NRC INSPECTION MANUAL

CIPB

INSPECTION PROCEDURE 93815

PART 52, OPERATIONAL PROGRAMS IMPLEMENTATION INSPECTION

PROGRAM APPLICABILITY: 2504

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93815-01 INSPECTION OBJECTIVES

The objective of this procedure is to provide guidance for conducting the Operational Programs Implementation Inspection (OPI) for new plants. Results from this inspection will provide the input by which the NRC staff will inform the Commission of the status of the new plant's operational programs, as discussed in SECY-06-0114. The schedule and scope of this inspection shall be tailored to the circumstances at individual plants. The OPI will be a joint effort by NRO/DCIP, the Center of Construction Inspections (CCI), and the new plant's host Regional Office.

93815-02 INSPECTION REQUIREMENTS AND GUIDANCE

General Guidance: The OPI will ascertain the status of the licensee's development and implementation of operational programs necessary to support plant operations. (*See* Attachment 1 for a list of applicable operational programs). The status of licensee implementation of operational programs and milestones described in the Combined License (COL) and its associated license conditions will be inspected.

This inspection is intended as a follow-up to previously conducted IMC-2504 inspections of the specific operational programs listed in Attachment 1. Open items from those previous inspections will be the focus of the OPI.

02.01 Inspection Planning.

The OPI should be conducted in two phases to ascertain the status of the licensee's development and implementation of programs necessary to support operation. The programs are listed in Attachment 1.

Phase 1 of the inspection is a "ready review" and is to be performed after the licensee submits the 225-day notification required by 10 C.F.R. §52.99(c)(2). Phase I will determine:

a. The status of all operational programs listed in Attachment 1. It is understood that some programs will not be fully developed at this stage of project completion and will be stated in the inspection report.

b. The status of inspections required by IMC 2504 and identify all remaining open items associated with the programs or inspections of the programs. That information is obtained from the Construction Reactor Oversight Program (cROP) using Construction Inspection Program Information Management System (CIPIMS) database.

Following completion of the Phase 1 Ready Review, a letter will be sent to the licensee that informs the licensee of the NRC's readiness to conduct Phase 2.

Phase 2 is the OPI itself and is to be conducted 1-2 months prior to the anticipated fuel load. Twenty-four hour inspection coverage of shift operations may be useful at various times during the inspection if there are backshift activities in process that are important to observe. This inspection will:

a. Inspect all the open items and disposition those open items related to programs required before fuel load.

b. Obtain direct observation of the programs listed in Attachment 1.

c. Assess the acceptability of open items related to programs required after fuel load and factor that into the status determination.

Guidance: The timing of the OPI should be coordinated with other NRC and third party inspection activities, such as the conduct of the INPO Preoperational Assistance visit at the site.

The scope of the inspection will cover all the IMC 2504 operational programs over a two-week time period using a team of five to seven inspectors from NRO/DCIP, the CCI, and the new plant's host Region.

Inspectors who have operating plant experience should be selected. Resident inspectors from similar units and experienced inspectors from the Regions or Offices of New Reactors (NRO) and Nuclear Reactor Regulation (NRR) are preferred. A licensing examiner should also be included on the inspection team to review reactor operator training status.

The OPI will form the basis of the Staff's opinion of the status of licensee compliance with FSAR and license condition commitments to develop and implement operational programs prior to fuel load. This opinion will then inform the "Staff Statement Regarding the Status of Operational Programs" Commission information paper provided before the licensee's anticipated date for loading fuel. Attachment 2 of this procedure is provided as a template to develop the inspection report.

93815-03 RESOURCE ESTIMATE

The OPI is estimated to require 640 direct inspection hours of regional and headquarters resources. Actual inspections at a specific plant may require substantially more or fewer resources, depending on the level of licensee preparation prior to the inspection. The Phase 1 portion of the inspection requires 80 hours (team leader and one inspector for 1 week). The Phase 2 portion of the inspection requires 560 hours (team leader and six inspectors for 2 weeks).

93815-04 REFERENCES

SECY 06-0114, "Description of the Construction Inspection Program for Plants Licensed under 10 CFR Part 52"

NRC Inspection Manual Chapter 2504

NUREG-0800, Chapter 13.4, “Standard Review Plan – Operational Programs,” Revised Mar 2007.

93815-05 PROCEDURE COMPLETION

The inspection is completed when all operational programs are inspected and their development and implementation status has been ascertained and before the 10 CFR 52.103(g) finding is issued by the Commission.

END

Attachment 1 – Operational Programs Requirements and Inspection Procedures

Attachment 2 – Documentation of OPI Results

Attachment 3 - Revision History for IP 93815

Attachment 1

OPERATIONAL PROGRAMS REQUIREMENTS AND INSPECTION PROCEDURES

This Appendix lists the requirements and inspection procedures (IPs) to be conducted to evaluate and assess operational programs under IMC 2504.

The purpose of IP 93815 is to determine the status of these operational programs.

The listing of operational programs and IPs in the Appendix may not be all inclusive and changes may be required to the listing at a later date.

OPERATIONAL PROGRAM INSPECTIONS			
Program	**Requirement**	**IP No.**	**IP Title**
Inservice Inspection	50.55a(g)	73054	Part 52, Preservice and Inservice Inspection - Review of Program
		73754	Part 52 - Preservice Inspection - Non-Destructive Examination
		73757	Part 52 Inservice Inspection - Data Review and Evaluation
Inservice Testing	50.55a(f)	73756	Inservice Testing of Pumps and Valves
Environmental Qualification	50.49	51080	Part 52 Environmental Qualification (EQ) Under 10 CFR 50.49
Preservice Inspection	50.55a(g)	73054	Part 52, Preservice and Inservice Inspection - Review of Program
		73754	Part 52, Part 52 - Preservice Inspection - Non-Destructive Examination
Reactor Vessel Material Surveillance	50.60, App. H	50054	Reactor Vessel Material Surveillance Program

OPERATIONAL PROGRAM INSPECTIONS			
Program	**Requirement**	**IP No.**	**IP Title**
Preservice Testing	50.55a(f)	TBD	TBD
Containment Leak Rate Testing	50.54(o)	70307	Containment Integrated Leak Rate Test Procedure Review
		70368	Part 52 Containment Leakage Rate Testing Program (Programmatic)
Fire Protection	50.48	64705	Part 52, Fire Protection Operational Program
Process and Effluent Monitoring	50.34(b)(3), Part 50, App. I	84527	Part 52, Solid Waste Management
		84528	Reserved for Part 52, Liquid Waste Management
		84529	Reserved for Part 52, Gaseous Waste Management
		80522	Part 52 Radiological Environmental Monitoring Program (REMP)
		83746	Part 52, Offsite Dose Calculation Manual (ODCM)
Radiation Protection	Part 20, Subpart B	83533	Part 52 External Occupational Exposure Control and Personal Dosimetry
		83534	Part 52 Internal Exposure Control
		83535	Part 52 Control of Radioactive Materials and Contamination, Surveys, and Monitoring
		83536	Part 52 Facilities and Equipment
		83537	Part 52 Maintaining Occupational Exposures ALARA
Non licensed Plant Staff Training Program	50.120 52.79(a)(33)	41501	Part 52, Review of Training and Qualification Programs

OPERATIONAL PROGRAM INSPECTIONS			
Program	**Requirement**	**IP No.**	**IP Title**
Reactor Operator Training	52.79(a)(33), 55.13, 55.31, 55.41, 55.43, 55.45	41501	Part 52, Review of Training and Qualification Programs
		41502	Nuclear Power Plant Simulation Facilities
Reactor Operator Requalification	52.79(a)(34) 50.34(b) 50.54(i) 55.59	71111.11	Licensed Operator Requalification
		41502	Nuclear Power Plant Simulation Facilities
Emergency Preparedness	50.34(b)(6)(v), 50.47, 50.54(q), 50.54(t)	82002	Part 52, Emergency Preparedness Program
Security (including training, vehicle and personnel access control, FFD and safeguards contingencies)	50.34(c) 50.34(d) 50.34(e) 50.54(p)(1) 50.54(v) Part 26	81000.01	Access Authorization
		81000.02	Access Control
		81000.03	Performance Evaluation Program
		81000.04	Testing and Maintenance
		81000.05	Protective Strategy Evaluation
		71130.06	Protection of SGI Security Training
		81000.07	Fitness for Duty
		81000.08	Management Effectiveness and Security Organization
		81000.10	Material Control & Accounting
		81000.11	Target Set Review
		73130.14	Cyber Security Program
Quality Assurance (Operation)	Part 21 50.54(a) Part 50, Appendix B	35101	QA Program Implementation Inspection for Operational Programs
		36100	Part 52 - Procurement Control & Receipt, Inspection of 10 CFR Parts 21 and 50.55(e) Programs for Reporting Defects and Noncompliance
		43004	Inspection of Commercial-Grade Dedication Programs
		36302	Part 52, Operational Staffing
		42401	Part 52, Plant Procedures
		42453	Part 52, Operating Procedures Inspection
		42454	Part 52, Emergency Procedures

OPERATIONAL PROGRAM INSPECTIONS			
		71303	Part 52, Technical Specifications Review
Maintenance Rule	50.65	TBD	TBD
Motor-Operated Valves	50.55a(b)(3)(ii)	TBD	TBD
Initial Startup Testing portion of Initial Test Program	50.34 52.79(a)(28)	TBD	TBD
Operational Readiness	SECY-06-0114	93813	Reserved for Part 52 Operational Readiness Assessment Team Inspection

Attachment 2
Documentation of OPI Results

Operational Programs Status – The OPI report should document the results of the inspection as follows:

(i) Inservice Inspection

The review team evaluated the status of the licensee's inservice inspection program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's inservice inspection program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's inservice inspection program is adequate to support low power operations and testing.

(ii) Inservice Testing

The review team evaluated the status of the licensee's inservice testing program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's inservice testing program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's inservice testing program is adequate to support low power operations and testing.

(iii) Environmental Qualification

The review team evaluated the status of the licensee's environmental qualification

program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's environmental qualification program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's environmental qualification program is adequate to support low power operations and testing.

(iv) Preservice Inspection

The review team evaluated the status of the licensee's preservice inspection program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's preservice inspection program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's preservice inspection program is adequate to support low power operations and testing.

(v) Reactor Vessel Material Surveillance

The review team evaluated the status of the licensee's reactor vessel material surveillance program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's reactor vessel material surveillance program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's reactor vessel material surveillance program is adequate to support low power operations and testing.

(vi) Preservice Testing

The review team evaluated the status of the licensee's preservice testing program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's preservice testing program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's preservice testing program is adequate to support low power operations and testing.

(vii) Containment Leak Rate Testing

The review team evaluated the status of the licensee's containment leak rate testing program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's containment leak rate testing program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's containment leak rate testing program is adequate to support low power operations and testing.

(viii) Fire Protection

The review team evaluated the status of the licensee's fire protection program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's fire protection program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's fire protection program is adequate to support low power operations and testing.

(ix) Process and Effluent Monitoring

The review team evaluated the status of the licensee's process and effluent monitoring program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's process and effluent monitoring program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's process and effluent monitoring program is adequate to support low power operations and testing.

(x) Radiation Protection

The review team evaluated the status of the licensee's radiation protection program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's radiation protection program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The

team concludes that the status of the licensee's radiation protection program is adequate to support low power operations and testing.

(xi) Non-Licensed Plant Staff Training Program

The review team evaluated the status of the licensee's non-licensed plant staff training program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's non-licensed plant staff training program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's non-licensed plant staff training program is adequate to support low power operations and testing.

(xii) Reactor Operator Training

The review team evaluated the status of the licensee's reactor operator training program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's reactor operator training program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's reactor operator training program is adequate to support low power operations and testing.

(xiii) Reactor Operator Requalification

The review team evaluated the status of the licensee's reactor operator requalification program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open

issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's reactor operator requalification program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's reactor operator requalification program is adequate to support low power operations and testing.

(xiv) Emergency Preparedness

The review team evaluated the status of the licensee's emergency preparedness program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's emergency preparedness program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's emergency preparedness program is adequate to support low power operations and testing.

(xv) Security (including training, vehicle and personnel access, FFD and safeguards contingencies)

The review team evaluated the status of the licensee's security program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's security program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's security program is adequate to support

low power operations and testing.

(xvi) Quality Assurance (Operation)

The review team evaluated the status of the licensee's quality assurance (operation) program in light of the previous IMC-2504 inspections on [*insert dates of previous inspections*] and the open issues from those inspections.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's quality assurance (operation) program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's quality assurance (operation) program is adequate to support low power operations and testing.

(xvii) Maintenance Rule

The review team evaluated the status of the licensee's maintenance rule program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's maintenance rule program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's maintenance rule program is adequate to support low power operations and testing.

(xviii) Motor-Operated Valves

The review team evaluated the status of the licensee's motor-operated valves program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open*

issues]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's motor-operated valves program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's motor-operated valves program is adequate to support low power operations and testing.

(xix) Initial Test Program

The review team evaluated the status of the licensee's initial test program in light of the previous IMC-2504 inspection on [*insert date of previous inspection*] and the open issues from that inspection.

As a result of the review, the inspection team was able to close [*insert number*] open issues. [*Insert number*] issues remain open. These open issues are [*insert list of open issues*]. [*Based on the team's review of these remaining open issues, the team concludes that the status of the licensee's initial test program is (adequate or not adequate) to support low-power operations and testing*].

OR

As a result of the review, the inspection team was able to close all open issues. The team concludes that the status of the licensee's initial test program is adequate to support low power operations and testing.

Attachment 3
Revision History For IP93815

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	XX/XX/XX	Initial Issue	None	N/A	ML93815XXXX

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