applicable	•			Note No. 30



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Systems in Support of Residual Heat Removal from Spent Fuel Storage Pool

CODE CLASS: 3

			WETEND OF	EXTENT OF EXAMINATION				
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	·· 3RD PERIOD	REMARKS	
D3.10	D-C	Pressure Retaining Components	Visual, Vi-2	System Pressure Test	System Pressure Test	System Hydro- static Test	Relief Request No. 19	
D3 . 20	D-C	Integral Attachment - Component Supports and Restraints (6)	Visual, VT-3	2 Supports	2 Supports	2 Supports		
D3.30	D-C	Integral Attachment - Mechanical and Hydraulic Snubbers	Not Applicable				Note No. 30	
D3.40	D-C	Integral Attachment - Spring Type Supports	Not Applicable				Note No. 30	
D3.50	D-C	Integral Attachment - Constant Load Type Supports	Not Applicable				Note No. 30	
03.60	D-C.	Integral Attachment - Shock Absorbers	Not Applicable				Note No. 30	



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

**COMPONENT:** Plate and Shell Type Supports

CODE CLASS: 1

			<u>-</u> _	EXT	ENT OF EXAMINATION	DN	
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
F1.10	F-A	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Not Applicable			•	Note No. 31
F1.20	F-A	Weld Connections to Building Structure	Not Applicable				Note No. 31
F1.30	F-A	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non- integral supports (1)	Visual, VI-3	33.3% of Support	33.3% of Support	33.3% of Support	
F1.40	F-A	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Not Applicable				Note No. 31



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Linear Type Supports

CODE CLASS: 1

				EXT			
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	' 3RD PERIOD	REMARKS
F2.10	F-8	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Not Applicable				Note No. 32
F2.20	F-B	Weld Connections to Building Structure	Not Applicable		·		Note No. 32
F2.30	F-B	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non-integral supports	Not Applicable			•	Note No. 32
F2.40	F-B	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Not Applicable				Note No. 32

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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

**COMPONENT: Component Standard Supports** 

CODE CLASS: 1

				EX	a a		
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	" 3RD_PERIOD	REMARKS
F3.10	F-C	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Visual, VI-3	33.3%	33.3%	33.3%	
F3.20	F-C	Weld Connections to Building Structure	Visual, VT-3	33.3%	33.3%	33.3%	
F3.30	F-C	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non-integral supports	Visual, VT-3	33.3%	33.3%	33.3%	
F3.40	F-C	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Visual, VT-3	33.3%	33.3%	33.3%	
F3.50	F-C	Spring type supports, constant load type supports, shock absorbers, hydraulic and mechanical type snubbers.	Visual, VT-4	33.3%	33.3%	33.3%	





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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Plate an Shell Type Supports

CODE CLASS: 2

		COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EXT			
ITEM NO.	EXAM. CAT.			1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS
F1.10	F-A	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Not Applicable				Note No. 31
F1.20	F-A	Weld Connections to Building Structure	Not Applicable	. •			Note No. 31
F1.30	F-A	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non- integral supports (4)	Visual, VI-3	1 Support	1 Support	2 Supports	
F1.40	F-A	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Not Applicable				Note No. 31



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

**COMPONENT:** Linear Type Supports

CODE CLASS: 2

				EXTENT OF EXAMINATION				
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	3RD PERIOD	REMARKS	
F2.10	F-B	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Not Applicable	·			Note No. 32	
F2.20	F-B	Weld Connections to Building Structure	Not Applicable	·			Note No. 32	
F2.30	F-B	Weld and Mechanical Connections at intermediate joints in multiconnected integral and non-integral supports	Not Applicable				Note No. 32	
F2.40	F-B	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Not Applicable	÷			Note No. 32	



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

**COMPONENT: Component Standard Supports** 

CODE CLASS: 2

		COMPONENT IDENTIFICATION		· EX			
ITEM NO.	EXAM. CAT.		METHOD OF EXAMINATION	1ST PERIOD	2ND_PERIOD.	3RD PERIOD	REMARKS
F3.10	F-C	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Visual, VI-3	33.3%	33.3%	33.3%	
F3.20	F-C	Weld Connections to Building Structure	Visual, VT-3	33.3%	33.3%	33.3%	
F3.30	F-C	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non-integral supports	Visual, VT-3	33.3%	33.3%	33.3%	
F3.40	F-C	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Visual, VT-3	33.3%	33.3%	33.3%	
F3.50	F-C	Spring type supports, constant load type supports, shock absorbers, hydraulic and mechanical type snubbers.	Visuai, VT-4	33.3%	33.3%	33.3%	



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Plate and Shell Type Supports

CODE CLASS: 3

	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	EXT	• . • •	
ITEM NO.				1ST PERIOD	2ND PERIOD 3RD PERIO	D REMARKS
F.1. 10	F-A	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Not Applicable			Note No. 31
F1.20	F-A	Weld Connections to Building Structure	Not Applicable			Note No. 31
F1.30	F-A	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non- integral supports (4)	Not Applicable	,		Note No. 31
F1.40	F-A	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Not Applicable			Note No. 31



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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Linear Type Supports

CODE CLASS: 3

				EXT			
ITEM NO.	CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	· 3RD PERIOD	REMARKS
F2.10	F-B	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Not Applicable	t			Note No. 32
F2.20	F-B	Weld Connections to Building Structure	Not Applicable		•		Note No. 32
F2.30	F-B	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non-integral supports	Not Applicable	·			Note No. 32
F2.40	F-B	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Not Applicable	· ,			Note No. 32

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SECTION XI EDITION: 1983 THRU SUMMER 1983 ADDENDA

COMPONENT: Component Standard Supports

CODE CLASS: 3

				EX.	•		
ITEM NO.	EXAM. CAT.	COMPONENT IDENTIFICATION	METHOD OF EXAMINATION	1ST PERIOD	2ND PERIOD	" 3RD PERIOD	REMARKS
F3.10	F-C	Mechanical Connections to Pressure Retaining Com- ponents and Building Structure	Visual, VT-3	33.3%	33.3%	33.3%	
F3.20	F-C	Weld Connections to Building Structure	Visual, VT-3	33.3%	33.3%	33.3%	
F3.30	F-C	Weld and Mechanical Connections at inter- mediate joints in multiconnected integral and non-integral supports	Visual, VT-3	33.3%	33.3%	33.3%	
F3.40	F-C	Component displacement settings of guides and stops, misalignment of supports, assembly of support items.	Visual, VT-3	33.3%	33.3%	33.3%	
F3.50	F-C	Spring type supports, constant load type supports, shock absorbers, hydraulic and mechanical type snubbers.	Visual, VT-4	33.3%	33.3%	33.3%	





# INDIAN POINT UNIT NO. 3 INSERVICE INSPECTION PROGRAM 2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

#### NOTES:

- 1. There are no weld repair areas in the reactor vessel beltline region.
- 2. There are no partial penetration reactor vessel nozzle welds.
- 3. There are no nominal pipe size less than 4 in, nozzle to safe-end butt welds.
- 4. There are no nozzle to safe-end socket welds.
- 5. Reactor vessel closure heads studs are removed during refueling outages and will be examined under Item. No. B6.30.
- 6. There are no bolts, studs and nuts 2 in, or less.
- There are no integrally welded attachments.
- 8. There are no circumferential head welds.
- 9. There are no meridional head welds.
- 10. There are no nozzle to vessel welds.
- 11. There are no bolts or study greater than 2 in.
- There are no Class 1 heat exchangers other than the steam generators.
- 13. There are no nominal pipe size equal to or greater than 4 in. dissimilar metal butt welds.
- 14. There are no nominal pipe size less than 4 in. dissimilar metal butt welds.
- 15. There are no dissimilar metal socket welds.
- There are no longitudinal pipe welds.
- 17. There are no valves, nominal pipe size less than 4 in. valve body welds.
- 18. There are no valves, nominal pipe size equal to or greater than 4 in. valve body welds.
- 19. There are no nozzle to shell (or head) weld in vessels equal to or less than 1/2 in. nominal thickness.
- 20. There are no reinforcing plate welds to nozzle and vessel in vessels greater than 1/2 in. nominal thickness.
- 21. There are no nozzle to shell (or head) welds when inside of vessel is accessible in vessels greater than 1/2 in. nominal thickness.
- 22. There are no nozzle to shell (or head) welds when inside of vessel is inaccessible in vessels greater than 1/2 in. nominal thickness.
- 23. There are no shell circumferential welds.
- 24. There are no nozzle to shell (or head) welds without reinforcing plate in vessels greater than 1/2 in. nominal thickness.
- 25. There are no nozzle inside radius section without reinforcing plate in vessels greater than 1/2 in, nominal thickness.
- 26. There are no tubesheet to shell welds.
- 27. There are no longitudinal welds on pipe branch connections greater than 4 in. nominal branch pipe size.



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- 28. There are no pump casing welds.
- 29. There are no valve body welds.
- 30. There are no Class 3 Integral Attachments in this Item No. and Examination Category.
- 31. There are no Class 1, Class 2 or Class 3 Plate and Shell Type Supports in this Item No. and Examination Category.
- 32. There are no Class 1, Class 2 or Class 3 Linear Type Supports in this Item No. and Examination Category.

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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Vessel RCPCR-V1 Shell Circumferential (2) and Longitudinal (9) Welds; Head Circumferential (3) and

Meridional Welds (12); Shell to Flange Weld; Head to Flange Weld; Nozzle to Vessel Welds (8) and Nozzle

Inside Radius Sections (8).

CODE CLASS:

CODE TABLE:

IWB-2500-1

**CUDE CATEGORY:** 

B-A; B-A; B-A; B-A; B-A; B-D; B-D

CODE ITEM NO .:

B1.11; B1.12; B1.21; B1.22; B1.30; B1.40; B3.90; B3.100

EXAMINATION REQUIREMENT: Alternate volumetric examination per United States Nuclear Regulatory Commission Regulatory Guide 1.150

Rev. 1

**BASIS FOR RELIEF:** 

Reference attached Westinghouse NSID Position Paper on United States Nuclear Regulatory Commission

"Regulatory Guide 1.150 Rev. 1."

ALTERNATIVE EXAMINATION:

Reference attached Westinghouse NSID Position Paper on United States Nuclear Regulatory Commission

"Regulatory Guide 1.150 Rev. 1."

RELIEF REQUEST NO. 1 PAGE 1 OF 16

# APPLICATION OF REGULATORY GUIDE 1.150 AT THE INDIAN POINT UNIT NO. 3 NUCLEAR POWER PLANT

# **INTRODUCTION**

The following paragraphs describe the extent to which the recommendations of USNRC Regulatory Guide 1.150, "Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examination," are applied during execution of Reactor Vessel examinations at New York Power Authority's Indian Point Unit No. 3 Nuclear Power Plant. The basis for implementation of the document is Appendix A to Revision 1 of Regulatory Guide 1.150, dated February 1983, where the recommendations of the Electric Power Research Institute are adopted as an acceptable approach to the base document.

# REMOTE ULTRASONIC EXAMINATIONS OF REACTOR VESSEL NOZZLE INNER RADIUS; SHELL, FLANGE, NOZZLE AND BOTTOM HEAD WELDS.

# 1.0 INSTRUMENT PERFORMANCE CHECKS

Paragraphs 1.1a and 1.1b recommend records of the RF (radiofrequency) pulse waveform from a reference reflector be obtained for each search unit in a manner which will provide frequency-amplitude information. The procedures and equipment used for this process must be documented and the checks are to be made within six months prior to performing reactor vessel examinations.

# RELIEF REQUEST NO. 1 PAGE 2 OF 16

The recommendations of paragraphs 1.1a and 1.1b are met via implementation of paragraph 1.2c of the Regulatory Guide, wherein it is recommended that records of the RF pulse waveform be made before and after examining all welds that must be examined during one outage. Photographic records of the RF pulse waveform are made prior to reactor vessel examinations during the calibration process and on site after reactor vessel examinations are completed. Results are documented and maintained in the reactor vessel examination data package.

# 1.2 FIELD PERFORMANCE CHECKS

Paragraph 1.2a recommends that RF waveforms, screen height and amplitude control linearity, and angle beam profile characterization be verified before and after examining all welds that must be examined during one outage.

The recommendations of paragraph 1.2a are met with the exception of angle beam profile characterization, which is performed prior to reactor vessel examinations only, during the calibration sequence. Only in the event significant reflectors are detected with a transducer would these measurements be made after examinations are completed.

Paragraph 1.2b recommends the instrument sensitivity during performance of the amplitude control linearity verification be at the calibration sensitivity or at some point between the calibration sensitivity and the scanning sensitivity.

## RELIEF REQUEST NO. 1 PAGE 3 OF 16

The recommendations of paragraph 1.2b are met as amplitude control linearity verification is performed at the calibration sensitivity. These verifications are documented in the calibration data package.

Paragraph 1.2c recommends records of the RF (radiofrequency) pulse waveform from a reference reflector be obtained and recorded in a manner that will permit extraction of frequency-amplitude information.

The recommendations of paragraph 1.2c are met. Photographic records of the RF waveforms are collected for each transducer in a manner in which frequency-amplitude information can be extracted before the vessel examination, during the calibration sequence, and after the vessel examinations are completed. Results are documented and maintained in the reactor vessel examination data package.

Paragraph 1.2d recommends verification of screen height linearity according to the requirements of Appendix I, Article 4, of Section V of the ASME Boiler and Pressure Vessel Code.

The recommendations of paragraph 1.2d are met. Screen height linearity is verified prior to the calibration sequence and before and after each series of Reactor Vessel examinations performed in one outage. Documentation of these verifications is maintained in the Reactor Vessel examination data package.

# RELIEF REQUEST NO. 1 PAGE 4 OF 16

Paragraph 1.2e recommends verification of amplitude control linearity according to Appendix II, Article 4, of Section V of the ASME Boiler and Pressure Vessel Code.

The recommendations of paragraph 1.2e are met. Amplitude control linearity is verified prior to the calibration sequence and before and after each series of reactor vessel examinations performed in one outage. Documentation of these verifications is maintained in the reactor vessel examination data package.

Paragraph 1.2f recommends the vertical beam profile be determined for each search unit used during the examination by a procedure similar to that outlined in Article 4 of Section V of the ASME Boiler and pressure Vessel Code.

The recommendations of paragraph 1.2f are met. All angle beam search units are characterized in terms of beam profile by collecting sweep and transducer location data at 20 percent DAC and 50 percent DAC limits during the calibration sequence. Documentation of these characterizations is maintained in the reactor vessel examination data package.

# 2.0 CALIBRATION

This paragraph recommends calibration be performed to establish the distance-amplitude-curve and sweep range calibration in accordance with Article 4, Section V of the ASME Boiler and Pressure Vessel Code. Calibration confirmation is recommended before and after each examination or each week the system is in use, whichever is less. It is also recommended, where possible, the same calibration block be used for successive vessel examinations.

# RELIEF REQUEST NO. 1 PAGE 5 OF 16

The recommendations of paragraph 2.0 are met. Calibrations for vessel examinations are established per Article 4, Section V of the ASME Boiler and Pressure Vessel Code, calibration confirmation is performed within specified intervals, and the same calibration blocks are used for successive examinations of the reactor vessel where possible. All calibration data are documented and maintained in the reactor vessel examination data package.

Paragraph 2.1 recommends static calibrations for instances where sizing is performed using static transducers. When signals are maximized during calibration, they should also be maximized during sizing. Reference hole detection should be shown at the scanning speed.

The recommendations of paragraph 2.1 are met. manual calibrations and sizing are performed statically, signals are maximized during calibration and sizing, and manual scanning is performed at 2X to 5X the calibration level to assure reflector detection during the examination process.

Paragraph 2.2 provides recommendations for various options intended to assure adequate detection during mechanized scanning. Options include:

- 1) dynamic calibration using the scanning mechanism used for vessel examinations or a mechanism that duplicates critical parameters of the actual vessel scanner,
- 2) employing a calibration speed at or greater than the vessel scanning speed, and
- 3) development of correction factors between static and dynamic responses.

## RELIEF REQUEST NO. 1 PAGE 6 OF 16

The recommendations of paragraph 2.2 are met. Calibration procedures specify transducers be mounted on the array plate which will be used for the reactor vessel examinations. The array plate is manipulated on a device which simulates the motions of the actual reactor vessel inspection device. Distance-amplitude curves are developed statically and verified dynamically at or higher than the specified scanning speed for the vessel.

# 2.3 CALIBRATION CONFIRMATION

This paragraph provides recommendations concerning the performance of mid-shift or interim confirmations of calibration. The stability requirements of paragraph T-433, Article 4, Section V of the ASME Boiler and Pressure Vessel Code are referenced. When electronic simulators are used, it is recommended that target reflectors be used to supplement simulator checks. A minimum of two targets separated by a distance representing 75 percent of maximum thickness should be used for the supplementary checks. Written records of the calibrations should be developed for both the target reflector responses and the Code calibration block distance-amplitude curves for each transducer.

Finally, it is recommended that measures be taken to ensure environmental control of the calibrated electronics.

The recommendations of paragraph 2.3 are met. System calibration is confirmed, as a minimum, before and after each series of reactor vessel examinations performed with a particular transducer array plate. In addition, instrument stability is verified as a minimum once each shift using an Electronic Block Simulator (EBS). Complete ultrasonic system performance is confirmed using an array of cylindrical reflectors called a Mechanical Calibration Transfer Standard. Responses from reflectors in the array are referenced to the distance-amplitude curves generated with the basic calibration blocks per Article 4 of Section V of the ASME Boiler and Pressure Vessel Code. The design of the array allows at least a two-point check of sweep and sensitivity. Typically, a minimum of three reflectors are selected for verification which appear at transit times representative of the primary reflectors in the basic calibration block. Written records are developed for the Electronic Block Simulator information, the target reflector responses, and the distance-amplitude-curves for each search unit/inspection channel combination. All instrumentation is protected from temperature, vibration, and shock via the trailer mounted control center which employs provisions for shock mounting and environmental control.

# 2.4 CALIBRATION BLOCKS

This paragraph recommends calibration block designs comply with Article 4, Section V of the ASME Boiler and Pressure Vessel Code. When alternative or new blocks are used, a comparison of acoustic response with blocks used previously is recommended. Block and reference reflector surfaces should be protected during storage and should not be modified between successive examinations. If blocks or reflector surfaces are modified in any way, these modifications should be documented.

The recommendations of this paragraph are met. Basic calibration blocks are designed per the requirements of Article 4, Section V of the ASME Boiler and Pressure Vessel Code. Block surfaces and surfaces of reference reflectors are protected, and block modifications are not permitted without prior approval and documentation.

## 3.0 EXAMINATION

This paragraph recommends the scope and extent of the ultrasonic examinations performed comply with IWA-2000, Section XI of the ASME Boiler and Pressure Vessel Code. Furthermore, if electronic gating is used the entire required thickness should be within the gated region. If single gates are used, they should be capable of recording multiple indications within the gate. Finally, examinations should be conducted with a minimum of 25 percent overlap based on the transducer element size.

The recommendations of paragraph 3.0 are met. The scope and extent of examinations performed are selected based upon IWA-2000, Section XI of the ASME Boiler and Pressure Vessel Code. Electronic gating, capable of detecting up to four indications appearing simultaneously within the range, is applied. Gates are set to include the entire examination volume to the extent practical. Examinations are conducted with a minimum of 25 percent overlap based upon transducer element size. Typically, a 50 percent scan overlap is applied.

Paragraph 3.1 provides recommendations for interrogration of the internal clad/base metal interface region of the reactor vessel. Procedures fo examining this region should be capable of detecting the 2 percent, 90 degree corner reflector which penetrates the clad surface of the calibration block defined by Article 4, Section V of the ASME Boiler and Pressure Vessel Code. Alternate reflectors are permissible provided they are located in the clad/base metal interface region, do not exceed the maximum allowable defect size, and are demonstrated to provide equivalent or superior results. The volume of interest is defined as one inch of metal as measured perpendicular to the nominal location of the clad/base metal interface.

The recommendations of paragraph 3.1 are met by application of examination procedures for supplementing Code required examinations with techniques specifically intended to interrogate volumes of material within one inch of the clad/base metal interface when scanning vessel shell beltline region welds. Procedures provide for implementation of near surface examination methods capable of identifying the clad side, 2 percent 90 degree corner reflector in the basic calibration bloc specified in Article 4, Section V of the ASME Boiler and Pressure Vessel Code. Either 45 degree full node or shallow angle techniques may be used to comply with this recommendation.

Paragraph 3.2 recommends that beam angles selected to scan welds be based on the geometry of the weld/parent metal interface. In particular, welds identified in paragraph T-441.4.3, Article 4, Section V of the ASME Boiler and Pressure Vessel Code should be examined such that at least one beam angle is perpendicular, plus or minus 15 degrees, to the weld/parent metal interface. If this is not feasible, demonstration that unfavorably oriented flaws can be detected or use of alternative NDE techniques is recommended.

The recommendations of paragraph 3.2 are met. Beam angles are selected for examinations of nozzle-to-shell welds from the nozzle bores and the vessel flange-to-shell weld from the flange seal surface based on their ability to provide near normal incidence to the weld/base metal interface. Ability to adhere to the plus or minus 15 degree tolerance suggested is dependent upon component geometry.

# 4.0 BEAM PROFILE

These recommendations are discussed in 1.2f.

# 5.0 SCANNING WELD/METAL INTERFACE

The recommendations are discussed in 3.2.

# 6.0 RECORDING AND SIZING

This paragraph recommends the capability to detect, record, and size flaws defined by paragraph IWB-3500, Section XI of the ASME Boiler and Pressure Vessel Code be demonstrated. The measurement tolerance established should be applied when sizing flaws detected and recorded during scanning.

The ability to detect, record and size flaws is demonstrated to the extent that calibrations are required by Article 4, Section V of the ASME Boiler and Pressure Vessel Code. Experience suggests procedures, equipment, and personnel utilized for these examinations are capable of detecting and recording reflectors which exceed the recording criteria defined in Article 4, Section V of the ASME Boiler and Pressure Vessel Code as augmented by USNRC Regulatory Guide 1.150. Experience is being developed with advanced sizing methods and automated data acquisition and recording equipment. Application of these emerging technologies will be considered in the event significant reflectors are detected.

Paragraph 6.1 recommends indications from geometric sources need not be sized. Recording should be at 50 percent DAC. Once sufficient information has been gathered to identify the origin of the geometric indication, further evaluation and recording are not required.

The recommendations of paragraph 6.1 are met. All indications which exceed the recording level are automatically identified on the remote inspection tool data printout in terms of amplitude, sweep position, and location in the vessel. All indications are investigated to determine their origin and the interpretation, along with the basis for that interpretation are documented in the vessel examination records.

# 6.2 INDICATIONS WITH CHANGING METAL PATH

This paragraph provides recommendations for recording of indications which change metal path for a distance greater than that recorded from the calibration reflector. Reflectors at metal paths representing 25 percent and greater of the through-wall thickness of the vessel wall as measured from the inner surface should be recorded per Sections V and XI of the ASME Boiler and Pressure Vessel Code and characterized at 50 percent DAC. Reflectors within the inner 25 percent of the vessel through-wall thickness should be recorded at 20 percent DAC. Characterization should be in accordance with methods demonstrated in paragraph 6.0. Indications sized to 20 percent DAC may have their size corrected by subtracting the beam width in the through thickness direction as based on data collected from a calibration hole at a depth similar to that of the reflector. This size should be compared to the reflector size determined based on 50 percent DAC without beam spread correction. The size used for evaluation should be the larger size as determined by the two methods.

The recommendations of paragraph 6.2 are met. Valid angle beam indications at metal paths representing 25 percent and greater of the vessel through-wall thickness measured from the inner surface are recorded and characterized at 50 percent DAC regardless of indication travel. Valid angle beam indications within the inner 25 percent of the vessel wall thickness measured from the vessel inner surface are recorded at 20 percent DAC regardless of indication travel. If indications within the inner 25 percent of the vessel inner surface exceed 50 percent DAC, they are recorded at 20 percent and 50 percent DAC limits. The size is determined by the larger of the 20 percent DAC size minus beam width or 50 percent DAC without beam spread correction.

## 6.3 INDICATIONS WITHOUT CHANGING METAL PATH

This paragraph recommends that indications which do not change metal path and are within the outer 75 percent of the through-wall dimension be recorded only when any continuous dimension exceeds one inch. If such an indication falls within the inner 25 percent of the through-wall dimension it should be recorded at 20 percent DAC and evaluated at 50 percent DAC. A precautionary note is included which provides some guidance in determining whether a reflector is truly of the non-traveling variety.

The recommendations of paragraph 6.3 are met. Procedures employed do not discriminate between traveling and non-traveling indications during the recording process. Thus, valid angle beam indications at metal paths representing 25 percent and greater of the vessel wall thickness are recorded at 50 percent DAC, regardless of the extent to which they might be observed to travel. Valid angle beam indications within the inner 25 percent of the vessel wall thickness as measured from the inner surface are recorded at 20 percent DAC, regardless of the extent to which they might be observed to travel. When indications in the inner 25 percent of the vessel wall thickness exceed 50 percent DAC, they are recorded at 20 percent and 50 percent DAC limits. The size is determined by the larger of the 20 percent DAC size minus beam width or 50 percent DAC without beam spread correction.

# 6.4 ADDITIONAL RECORDING CRITERIA

This paragraph recommends supplementary recording criteria for reflectors which are reportable according to the Regulatory Guide. Reportable indications should be recorded at scan intervals no greater than one-fourth inch. The recorded information should include metal path and transducer location data for 20 percent DAC, 50 percent DAC, 100 percent DAC, and the peak amplitude locations, where applicable. Electronic gating systems shall provide on-line, reproducible, recorded information regarding metal path, amplitude, and positin of all indications exceeding a preset level, representing the minimum recording level required. Preferred methods are to employ multiple gates or a single gate for each cahnnel with multi-indication recording capability.

The recommendations of this paragraph are met. Reportable indications are recorded at scan intervals of one-fourth inch, maximum. Recording procedures require collection and documentation of indication transit time and transducer location for 20 percent DAC, 50 percent DAC, 100 percent DAC, and peak amplitude locations, where applicable. Information presented automatically on the data printout include indication amplitude, sweep position, and location in the vessel. The gating system employed is capable of recording up to four indications which might appear in the gate simultaneously.

# 7.0 REPORTING OF RESULTS

This paragraph recommends that records obtained while following the recommendations of Regulatory Positions 1.0, 2.0, 3.0, and 6.0 along with any discussion and explanation be kept available at the site. Indications determined by Regulatory Positions 6.2 or 6.3 to exceed the allowable limits of Section XI of the ASME Boiler and Pressure Vessel Code should be reported as abnormal degradation of the reactor pressure boundary in accordance with the recommendations of Regulatory Position 2a(3) of Regulatory Guide 1.16.

The report of the ultrasonic examination should also include the best estimate of the tolerances in sizing flaws at the sensitivity specified in 6.0 and the basis for this estimate, a description of the technique used to qualify the effectiveness of the examination procedure, the best estimate of volumes not efficiently examined, and sketches of equipment and identification of reference points and necessary dimensions to allow a reviewer to follow the equipment's indication location scheme. Finally, if other volumetric techniques are used, they should be described in the final report.

The recommendations of paragraph 7.0 are met as described below. The reactor vessel final report includes all records obtained per implementation of Regulatory Positions 1.0, 2.0, 3.0, and 6.0. Indications determined to exceed the allowable limits of Section XI of the ASME Boiler and Pressure Vessel Code are reported as required. The report of the ultrasonic examinations includes all calibration records and procedures; estimates of volumes inaccesible due to geometry, access, etc.; descriptions and sketches of the remote examination system which explain its operation, critical reference points, and dimensions; and descriptions of alternative volumetric techniques, if applied. Estimates of error bands associated with flaw sizing are not provided as they are considered subjective in nature and not readily substantiated with quantitative data. As more experience is developed with use of advanced sizing methods and automated data acquisition equipment, estimates of this nature may be possible in the future.

# 8.0 MANUAL ULTRASONIC EXAMINATIONS OF REACTOR VESSEL CLOSURE HEAD WELDS

Manual ultrasonic examinations of Reactor Vessel Closure Head Flange and Meriodional Welds will be performed to ASME Boiler and Pressure Vessel Code Section V and XI-1983 Edition thru Summer 1983 Addenda for calibration, examination and recording criteria. In addition, valid flaw indications which provide a response equal to or greater than 20% of primary reference DAC and are at sweep locations representing the inner 25% through wall thickness measured from the inner surface will be recorded per the requirements of USNRC Regulatory Guide 1.150 Rev. 1.

# **NEW YORK POWER AUTHORITY** INDIAN POINT UNIT NO. 3

INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Vessel RCPCR-V1 Closure Head and Reactor Vessel Bottom Head

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-A

CODE ITEM NO.:

B1.21

EXAMINATION REQUIREMENT: Volumetric examination of 100% of Code Required Accessible Length of one Weld per IWB-2500-3.

**BASIS FOR RELIEF:** 

The Reactor Vessel Closure Head peel segment to disc circumferential weld is completely enclosed within the pattern of CRDM penetrations inside the shroud and are not accessible for Volumetric examination. Volumetric examination of the Reactor Vessel bottom head peel segment to disc circumferential weld is restricted from inside by the location of adjacent in-core instrumentation penetrations. Volumetric examination from the outside of the Reactor Vessel is restricted by incore instrumentation conduits which prevent sufficient scanning path for Volumetric examination.

ALTERNATIVE EXAMINATION: As required by Section XI-Category B-A, Item No. B1.21-100% of "accessible length of one weld" is to be examined during the Second Interval. Therefore, the 3rd weld in this category (Reactor Vessel Lower Head Circumferential Weld) will be examined volumetrically 100% of accessible length.

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Vessel RCPCR-V1: Closure Head Meridional Welds (6) and Bottom Head Meridional Welds (6)

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-A

CODE ITEM NO.:

B1.22

EXAMINATION REQUIREMENT: Volumetric Examination of 100% of Code Required Accessible Length of One Weld per IWB-2500-3.

BASIS FOR RELIEF:

The Reactor Vessel Closure Head Meridional Welds are restricted by the shroud enclosing the CRDM penetrations for Volumetric examination. The Reactor Vessel Bottom Head Meridional Welds are restricted from inside the Reactor Vessel by the location of adjacent in-core instrumentation penetrations. Volumetric examination from the outside of the Reactor Vessel is restricted by in-core instrumentation conduits which prevent sufficient scanning path for Volumetric examination.

ALTERNATIVE EXAMINATION: As required by Section XI-Category B-1, Item No. 1.22-100% of "Accessible Length of Weld" will be examined

during the Second Interval.

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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Vessel RCPCR-V1 Shell to Flange Weld

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-A

CODE ITEM NO.:

B1.30

**EXAMINATION REQUIREMENT:** Volumetric Examination of 100% of Code Required Area per IWB-2500-8.

**BASIS FOR RELIEF:** 

Volumetric examinations of the Reactor Vessel Shell to Flange Weld from the Seal Surface is restricted due

to 2 Guide Studs at Reactor Vessel Core locations #12 and #44.

ALTERNATIVE EXAMINATION: Volumetric examination of the Reactor Vessel Shell to Flange Weld is performed utilizing the automated Reactor Vessel Tool. 1. From the Seal Surface (when the Core Barrel is in place) and 2. From the Reactor Vessel I.D. and Seal Surface (when the Core Barrel is removed). Volumetric examination will be performed on approximately 86% of the Reactor Vessel Shell to Flange Weld from the Seal Surface and 100% of the Reactor Vessel Shell to Flange Weld from the I.D.

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Class 1 Components and Piping Welds; Class 1 Integrally Welded Attachments

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-A: B-B: B-B: B-B: B-D: B-F: B-H: B-J: B-J: B-J: B-J: B-J: B-K-1: B-K-1

CODE ITEM NO.:

B1.40; B2.11; B2.12; B2.40; B3.140; B5.70; B8.20; B9.11; B9.12; B9.21; B9.31; B9.32; B9.40; B10.10; B10.20

EXAMINATION REQUIREMENT: Volumetric and/or surface examination of 100% of Code Required Area per IWB-2500-1, IWB-2500-2, IWB-2500-5,

IWB-2500-6. IWB-2500-8. IWB-2500-9. IWB-2500-10, IWB-2500-11, IWB-2500-12, IWB-2500-13, IWB-2500-14, and

IWB-2500-15.

**BASIS FOR RELIEF:** 

Limitations may occur for the examination of Class 1 Component and Piping Welds when the welds are at geometric discontinuities such as pipe to vessel welds, pipe to valve or flange welds, elbow introdus or extrodus or vessel to flange welds. Limitations may also occur from welded pads, welded support lugs,

welded name plates or component and Integrally Welded Attachment configurations.

ALTERNATIVE EXAMINATION: Volumetric and/or Surface examinations as required by ASME Boller and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda will be performed to the maximum extent possible. Where limitations restrict examination of 100% code required area the limitation will be documented on the data sheet for the weld examined and a Limitation to Examination Form describing approximate size, location and type of

limitation.

# NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

**SECTION XI EDITION:** 

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Vessel RCPCR-V1 Nozzle to Safe End Butt Welds (8)

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-F

CODE ITEM NO.:

B5.10

EXAMINATION REQUIREMENT: Volumetric and Surface examination of 100% of Code Required Area per IWB-2500-8.

**BASIS FOR RELIEF:** 

The only access to the Reactor Vessel Nozzle to Safe End Butt Welds from the outside surfaces is through removable plugs in the primary shield. These plugs are located above the nozzle safe ends and are removable through the refueling cavity floor. With the plugs removed, the top insulated surfaces (approximately 25%) of the nozzle safe ends are visible, however the fixed insulation, designed as nonremovable, the limited space between the nozzle and cavity wall and expected high radiation levels

precludes surface examinations.

ALTERNATIVE EXAMINATION: The Reactor Vessel Nozzle to Safe End Butt Welds will be volumetrically examined only during the 2nd

Inspection Interval from the inside diameter with the automated Reactor Vessel Tool.

### NEW YORK POWER AUTHORITY INDIAN POINT UNIT NO. 3 INSERVICE INSPECTION PROGRAM 2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

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SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

**COMPONENT:** 

Reactor Vessel RCPCR-V1 Threads in Flange (54)

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-G-1

CODE ITEM NO.:

B6.40

**EXAMINATION REQUIREMENT:** Volumetric examination of 100% of Code Required Area per IWB-2500-12.

**BASIS FOR RELIEF:** 

The Reactor Vessel Threads in Flange are examined Volumetrically utilizing the automated Reactor Vessel Tool. Guide Studs located at Stud Holes #12 and #44 restrict examinations for a total of 6 Stud Holes (11,

12, 13, 43, 44 and 45).

ALTERNATIVE EXAMINATION: Visual examination of the 6 restricted threads in flange will be performed in conjunction and as accessible

during Vessel Interior examinations performed under Section XI-Code, Item No. B.13.10.

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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Pressurizer RCPCPR1 Circumferential (1) and Longitudinal (1) Welds

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-B

CODE ITEM NO.:

B2.11 and B2.12

**EXAMINATION REQUIREMENT:** Volumetric examination of 100% of Code required area per IWB-2500-1 and IWB-2500-2.

**BASIS FOR RELIEF:** 

The Pressurizer Upper Head Circumferential and Longitudinal Welds are enclosed in a biological and missile

shield and are inaccessible for examination.

ALTERNATIVE EXAMINATION: Visual examination for evidence of leakage will be performed during System Leakage and System Hydrostatic

Tests per Section XI Code Items 815.20 and 815.21.

#### **NEW YORK POWER AUTHORITY** INDIAN POINT UNIT NO. 3 INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

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SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Pressurizer RCPCPR1 Nozzle Inside Radius Sections (6)

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-D

CODE ITEM NO.:

B3.120

Volumetric examination of 100% by Code required area per IWB-2500-7.

**BASIS FOR RELIEF:** 

The nozzles on the Pressurizer upper and lower head are cast with the vessel heads. The as cast surface of the heads, combined with the geometry of this area effectively preclude ultrasonic examination of the nozzle inner radii. The geometry and size of the nozzles are such that a radiographic examination is not feasible. Specifically, the radiographic test film cannot be situated properly from the I.D. due to lack of interior structure to work from. Placement of the source will not allow proper film to source distance. resulting in geometric unsharpness. Surface and visual examinations would be restricted by anticipated

radiation levels and the as clad surface.

ALTERNATIVE EXAMINATION: Visual examination for evidence of leakage will be performed during System Leakage and System Hydrostatic

Tests per Section XI, Code Items B15.20 and B15.21.

## **NEW YORK POWER AUTHORITY** INDIAN POINT UNIT NO. 3 INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

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SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

**COMPONENT:** 

Reactor Coolant Pipe Circumferential Welds (8)

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-J

CODE ITEM NO.:

B9.11

**EXAMINATION REQUIREMENT:**Volumetric and Surface examination of 100% of Code Required area per IWB-2500-8.

**BASIS FOR RELIEF:** 

The only access to the first Reactor Coolant Pipe Circumferential Weld off the Hotleg and Coldleg at the Reactor Vessel from the outside surfaces is through removable plugs in the primary shield. These plugs are located above the Reactor Coolant Pipe Circumferential Weld and are removable through the refueling cavity floor. With the plugs removed, the top insulated surfaces (approximately 25%) of the Circumferential Welds are visible, however the fixed insulation, designed as nonremovable, the limited space between the Reactor Coolant Pipe and cavity wall and expected high radiation levels preclude surface examinations.

ALTERNATIVE EXAMINATION: The first Reactor Coolant Pipe Circumferential Weld off the Hotleg and Coldleg at the Reactor Vessel will be volumetrically examined in conjunction with the Reactor Vessel Nozzle to Safe End Butt Welds Section XI, Item No. 85.10 during the 2nd Inspection Interval from the Inside Diameter with the automated Reactor Vessel Tool.

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Coolant Pipe Longitudinal Welds (16)

CODE CLASS:

CODE TABLE:

IWB-2500-1

**CODE CATEGORY:** 

B-J

CODE ITEM NO.:

B9.12

EXAMINATION REQUIREMENT: Volumetric and Surface examination of 100% of Code required area per IWB-2500-8.

BASIS FOR RELIEF:

The eight (8) ninety degree elbows on the crossover legs of the Reactor Coolant System are fabricated in two halves from austenitic stainless steel castings welded together by the electroslag process. The structure and nature of the electroslag weld in the case of the austenitic ninety degree elbows is such that the material is opaque to ultrasonic transmissions utilizing currently available techniques. Radiography would be restricted due to trying to obtain double wall shots on these components which are approximately 38" diameter, 3.5 inch wall thickness, containing a 2" thick splitter plate and having.

radiation levels up to 300 mr/hr on contact.

ALTERNATIVE EXAMINATION: Surface examination will be performed as required by Section XI - Code Item B9.12.

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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Coolant Pumps RCPCP1-31, RCPCP1-32, RCPCP1-33 and RCPCP1-34 Pump Casing Welds (12) and

Pump Casing (4)

CODE CLASS: CODE TABLE:

TWB-2500-1

CODE CATEGORY:

B-L-1 and B-L-2

CODE ITEM NO.:

B12.10 and B12.20

EXAMINATION REQUIREMENT: Volumetric and Visual VT-3 of 100% of Code regulred area per IWB-2500-16 and Internal Surfaces.

**BASIS FOR RELIEF:** 

The Code requirement to disassemble a Reactor Coolant Pump strictly for visual and volumetric examination has a very small potential for the identification of service induced flaws. This fact is demonstrated when reviewing the results from a number of Reactor Coolant Pump Casings examined in the industry at this time. No potentially degrading flaws or indications have been found during these examinations. The inappropriate balance of possible flaw detection and enormous impact on expenditures of Plant manpower does not justify a Reactor Copiant Pump disassembly solely for examination purposes. Also, when reviewing the substantial expenditures of man-rem and the small potential for finding flaws, justification for these inspections is not warranted and is very undesirable due to ALARA concerns. The design and construction of the pump casings greatly reduce any potential for failure in the areas which require inspection by the code; also, the Reactor Coolant Pumps are continually monitored for vibration, bearing temperature, seal flow and seal flow temperature. The Reactor Coolant Pumps are also visually inspected for leaks prior to startup after each refueling.

ALTERNATIVE EXAMINATION: Volumetric and Visual examinations will be performed when a Reactor Coolant Pump is required to be disassembled for maintenance purposes. However, a surface examination will be performed on the 3 Reactor Coolant Pump Welds from the OD and a visual examination on the Casing from the OD will be performed at the end of the 2nd Inspection Interval.

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Reactor Coolant Pumps RCPCP1-31, RCPCP1-32, RCPCP1-33 and RCPCP1-34 Flywheels

CODE CLASS:

CODE TABLE:

Not Applicable

CODE CATEGORY:

Not Applicable

CODE ITEM NO.:

Not Applicable

EXAMINATION REQUIREMENT: United States Nuclear Regulatory Guide 1.14 requires Volumetric examination of each Reactor Coolant Pump

Flywheel every 3 years and Surface examination once every 10 years.

**BASIS FOR RELIEF:** 

Volumetric examinations as required by Regulatory Guide 1.14 would require each Flywheel to be examined 3

times during the 2nd Ten Year Interval which exceeds normal Section XI examination extent and frequency for

other components. Surface examinations are impractical due to the painted condition of the Flywheel.

**ALTERNATIVE EXAMINATION:** 

An in place ultrasonic volumetric examination of the areas of higher stress concentration at the bore and

keyway will be performed on each Reactor Coolant Pump Flywheel once during the 2nd Ten year Interval.

Scheduling will be equally divided throughout the 10 year period. As required by Section XI if a

rejectable indication is noted the remaining Reactor Coolant Pump Flywheels will then be examined during the scheduled outage. Surface examination will be performed on each Flywheel unpainted bore and keyway

surfaces when disassembled for maintenance.

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Valve Body (4)

CODE CLASS:

CODE TABLE:

IWB-2500-1

CODE CATEGORY:

B-M-2

CODE ITEM NO.:

B12.50

**EXAMINATION REQUIREMENT:** Visual VT-3 of 100% of Code required area (Internal Surfaces).

**BASIS FOR RELIEF:** 

Code specified internal visual examinations is to verify continued integrity of the valve pressure boundary. All valves are visually examined for leakage after each refueling outage and during the hydrostatic tests of the Reactor Coolant System while subjected to full Reactor Coolant System pressure. The integrity of these valves have therefore been demonstrated by continued leakage for hydrostatic tests. Additionally, these valves are part of the IWV-3000 Inservice Testing Program. Disassembly therefore for

Section XI requirements should not be required.

ALTERNATIVE EXAMINATION: Visual VT-3 examinations of the 4 required valves interior surfaces will be performed during the 2nd Ten Year Interval if disassembled for normal maintenance.

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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Class 2 Component and Piping Welds: Class 2 Integrally Welded Attachments

CODE CLASS:

2

CODE TABLE:

IWC-2500-1

CODE CATEGORY:

C-A: C-A: C-B: C-B: C-B: C-C: C-C: C-F: C-F: C-F: C-F: C-F

CODE ITEM NO.:

C1.10; C1.20; C1.30; C2.21; C2.22; C2.31; C3.10; C3.20; C5.11; C5.12; C5.21; C5.22; C5.31

EXAMINATION REQUIREMENT: Volumetric and or Surface examination of 100% of Code required area per IWC-2500-1, IWC-2500-2,

IWC-2500-4(a) or (b), IWC-2500-4(c), IWC-2500-5, IWC-2500-7, IWC-2500-9, IWC-2500-10, IWC-2500-11,

IWC-2500-12 and IWC-2500-13.

BASIS FOR RELIEF:

Limitations may occur for the examinations of Class 2 component and piping welds when the welds occur at geometric discontinuities such as pipe to vessel welds, pipe to valve or flange welds, elbow introdus or extrodus or vessel to flange welds. Limitations may also occur from welded pads, welded support lugs, welded name plates or component and Integrally Welded Attachment configuration.

ALTERNATIVE EXAMINATION: Volumetric and or Surface examinations as required by ASME Boiler and Pressure Vessel Code Section XI-1983 Edition thru Summer 1983 Addenda will be performed to the maximum extent possible. Where limitations restrict examinations of 100% of Code required area the limitation will be documented on the data sheet for the weld examined and a limitation to Examination Form describing approximate size, location and type of limitation.

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INSERVICE INSPECTION PROGRAM

2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Steam Generator RCPCSG1-31, RCPCSG2-32, RCPCSG3-33 and RCPCSG4-34 Mainsteam Nozzle Inside Radius Sections

(4)

CODE CLASS:

CODE TABLE: CODE CATEGORY: IWC-2500-1 C-B

CODE ITEM NO.:

C2.22

**EXAMINATION REQUIREMENT:** Volumetric examination of 100% of Code required area per IWC-2500-4(a) or (b).

**BASIS FOR RELIEF:** 

The inside radius section of the 4 Mainsteam Nozzles per Section XI are considered susceptible to flaw initiation and growth due to high thermal and mechanical stresses associated with the vessel and connected piping systems. In the case of Indian Point No. 3 steam generator nozzles, the nozzle is a one-piece forging containing a set of seven holes bored parallel to the nozzle centerline. Inconnel flow restrictors are subsequently installed within each of these holes and attached to cladding that is weld deposited onto the bottom surface of the nozzle. The cladding serves as a medium of attachment for the inconnel flow restrictors and as an erosion barrier to protect the nozzle forging. Since the ligaments between the holes distribute the stresses throughout the nozzle forging, there is no high stress, inside radius section for

the mainsteam nozzle design.

ALTERNATIVE EXAMINATION: Visual examination, however, will be performed during System Leakage and System Hydrostatic tests as

required by Section XI-Code Item No. 7.10 and 7.20.

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SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Seal Water Heat Exchanger CSAH SW1-31 Shell and Head Circumferential Welds

CODE CLASS:

2 (Augmented)

CODE TABLE:

IWC-2500-1

CODE CATEGORY:

C-A

CODE ITEM NO .:

C1.10 and C1.20

EXAMINATION REQUIREMENT: Volumetric examination of 100% of Code required area per IWC-2500-1.

**BASIS FOR RELIEF:** 

The thickness of the material (0.187 in.) used to construct the thin walled Pressure Vessel is such that

the combined dead zone and near field effect of the ultrasonic transducer would render ultrasonic

examination meaningless.

ALTERNATIVE EXAMINATION: Surface and Visual examinations will be performed at the extent and frequency required in Table IWC-2500-1.

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SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Seal Water Return Filter CSFLSW1-31 Shell and Head Circumferential Welds

CODE CLASS:

2 (Augmented)

CODE TABLE:

1WC-2500-1

**CODE CATEGORY:** 

C-A

CODE ITEM NO .:

C1.10 and C1.20

**EXAMINATION REQUIREMENT:** Volumetric examination of 100% of Code required area per IWC-2500-1.

**BASIS FOR RELIEF:** 

The thickness of the material (0.188 in.) used to construct the thin walled Pressure Vessel is such that

the combined dead zone and near field effect of the ultrasonic transducer would render ultrasonic

examination meaningless.

ALTERNATIVE EXAMINATION: Surface and Visual examinations will be performed at the extent and frequency required in Table IWC-2500-1.

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TABLE NO. 4 RELIEF REQUEST NO. 19

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2ND INTERVAL AUGUST 30, 1986 THRU AUGUST 30, 1996

SECTION XI EDITION:

1983 THRU SUMMER 1983 ADDENDA

COMPONENT:

Class 1, 2 and 3 Components

CODE CLASS:

1, 2 & 3

CODE TABLE:

IWB-2500-1, IWC-2500-1 and IWD-2500-1

CODE CATEGORY:

B-P. C-H. D-A. D-B and D-C

CODE ITEM NO.:

B15.10: B15.11: B15.20; B15.21: B15.30; B15.31; B15.40; B15.41: B15.50; B15.51; B15.60: B15.61: B15.70:

B15.71: C7.10: C7.20: C7.30; C7.40; C7.50; C7.60; C7.70; C7.80: D1.10: D2.10 and D3.10

**EXAMINATION REQUIREMENT:** Volumetric VT-2; during System Pressure and System Hydrostatic Tests:

**BASIS FOR RELIEF:** 

Certain components are made inaccessible by high radiation areas, congested piping and closed piping tunnels. It is proposed that they be inspected in accordance with the buried component provisions of Paragraph IWA-5244 of the ASME Botter and Pressure Vessel Code, Section XI 1983 Edition through Summer 1983 Addenda (83/S83). Other portions and components of various Class 1, 2 and 3 systems cannot

meet test pressure requirements of Section XI 83/S83 due to plant specific system configurations.

ALTERNATIVE EXAMINATION: The individual systems where relief is required and the alternative tests to be performed will be identified in the Indian Point Unit No. 3 System Pressure and Hydrostatic Tests Relief Requests.