	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3	Page 1 OF 194	

PROGRAM SECTION NO. SEP-IP3-IST-2
Revision No. 0
Page 1 of 194

INDIAN POINT 3 FOURTH TEN-YEAR INTERVAL

INSERVICE TESTING PROGRAM PLAN

ENTERGY NUCLEAR ENGINEERING PROGRAMS

APPLICABLE SITES


All Sites: ☐

Specific Sites: ANO ☐ GGNS ☐ IPEC ☒ JAF ☐ PLP ☐ PNPS ☐ RBS ☐ VY ☐ W3 ☐ HQN ☐

Safety Related: ☒ Yes

☐ No

Program Section Revision Summary	
Current Revision	Description of Change
0	This Site Engineering Program (SEP) supercedes the previous IST Program Plan, SEP-IST-IP3-1 rev. 2.

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3	Page 2 OF 194	

REVIEW AND CONCURRENCE

Program Section No.: SEP-IP3-IST-2

Revision No.: 0

Program Section Title: Indian Point 3 Fourth Ten-Year Interval Inservice Testing Program Plan

Prepared By: 

Date 6/9/11

Checked By: 

Date 6-9-2011

(Additional 'Reviewed By' lines may be added as needed)

ANII N/A


Date _____

Reviewed By (or N/A)

Concurred:  for N. Azeredo

Date 6-13-2011

Responsible Supervisor

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3	Page 5 OF 194	

1.0 INTRODUCTION

This revision of the Indian Point Unit 3 (IP3) Inservice Testing Program Plan will be in effect for the applicable duration of the fourth 120-month (10-year) inspection interval (7/21/09-7/20/19), unless changed for other reasons. The Plan will be updated prior to the start of the fifth inspection interval in accordance with the requirements of 10 CFR 50.55a(g).

1.1 Purpose


To provide requirements for the performance and administration of assessing the operational readiness of those ASME Class 1, 2, and 3 pumps and valves whose specific functions are required to:

- Shutdown the reactor to the safe shutdown condition,
- Maintain the safe shutdown condition, or
- To mitigate the consequences of an accident.

IP3 was designed and licensed to operate as a Hot Shutdown plant. For the purposes of the IST Program, Cold Shutdown is defined as the “safe” shutdown condition (Unit 3 UFSAR, Table 5.2-3).

The Inservice Inspection (ISI) Classification Boundaries are identical to the Quality Group Boundaries shown on the plant Piping and Instrument Diagrams (P&IDs) listed in Attachment 1. This Inservice Testing (IST) Program was developed using the following documents:

- Title 10, Code of Federal Regulations, Part 50, Paragraph 50.55a
- Standard Review Plan 3.9.6, "Inservice Testing of Pumps and Valves"
- Safety Analysis Report, Indian Point Plant
- Technical Specifications, Indian Point, Unit 3
- Technical Requirements Manual;
- Past program correspondence;
- Operating Procedures (Normal, Emergency and Off-Normal);
- Design Basis Documents.
- NUREG-1482, Rev. 1 "Guidelines for Inservice Testing at Nuclear Power Plants"
- ASME OM-Code 2001 edition 2003 addenda
- IP-SM-DC-131, "IPEC Check Valve Condition Monitoring Program"

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3	Page 6 OF 194	

1.2 Scope

All references to the ASME OM Code within this document are intended to apply to the 2001 OM Code through the 2003 Addenda. The program plan was prepared to meet the requirements of the following subsections of the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants, 2001 Edition through 2003 Addenda as follows:

- ASME OM Code, Subsection ISTA, *“General Requirements”*

ISTA contains the requirements directly applicable to inservice testing including the Owner's Responsibility and Records Requirements.

- ASME OM Code, Subsection ISTB, *“Inservice Testing of Pumps in Light-Water Reactor Nuclear Power Plants”*


ISTB establishes the requirements for inservice testing of pumps in light-water reactor nuclear power plants. The pumps covered are those provided with an emergency power source, that are required in the shutting down the reactor to the safe shutdown condition, in maintaining the safe shutdown condition, and/or in mitigating of the consequences of an accident.

- ASME OM Code, Subsection ISTC, *“Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants”*

ISTC establishes the requirements for inservice testing of valves in light-water reactor nuclear power plants. The valves covered include those which provide overpressure protection and those which are required to perform a specific function, either actively through the changing of valve obturator position or passively by maintaining required obturator position in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident.


- ASME OM Code, Mandatory Appendix I, *“Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants”*

Appendix I provides the requirements for performance testing and monitoring of nuclear plant pressure relief devices. Methods, intervals, and record requirements for monitoring and testing are established, as well as guidelines for the evaluation of results. The Appendix applies to safety valves, safety relief valves, pilot-operated pressure relief valves, power-actuated pressure relief valves, nonreclosing pressure relief devices and vacuum relief devices, including all accessories and appurtenances.

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3	Page 7 OF 194	


The IP3, Pump and Valve Inservice Testing Plan will be in effect through the fourth 120-month interval.

- Unit Three: **Begin:** July 21, 2009 **End:** July 20, 2019

 Entergy	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3	Page 118 OF 194	


ATTACHMENT 12

INSERVICE TESTING PUMP TABLE

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3		Page 121 OF 194


Pump Table

Pump Tag	P&ID	P&ID Zone	Cat	Code Class	Pump Type	Pump Driver	Test Type	Test Freq	Relief Request	Tech Position
AFW-33	F-20193	B-6	A	3	Centrifugal	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Motor Driven Aux Feed Pump #33
CCW-31	F-27513-1	C-7	A	3	Centrifugal	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Component Cooling Pump #31
CCW-32	F-27513-1	B-7	A	3	Centrifugal	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Component Cooling Pump #32
CCW-33	F-27513-1	B-7	A	3	Centrifugal	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Component Cooling Pump #33

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3		Page 122 OF 194

Pump Table

Pump Tag	P&ID	P&ID Zone	Cat	Code Class	Pump Type	Pump Driver	Test Type	Test Freq	Relief Request	Tech Position
CS-31	F-27503	D-4	B	2	Centrifugal	Motor	bdP	M3		
							cdP	2Y		
							cQ	2Y		
							cV	2Y		
										Containment Spray Pump #31
CS-32	F-27503	D-4	B	2	Centrifugal	Motor	bdP	M3		
							cdP	2Y		
							cQ	2Y		
							cV	2Y		
										Containment Spray Pump #32
REC-31	F-27353	B-5	B	2	Centrifugal	Motor	cdP	2Y		
							Qc	2Y		
							cV	2Y		
										Recirculation Pump #31
REC-32	F-27353	B-4	B	2	Centrifugal	Motor	cdP	2Y		
							cQ	2Y		
							cV	2Y		
										Recirculation Pump #32
RHR-31	F-27513-1	F-3	A	2	Centrifugal	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										RHR Pump #31

	Inservice Testing Program Plan Fourth Interval	SEP-IP3-IST-2		Rev. 0
		Indian Point Unit 3		Page 124 OF 194

Pump Table

Pump Tag	P&ID	P&ID Zone	Cat	Code Class	Pump Type	Pump Driver	Test Type	Test Freq	Relief Request	Tech Position
SWN-32	F-20333	B-3	A	3	Vert Line Shaft	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Service Water Pump #32
SWN-33	F-20333	B-4	A	3	Vert Line Shaft	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Service Water Pump #33
SWN-34	F-20333	B-5	A	3	Vert Line Shaft	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Service Water Pump #34
SWN-35	F-20333	B-6	A	3	Vert Line Shaft	Motor	adP	M3		
							cdP	2Y		
							aQ	M3		
							cQ	2Y		
							aV	M3		
							cV	2Y		
										Service Water Pump #35

